The European Commission's Expert Groups: Adapting to the Contestation of Expertise

EUROPEAN ADMINISTRATIVE GOVERNANCE

The Contestation of Expertise in the European Union

Edited by
Vigjilenca Abazi · Johan Adriaensen
Thomas Christiansen

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Vigjilenca Abazi · Johan Adriaensen ·
Thomas Christiansen
Editors

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macmillan

Editors
Vigjilenca Abazi
Faculty of Law
Maastricht University
Maastricht, Limburg
The Netherlands

Johan Adriaensen
Faculty of Arts and Social Sciences
Maastricht University
Maastricht, Limburg
The Netherlands

Thomas Christiansen
Department of Political Science
Luiss University
Rome, Lazio
Italy

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Preface

The public debates before and after the UK's referendum on its membership of the European Union, the persistent denial in some quarters of climate change, as well as the lead-up to and fall-out from Donald Trump's election as U.S. President have revealed a growing distrust towards experts. Calling into question the authority of those who invoke expertise is, however, not a recent phenomenon. Decisions concerning the use of genetically modified organisms and chemicals such glyphosate, compulsory vaccination policies or the wisdom of different economic policies and their social impact have often triggered heated political debate. Yet the scale and veracity by which such contestation of expertise has been taking place in recent years is unprecedented. Moreover, this development has a direct implications for the scientific community whose members derive their authority from expertise. Not only does it raise questions regarding the role academics may have played in contributing to the backlash we are observing, but also about the manner in which societies cope with the changing environment in which we operate. Is it possible for scholars to reclaim the authority expertise once held? And, perhaps more importantly, should this be aspired?

These questions were paramount in our minds when we decided to focus on the contestation of expertise as the theme for the 2017 annual conference of the Centre of European Research in Maastricht (CERiM)—a Jean Monnet Centre of Excellence at Maastricht University. The conference brought together an international group of scholars to debate these

issues, and the present volume emerged from this conference. In line with the different disciplinary backgrounds of the editors, and the nature of the work of CERiM more generally, the book takes a multidisciplinary approach to the issue and offers contributions from (international) law, political science and public administration. Focusing on developments at the national, European and international level, the book provides a range of studies on the manner in which expertise is contested, and on the policy responses it has triggered.

We gratefully acknowledge the financial support we received from Maastricht University and from the Erasmus+ programme of the European Commission that provided the necessary funds to host this conference and thereby also helped to make this book possible. We are deeply grateful to Prof. Ellen Vos, the Co-Director of CERIM at the time, who supported the organisation of the conference and subsequently contributed to the conception of the book. Above all, we are in debt to all contributors to this volume for entrusting their work to us and remaining patient and committed throughout the editing process.

We had tremendous support from the beginning and throughout the process from Jemima Warren and Oliver Foster at Palgrave Macmillan, as well as from our colleague and series editor, Prof. Sophie Vanhoonacker. Furthermore, we are grateful for the diligent and reliable support we received from Shelly Tsui, Jonah Thompson and Giulia Gallinella in the organisation of the initial conference, in the research assistance provided during the editing process and in the preparation of the book manuscript, respectively.

As always, the publication of an edited volume has relied on support and input from many individuals, and we are pleased that we have been able to bring this process to a successful conclusion. If anything, the contestation of expertise has become even more fierce during the time that has passed since the inception of this book, and we therefore hope the readers will find it a valuable contribution to the literature in the field.

Copenhagen, Denmark — Vigjilenca Abazi
Maastricht, The Netherlands — Johan Adriaensen
Rome, Italy — Thomas Christiansen
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Contents

Notes on Contributors

Vigjilenca Abazi is Assistant Professor at Faculty of Law, Maastricht University, The Netherlands.

Johan Adriaensen is Assistant Professor at University Maastricht, Maastricht University, The Netherlands.

Tannelie Blom is Professor of European Studies at University Maastricht, Maastricht, The Netherlands.

Johanna Breuer is Ph.D. researcher at the European University Institute, Florence, Italy.

Johan Christensen is Assistant Professor at the Institute of Public Administration, Leiden University, The Netherlands.

Thomas Christiansen is Professor of Political Science and European Integration at Luiss University, Rome, Italy.

Francesca Colli is Assistant Professor in European Studies at the Faculty of Arts and Social Sciences (FASoS), Maastricht University. This work was completed during a Ph.D. fellowship at Leuven International and European Studies (LINES), KU Leuven.

Lukasz Gruszczynski is an Associate Professor of International Law at Kozminski University, Warsaw, Poland.

Cathrine Holst is Professor at the Department of Sociology and Human Geography and ARENA Centre for European Studies, University of Oslo, Norway.

Bart Kerremans is Professor of American Politics and International Political Economy at the Faculty of Social Sciences, KU Leuven, Leuven, Belgium.

Marjan Peeters is a Professor of Environmental Policy and Law at Maastricht University, The Netherlands.

Elissaveta Radulova is Assistant Professor in European Public Policy and Programme Director of the Bachelor "European Studies" of Maastricht University, The Netherlands.

Aneta Spendzharova is Associate Professor of Political Science at Maastricht University, The Netherlands.

Shelly Tsui is a Ph.D. candidate at the Eindhoven University of Technology, Eindhoven, The Netherlands.

Sophie Vanhoonacker is Professor of European Administrative Governance at the Faculty of Arts and Social Sciences at Maastricht University, The Netherlands.

Abbreviations

ASEAN	Association of Southeast Asian Nations
CAN	Climate Action Network
CEO	Corporate Europe Observatory
CETA	Comprehensive Economic and Trade Agreement
CFSP	Common Foreign and Security Policy
CJEU	Court of Justice of the European Union
CSA	Chief Scientific Advisor
CSDP	Common Security and Defence Policy
DGs	Directorate Generals
ECI	European Citizenship Initiative
EEAS	European External Action Service
EFSA	European Food and Safety Authority
EGs	Expert Groups
EIPPCB	European Integrated Pollution Prevention and Control Bureau
EMA	European Medicine Agency
EP	European Parliament
EPA	Environmental Protection Agency
EU	European Union
FTA	Free Trade Agreement
GATT	General Agreement on Tariffs and Trade
GMO	Genetically Modified Organism
HRVP	High Representative for Foreign Affairs and Security Policy and Vice-President of the European Commission
IED	Industrial Emissions Directive
IOs	International Organisations
IPCC	InterGovernmental Panel on Climate Change

ISDS	Investor State Dispute Settlement
JRC	Joint Research Centre
MAI	Multilateral Agreement on Investment
NGOs	Non-Governmental Organizations
SAM	Scientific Advice Mechanism
SIA	Sustainability Impact Assessment
SPS	Sanitary and Phytosanitary
TBT	Technical Barriers to Trade
TEU	Treaty on the European Union
TFEU	Treaty on the Functioning of the European Union
TRIPS	Trade-Related Aspects of Intellectual Property Rights
TTIP	Transatlantic Trade and Investment Partnership
TWGs	Technical Working Groups
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
WTO	World Trade Organization

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CHAPTER 1

Introduction

The Role of Scientific Expertise in EU Policy-Making: Ever Greater Contestation?

Vigjilenca Abazi, Johan Adriaensen, and Thomas Christiansen

Introduction

"People … have had enough of experts" was one of the memorable quotes during the campaign for the British exit from the European Union (EU) (Mance 2016). Whilst this statement from a leading politician of the governing party was remarkable, and amplified by the outcome of the referendum, this contestation of expertise and the role of experts is not

V. Abazi (✉) · J. Adriaensen
Maastricht University, Maastricht, The Netherlands
e-mail: v.abazi@maastrichtuniversity.nl

J. Adriaensen
e-mail: j.adriaensen@maastrichtuniversity.nl

T. Christiansen
Luiss University, Rome, Italy
e-mail: tchristiansen@luiss.it

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limited to this specific decision taken in the UK. In fact, it is symptomatic of a broader global trend in contesting, and even discounting, the role and information provided by experts. Climate change is a salient example of the latter, despite increasing number of scientific evidence showing its repercussions. In the EU context, the relationship between expert bodies and democratic decision-making is also contested on the account of lack of accountability of experts to majoritarian institutions and the public in general as well as the lack of participatory and representative elements of expert bodies (Brown 2009).

This growing hostility in the public debate about the role of expertise clashes with long-standing assumptions about the need for such expertise, especially, in the EU, where the reliance on technocratic expertise has traditionally been considered as a key factor legitimating an emerging polity. EU policy-making today, in an era of evidence-based decision-making and legal requirements for impact assessment studies, is impossible to imagine without the knowledge and involvement of experts. Even minor national policy decisions increasingly entail a high level of complexity but also interconnectedness with regional and global policies, which in turn require sophisticated knowledge and approaches that experts can offer.

The recent trend towards contestation of expertise in the policy-process therefore raises fundamental questions about the way in which the EU is being governed. This book examines the current role of expertise in EU decision-making and explores the factors leading to its contestation. In doing so, we start from the position that the nature of institutional arrangements and administrative procedures are essential, both to understand the contestation of expertise and to identify the means by which apparently opposing principles can be meaningfully reconciled. From this institutionalist starting-point, the book provides a multidisciplinary perspective on expertise and its contestation by looking at diverse policy fields including EU external relations, bioethics, and climate change.

The contributions to this volume come at an important time when it is increasingly urgent to study, in a scientific and rigorous manner, the position and role of expertise in EU policy-making and governance. Taking into account that a wealth of (often contradictory) information leads many to question expert advice, we observe that the very notion of expertise and expert advice is increasingly losing authority (Nichols 2017). This emerging political culture, frequently coined as 'post-factual' or 'post-truth' politics, risks undermining liberal values and the rule of

law. Populism, in combination with a growing trend to rely on referendums founded or run on misinformation by political leaders, threatens a well-informed public debate, which is a foundational basis for the functionality of democratic mechanisms. These developments also question the role of judicial review and of independent agencies (such as central banks), and consequently undermine the notion of a separation of powers. This book addresses these conflicts and challenges by empirically examining specific administrative processes and institutional designs in the European Union.

The book draws from the considerable attention and rich discussions on the topic of expertise in the scholarly literature. Yet it expands on existing debates by focusing on the *contestation* of expertise by reflecting on the latest developments and trends in the field. Going beyond a singular focus on one discipline (Ambrus et al. 2014; Littoz-Monnet 2017; Edmond 2004; Kohlrausch and Trischler 2014; Schofield 2014), the book adopts a multidisciplinary approach and combines theoretical and empirical reflections on the topic. An additional contribution to the debates on expertise in the EU decision-making is that the book offers a deeper understanding of administrative practice and institutional responses to contestation of expertise by examining a wide variety of EU institutions, including the Commission, the European Parliament, and the European External Action Service. This sets the book apart from the many contributions that analyse singular institutions or bodies at the expense of a broader understanding of the role of experts in the EU (Metz 2015; Ossege 2016). Hence, a significant addition to existing literature is that the book will offer findings that are representative both across different EU policy fields, but also allow us to identify patterns common to various EU actors, and indeed to the EU's institutional architecture as a whole. Furthermore, the book provides a contribution to wider debates on expertise by expanding the focus to decision-making on global governance issues such as climate change and trade (Fleck et al. 1998; Ericsson et al. 2006; Fischer 2009; Ahn et al. 2014; Stone 2013; Sending 2015).

Understanding 'Contestation' of Expertise

The Notion of 'Contestation' and the Approach of This Book

This book centres on the *contestation* of expertise. How is contestation of expertise understood? In his elaborate analysis on the role of legal experts, Kennedy remarks that it is even difficult to more adequately understand '*what these experts do, the nature and limits of their vocabulary, and the possibilities for translating their work into politically contestable terms — or promoting the experience of responsible human freedom among the experts who govern our world*' (Kennedy 2004, p. 1). Indeed, expertise is often treated as a privileged kind of knowledge (Turner 2006). Contesting this privileged knowledge can arise due to democratic concerns for egalitarian access to the production of knowledge, but may also arise from an emerging political culture frequently coined as 'post-factual', we explain the logics of contestation below.

Based on the premise that institutions are a key forum where different principles are reconciled and translated into practices and procedures, this book focuses on the institutional approach to understand the growing contestation of expertise, its implications for policy-making and the legal order, as well as potential ways forward. It hence seeks not merely to understand the processes and actors in the expertise arena, but rather to focus on the factors and institutional setting that drive such contestation and map its implications. The book therefore furthers our understanding of the processes in which individuals or groups challenge the reliance on, or the participation of, experts in the decision-making process, or expertise as a foundation for governmental decision-making. Whilst acknowledging the growing literature addressing contestation in international relations (Wiener 2014), this book focuses on the institutional approach for contestation specifically of experts.

Actors, Aspects and Logics of Contestation

Contestation is an organising principle of both scientific and political life. Academics organise the contestation of their work through conferences and the creation of peer-review mechanisms prior to the publication of research. Politics itself is equally characterised by a clash of ideas and ideologies. The deliberative turn in democratic theory particularly, led to a growing appreciation of the need for a constructive exchange of (reasoned) opinions through public or parliamentary debate. Whereas the

central focus of the academic critique lies on the qualities of the scientific process through which findings were obtained, political contestation is more concerned with the normative implications of the research for public policy and how it fits the political narrative. Can it be instrumentalised, annotated or should it be opposed? Beyond the epistemic and normative rationale for contestation, a third logic has become increasingly prominent.

Critical theory has drawn attention to the structural context through which facts and science are being constructed. Thomas Kuhn's recognition that ruling scientific paradigms inevitably form the lens through which new facts are being interpreted, helped explain the disproportionate counter-evidence required to reconsider our assessment of scientific 'facts'. This critique applied both to the exact sciences (e.g. the change from geocentrism to helio-centrism) as well as the social sciences (e.g. the paradigmatic change from Keynesian to Monetarist economic policies). By now, scholars in the Science, Technology and Society (STS) community have developed far more refined models to grasp the multitude of structural conditions that shape and construct our understanding of facts and findings. This represents a third logic of contestation (Table 1.1).

The main protagonists that contest expertise vary across the forums discussed. Within epistemic communities, it mostly concerns critique by academic peers focusing on the scientific process through which findings emerge. At a political level, the debate is funnelled through opposing ideological perspectives interpreting the policy implications of the new findings and how they may be used in the political narrative.

Finally, structural critiques are often voiced by organised interests in society. Environmental groups critiquing the privileged position of business interests in institutionalised decision-making, or groups that

Table 1.1 Overview: Arenas of contestation

Actors of contestation	*Contestation*	*Logic of contestation*
Researchers	**Process:** Do the findings follow from the consulted data?	Epistemic
Elected officials	**Results:** What has been found?	Normative (political)
Civil society	**Context:** How were the facts constructed?	Structural

Source Authors

take issue with the use of privately funded research when assessing the carcinogenic risks of glyphosate are but two examples that spring to mind.

The existence of citizen science, the concepts of a socially engaged researcher, or a technically trained elected official make it obvious that the above overview is but a huge simplification of a more complex reality. Within each group there is a common vocabulary and a joint understanding of what constitutes a valid critique and -more importantly- the implications of such critique for the expertise of the concerned groups. While the composition of expert bodies judging the permissibility of a GMO field trial can be questioned and debated from a structural point of view, it does not necessarily say anything about the soundness of the research design proposed and their implications.

A Culmination of Critiques

Arenas of contestation have never been independent from one another. Policy-makers have often turned to scientific experts to inform their policies. Academics in turn have often taken an active role in society. The intensity of such interaction has, however, taken a more profound turn with the increased reliance on evidence-based policy-making but also the broadening of experts able to weigh in on the topic.

The increasing coupling of science and politics has caused several paradoxes according to Weingart (1999). Policy-makers reliance on science to inform decision-making, especially when it concerns novel developments has led to an erosion of its authority. "*the intensified use of scientific expertise has not increased the degree of certainty on the part of judges, administrators and policy-makers; on the contrary, it has left them witnessing the ongoing debates among scientific experts and forces them to decide between conflicting advice*" (Weingart 1999, p. 158).

The common solution advanced by the scientific community is to take greater efforts at selecting the information to be offered through the organisation of institutions. "*This selection must operate internally to science and may take the form of pooling and monopolising expertise (contraction of knowledge supply) on the part of science and of creating institutional hierarchies of expertise (contraction of knowledge demand)*" (ibid., p. 160). In other words, an increasing reliance on scientific expertise in policy-making, results in a loss of authority, which the scientific community tries to resolve through institutionalising the disparate

research. In that sense, it does not need to surprise that in recent debates, the institutions created are also being contested.

In summary, over time the three arenas have become increasingly integrated with one another, which means that contestation can easily traverse from one to the next arena. However, much like a Chinese whisper, the logic and principles guiding contestation may get lost in translation. The most well-known example, perhaps, was the *mea culpa* voiced by Bruno Latour when questioning whether social critique contributed to the rise of conspiracy theories: "Maybe I am taking conspiracy theories too seriously, but I am worried to detect, in those mad mixtures of knee-jerk disbelief, punctilious demands for proofs, and free use of powerful explanation from the social neverland, many of the weapons of social critique." (Latour 2004, p. 230) The election of Donald Trump and the Brexit vote ushered in similar debates within the STS community (Sismondo 2017; Fuller 2017).

Another example of conflating logics is observed when scientific debate is represented in the political arena. Political discussions -especially when mediatised- are organised with the aim of presenting a balanced view. All political parties are treated as equals and are -often- granted equal speaking time. By applying such a logic to scientific debates on the impact of Brexit or the possibility of anthropogenic climate change, we misrepresent the status of current research. Or worse, it can deliberately call into question any scientific consensus.

The conflation of epistemic, structural and political critiques has given rise to the erosion of experts' authority but -more importantly- it has also extended and amplified the polarisation on issues of scientific debate. The result is a deepened rift in society between believers and non-believers each supported by their own epistemic, societal and political community.

The tendency to delegate contentious decisions to expert committees, agencies or judicial arbitrators thus creates a dual edge sword. If the affected stakeholders, both public and private, accept the expert's opinion, the problem is solved without too much backlash. However, if the conclusions are rejected for political or other reasons, the experts and their work become the topic of political debate. Political adversaries thus delegitimize and question the authority of the experts that voiced the original opinion. This can occur through valid structural or epistemic critiques but opponents can equally well resort to the toolbox of political debate: strategic discourse and framing in an attempt to influencing of public perception.

To address this challenge a clean separation between the political and the epistemic sphere is not always possible or a desirable solution. STS scholars like Sheila Jasanoff and Simmet (2017) argue that the political use of expertise implies the procurement and creation of such information cannot be separated from its political uses and therefore a more structural solution needs to be found. It echoes similar remarks by Radaelli (1999, p. 757) who claimed that "the main challenge is neither to preserve an unattainable depoliticized [European] Union nor to assume that politicization will tame technocracy, but to make expertise more accountable in an increasingly politicized environment". One way of addressing this challenge could be through 'hybrid advisory committees' that combine both experts and societal stakeholders (Krick 2015).

Expertise and Its Contestation in the European Union

Technocracy, Expertise and Legitimacy

The run-up to the 2014 elections to the European Parliament witnessed a novelty in EU politics: the arrival of so-called 'Spitzenkandidaten' nominated by the main political parties for the position of European Commission President (Hobolt 2014; Schmitt et al. 2015; Christiansen 2016), an experiment that was repeated, albeit with a different outcome, at the 2019 election (Dawson 2019). This process, involving campaigning across most member states and several high-profile debates, highlighted the increasingly political nature of the European Commission's work. Jean-Claude Juncker, upon assuming office, promised right away that under his leadership the Commission would be "more political" (EU Observer 2014)—a trend that his predecessor Juan Manuel Barroso claimed had already begun during his term as Commission President (European Voice 2014). Indeed, academic observers have for some time pointed to the increasing politicisation of the work of the European Commission, and of the institutions and policy-making process of the European Union as a whole (De Wilde and Zürn 2012; De Wilde 2011, 2012; Statham and Trenz 2015; Wille 2012).

This trend towards politicisation is multi-faceted, complex and fraught with problems (Bartolini and Hix 2007), and is one particular aspect of the wider development which has been identified as 'post-functionalism'—the argument that European integration has become

politicised, and that, as a consequence party political differences and conflicts about identity shape contestation of EU politics (Marks and Hooghe 2009). This is a wide-ranging debate in the literature, concerned both with the conceptual framing and empirical evidence, and there is insufficient space here to enter into it deeply into this debate. What it does indicate, however, is that EU institutions are increasingly seen, both by insiders and by external observers, as having moved away from their earlier and original conception as technocratic managers of a largely de-politicised policy-process.

Technocracy, defined as a system of rule which "recognises expertise as the sole basis of authority and power" (Radaelli 1999, p. 1), was, in the initial phase of European integration, a cornerstone of the manner in which the European Community, and later the European Union, were governed. It was this reliance on technical expertise rather than the response to popular preferences that justified governments delegating competences to 'Brussels'. European policy-making in this era was therefore legitimised not by the 'input' from citizens—elections, referendums or other mechanism of voters expressing their preferences—but rather in terms of the quality of the 'output'—efficiency gains, economic growth and greater prosperity resulting from common policies (Scharpf 1999). Whatever the merits of this system, it came under ever-greater strain from the early 1990s onwards, with the Maastricht Treaty constituting a critical juncture in the process. Both in terms of its substance—the move towards "Political Union" and the creation of a Single Currency—and in terms of its process—the public debates, supreme court cases and repeated referendums required for its ratification—the treaty marked a watershed in the way in which the EU has been governed: it opened the doors to political contestation about the nature and direction of the integration process, and launched a debate about the EU's 'democratic deficit' that continues until today.

Arguably, the EU is still caught in the trap of this 'trilemma' of a polity relying on, or searching for, a legitimation of its policy-making from different, and largely incompatible sources: popular preferences, state interests and technocratic expertise (Höreth 1999). Even though the EU has undergone a process of politicisation, and successive constitutional reforms have empowered the European Parliament to channel popular preferences into the policy-making process, the democratic legitimacy of the EU remains inherently compromised by the need to respect state interests, protect structural minorities and search for compromise when

making decisions. The EU, despite three decades of politicisation and the fundamental transformation it has undergone since the early 1990s, is structurally limited from moving towards a fully-fledged majoritarian system because of the tensions and potential instability that would arise from such a move (Dehousse 2015)—which is one reason why it has been important for institutions such as the European Commission to continue to rely on expertise as a legitimating factor for their decision-making.

In fact, it is also in recognition of these fundamental limitations or inherent risks attributed to majoritarian politics that some scholars consider the EU better suited to non-majoritarian decision-making. EU governance, with its focus on the search for efficient, 'pareto-optimal' solutions to collective action problems, can be regarded as a "regulatory state" (Majone 1994). Regulatory tasks such a setting technical standards for industrial goods, regulating financial services, preventing monopolistic tendencies and other forms of market abuse, or supervising safety standards and procedures for air travel and maritime transport, are all examples of the kind of activities that should, from this perspective, better be left to European technocrats because expertise, rather than political preferences, promises the best outcome (Christiansen 2015). Indeed, it is important, for these reasons, to insulate decision-makers from the political process in order to ensure that their reliance on technical expertise is not compromised.

We see many examples of such non-majoritarian decision-making in the European Union: much of the European Commission's regulatory work has been 'outsourced' to decentralised agencies, policy-proposals have to be evidence-based, legislative drafting is constrained by requirements to conduct impact assessments (IAs), and—arguably the pinnacle of technocratic governance—the management of monetary policy has been entrusted to an *independent* European Central Bank. In all these areas, expertise continues to play a central role, both in the process of making policy, and in the manner policy is subsequently legitimised.

It is against this background of the long-standing, deeply entrenched and arguably essential role technical expertise has played in the European Union that the threat of its contestation looms large. The contestation of expertise is a challenge for any modern state, but for the European Union and its fragile reliance on multiple channels of legitimation it is particularly problematic. Potentially, such a development is an existential threat: without recourse to expertise as a basis for policy-making,

the EU would be ill-equipped to face the potentially centrifugal tendencies of polarised public opinion or incommensurable policy-preferences. If expertise as the basis for decision-making is contested and ultimately discounted, EU policy-making risks losing a convincing narrative to legitimise policy-choices—choices which are bound to be unpopular in some parts of the polity, and which cannot be legitimised through the traditional, majoritarian mechanisms on which established nation-states can rely.

Contestation of Expertise in EU Policy-Making

The important role played by expertise is evident during all stages of the EU policy-cycle: in the preparatory and agenda-setting stages, the European Commission relies a large number of expert advisory groups, in the decision-making stage, the requirement to produce IAs plays a central role, and in the implementation stage European agencies have become critical in many policy-areas. Along with this mounting reliance on various sources of expertise, the scope for contestation has also grown, and has been documented in varying degrees.

The use of expert groups by the European Commission is well documented (Metz 2015; Gornitzka and Sverdrup 2008). While largely consultative bodies they can play a crucial role in the earlier stages of the policy-making process as experts provide input for the Commission's legislative proposals. An important subject of research has been the motivations for the Commission to make use of these groups. Beyond epistemic motives of problem-solving or reducing uncertainty, there has also been extensive research on the Commission's political motivations (Rimkute and Haverland 2015; Van Ballaert 2015; Metz 2013; Boswell 2009). The Commission can draw on the expert groups to gain external and independent support when engaged in inter-institutional bargaining with Council and Parliament. Moreover, analyzing the use of expert groups by four different Directorates General of the European Commission, Van Ballaert (2015) hypothesized that expertise can be requested to reduce uncertainty or to abrogate political responsibility in cases of high political salience. While the data lend support to the former, it did not provide evidence for the latter. In a recent survey of expert group members, Rimkute and Haverland (2015, p. 441) showed how 42% of respondents agreed (while 24% disagreed) to the statement that "The presence of scientists and their scientific knowledge was used as a tool to

increase DG's powers and influence against other actors", lending support to the argument about the strategic use of expertise and expert groups in EU decision-making.

A second topic of inquiry concerns the composition of these groups. This has long been a contested issue as civil society organisations lament the balance in favor of business interests (AlterEU 2013). Similar critiques were voiced by the European Parliament, which blocked expert groups' funding in 2012 and the European Ombudsman, which started an own inquiry into the topic in 2014 (European Ombudsman 2014). Over the last decades the Commission thus installed minimum requirements on expert group composition, improved openness and provided greater transparency (Moodie 2016). Yet, various civil society organisations remain critical not only about the extent of these reforms but also about the process through which these came about (AlterEU 2016).

In other words, the contestation of expertise not only pertains to the structure of expert groups but also the process by which these decisions are made. The European Ombudsman's recommendations—in much the same vain—suggested the Commission should provide a clear rationale for the type of expertise sought and how it is reflected in the expert groups' composition and procedures. (European Ombudsman 2016, paras. 44–45). Blom and Vanhoonacker (2014) term this the 'constitutive politics of information'. It refers to the "(sometimes politically charged) processes by which political principals formally decide on the rules covering the use of expert groups by their bureaucratic agents."

The use of IAs has triggered much the same debates. While originally considered as an instrument to hold the European Commission accountable (Radaelli and Meuwese 2010, p. 145) the discussion has moved to the exploration of IAs as a discursive instrument of the Commission. Thus conceived, 'the IA is a useful tool to bypass the boundary between technical and political appraisal of proposals' (Radaelli et al. 2013, p. 513) providing another example of the difficulty of separating the epistemic debate from its political uses. The IAs do not only have an impact on inter-institutional bargaining with the European Parliament and the Council, but it also fulfils a discursive role in seeking societal support. De Ville and Siles-Brügge (2015) criticised the EU's impact assessment for TTIP as an 'exercise in managing fictional expectations'.

Impact assessments are mainly the work of the European Commission (though may involve the cooperation of external experts), and may function (and be contested) in various ways as discussed above. However,

a less debated question concerns the manner in which both Council and Parliament motivate the amendments to legislative proposals tables by the Commission. Logically, if better law-making requires the assessment of impacts of legislative proposals, then so should the impact of changes to the legislation. Yet this is not done systematically. Once a dossier enters the legislative procedure, political considerations—national interests, stakeholder preferences, party political agendas—dominate the bargaining among and within the legislative institutions in the course of co-decision. Amendments are the result of complex interaction between the many actors involved, and are ultimately accepted based on their political acceptability. The fact that the impact of such amendments is then not assessed independently can be seen as a negation of the earlier insistence on evidence-based decision-making, yet is also a demonstration that Council and Parliament are (or at least consider themselves to be) inherently more legitimate than the European Commission.

Once legislation is adopted, policy-implementation and enforcement of compliance remain as major challenges in the European multilevel system of governance. While much of EU policy is implemented at the national or sub-national levels, there is also considerable centralised implementation requiring the European Commission to adopt implementing or delegated acts. These powers delegated to the European Commission are far-reaching and have been expanding as EU policies have become more complex. Delegated powers are scrutinised by the Member States, Council and Parliament through various procedures, depending on the type of instrument being used. The Curt is an important arena of contestation utilised by the actors involved in EU decision-making. Reliance on expert advice and knowledge are salient for the Court to reach its judgements. As the 'guardian of the Treaties' the Commission also relies on adjudication in order to ensure the enforcement of EU law.

Implementing acts to be adopted by the Commission must go through a system known as "comitology"—implementing committees bringing together member state representatives who need to provide an opinion, and, under some procedures, to give their approval, to the Commission's proposals. The detailed and technical nature of such measures means that this goes beyond the expertise present in the Council and the permanent representations in Brussels. Instead, it requires the presence of officials from ministries, regulators or other relevant authorities in the member states.

Proposed delegated acts, on the other hand, are being scrutinised directly by Council and Parliament. They are a newer instrument for implementing legislation, having been established by the Lisbon Treaty. Compared to comitology, there is a vacuum of expertise here, given the limited resources that both Council and Parliament have at their disposal to engage with the technical detail of such delegated regulations. Given this situation, it comes as no surprise that one of the first things agreed in an inter-institutional agreement among all three institutions was to set up expert groups that the Commission could consult before submitting the formal proposal for delegated acts to the legislative institutions.

Another important element in the provision of technical expertise in the EU policy-process are EU agencies. There are some 40 decentralised agencies that provide a number of critical roles. Some, such as the European Food Safety Authority (Parma), European Medicines Agency (London) or the European Maritime Safety Agency (Lisbon), have the function to assist the European Commission by providing scientific assessments, on the basis of which then legislation, implementing acts or product authorisations can be proposed. While such scientific advice is not binding, it is nevertheless considered authoritative, and the Commission never deviates from the recommendations of these agencies. Other agencies, such as the European Aviation Safety Agency (Cologne), have, in addition to their advisory function, also direct regulatory powers themselves, being responsible for setting technical standards and certifying staff, products and processes. Yet other agencies have executive functions in carrying out specific EU policies (e.g. the European Research Agency), facilitating systematic collection and exchange of information (e.g. the European Environment Agency) or coordinating operations carried out by member states (e.g. the European Border and Coast Guard Agency).

The observed trend of creating ever-more agencies at the European level and handing over an increasing range of tasks to these has been described as "agencification" (Levi-Faur 2011). It ties in with the earlier discussion of the rise of the regulatory state in Europe, given that these executive and regulatory agencies of the EU have considerable powers to influence the policy process, yet are removed from the democratic process that the main institutions are subject to—a state of affairs that raises questions about the limited legitimacy of agencification (Scholten and Van Rijsbergen 2014). In line with the regulatory state argument, such arrangements are justified because the technical nature of such regulatory tasks requires scientific expertise rather than democratic

decision-making. However, a number of high-profile disputes involving the expertise provided by EU agencies—authorisations of GM foods, the licensing of the herbicide glyphosate, flaws in the public health surveillance demonstrated by the BSE outbreak—have revealed the potential for political contestation in areas supposedly governed by scientific expertise. These examples are not representative of regulatory decision-making in the EU—indeed, they only concern a small minority of the thousands of instances every year in which such decisions are taken. Yet, they nevertheless emphasise the *potential* for political conflict that can arise despite—or, in some cases even because—regulatory decision-making in the EU relies heavily on scientific expertise. They demonstrate that agencification does not provide a safe harbour from the contestation of expertise in the EU.

Outline of the Book

The analysis provided in this book is structured in three main parts: beginning with the conceptual analysis that sets the broader framework to the topic, continuing with the empirical studies focused on the EU and concluding with the expansion of analysis to international insights and comparisons. More specifically, the first part of this book includes contributions seeking to theorize expertise and its contestation. In Chapter 2 by Blom, the functionality and role of expertise and experts in policy-making is examined. The chapter explains the different conceptual and theoretical dilemmas that give rise to the divergent approaches and findings on expertise. This discussion shows there are some important differences between the 'expert twist' in the study of EU public administrations and earlier work on EU technocracy and the impact of 'collectivized cognition' on policy development. In Chapter 3, Christensen and Holst show that concurrently to the process of 'expertisation' of politics and policy-making another processes has taken place: Europeanisation. The latter is defined as a process through which national governance systems adapt to European-wide norms and EU institutions. They examine the relation between these two phenomena and offer three theoretical links between the two.

Building on these broader examinations, the second part of the book delves into empirical institutionalist accounts of expertise and maps the role of experts in a variety of EU institutions but also explains the implications of when EU bodies themselves are in 'expert' position. But this position is also held by outside actors, such as civil society organisations.

In this light, Chapter 4 by Colli and Kerremans examines the implications of civil society's engagement in expertise based decision-making. They show that while civil society may be able to contest expertise, groups which politicise the issue may undermine the legitimacy of their message and ultimately hinder future actions. Moving toward institutional actors, Chapter 5 offers insights for the expertise in the Commission's and European Parliament's through their Advisory Committees. This contribution systematically maps the differences in composition of advisory committees and investigates the composition of advisory committees in financial sector governance, higher education, research policy and civil rights. Chapter 6 focuses on the emerging EU diplomatic system and the role of expertise in the EEAS, discussed by Blom and Vanhoonacker. Expertise in the EU is also manifested through the work of EU agencies, yet questions are raised whether their role remains expert-based or is increasingly politicised. Everson and Vos in Chapter 7 defend expertise and address the two challenges that expertise poses to the principle of equality within liberal democratic structures and principle of the neutrality of the liberal democratic state. Yet, looking at contestation of expertise only within the EU would not account to a better understanding to what extent these processes and dynamics are unique to the EU or are these issues of broader relevance. Hence, in the third part, the book opens the lens to developments beyond the EU by taking into account two highly pertinent fields: climate change and trade. Arguably, experts are critical in both of these fields due to their complexity and fast-developing nature. Yet, these are also politicised issues and ones where great national interests are vested that may not always coincide with purely expert-based decisions. Often it is the case that courts find themselves in this arena of dealing with tensions between expertise and politicisation. Therefore, the book looks at climate change in Chapter 8 in a contribution by Peeters on scientific advice and courts and in Chapter 9 the book offers insights into trade with a contribution by Gruszczynski on the World Trade Organisation in order to provide an outside-in perspective on expertise. The final Chapter 10 brings together the conclusions. Studying the contestation of expertise from an interdisciplinary perspective addresses broader questions about the position of knowledge and expertise in a democratic society and how the production of regulatory knowledge should be understood from an institutionalist perspective.

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CHAPTER 2

Conceptualising the Role of Expertise in EU Policy-Making

Tannelie Blom

Introduction

In the mid-2000s Jarle Trondal identified a 'Public Administration Turn' in EU studies, recognizing scholars becoming more attentive to intra-organizational features of core institutions of the EU. This involved for example the study of the distribution of competences over superior and subordinate administrative units, of the mechanisms of administrative coordination and of forums of multilevel governance (Trondal 2007). Subsequently, this turn appears to have taken a specific twist with growing academic interest in the different ways the bureaucracies of the EU obtain and use expertise. Early exponents of this research agenda have been concerned with the roles and functions of experts/expertise in EU policy making and implementation (Krapohl 2003; Levidow et al. 2005; Schröder 2006; Gornitzka and Sverdrup 2008; Haverland 2007; Robert 2010; Eriksen 2011; Metz 2013; Mégie 2014; Chalmers 2014; Rimkute and Haverland 2014).

T. Blom (✉)
Maastricht University, Maastricht, The Netherlands
e-mail: blom@maastrichtuniversity.nl

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Scholars have also collaborated extensively in developing a body of literature in this field, as demonstrated for example by the special issue of *Politique Européenne* focusing on 'Les groupes d'experts dans le gouvernement de l'Union européenne', edited by Robert (2011), the publication of *The Role of Experts in International and European Decision-Making Processes*, edited by Ambrus et al. (2014) and the special issue of *Politics and Governance* dedicated to 'The Role of Expert Knowledge in EU Executive Institutions', edited by Gornitzka and Holst (2015). Some of this work has a more socio-political character in that it investigates the societal and/or professional background of the experts recruited by EU institutions and their bureaucracies, sometimes also scrutinizing (informal) mechanisms of recruitment (e.g. Chalmers 2014; Christensen 2015; Gornitzka and Sverdrup 2008; Mégie 2014; Metz 2013; Schröder 2006). Others, in a more administrative science vein, concentrate on the actual use of expertise by EU bureaucracies and their attempts to direct the outcomes of the information processing by expert groups (e.g. Ballaert 2015; Eriksen 2011; Levidow et al. 2005; Rimkute and Haverland 2014). In addition, some cover both lines of interest (e.g. Robert 2010; Schröder 2006).

This heightened interest in the role of experts and expertise in EU policy-making has built on earlier work on EU technocracy (e.g. Majone 1996; Radaelli 1999a, c; Harcourt and Radaelli 1999) and on the role of epistemic communities and advocacy coalitions in the development of EU policies and policy fields (e.g. Dudley and Richardson 1999; Fligstein and Mara-Drita 1996; Nylander 2001; Radaelli 1999b). Yet there are some important differences between the 'expert twist' in the study of EU public administrations and earlier work on EU technocracy and the impact of 'collectivized cognition' on policy development. Compared to studies on the technocratic character of EU politics and policy-making the new approach to the role and use of experts and expertise demonstrates a greater awareness of the differences in terms of roles and interests between commissioned experts and commissioning bodies like individual Directorate-Generals (DGs) of the European Commission or EU agencies.

Furthermore, while analyses of epistemic communities or advocacy coalitions typically address the question as to why certain policies developed and were chosen over alternative options, the more recent interest in the role of experts in EU policy-making is more concerned with the

day-to-day operations of the provision of expertise, while taking the existence of a policy field as a given. Generally, this 'twist' toward experts and expertise is focused more on the micro- and meso-level of the EU machinery than the macro-level, constituting an attempt to open up the 'black box' of public administration beyond the nation state.

Clearly, the present volume is a further contribution to this expert-twist within the broader turn of scholarly interest towards the study of EU public administration. Yet, as the introduction explains, this multidisciplinary volume stands out from the existing literature "by focusing on the *contestation* of expertise" in the processes of EU decision-making (This Volume, p. X). Such contestation can take the form of challenging the expert advice as such as well as apparent privileged access experts may have in EU policy-making.

This chapter contributes to this effort by providing a sort of meta-contestation of expertise in the EU. It seeks to demonstrate that 'expertise' is not only contested 'out there' in the world of policy-making, but also at the conceptual-analytical level of scholarly research in a number of ways. Even if we limit ourselves to the behavioral sciences (understood broadly), we can identify at least three established fields of academic research beyond political science with an articulate interest in the nature of experts and expertise: first, sociology, and in particular the sociology of science and technology as it has crystallized in Science and Technology Studies (STS); second, cognitive psychology, nowadays called cognitive science because of the strong influence of artificial intelligence and ergonomics; and, third, behavioral psychology, more specifically the field of decision-making research. In addition, there is also a new field of study: socio-psychological research on expert groups. This chapter will review the developments in these various fields and assess their contribution to the study of expertise in EU policy-making.

One immediate challenge here is that these (sub-) fields of study hardly take notice of one another. STS scholars are generally not engaging with the research on experts conducted by behavioral psychologists; political scientists have shown little interest in the contributions of cognitive scientists; and decision-making researchers do not demonstrate much awareness of the fact that the role and functioning of expertise is a core theme of STS. Yet, *when* researchers from these different fields take notice of one another, as decision-making researchers for example do with regard to the research on experts by cognitive scientists, their empirical findings seem often flatly contradicting, revealing highly differing ontological

and epistemological assumptions. At first sight, academic thinking about experts and expertise seems fragmented and lacks overall coherence.

EU scholars may not be interested in the nature of expertise as such, but more directly in the role it plays in the policy-making process, or even more specifically in the growing contestation of the role of experts and expert advice. However, taking notice of what various disciplines have contributed to our understanding of the subject has a valuable function: it can serve as a kind of mirror confronting EU scholars with their own, often implicit, assumptions concerning basic questions and topics like: "What is it to be an expert?"; "What constitutes expertise?"; "How to identify experts?"; or "What (if anything) makes experts exceptional?"

This chapter starts with identifying the different conceptual and theoretical dilemmas that give rise to divergent approaches and findings. Instead of structuring the discussion along the lines of the above-mentioned questions, the following sections will concentrate on what sociologists, cognitive scientists, decision-making researchers, political scientists, and social psychologists, respectively, have contributed to the study of experts and expertise. This will provide an accessible overview of the different approaches and their mutual incongruities. Against this background, it will then be asked how to make use of these diverging and sometimes contradictory insights in a manner that is still coherent and systematic. Attempting to answer this question, the chapter will outline the basic tenets of an information-processing approach to experts and expertise that may support a 'controlled eclecticism'.

Science and Technology Studies Approaches to the Study of Expertise

Since the 1970s, and more specifically since the proclamation of the 'strong program' by the Edinburgh School (Barnes 1974, 1977; Bloor 1977) and the Bath School (Collins 1985) Science and Technology Studies (STS) has been dominated by social constructivist epistemologies geared to the deconstruction of essentialist assumptions regarding the exclusive cognitive authority of contemporary science. Repeatedly the message has been that distinctions between scientific knowledge and other forms of knowledge are socially constructed (and contested). Gieryn's (1983) concept 'boundary work', referring to the ideological strategies

and rhetoric tactics that 'statesmen of science' have used to demarcate 'modern', 'evidence based' science from other knowledge practices has also been applied to the demarcation between science and politics (cf. Jasanoff 1987, 1994; Wynne 1989, 2003). Against the Mertonian assumption of a strict role division between science and politics—'science speaking truth to politics'—, STS researchers have repeatedly attempted to show that this distinction is not obvious at all. The demarcation of what is 'scientific' about a policy issue and what 'political', is the outcome of ongoing negotiations between groups of scientists and politico-administrative units, in which there are other interests at stake than only scientific ones.

When approaching the more particular topic of the role of experts/expertise in public policy-making STS scholars tend, or at least tended, to equate expertise with scientific expertise, perhaps to be critically opposed in a next step to 'lay experts' (cf. Wynne 1989, 2003; Horlick-Jones 2004). Yet central remains the science-politics distinction as witnessed by the thematic centrality of the 'scientification of politics' that took place in the twentieth century and thereafter and of its concomitant, i.e. the 'politicization of science', driven, not in the least, by the emergence since the 1970s of environmental and other risk-related policies (cf. Bimber 1996, p. 97; Jasanoff 1987; Weingart 1999). As Jasanoff points out, risk-related policies 'placed unprecedented demands on the capacity of science to predict future harm. [-] But this shift of scientific attention to the unknown, and possibly unknowable, effects of technology highlighted the intuitive, subjective and uncertain underpinnings of much of the advice that scientists provide to government' (Jasanoff 1987, p. 201; cf. Yearly 2000; Brown 2009).

Originally stemming from sociology, that is, the sociology of science, STS researchers typically depart from a 'relational' concept of 'expert' when it comes to the identification of experts: to be an expert is to be recognized as an expert (cf. Collins and Evans 2002, 2009, p. 2). As Martin, an early forerunner of STS, maintained: 'Expertness is an *ascribed quality*, a badge which cannot be manufactured and affected by an expert himself' (Martin 1973, p. 159). Expertness then is not a specific quality some exceptional individuals have, but is something in the eyes of a beholding audience. Why an audience would recognize some individuals as experts yet others not, is then explained by social and

socio-political processes and mechanisms, for example by professionalization processes (e.g. Wilensky 1964; Brint 1994; Turner 2001), boundary work (e.g. Gieryn 1983; Jasanoff 1987, 1994), scientification of politics (e.g. Weingart 1999; Maasen and Weingart 2005; Brown 2009), and the like.

Cognitive Science Approaches to the Study of Expertise

Starting with De Groot's (1946), and Simon and Chase's (1973) work on chess expertise—what is the secret of grand masters?—cognitive psychological research on experts and expertise became a booming field during the eighties, strengthened by the input of post-Piagetian learning theory, Artificial Intelligence and Ergonomics (e.g. Anderson 1981; Larkin et al. 1980; Cellier et al. 1997; Chi et al. 1988; Dreyfus and Dreyfus 2005).[1] To distinguish this line of research from decision-making studies on expert performance (see below) we will follow current parlance and refer to it as 'cognitive science' (cf. Farrington-Darby and Wilson 2006).

From the perspective of cognitive scientists, the most fundamental criterion of expertise is not *scientific* training and the qualifications and certificates that come with it, but long time, domain-specific *experience*. Simon and Chase had already estimated that 'a [chess] master has spent perhaps 10.000 to 50.000 hours staring at chess positions' (Simon and Chase 1973, p. 402). According to Ericsson and his collaborators studies like the ones by Simon and Chase, Hayes (1981), and Bloom (1985) reveal that it takes about 10 years of daily practice (and training) in a specific domain to become an expert (cf. Ericsson et al. 1993; Ericsson and Charness 1994). From this intensive preparation, it is assumed, results the expert's *intuitive* grasp and recognition of complex patterns of information that are relevant for the expert's domain. As Cellier, Eyrolle and Marine maintain, expert skills 'are based on routines and wider, deeper and more functional representations such as patterns or "chunks" built up with practice' (Cellier et al. 1997, p. 29; cf. Larkin et al. 1980). It is the quality of available patterns that 'allows experts to identify faulty parameter outlines rapidly, to make inferences on covert or inaccessible

[1] For an informative summary of the early development of expert research see Ericsson and Smith (1991); see also Shanteau and Stewart (1992).

variables, to store previous states of the process and to focus quickly on the relevant aspects of the task' (Cellier et al. 1997, pp. 32, 33; cf. Greenwood 2010). Dreyfus and Dreyfus, emphasize the intuitive aspect of expert performance: 'an expert … intuitively sees what to do without recourse to rules. [-] The expert is simply not following any rules! He or she is … just… discriminating thousands of special cases' (Dreyfus and Dreyfus 2005, p. 788).

Given these basic assumptions, for cognitive scientists a relational concept of 'expert' is out of the question. Instead, cognitive scientists opt for a 'substantive' assumption. Experts *do* possess special qualities and characteristics, independent of their expertise being recognized by others (cf. Collins and Evans 2009, pp. 2–3). For example, Ericsson and Smith have strongly recommended that for the identification of experts researchers should not rely on the opinions of certain audiences concerning 'who are the experts'. In its place, the first and crucial step is the development of a set of tasks that can capture the superior performance that is *the* characteristic of experts. 'Once it is possible to measure superior performance under standardized conditions, there is no need to rely on social indicators' (Ericsson and Smith 1991, p. 3).

Decision-Making Theory Approaches to the Study of Expertise

Clearly, cognitive scientists are genuinely impressed by the abilities of genuine experts (cf. Glaser and Chi 1988, pp. xvii, xviii; Shanteau 1992, p. 255). Baffling, then, is that colleagues in the neighbouring psychological sub-discipline of 'decision making research' are highly sceptical about the assumed capabilities of experts (cf. Chan 1982; Shanteau and Stewart 1992; Farrington-Darby and Wilson 2006). As Camerer and Johnson put it in their review of decision-making studies on medical experts: 'The depressing conclusion from these studies is that expert judgments in most clinical and medical domains are no more accurate than those of lightly trained novices. (…) And expert judgments have been worse than those of the simplest statistical models in virtually all domains that have been studied' (Camerer and Johnson 1991, p. 203; cf. Johnson 1988, p. 211; Farrington-Darby and Wilson 2006, p. 14). If experts are exceptional, if at all, this pertains predominantly to what has been labelled the 'representation phase' of a problem solving process (cf. Voss et al. 1980; Voss

and Post 1988). In the representation phase the goal of the task is identified, its basic pattern (or: 'deep structure') and the constraints on possible solutions. Crucial for this phase is the ability to extract the relevant information concerning core variables and parameters. As already becomes clear by the quotes from Cellier, Eyrolle and Marine, and Dreyfus and Dreyfus, cognitive scientists claim that experts excel exactly in identifying quickly the relevant information and faulty solutions (cf. Priest and Lindsay 1992, p. 403). Camerer and Johnson (1991, p. 211) do indeed concede that experts 'are successful at generating hypotheses and inducing complex decision rules. The result is a more efficient search at the available information directed by goals and aided by the expert's superior knowledge.' As Johnson (1988, p. 213) had put it earlier: 'Experts' strength is in the selecting and coding of relevant variables; their weakness seems to be in combining them' (cf. Chan 1982, p. 437).

Political Science Approaches to the Study of Expertise

Compared to STS researchers, political scientists interested in experts and expertise are less inclined to equate expertise with *science*-based knowledge and skills, although depending on the subject of investigation the relevant experts may well happen to be qualified scientists. Yet, as Gornitzka and Sverdrup (2008) have shown, the 1237 expert groups organized by the Commission in 2006 are clearly dominated by representatives of member state governments; next comes the private sector, and representatives of academia come only third. According to Eriksen (2011, p. 1169), '[i]n security politics, more than in any other policy area, we seem to be in the hands of experts'. Yet, 'there is no such thing as security expertise in a scientific sense of the word' (Eriksen 2011, p. 1184).

Consequently, the aim of political scientists studying the relation between experts and politics is not the deconstruction of fixed assumptions concerning the distinctions between science and other social practices, an endeavour that is at the core of the STS movement. Going back, at least, to Carol Weiss' 'The Many Meanings of Research Utilization' (Weiss 1979), the interest is much more in the *use* of experts and expertise by policy-makers and the bureaucracies involved. Weiss herself identified no less than 7 policy and politics related uses of scientific research and knowledge. Current approaches are more modest, identifying in general three modes of exploiting expertise, which may be labelled as *instrumental*, *political*, *symbolic* or *consensual* (cf. Boswell 2008; Weible 2008;

Schrefler 2010). Expertise is used instrumentally if it is used by policy-makers to improve the quality/effectiveness of their policies. The use of expertise is political when it is used 'as "ammunition" for substantiating organizational preferences' (Boswell 2008, p. 472)—'when decision makers rely on expert-based information to legitimize previously made policy decisions' (Weible 2008, p. 629). The symbolic use of expertise is evident when hiring experts or referring to in-house expertise has no other aim than showing the outside world that the policy-making organization is operating according to the norms and standards of 'rational', preferably 'science-based' policy-making.

Yet, as Schrefler maintains, 'the symbolic use of knowledge is not a viable strategy in the long run…. as no agency can afford to pretend doing something for a sustained period of time' (Schrefler 2010, p. 315). This may well have been the reason for authors like Metz (2013) and Krick (2014) to exchange the category 'symbolic use' for 'consensual use'—the EU system of expert committees as an 'institutional framework where stakeholders can meet, exchange (contradicting) views and reach agreements' (Metz 2013, p. 271). Which way ever, one of the basic question that inspires a lot of this type of research is the question under which conditions which use of expertise—instrumental, political, symbolic, or consensual—can be expected to become the dominant mode (e.g. Dunlop 2010; Schrefler 2010).

When it comes to the operationalization of 'being an expert', political scientists tend to fall back on a rather 'relaxed' relational concept of 'expert'. To be an expert is simply to be a member of a group that is officially labelled or is throughout perceived as an expert (or scientific) group or committee (For example, Dunlop 2010; Schröder 2006; Metz 2013; Robert 2010). Given, amongst others, the formal rules and informal practices that govern the recruitment of experts for the Commission—the biggest consumer of expertise in the EU—, most authors are rather sceptic when it comes to the quality of experts that make up the temporary or standing expert groups purposively established by the Directorates General of the Commission. Robert, for example, has pointed out that the way in which EU experts are recruited and expert groups are formed runs counter to what one may expect from genuine experts and expertise. '[E]ach recruitment is thought of and performed as, choosing a representative and an expert. This view of expertise leads consequently to ceasing to think of experts as top-rank specialists in the same discipline: expert knowledge is neither a prerequisite nor a widely shared property'

(Robert 2010, p. 253). As Chalmers (2014, 989–990) observes: 'To a certain extent expert group membership is just as much about expertise as it is about superior resources, particular interests and existing institutional ties' (Chalmers 2014, pp. 989, 990; cf. Eriksen 2011, p. 1171; Mégie 2014). This is of course very different from the cognitive scientists' appreciation of experts and from the familiar association of 'being an expert' with 'being exceptionally good' in a certain field or societal practice, or at least substantially above average compared to peers participating in the same practice.

Applying Social Psychology to the Study of Expert Groups

In the introduction to this Chapter, the social psychology of expert groups was mentioned as a 'newcomer' in comparison to more established lines of research into the characteristics of experts and the role of expertise. This is not to deny that social psychology, taken more broadly, has a long history, beginning at the end of the nineteenth century and famously represented by authors like Lewin in the thirties and Milgram after WW II. Yet from the early 1970s onwards the social psychology of small groups[2] saw a serious decline, only to find a 'second wind' in the early nineties (cf. Brauner and Scholl 2000). Two cognitive developments have been especially relevant for this new boost. On the one hand the 'emerging conceptualization of groups as information processors', as Hinsz et al. (1997) retrospectively labelled this development; on the other, and of particular importance for the social psychology of *expert* groups, the elaboration of the 'hidden profiles' paradigm in the wake of Stasser and Titus' seminal publication of 1985. The hidden profiles paradigm departs from the assumption that groups are indeed information processors but asks more specifically why 'instead of sharing all information team members consistently focus on shared information at the expense of unshared information' (Sohrab et al. 2015, p. 490). This bias towards shared information tends to undermine group performance when confronted with problem solving tasks.

[2] The reference here is to 'small groups' in order to distinguish this branch of social psychology from mass psychology.

Building upon these cognitive developments in social psychology, scholars working on expert groups first recognize that 'the lone analyst working in isolation to extract the meaning from a set of data is the exception rather than the rule' (Woolley et al. 2008, p. 353). Moreover, their research conveys the impression that the 'expert' members of the groups they study are not per se exceptional individuals or 'above average' compared to their peer practitioners. What it asks to be an expert member is to be knowledgeable or skillful in a specific knowledge domain or social practice, based on longstanding experience and/or training. So compared to non-experienced and non-trained individuals they should be 'above average'. As Woolley and his collaborators put it: 'Experts are individuals who possess an appreciably higher level of knowledge or skill than the average person' (Woolley et al. 2008, p. 354).

Still, the question remains whether expert groups when seeking to achieve problem-solving than other perform better than non-expert groups. Or, to put it differently, in recognition of cognitive scientists' appreciation of experts: "are expert groups faster and better in representing the basic structures of problems/tasks and in identifying relevant parameters for solutions than groups consisting of novices/lays?" Research suggests that expert groups indeed tend to outperform non-expert groups, in particular when the following conditions are satisfied (cf. Hill 1982): First, groups comprising experts will perform better than average if the expert members are identified prior to group discussions about problems and their solution (Franz and Larson 2002)—'members may need to be mutually aware of each other's area of expertise at the onset of discussion to facilitate dissemination of unshared information' (cf. Majchrzak et al. 2007). Left to themselves, however, groups are not very good in identifying their expert members, 'often simply assuming that the more dominant and assertive group members are the most expert' (Bunderson 2003, p. 559; cf. Bonner et al. 2002; Bonner and Bolinger 2013).

Second, heterogeneously-composed groups tend to perform better than homogeneous groups—'functional diversity is important [-] teams with relevant functional diversity generally outperform teams that lack such diversity' (Woolley et al. 2008, p. 367). Yet this will only happen if this diversity is well coordinated. This means in turn that not only diversity in task *content*-related expertise is required for a group to perform well but also other skills and roles. Woolley and his collaborators note for

example that expert groups need 'members with the intrapersonal diversity or breadth of personal skill and experience to help bridge among others with more narrow expertise' (Woolley et al. 2008, p. 356).

Pursuing the idea of group coordination and group internal role differentiation, Garret and his collaborators distinguish between six different 'dimensions' of expertise: subject-matter related; situational context related, interface tool related; expert identification expertise; communication related; and information flow path related. They add to this classification that 'any one individual must be able to perform well on multiple dimensions at the same time; however it is likely that specific individuals' job functionality will require more expertise in some dimension than others' (Garret et al. 2009, p. 101).

Developing an Information-Processing Approach to the Study of Expertise

A first encounter with academic thinking about experts and expertise, even if limited to the social and behavioral sciences, is indeed rather confusing: different approaches and findings, which in juxtaposition produce seemingly intractable dilemmas and paradoxes. Although, at closer inspection not all the observed differences appear to be that disturbing, some dilemmas seem obdurate, being deeply embedded in principled ontological and epistemological convictions. Yet some of these findings and conceptions are intuitively plausible and theoretically interesting also for those who are interested in (the politics of) trans- and supranational public administrations. The basic question then is how to make use of these diverging and sometimes contradictory insights in a still coherent and systematic manner.

The strategy probed in the following is to embed thinking about experts and expertise in a more encompassing theory and to let this theory function as a 'selector' of multi-disciplinary insights and approaches. How encompassing that master scheme should be, that is, what level of theoretical aggregation is needed to provide a theoretical context which allows for a controlled eclecticism depends on one's basic research interests (cf. Sil and Katzenstein 2010). For example, for STS researchers with a focus on the phenomena of scientification of politics, and politicization of science, a macro-level theory of modern, functionally differentiated society in which 'politics' and 'science' represent two of its subsystems, may well be attractive (cf. Maasen and Weingart 2005).

Yet for those interested in the influence that *administrative* (non-elected) actors exert on the content, scope, and execution of trans- and supranational policies which are formally decided upon by *political* actors, such a level of theoretical aggregation would be too high. Therefore, in line with Boswell's dictum that 'any account of how organizations use expertise will inevitably be premised on a theory of organizations' (Boswell 2008, p. 473), the approach proposed below is indeed an organization theoretical one. More specifically, the remainder of this chapter develops an information-processing approach to public organizations.

The starting point to such an approach is the ontological assumption that organizations exist in the form of subsequent episodes of information processing with explicit decisions seen as transitional events that mark the end of one episode and the beginning of a new one (cf. Simon 1997, p. 240ff.; March and Simon 1958, p. 152ff.). Following Luhmann (2000) it is moreover assumed that 'reflexive' or 'second order' decision-making is the main device of organizations for developing their formal structures: organizations inevitably decide on deciding (including decisions not to decide). Organizations decide for example on their *temporal* order, i.e. on *when* decisions have to be made, and, as a corollary, when information has to be accessed and made available.

In a similar way, organizations do decide on their *substantiv*e order, that is, on the goals of the organization, on the kind of information that is considered relevant and should be accessed, on the rules and routines specifying how relevant information should be processed, and on how decisions should be made. Finally, yet importantly, organizations decide on their *social* order, i.e. on their membership rules, on the distribution of information over the organization, and on who will have a voice or even a say during which episode of information processing/decision-making. The overall point to be made here is that *the core structures of organizations consist of the rules and routines that prescribe when, how and by whom information is accessed, processed, distributed, stored,* etc. *and decisions are made.*

From an analytical perspective, an information processing approach fits quite logically research on the role and functions of expertise within public administrations. After all, policy-relevant expertise only begets social reality as communicated *information*. Consulting experts and generating expert advice is just a particular instance of information processing, just a specific episode of the sequence of information processing episodes out of which organizations exists. Moreover, an

information processing approach suggests, and this in line with socio-psychological research on expert groups, that expertise is the product of communicative interaction and thus involves minimally two actors—a 'sender' and an understanding 'receiver' of expert information. Yet usually more actors are involved—expertise is typically the product of group work. In the words of Mieg: 'Expert as a form of interaction rather than as a person—it is a social form' (Mieg 2001, p. 43) As also STS scholars have noted, this holds true in particular for policy related expert advice. Jasanoff (2011, p. 28): 'expert advice is rarely the prerogative of single individuals'. Consequently the basic unit of analysis should in general not be individual experts but expert *groups* contributing to policy-making and—implementing processes.

Blom and Vanhoonacker (2014) distinguish between the 'constitutive politics of information' and the 'operational politics of information'. This distinction can be specified with a view to the use of expertise in policy processes. 'Constitutive politics of expertise then refers to the (sometimes politically contested) processes by which political principals formally decide on the rules covering the use of expert groups by their bureaucratic agents'. Political principals may for example decide on who is formally eligible for positions in expert groups/committees; on recruitment procedures; on the overall composition of the expert group (e.g. on gender, interests, or geographical balance); on how broad or restricted the mandate of an expert group should be—inspection and assessment of the 'evidence base' of policy proposals ('diagnostic' use of expert groups) only, or also the evaluation and formulation of policy alternatives?; on whether, if in-house expertise is not sufficiently available or suspect in the eyes of the outer world, the commissioning organizational unit should rely on independent epistemic communities, or on expert groups purposively established by the organization self (cf. Dunlop 2010); on during which phase of the policymaking process expert groups have to be consulted and when exactly expert reports have to be delivered; on how binding expert advice will be (strict coupling), or whether it can be taken into consideration as just one of the informational inputs (loose coupling); etcetera.

Regardless of how fixed and detailed prescriptions on the intake and use of experts may be, usually room for the 'operational politics of expertise' remains. 'Operational politics of expertise' refers to the actual organizing and maneuvering of expert groups by civil servants in order to get the desired outcomes/advices—and this based on the

rules fixed during the constitutive phase. For a start, representatives of the commissioning bureaucracy may claim the role of chair in order to stay in charge of the agenda and minutes, of how uncertainty and dissent come to the fore in the final advisory reports, and to act as gatekeeper between the expert group and the political level. Bureaucracies that fear 'expert drift'—i.e. expert groups developing and following their own agenda and preferences—, may counter that by inviting experts who do not know each other personally and/or who don't have a common agenda, or simply by establishing expert groups on an interdisciplinary basis. Against expert pressure, commissioning bureaucracies may establish different expert groups, preferably with different disciplinary/professional backgrounds in order to insulate themselves from each particular expert group and to create more leeway. In addition, the representative of the commissioning bureaucracy can of course attempt to frame the mandate or objectives of the expert group in a way that suggests political infeasibilities.

Inspired by previous analyses of the different dimensions/functions of expertise/experts (Garret et al. 2009), the following five-fold differentiation is proposed as a better fit better for the study of expertise within EU expert groups:

- *Subject matter expertise* is related to the content of the issue at hand, more specifically to the scientific, technical and normative aspects of policy problems and their proposed solutions. It refers to intimate knowledge of the cause-effect relationships between the variables pertaining to a specific domain, or to the skill of interpreting the normative aspects of possible political courses of action against the background of more general and widely accepted moral frameworks (cf. Lindvall 2009).
- *Political expertise* refers to the ability to assess the political feasibility of possible courses of action/policies—what are the preferences of the formally competent decision makers? What is their combined win-set?—and to the 'skills to effectively steer negotiations to an outcome' (Beach 2005).
- *Procedural expertise* refers to extensive knowledge about the legal parameters and requirements of possible policy solutions and about the formal procedures policy-making and -implementation are subject to: which institutions/actors have to be involved in which

capacity, when, and how? (cf. Beach 2005; Tallberg 2008; Haverland 2007).

- *Policy expertise* refers to 'knowledge of the range of policies and instruments, past and current, proposed and enacted, governing a particular policy area as well as knowledge of how they work' (Page 2010, p. 259).
- *'Expertise on experts'* refers to the ability to identify experts—knowing who has what kind of expertise—and to handle expert groups with a view to elicit expertise opinion/information and getting shared *and* unshared information at the table (to uncover 'hidden profiles') (cf. Garret et al. 2009, p. 101; Stasser et al. 1995).

From an analytical perspective the benefit of such a classification is evident: it offers a conceptual instrument for sketching a much more refined picture of the internal structure and dynamics of expert groups than the black box that is usually presented. Furthermore, it enables explicit reflections on the relations between policy expert groups, and their administrative, political and legal environments. For example, within the EU context 'expertise on experts', procedural expertise, and political expertise appear (prima facie) to be qualities that typically are present in those actors that are involved in the establishment, composition and chairing of expert groups. At the same time, these officials may also perform the role of gate-keeper between the group and the wider bureaucratic and political environment.

Conclusion

This chapter discussed the multi-faceted and sometimes contradictory findings of different disciplinary strands of research on experts and expertise. Based on this review, this chapter developed an information-processing approach to the study of expertise, building on insights from social psychology approaches to the study of expert groups.

Based on the more general concepts of 'constitutive' and 'operational' politics of information as developed by Blom and Vanhoonacker (2014) in their politics of information approach to the EU, and further elaborated in Blom (2014), the more specific concepts of 'constitutive politics of expertise' and 'operational politics of expertise' were introduced in

this Chapter. 'Constitutive politics of expertise', refers to 'the (sometimes politically contested) processes by which political principals formally decide on the rules covering the formation and use of expert groups by their bureaucratic agents. As such this concept covers both internal and external contestation of the rules and guidelines which govern the process of setting up expert groups, selecting their members and specifying their tasks and objectives.

In the EU, internal contestation between member states takes place in the Council of the European Union, while inter-institutional political struggles may for example occur between Council and Commission. Typical instances of such internal contestations can be witnessed in the process of establishing EU agencies: the setting up of the European Chemical Agency (ECHA) for example took seven years, while the establishment of the Fundamental Rights Agency (FRA) lasted two years and resulted in a regulation that stripped this agency of most of the initially foreseen competences (cf. Blom and Carraro 2014).

Forms of external contestation are for example the protests of civil society organizations like Friends of the Earth and Green Peace against market authorizations based on the advice of for example ECHA and the European Food Safety Agency. The Introduction to this volume draws attention to the more general phenomenon of external contestation of the seemingly privileged participation of experts in European policy-making process, with AlterEU in a star role.

The idea of 'operational politics of expertise', which refers to the actual organizing and maneuvering of expert groups by civil servants in order to get the desired outcomes/advices, ties nicely in with political science research into modes of exploiting expertise, but also with psychological research into human decision-making. The work of authors like Boswell and Dunlop shows how civil servants from UK ministries consciously manipulated the composition of expert groups in order to get politically relevant and feasible advice from them. The link with decision-making theory may be less clear at first sight, but that is probably an effect of the rather selective outline of this type of research given above. Yet the 'framing' of problems and questions, as originally coined by the psychologists Kahneman and Tversky (e.g. 1979, 1984; see also Tversky and Kahneman 1981, 1986), clearly comprises connotations of purposive manipulation, suggesting that it can be exploited strategically in interactive settings (cf. Nylander 2001, p. 294).

These contributions suggest that civil servants sometimes may present the problem or the mission to be handled by an expert group in such a way that it prejudices the choice of experts to be invited to participate or what type of solutions/policies will be proposed. To give one example: drugs may be a societal problem, but is it presented as a legal-criminal problem or as a medical problem?

Moreover, an extension of the original framing approach, labelled 'heuristic' theories of decision-making, has studied the different decision strategies human beings use and shown that decision strategies have an impact on decisional outcomes, in the sense that given the same decision task different decision strategies will lead to different decisions. The interesting thing is that the choice of a decision strategy is not purely contingent but that decision-makers adapt to 'task complexity' and 'task-environment' features (Ford et al. 1989, p. 105; cf. Beach and Mitchell 1978; Billings and Scherer 1988; Payne et al. 1988, 1993; Mintz et al. 1997). Civil servants who commission expert groups are sometimes able to manipulate these features, especially task environment features. They can for example organize time pressure, or manipulate the order in which connected problems and tasks are presented to an expert group, e.g. if all problems and tasks are given at the outset (static) or emerge sequentially (dynamic sequence). Experiments by Mintz and his collaborators (Mintz et al. 1997) have shown that static sequences will lead to different solutions if compared with dynamic sequences.

These examples highlight the potential of the proposed approach in developing a better understanding of the role of expertise, and its contestation, in the EU. A separate contribution to this volume (Blom and Vanhoonacker 2020) applies this approach to the study of the manner in which expertise is used within one particular EU institution, the European External Action Service.

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CHAPTER 3

The Europeanization of National Knowledge Regimes

Johan Christensen and Cathrine Holst

Introduction

Decision-making in the European Union is often characterized as technocratic and depoliticized, relying heavily on technical agencies, expert groups and European networks of experts. But how has European integration influenced the role of experts and expertise in national policy-making? There is by now an extensive literature on Europeanization, understood as the processes through which national governance systems adapt to European-wide norms and EU institutions. Studies have examined the European integration of political institutions, administrative systems, interest group representation and civil society, showing how the character of national institutions is gradually being reshaped by the institutional architecture at the EU level (Crum and Fossum 2009; Trondal

J. Christensen (✉)
Leiden University, Leiden, The Netherlands
e-mail: j.christensen@fgga.leidenuniv.nl

C. Holst
University of Oslo, Oslo, Norway
e-mail: cathrine.holst@sosgeo.uio.no

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2010; Beyers and Kerremans 2007; De la Porte and Van Dalen 2015). By contrast, the Europeanization of national institutions for the provision of knowledge and advice to policy-makers has received little attention. Given the essential role of technical expertise in EU policy-making (see introductory chapter), this is an important missing piece in our understanding of how national institutions have changed in the face of EU integration.

This chapter attempts to fill this gap by developing a theoretical argument about the interaction between the systems for the provision of expert advice at the European and national levels. It does so by combining arguments from the literature on Europeanization with recent work on 'knowledge regimes' (Campbell and Pedersen 2014). A knowledge regime is "the organizational and institutional machinery that generates data, research, policy recommendations, and other ideas that influence public debate and policymaking" within a specific polity (Campbell and Pedersen 2014, p. 3). This encompasses the wide range of organizations that produce policy-relevant knowledge—research bodies, temporary and permanent advisory bodies, think tanks, etc.—and the institutions that govern them. The notion of knowledge regimes is useful since it points to the multitude of institutions involved in the provision of policy-relevant knowledge and how these institutions have nationally specific characteristics. However, how knowledge regimes at different governance levels relate to each other has so far not been explored.

The argument put forward in this chapter is the following: Europeanization has implied the integration of production regimes (i.e. the creation of the internal market and harmonization of economic regulation) and policy-making regimes (i.e. the creation of EU political institutions and a European administrative order). By extension, we would expect knowledge regimes at the European and national levels to become increasingly intertwined. This entails that national institutions for the production of policy-relevant knowledge adapt to the knowledge architecture at the EU level. This adaptation may be driven by different processes of institutional change, such as coercive, normative and mimetic isomorphism (DiMaggio and Powell 1983). Yet, there are also mechanisms that work towards continued variation, such as institutional complementarities and path dependence. The Europeanization of knowledge regimes may take place within several institutional sites: expert agencies; advisory bodies and consultation mechanisms; parliamentary expertise; and research and education policy and institutions. For each of these institutional sites, the chapter discusses potential mechanisms

of adaptation or continued divergence. While it is beyond the scope of the chapter to test this argument empirically, it does point to important topics and questions for future research.

The Europeanization of national knowledge regimes is significant for several reasons. First of all, adaptation to EU-level expertise and advisory structures implies changes in who participates in the formulation of public policies. These processes may empower particular actors while weakening the position of others, thereby altering the distribution of power in public policy-making. For instance, scientific actors may gain a more prominent position at the expense of interest groups. Second, the Europeanization of knowledge regimes has consequences for the type of information and knowledge that feeds into policy-making. This may have positive effects such as a broader knowledge basis and greater consistence in the factual premises underlying policies. But it may also entail particular biases and limit the diversity of expert views going into policy-making. Third, adaptation to the EU-level knowledge regime may clash with existing national institutions for policy assessment and advice. For instance, instruments such as regulatory impact assessments may conflict with existing practices for assessing policies based on consultation of affected parties. Changes along all these dimensions may reinforce worries about the role of expertise in European policy-making. If national decision-making systems take on the technocratic character of the EU system, this is likely to lead to heightened concerns about and more intense contestation of the power granted to experts and expert knowledge in policy-making. Others may welcome a growing EU-induced role of technical expertise in state level policy-making, assuming this contributes to increased governance quality and more knowledge-based policies.

The chapter proceeds as follows: We first introduce the literature on Europeanization and highlight that this literature has so far not been extended to expert systems. We then present and discuss the concept of knowledge regimes and the determinants of knowledge regime dynamics. We subsequently bring insights from these two literatures together to construct an argument about the adaptation of national knowledge regimes to EU-level structures, drawing out the mechanisms and institutional sites of adaptation.

Europeanization

A central theme in EU literature is that European integration has transformed the conditions for national policy-making. 'Europeanization' most commonly refers to the ways in which national governance systems adapt to European-wide norms and EU institutions (Olsen 2002, p. 932). That is, the progressive development of EU institutions and policies has produced changes in core domestic governance institutions. This adaptation is however not to be conceived of as a passive top-down process. Such an understanding arguably underpinned the first wave of Europeanization studies with its focus on European integration and increasing national and institutional convergence (Exadaktylos and Radaelli 2012). The second wave and more recent studies have had a stronger emphasis on the active role of national actors in interpreting and shaping the speed and form of Europeanization and on national and institutional variation across Europe in the adaption to EU (Radaelli and Pasquier 2006). The latter focus has also contributed to an increased interest in the range of mechanisms involved in Europeanization processes. Existing work has suggested certain mechanisms, such as experiential learning and competitive selection (Olsen 2002, pp. 932–933). This chapter proposes a different typology of institutional mechanisms underlying Europeanization, drawing on insights from different branches of organizational theory and neo-institutionalism.

Europeanization has affected different parts of national governance systems. First of all, national political institutions have adapted to EU-level structures. This most obviously concerns the way in which national governments on the one hand have become constrained by EU rules when formulating policies and on the other hand have been drawn into decision-making at the EU level. Similar developments are also visible in the legislature: national parliaments have adopted new structures and practices in response to the increasing amount of EU legislation and the expanding role of the European Parliament (EP). This process is not only top-down; there is also bottom-up diffusion of norms and policies from the national parliaments to the EP and increased interaction across national parliaments coordinated through the EP. This complex structure of democratic representation in the EU has been referred to as a "multilevel parliamentary field", a concept developed to capture the different ways representative bodies in the EU are interlinked across levels (Crum and Fossum 2009).

Second, there is an extensive literature on how national administrative institutions have changed in response to the growing administrative apparatus at the EU level. With the creation of EU agencies and European networks of regulatory agencies, national administrative bodies have gradually been integrated into a 'European executive order' with a high degree of interaction and coordination between different levels of public administration (Trondal 2010). This has given rise to a 'multi-level administration' (e.g. Bauer and Trondal 2015). A central argument is that the emergence of a European administrative order has changed the patterns of control and autonomy. Through transnational agency networks, national agencies have become increasingly oriented towards peer agencies in other European countries and EU agencies, and towards the European Commission as a principal. This has empowered national agencies vis-à-vis their parent ministries and loosened the control of national politicians over their activities (Egeberg and Trondal 2016).

Third, the representation of societal interests has changed with the expansion of decision-making power at the EU level. The strong preference of the European Commission for European interlocutors has led interest groups to form European federations and shift their efforts at influencing policy towards the European level (Beyers and Kerremans 2007; Klüver 2010). Studies have also reported the development of an increasingly Europeanized public sphere, although there is substantial variation across countries and issues (De la Porte and Van Dalen 2015). National publics communicate more and more across and with EU levels, and citizens' discussions in mass and social media include claims and narratives referring to Europe or the EU. Obviously, this does not mean that deliberation and storytelling are EU-friendly. A significant part of the Europeanized public discourse is Eurosceptic. This discourse questions and criticizes EU policies, but can also be skeptical of EU's legitimacy as an independent polity (Trenz 2016).

However, the Europeanization of another important part of the governance system, namely the institutions providing decision-makers with expert knowledge and advice, has received little attention. To be sure, arguments about administrative integration to some extent cover questions of expertise, in particular the technical knowledge provided by agencies. Interest representation, moreover, also includes the provision of technical knowledge (Bouwen 2002), and the public sphere also includes expert networks and publics, and experts communicating in the mass

media and other lay publics. But the transformation of expert and advisory institutions in the context of growing European cooperation has so far not been tackled directly. Developments along this dimension have consequences for who participates in policy-making and what kind of knowledge forms the basis for public policies. Europeanization of national expert and advisory institutions may therefore lead to heightened scrutiny and contestation of the role of expertise in governance. If national policy-making adopts some of the technocratic features of EU policy-making, this is likely to exacerbate fears about expert rule. Others are likely to see Europeanization along technocratic lines in a more positive light, assuming it contributes to improved quality in national policy-making. In the next section, we propose to theoretically capture the Europeanization of expert and advice institutions by drawing on the concept of knowledge regimes.

Knowledge Regimes

An approach that draws the attention towards the role of expert knowledge in the governance system is the recent work on 'knowledge regimes' (Campbell and Pedersen 2014, p. 2015). Campbell and Pedersen argue that how knowledge production is organized is crucial for understanding the ideas that inform public policies. Beyond policy-making regimes (i.e. political institutions) and production regimes (i.e. varieties of capitalism), knowledge regimes are a key element in the decision-making system. A knowledge regime refers to the whole field of organizations that produce research, data, policy ideas and advice, and the institutions that govern them. This includes "policy research organizations like think tanks, government research units, political party foundations, and others that produce and disseminate policy ideas" (Campbell and Pedersen 2014, p. 3).

Exactly where the knowledge regimes starts and ends is a moot point. Campbell and Pedersen emphasize a particular set of knowledge-producers, namely the 'policy research organizations' occupying the space between the academic sphere and the political-administrative system (e.g. think tanks, applied research institutes), while excluding universities on the one hand and the provision of expert advice from within administrative bodies on the other hand (Campbell and Pedersen 2015, p. 684).

Yet, this exclusion is not theoretically justified by the authors, and a somewhat broader understanding of knowledge regimes seems perfectly in line with the underlying notion.

Campbell and Pedersen argue that knowledge regimes have nationally specific characteristics—that is, the organization of the production and dissemination of policy knowledge varies across countries. The knowledge regime is shaped by the character of a country's policy-making and production regimes. This follows from the idea of 'institutional complementarities', namely that the different institutions in a national economy or political system have complementary features (Hall and Soskice 2001). The particular features of institutions in one sphere enhance the results produced by specific institutional arrangements in another sphere. A particular political system will favor certain knowledge regime traits and certain types of knowledge actors. For instance, countries with a highly coordinated economy are likely to have a knowledge regime where corporatist interest groups play an important role, whereas countries with a liberal market economy are likely to have a knowledge regime populated by private actors and characterized by strong competition (Campbell and Pedersen 2014). Moreover, the development of the knowledge regime is influenced by dynamics within the field of knowledge-producing organizations. One such dynamic is competition between different knowledge providers. Another is that the existing configuration of knowledge providers conditions the emergence of new institutions. For instance, limited analysis capacity in parliament may encourage the formation of partisan think tanks.

However, Campbell and Pedersen's discussion of knowledge regimes is limited to national polities. They do not explore knowledge regimes at the international level or discuss the possible relationships between knowledge regimes at different governance levels. In the next section, we therefore attempt to extend the notion of knowledge regimes to the EU decision-making system and theorize about the linkages between national and European knowledge regimes.

The Europeanization of Knowledge Regimes

The EU Knowledge Regime

Although developed for national systems, the notion of a knowledge regime is applicable also to other polities. Specifically, the three types of regimes proposed by Campbell and Pedersen are discernible at the EU level: a production regime, made up of the European internal market,

firms operating within it and the rules and institutions governing it; a policy-making regime, composed of the legislative, executive and judicial institutions of the EU and the actors operating within it (e.g. national governments, European party groups); and a knowledge regime, encompassing the institutions that provide research and advice at the EU level and the institutions governing them.

A range of institutions can be said to be part of the EU knowledge regime: EU regulatory agencies providing technical expertise (Mathieu 2016; Rimkute 2018); the system of European Commission expert groups (Gornitzka and Sverdrup 2008; Metz 2015); European networks of national experts; mechanisms for stakeholder consultation in the Commission and the EU agencies (Arras and Braun 2018); the EU impact assessment procedure (Radaelli et al. 2013); research institutes, think tanks and consultancy firms operating at the EU level; the European Parliamentary Research Service; and the European Research Council.

Decision-making in the European Union is often characterized as technocratic and depoliticized, relying heavily on these mechanisms for expert input (see also introductory chapter). To be sure, expertization of policy-making may be thought of as a general trend. One sign of such a development is what Frank Vibert (2007) refers to as "the rise of the unelected": the expanding role of courts, agencies, central banks and other expert bodies inhabited by academics with substantive discretionary powers (see also Olsen 2010). We also see an increased significance of epistemic logics in parliamentary processes and in the public sphere, as civil society organizations and political parties increasingly feel the need to support their proposals with references to expert knowledge (Fischer 2009). However, accusations about technocracy have targeted the EU particularly hard. This is linked to the fact that the EU mostly engages in regulatory policy-making, in which technical expertise is a crucial resource (Majone 1996; Radaelli 1999). The EU's direct democratic legitimacy is also limited—the EU arguably has a democratic deficit. This has led to a focus on expert knowledge as an alternative way to achieve legitimacy, and to a priority of output above input legitimacy (Scharpf 1999). In the aftermath of the 2008 economic crisis and the stagnation period that followed, political processes and decision-making have become even more technocratic, with new competencies given to the Commission, EU agencies and the European Central Bank. There are of course exceptions to the general picture of expert-based decision-making. The European Commission for

instance has a relatively generalist profile, emphasizing generic 'competences' rather than specialist qualifications and expertise when recruiting civil servants (Christensen 2015). Perceptions of a democratic deficit also depend on the conception of democracy (Christensen and Holst 2017), and on how one conceives of the proper division of labor and relationship between different representative and participatory bodies and structures in the EU as a multi-level polity.

The question is then what influence the technocratic character of policy-making at the EU level has had on decision-making at the national level. Has increasing European integration strengthened the role of expert and expertise also at the national level? Theoretically, this raises the issues of the interaction between knowledge regimes at different levels.

The Interaction Between Knowledge Regimes at Different Governance Levels

The relationships between regimes at different levels of governance are illustrated in Fig. 3.1. These relationships may involve the exchange of resources (e.g. funding, information, legitimacy) or the flow of ideas, practices and models. At each level of governance, there is a production regime, a policy-making regime and a knowledge regime, and these three regimes are linked to each other (see discussion above). Additionally, we would expect there to be links between the production regime at the EU level and the production regimes at the national level, and likewise for the policy-making and knowledge regimes. These vertical links correspond to arguments in the Europeanization literature about the adaptation of national governance systems to EU-level institutions. The link between the production regimes corresponds to European economic integration, for instance the removal of trade barriers and harmonization of economic policy. The link between the policy-making regimes corresponds to European political and administrative integration, such as the participation of national governments in EU decision-making and the closer ties between EU agencies and national agencies.[1]

What about the link between the knowledge regimes? Just as with the other regimes, we would expect processes of integration between

[1] There may of course also be transversal Links, such as between the policy-making regime at the EU level and the production regime at the national level. For the sake of simplicity, these links are not examined or depicted here.

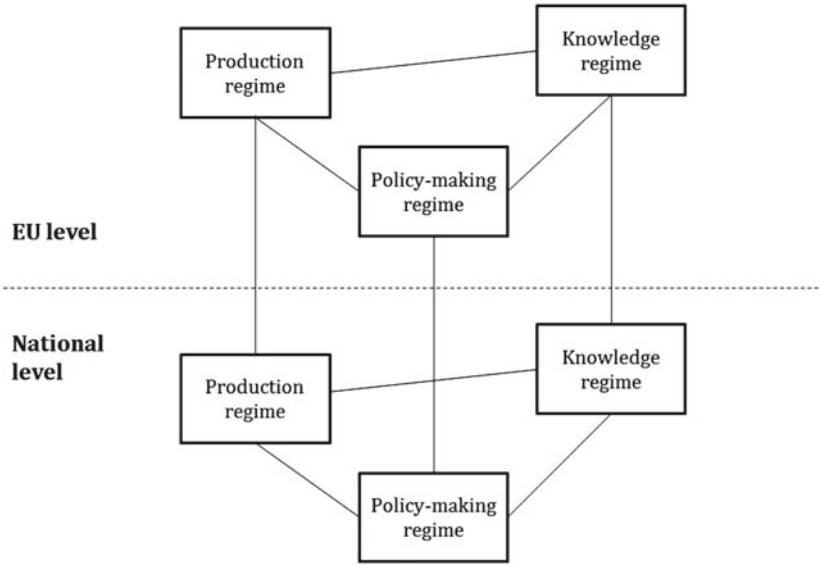

Fig. 3.1 The interaction between knowledge regimes at different governance levels (*Source* Authors)

EU and national knowledge regimes. In other words, national institutions for the production of policy-relevant knowledge adapt to the knowledge architecture at the EU level. However, adaptation will not be complete or uniform; the degree of adaptation is likely to vary across institutional spheres and policy areas (Olsen 2002, p. 933). Drawing on neo-institutional theory, we propose a set of mechanisms for understanding both convergence and isomorphism between knowledge regimes and continued variation between knowledge these regimes.

The degree to which national institutions become similar to European ones is an instance of the general phenomenon of institutions becoming more similar to each other—that is, institutional 'isomorphism'. DiMaggio and Powell (1983) propose three mechanisms of isomorphism: coercive, normative and mimetic. *Coercive isomorphism* means that institutions are forced to change due to external pressures from organizations on which they are dependent for resources. Applied to knowledge regimes, this would mean that knowledge institutions at the

national level adapt to EU-level structures because they are dependent on EU-level institutions for resources such as funding or expertise.

Normative isomorphism means that institutions adopt similar structures and practices due to pressures from professional communities. Particular standards and ways of doing things spread among members of a profession working in different institutions, leading to convergence between institutions. This would imply that national knowledge and advice bodies pick up policies, practices or premises from the European level through interaction between personnel with the same professional background working at the two levels. That is, practices spread through networks of researchers or expert administrators.

Mimetic isomorphism means that institutions imitate the structures of other institutions that are perceived as legitimate. Institutions adopt fashionable organizational models in order to increase their own legitimacy (Meyer and Rowan 1977). Applied to knowledge regimes, this would imply that national institutions adopt specific knowledge and advisory structures (e.g. expert groups or a scientific advisor) or procedures (e.g. impact assessments or stakeholder consultations) from the EU level in order to enhance the credibility of national governance institutions.

While these dynamics may explain convergence, there are also important barriers to adaptation. One mechanism that points towards continued institutional divergence or variation is the argument about *institutional complementarities*. Institutional complementarities are usually seen as a barrier to institutional change, since they produce institutional equilibria that cannot be upended without simultaneous changes across several institutional spheres (e.g. Streeck 2005). Knowledge regimes have nationally specific characteristics since they stand in a functional relationship to specific national production and policy-making regimes (Campbell and Pedersen 2014). That is, there is a specific 'fit' between the nature of the national economy and political institutions and the character of the national knowledge regime—that is, who participates in knowledge and advice production, whether knowledge institutions are public or private, etc. This fit represents a barrier to adaptation to European-level structures. Convergence with European institutions would undermine the institutional complementarities at the national level by leading to incongruence between national knowledge regimes and other national institutions.

A second mechanism that suggests continued variation is *path dependence* (Pierson 2001). National knowledge regimes are not blank slates.

They are made up of a set of organizations and institutions that are the product of specific historical processes of institutional formation, and these institutions may be highly resilient to change. Existing institutions may mediate and condition the processes of Europeanization, leading to differing changes in national knowledge regimes.

Institutional Sites of Adaptation

Adaptation between knowledge regimes at the national and EU levels can take place in different parts of the regime. Here we discuss some of the potential institutional sites for the Europeanization of these regimes.

1. Agencies: Agencies are key providers of specialized expertise for policy-making. Given the expansion of EU agencies and the growing integration of national administrative bodies in EU-wide administrative networks, this can be expected to be a key site for processes of Europeanization in the provision of policy knowledge. Research has pointed to the formation of strong networks between staff in national and European agencies, who share a professional background and sector-specific expertise (Vestlund 2017). This kind of network has stimulated the pooling of knowledge and information resources and a division of labor between different national agencies and the EU agency. This is in line with the idea of normative isomorphism, where institutions become more similar as a result of professional networks that cut across organizations. There may also be coercive dynamics at work. Given that EU agencies often form the hub in agency networks, national agencies may be dependent on EU agencies for knowledge and information. This may allow EU agencies to demand changes within national agencies, for instance in the way analyses are carried out.

However, adaptation to the knowledge practices of EU-level agencies may threaten institutional complementarities at the national level. The way national agencies gather and analyze information may be closely linked to distinct national styles of regulation, which again are linked to economic structures (Vogel 1986). Distinct national styles of regulation and the interests supporting them will then represent a barrier to adaptation. The central question is then how national agencies alter their knowledge and advice production in the face of these conflicting pressures.

2. Advisory bodies and consultation mechanisms: The European Commission has established a vast network of expert groups in which interest group representatives, national representatives and academics take

part (Gornitzka and Sverdrup 2008; Metz 2015) as well as mechanisms for stakeholder consultation. Distinct advisory institutions also exist at the national level, in the form of permanent advisory bodies or temporary advisory commissions (Craft and Halligan 2017; Christensen and Holst 2017). This is thus a potentially important site of interaction and adaptation. One possible link between advisory bodies at the national and EU levels runs through the personnel taking part in these bodies. Do the same academics, government specialists and industry experts take part in advisory groups at both levels? Is national advisory personnel integrated into the European system, or do EU advice bodies seek their own experts? A great degree of overlap would provide a scope for normative isomorphism. While the overall patterns so far have not been examined, studies of singly policy fields and processes do provide some support for such links. For instance, studies of Nordic ad hoc advisory commissions in the area of gender equality, family and anti-discrimination policy highlight the central role of personnel links both in civil society, public administration and transnational expert networks (Seibicke 2019).

There may also be resource dependencies between advisory bodies at the national and European levels. Given limited analysis capacities, national advisory bodies may have to rely on analyses produced by EU-level bodies. This may in turn shape the content of the advice provided at the national level. The above-mentioned studies highlight for example how Norwegian and Swedish advisory commissions and reports rely on EU policy documents in their approach to key issues in the development of gender equality and anti-discrimination laws and policies, such as 'gender mainstreaming' and 'intersectional' or 'multiple' discrimination (Holst and Molander 2017). Moreover, the imitation of advisory forms from the EU level may be a way to increase the legitimacy of policy-making at the national level. For instance, EU 'best practices' such as stakeholder consultations or formal rules about the composition and operation of expert groups may put pressure on member states to move in the same direction.

However, there are also obvious barriers to adaptation. Advisory bodies have distinct national features and deep historical roots. For instance, the Swedish series of official advisory reports produced by ad hoc commissions stretches back to 1922, and the practice goes much further back in time (Heclo 1974). These distinct ways of organizing the production of knowledge and advice for policy-making are likely to be highly resilient, based on the accumulated legitimacy of advisory bodies and

the support from the actors with a stake in these bodies. As a result, adaptation to the EU-level knowledge regime may take particular forms, such as the layering of new elements on top of existing institutions or the conversion of existing advisory bodies to new ends (cf. Streeck and Thelen 2005). For instance, previously corporatist advice bodies may be converted into institutions for scientific advice through changes in participation (Christensen 2018).

3. Parliamentary expertise: The European Parliament has expanded its research and analysis capacities in recent years, among other things through the expansion of a parliamentary research service and the use of commissioned studies (Rosén and Tørnblad 2018). National parliaments in many cases have limited independent analysis capacities, forcing them to rely on expertise produced by government. Against the backdrop of increasing contacts between the EP and national parliaments (Crum and Fossum 2009), parliamentary expertise is an area with considerable potential for interaction and integration.

First of all, national parliaments may become dependent on analyses (especially of EU issues) produced by the EP. A recent example is the controversy around the Transatlantic Trade and Investment Partnership (TTIP), where the EP gradually and in parallel to an increased politicization of the issue started to challenge the European Commission's agenda and developed an independent knowledge basis and positions that were later relied on in debates in national parliaments (Rosén and Tørnblad 2018). This would suggest a degree of coercive isomorphism. Yet, it may also have elements of normative isomorphism, if substantive ideas and analysis practices spread among national and European parliamentarians who have a shared role perception. In other policy areas, we see how best practice policy proposals travel from member states to EU institutions such as the Commission or the EP where the proposals are further developed and analyzed before travelling on to national parliaments. Such diffusion patterns have been identified in recent studies of how Nordic-style gender quotas in corporate boards have spread across Europe (Inderhaug 2018). This is a typical example of mimetic isomorphism. Cases like these come on top of the standard procedure across member state parliaments where parliamentarian committees or the plenary regularly discuss and vote over the implementation of EU policy and regulations based on premises and information provided them by the EP and other EU institutions (Crum and Fossum 2009).

4. Research and education policy and institutions: Research and higher education is one of the areas where the European institutions have pushed for the creation of a truly European system (Trondal 2001), and where an institutional architecture has been set up at the European level, including the European Research Council (Gornitzka and Metz 2014). This is also an area with strong national institutions—universities, education ministries, research councils, accreditation bodies, etc.—making it an interesting site for examining institutional changes. To start with, considerable harmonization of higher education policies in the European countries has taken place over the last two decades. The Bologna Process led to the harmonization of degree structures and credit systems. The Erasmus program for intra-European student mobility has also stimulated the harmonization of national education system.

But there are also other potential mechanisms of adaptation. For one, European research funding schemes may influence the character of research being conducted at the national level, by favoring research corresponding to specific criteria, such as academic excellence or EU-wide collaboration/networks or user involvement. The underlying mechanism here would be dependence on research funding. Second, national education and research officials participate extensively in European Commission expert groups and comitology committees (Trondal 2001, p. 341), which may contribute to the diffusion of shared understandings about research and education policy within professional networks, i.e. normative isomorphism. There may also be mimetic processes at work. Organizational structures or practices from the EU level may be imitated at the national level in order to increase the legitimacy of national education and research systems. For instance, EU programs for research and innovation may be imitated at the national level, or national resource councils may copy European research funding schemes.

Conclusion

This chapter has attempted to shed new theoretical light on the role of expertise in European decision-making by discussing the interaction between knowledge regimes at the EU and national levels. We have argued that the idea of a knowledge regime is highly relevant for debates about expertise in the EU, since it captures the various ways in which expert knowledge is incorporated into decision-making and stresses how the organization of knowledge for policy matters. By exploring possible

links between European and national expert and advisory institutions, we have tried to say something about the changing conditions for policy advice and formulation within a technocratic European order.

The Europeanization of knowledge regimes that we have discussed may be seen as an important factor behind the contestation of expertise. Concerns about the predominant role of scientific experts in EU policy-making not only refer to the EU institutions themselves but also to the effect that these institutions have on national decision-making. By affecting who provides advice about policy and what kind of knowledge informs decisions, the adaptation to EU-level knowledge and advisory structures may have shifted the balance in favor of scientific experts and expertise. This would exacerbate current worries from many corners that too many decisions are taken by unelected experts rather than by elected politicians, publics and affected parties. Other critics emphasize instead how national policy-making in Europe too often lack a proper knowledge basis. Some countries struggle moreover with high levels of corruption and a politicized civil service. From this perspective, the Europeanization of knowledge regimes along a more technocratic track would be assessed more positively; in some contexts even as a necessary condition for decent governance quality.

The argument developed in this chapter points to several avenues for further research. First of all, a systematic mapping of the knowledge regime at the EU level is needed. Which institutions exist for the production of policy-relevant knowledge? What characterizes knowledge production in these bodies? How do these institutions relate to each other and to the policy-making regime? Second, there is a need for a review of existing studies of how knowledge and advice institutions in different countries have changed in the context of European integration. The set of mechanisms and institutional sites proposed in this chapter may constitute a useful matrix for systematizing existing findings. Third, the theoretical argument should be assessed empirically through in-depth studies of Europeanization within specific knowledge and advice institutions. The proposed mechanisms suggest several different types of empirical studies: analyses of participation patterns in national and European advisory bodies based on administrative and biographical data; analyses of the reliance on European expertise based on text and citation data; or studies of the imitation of EU-level structures and practices based on the mapping of administrative bodies across countries.

Fourth, analyses of the Europeanization of knowledge regimes should be related to normative discussions of democracy and good governance, and in particular the debate on EU technocracy and democratic deficits. Do the ways in which national knowledge and advice institutions adapt to EU-level institutions cause democratic challenges? Do they contribute to increased or decreased policy and outcome quality? A key task for such normatively oriented scholarship would be to specify the more detailed parameters to rely on when assessing changes in knowledge regimes. This would imply further reflection on how participatory and epistemic concerns could be most properly balanced (Holst and Molander 2017), but also on how ideal concerns, be they democratic or epistemic, could be taken into account in different national and organizational contexts, and under conditions of increased expertise contestation. Another central task would be to develop empirical indicators that are the same time normatively salient and tailored towards the particular knowledge regime or knowledge organization under assessment. Finally, analyses and reviews of the Europeanization of knowledge regimes should be tapped on discussions of institutional design. Given reasonable normative parameters, the increased contestation of expertise, the features of Europeanization processes we see occurring, and the particular characteristics of national knowledge regimes and organizations, which institutional reforms should be pursued? In this connection, it would be of particular interest to map the variety of institutional solutions across Europe, to assess merits and shortcomings, and to identify best practices.

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CHAPTER 4

Winning Hearts, Losing Minds: Politicisation and the Contestation of Expertise in the Context of TTIP Negotiations

Francesca Colli and Bart Kerremans

Introduction

Expertise plays an important role in policymaking. It can provide legitimacy to institutions and policies; providing expertise can thus be a means for actors to gain authority and access to the policymaking process. On the one hand, research has noted a trend towards technocracy, which 'depoliticises' policymaking and sets it squarely in the domain of expert knowledge (Maasen and Weingart 2009). On the other hand, there has been a turn towards the 'democratisation of expertise' in the EU, calling for stakeholder and public participation as a means of creating public policy (European Commission 2002). This focus on policymakers' and institutions' knowledge dependencies fits with resource-based

F. Colli (✉)
Maastricht University, Leuven, Belgium
e-mail: f.colli@maastrichtuniversity.nl

B. Kerremans
University of Leuven, Leuven, Belgium

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theories of lobbying (e.g. Bouwen 2002), which conceive of lobbying as the exchange of expertise between interest groups and policymakers. Lobbying, therefore, is about the expertise that groups can provide, and factors such as the type of expertise a group provides and how they do so are important in earning or maintaining legitimacy and gaining access to institutions. Yet lobbying can also be about contesting other groups' expertise, particularly for groups with less structural power who aim to get their message heard by a wider audience.

This chapter examines how politicisation affects how expertise is contested during lobbying and policymaking, including who contests it and how those in power perceive their legitimacy. We examine one specific, recent case: the highly public policy debate surrounding the Transatlantic Trade and Investment Partnership (TTIP). This case, quite an exception in the breadth and scale of civil society engagement across the EU, reflects how expertise can be contested when any policy issue is highly politicised. Moreover, the scale of the movement against TTIP means that the case can provide us with the means to examine how various groups used and contested expertise during their campaigns. During and after the debate, the Commission and businesses accused NGOs of using simplistic narratives and spreading myths and lies to provoke emotional responses. While this may reflect a typical 'shooting the messenger' strategy used by the losing side (Tansey 2017), it also highlights a potential risk in choosing to use strong outside strategies to politicise a debate: the simplifying frames used to mobilise the public are an easy 'straw man' target of opponents' criticism. Such criticism, while it brushes over the expertise that groups did provide, shows the loss of legitimacy of (some) NGOs in the eyes of institutions and opponents.

While we discuss the possible tensions between the different strategies that groups use, we also explore their complementarities. The use of simplifying strategies can have negative consequences, including the loss of legitimacy, but may also be necessary for groups or a movement to create radical change. Politicisation polarises the debate, widening the gap between those on either side and potentially alienating parts of the population. However, more radical efforts to politicise a topic may complement the broader movement's goals and ultimately lead to the inclusion of more moderate groups in policymaking.

Our contribution to this edited volume discusses not only the role of the contestation of expertise in lobbying, but also examines how the type of contestation changes when an issue is politicised. As highlighted in

the introduction to the book, expertise is a double-edged sword which can be contested on a structural or epistemic level or drawn into the realms of politics. Nowhere is this more evident than in a discussion of the role and use of expertise in lobbying—particularly in TTIP, where high levels of politicisation and a public debate shifted discussion from the level of expertise to contestation based on framing and public opinion. By examining the strategies used by NGOs and the institutional reaction, we nuance the choice between conveying expertise and politicising an issue—rather than being a trade-off, they may work together. Finally, we contribute to the discussion of different types of contestation. During TTIP, NGOs used both structural and epistemic forms of contestation to argue against TTIP, but (once the issue was drawn into the politicised sphere) their claims were subsequently contested by both business groups and the Commission, who questioned the NGOs' expertise and legitimacy.

This chapter is structured as follows: we begin with an introduction of previous research and theories of the role of expertise in policymaking and lobbying, before discussing NGOs in particular and the conflicting choices they may face. We then examine the case of TTIP, based on a review of the significant extant research on the topic and original interviews. We conclude with a more general discussion on the process of politicisation and how it can affect who contests expertise.

Expertise and Policymaking

The struggle for control over expertise in policymaking is longstanding. Expertise provides public actors with authority that justifies their decisions, converting policymaking from a political negotiation to a technical process with which it is impossible to argue (Robert 2012). In a way, therefore, recourse to expertise can be seen as a way of depoliticising policymaking, with 'objective' knowledge raised above political negotiation (Hay 2007; Radaelli 1999). Barnett and Finnemore suggest that bureaucracies or organisations such as the EU rely on Weberian legal-rational authority, which stems from expertise; however, this only *seems* neutral or depoliticised, as the expertise chosen is always based on cultural values and hidden assumptions (1999, p. 708).

Indeed, choosing whether and when to provide expertise can be a strategic exercise in itself for both public actors and external organisations. For instance, the European Commission uses expertise to improve

its standing vis-à-vis the other EU institutions and legitimise its own actions (Saurugger 2005). In this sense expert knowledge can be used as a 'commodity' to 'shape the political agenda', rather than being produced only when requested by an institution (Maasen and Weingart 2009). The use of expertise for strategic reasons also applies to non-institutional actors: think tanks are perhaps the best example of organisations which use 'objective' expertise to pursue their political goals (Plehwe 2014). As we discuss in the following section, though, providing and exchanging expertise is part of lobbying for all groups.

Although recourse to expertise aims to depoliticise and "technocratise" policymaking, the use of scientific knowledge can in fact lead to contestation and politicisation when the image of scientific objectivity is broken. Nowotny (2003) claims that the inherently transgressional nature of expertise—crossing disciplinary boundaries and speaking to a diverse public—make it vulnerable to contestation, while others suggest that contestation becomes more likely under certain circumstances. For instance, expertise may lead to controversies if the public loses trust in the 'authority' of the experts, particularly if a certain decision turns out to be false (Munnichs 2004), or when experts disagree on the best route to take in a certain situation (Nelkin 1975; Pellizzoni 2011). This is partly due to the "hidden side" of science and expertise: although they appear objective on the surface, they ultimately hide value judgements and assumptions beneath scientific language and jargon (Sarewitz 2004). If these values are brought into the light and contested, politicisation can result, removing the façade of independence and depoliticisation which is created by using expertise. Politicisation can thus be the *result* of expertise, but also affects how expertise can be used and contested.

In sum, although expertise is often perceived as objective and used to provide authority and legitimacy, it is inherently linked to the politicisation of politics through its contestability and the controversies it can cause. This is clear in an evaluation of the links between lobbying and expertise.

Lobbying and Expertise

Although bureaucracies may see advantages in holding onto expertise, "democratising expertise" by including other actors in the policymaking process can help to build public trust in the process and the policies produced. In the EU, the European Commission's White Paper

on Governance (2001) introduced this idea, aiming at 'socially robust knowledge' by explicitly trying to increase (public) interest groups' and civil society's participation in policymaking (European Commission 2002; Nowotny 2003). The technical and social knowledge that these groups provide improve not only input and output legitimacy, but also 'throughput' legitimacy by ensuring that policy is based on a broad range of knowledge and multiple points of view (Greenwood 2007; Schmidt 2013).

This idea of the role of groups in providing expertise in policymaking is echoed in resource-based theories of lobbying. Resource exchange theory sees lobbying as an exchange of knowledge: groups trade their expertise as a "currency" to gain access to institutions (Bouwen 2002; Chalmers 2012). Groups can provide two different types of expertise: technical expertise and social or political knowledge, i.e. knowledge about the political sentiment or the 'encompassing interest' of their members (Bouwen 2004). These two types of knowledge have also been identified in studies of groups' involvement in expert advisory groups (Robert 2010). Recent research has indicated that both NGOs and business groups provide both types of knowledge, and that the type of knowledge provided rather depends more on the channel through which the information is being provided (with social or political knowledge more likely to be provided to parliaments or through the media) (De Bruycker 2016). When lobbying, groups can therefore provide two broad types of information: social knowledge or technical expertise.

Moreover, groups can choose different channels to convey this information, using either inside or outside strategies. Inside strategies refer to strategies where groups have direct contact with policymakers, either through meetings, advisory groups or personal letter-writing. Outside strategies, on the other hand, aim to mobilise the public in favour of a topic through actions such as petitions, protests and social media campaigns (Beyers 2004). Following resource exchange theory, these strategies are often used by groups with less expertise or fewer resources, or who choose to reject the institutional route. Kollman (1998) labels the two roles of outside strategies 'conflict expansion' and 'signalling': groups first aim to increase the salience of an issue, before showing policymakers what the public think about an issue, essentially warning them of the opposition and potential backlash they risk if they (do not) support a particular policy. The two have a mutual relationship: conflict expansion and increasing issue salience mean that outside strategies become more

effective, creating an 'attention cascade'—drawing policymakers', media and public attention to the issue—which further increases public awareness of the topic (Dür and Mateo 2016). Of course, the risk in widening the scope of conflict is that drawing attention to the debate will encourage counter-mobilisation by including actors who would otherwise have not participated.

Inside and Outside Strategies: Complementary or Contradictory?

While inside and outside strategies are often discussed as being clear-cut or a once-off decision, defining them in such a crisp way oversimplifies the issue, as most groups use combinations of strategies to achieve their policy goals. These mixes of strategies have different effects on the way groups are perceived. Inside strategies may seem to be the more advantageous choice but can be less interesting for member-based NGOs. For these groups, outside strategies send a clear message to members that the group is taking action on a topic, as well as providing them with a way to participate by signing a petition, writing a letter or attending a protest. Similarly, previous research has shown that citizen-based groups use outside strategies to curtail the power of business lobbying; in contrast to businesses, NGOs are able to use outside lobbying to prove their legitimacy (Trumbull 2012) and by creating "noise" they make it harder for businesses to lobby on regulations behind the scenes (Culpepper 2011).

However, these strategies also involve a trade-off: for some policy issues, it is necessary to get public attention onto a topic to swing the debate, but this may come at the expense of a nuanced debate and risks oversimplifying the message. Outside lobbying is therefore primarily used to communicate social knowledge, as technical details are difficult to convey through a slogan or a banner. Politicisation may swing the balance in favour of outside strategies, making them more feasible (as public attention is drawn to the issue) and more effective (as policymakers are unable to ignore the weight of public opinion).

Existing theory answers the question of how strategies may work together or against each other in different ways. Resource exchange theory—approaching the issue on an individual group level—highlights the possibility that groups which use particularly radical or combative outside strategies may see themselves denied access in future policy debates, due to fears that they will turn against institutions (Beyers 2004;

Trapp and Larsen 2017). Moreover, if a group uses many outside (and thus simplifying) strategies, they may be perceived as having less useful expertise than groups who limit themselves to technical policy or position papers. However, empirical evidence for this is contradictory or scarce, with many studies showing that the majority of groups do mix strategies and are still able to gain access to policymakers (Binderkrantz 2005).

On the other hand, radical flank theory from the study of social movements underlines the interdependencies and even reliance of one type of strategy on another on a more systemic level. While these can be negative, if a movement's reputation is damaged by a radical faction's highly disruptive or violent actions, positive radical flank effects are also possible. These occur because more radical groups provide a 'foil' against which more moderate groups appear reasonable; or they create 'crises' or situations from which the moderate groups can benefit (Haines 1984). In this way, when one branch of a movement puts public pressure on policymakers using outside strategies, they can force policymakers to include the movement (in the form of more moderate groups) in the policymaking processes—or at the very least, heed some of their demands. Of course, it is not impossible for both effects to happen in some way—groups using more radical strategies may lose legitimacy or be excluded, while other groups are included.

The complementarity of different strategies is thus not a given, and the effects unknown. We will draw upon both of these theories in our discussion of NGOs' campaign against TTIP. However, we first turn to a discussion of current work on the role of NGOs in EU trade policy. This will provide the background to our discussion of TTIP in more depth.

NGOs' Role in Trade Policy in the EU

The majority of research on the role of expertise in policymaking and its contestation focuses on risk regulation, especially hotly debated environmental issues such as climate change and GMOs, because of the prominent role of scientific advice and knowledge in these fields. Nonetheless, trade is a highly technical field of policymaking in which expertise is important for two reasons: firstly, for the regulation of these same risks (e.g. protecting public health and the environment in trade agreements); second, for analysis of the economic consequences of free trade agreements (FTAs). These equilibrium models, used in trade impact assessments to justify beginning negotiations, have been criticised by

NGOs and academics alike for inaccurately predicting the economic effects of previous trade agreements (including NAFTA and the EU's Single Market) and for their dependence on the expectations run through the models (De Ville and Siles-Brügge 2015, 2016). This highlights the contestation of previously 'objective' expertise when the underlying values and expectations are brought to light; however, groups have also been unable to provide significantly better alternatives to the current models.

Like other policy areas, EU trade policy has seen a democratisation of expertise. Preparations for the EU's White Paper on Governance highlighted the possibility of integrating non-market concerns into the assessment of FTAs in order to appease anti-globalisation voices (European Commission 2002, p. 299). As a result, the social and environmental consequences of EU FTAs are now assessed through sustainability impact assessments (SIAs). Unlike economic impact assessments, however, SIAs are conducted during negotiations rather than beforehand, and thus have been criticised for not informing the negotiating mandate (European Commission 2015b). Civil society has also been institutionally included in EU trade policymaking since 2002 through the Civil Society Dialogue mechanisms, although criticisms abound that this is more of a 'briefing' than a 'dialogue', and NGOs appear to have had little influence through this channel (Dür and De Bièvre 2007). Despite this, outside mobilisation has generally been limited on trade policy within the EU—previous work has showed that NGOs used similar strategies to business groups on trade at the EU level, despite having contrasting policy positions (Jarman 2008). The large-scale public mobilisation against the Anti-Counterfeiting Trade Agreement (ACTA) in 2013 was surprising because of how exceptional it was (Dür and Mateo 2014).

TTIP, a trade and investment agreement between the two largest economies in the world, is an exception. The agreement has attracted an unprecedented amount of public attention and debate, particularly in Germany and Austria—a fact that some have attributed to the work of NGOs both on—and offline (Bauer 2016b). While in a technical field of policy, TTIP was therefore at the same time highly politicised. As a contentious and prominent set of negotiations, it marked a change from the 'normal' type of campaigning and ways of contesting trade policy and is thus a useful case study for examining the links between lobbying and politicisation.

NGOs' Campaigns Against TTIP

Negotiations for TTIP began in 2013, and with them came the first wave of opposition. Opposition centred around several themes, notably the transparency of negotiations and investor-state dispute settlement (ISDS)—to be discussed further below—but also concerns of a 'race to the bottom' in environment and consumer regulation, labour rights and data privacy (Armanovica and Bendini 2014).

As noted above, TTIP was exceptional for both the sheer weight of opposition to the agreement and the breadth of groups involved (Gheyle 2016). Opponents included not only anti-globalisation and environmental NGOs that had been working on trade for years, if not decades (such as Attac, Greenpeace and Friends of the Earth) but also NGOs that had not previously been involved in trade policy. For example, the generally moderate European Consumers' Association (BEUC) is 'supportive of free trade in principle' but held reservations about TTIP (BEUC 2014). In 2014, a coalition of almost 230 NGOs from 23 EU countries launched a 'Stop TTIP and CETA' European Citizens' Intiative (ECI); however, this was rejected by the European Commission on institutional grounds. As a result, the groups began their own EU-wide petition, which gathered over 3.25 million signatures in one year and reached the country quorum in 23 countries (Stop TTIP 2015). The Stop TTIP coalition now counts over 500 member organisations.

The group of NGOs campaigning against TTIP used a wide range of strategies, including protests and petitions, TTIP-free zones, leaks of negotiating texts and technical reports. Below we discuss how politicisation affected the contestation of expertise in two of the main subjects of the anti-TTIP campaign: transparency and ISDS.

Structural Contestation: Transparency in TTIP

A significant proportion of NGOs' criticism of TTIP was the lack of transparency surrounding the trade negotiations, accused of taking place 'behind closed doors'. NGOs claimed that the policymaking process was biased in favour of business interests and called for changes in the way trade policy was made and the inclusion of other groups in the process, questioning the legitimacy of trade policymakers and institutions in the EU (Gheyle 2016). As mentioned above, while EU trade policy provides for NGO input in the form of Civil Society Dialogues, these are widely

regarded as box-checking and more a forum for the Commission to inform NGOs than for real input or discussion.

NGOs' calls for transparency took place mainly through outside strategies, by raising public awareness about the trade agreement and mobilising public opinion to pressure policymakers into increasing transparency around the negotiations. Stop TTIP justified its use of the ECI as an instrument with its perceived exclusion from the process, claiming that 'TTIP and CETA are prepared behind closed doors…the European Commission is in charge of negotiations and finalisation of the treaties' (Stop TTIP 2015). Protests in Brussels and other European capitals as part of Europe-wide action days against TTIP similarly focused on the lack of transparency in the negotiation process. These were supported by research by transparency-focused organisations such as Corporate Europe Observatory, compiling Commission data showing the numbers of meetings between Commissioners and different lobby groups during the negotiations (CEO 2015).

Another outside strategy used notably by Greenpeace was the 2016 leak of 248 pages of the EU's negotiating texts, accompanied by press releases and factsheets explaining the leaked documents (Greenpeace 2016). Many of the leaked texts were outdated or already available online thanks to the Commission, which had been providing textual proposals and factsheets of chapters in the negotiations since 2015 (Coremans 2017). Nonetheless, the leaked documents highlighted the discrepancies between the official elite discourse on the positive state of negotiations, and the real mismatch between the two parties' red lines. Furthermore, the leak created negative publicity around the negotiations and was framed by Greenpeace as 'breaking through' the opacity of the negotiation process. However, these leaks may have widened the rift between the Commission and campaigning groups, with Commissioner Cecilia Malmström issuing a blog post the day after the leaks highlighting the 'misconceptions' promoted by NGOs (European Commission 2016). The leaks seemed to confirm that groups would continue to antagonise the Commission throughout the negotiation.

Despite this, however, groups did see some of their demands met. In January 2014, the Commission created the TTIP Advisory Group, which included industry and civil society representatives, to advise negotiations; this included representatives from NGOs BEUC, Transport and Environment and the European Environmental Bureau (European Commission

2014).[1] Furthermore, as previously mentioned, the Commission moved towards a more proactive public transparency standard by allowing access to different negotiating texts and plain-English explanatory factsheets as part of its new 'Trade for All' strategy (Coremans 2017). Previous studies have shown that pressure from civil society was one of the factors which led to the Commission's substantive increase in transparency initiatives and the amount of publicly available information (Gheyle and De Ville 2017). So while groups' outside strategies were labelled as 'misconceptions' and misleading the public, they eventually saw some success and were included in the policymaking process. This indicates that politicising an issue and making enough "noise" can also be a helpful factor in *gaining* access to the policymaking process. Below, we discuss how a similar pattern occurred in the field of ISDS in TTIP.

ISDS: Politicisation and Technical Expertise

Investor-state dispute settlement (ISDS), which provides the regulatory framework for foreign investors to sue states for allegedly discriminatory practices, is included in bilateral treaties with many individual EU states. The Treaty of Lisbon gave the EU the competence to negotiate on foreign direct investment and thus to include ISDS in all new trade agreements, which it has done in the EU-Vietnam and EU-Canada (CETA) agreements. Given their previously relatively obscure profile and technical nature, it is surprising that ISDS became one of the most important issues in TTIP: so that in 2015 Commissioner Cecilia Malmström stated that 'ISDS has become the most toxic acronym in Europe' (VPRO 2015). As a consequence of NGOs' focus on the issue, up to 40% of online media coverage of TTIP between June and November 2014 was on ISDS, with the next highest subjects 13% on GMOs and 10% on transparency (Bauer 2015). Although this was helped (particularly in Germany) by the publicity surrounding the Vattenfall case, a Swedish company suing Germany for changing nuclear energy targets, the outcry and swift change in public opinion was also due to NGOs' own strategies. NGOs active in the Seattle to Brussels (S2B) network, a transatlantic network working on trade policy, had been studying the implications of the EU's new

[1] In 2017 the Advisory Group was institutionalised to create an Expert Group for trade policy for future negotiations.

competence for negotiating on investment in preparation for the TTIP negotiations (De Ville and Siles-Brugge 2016; Bollen 2018).

Thanks to this preparation, NGOs published detailed research about ISDS in the EU, analysing not only the proposals made in negotiating documents but also previous and ongoing lawsuits against EU states. For example, Friends of the Earth Europe published a peer-reviewed database of all ISDS lawsuits against European governments and their outcomes (FOE EU 2014b). In addition to longer research reports, NGOs produced sources in plain English and accessible formats like factsheets and videos (CEO 2014a, b). NGOs' modus operandi during the anti-TTIP campaign mirrored those used to protest the Multilateral Agreement on Investments (MAI) in the 1990s, including 'MAI-free zones'); NGO networks like S2B were important not only for information-sharing but for strategic planning (Bollen 2018, interview with CEO representative, December 2017). Interviewees highlighted that the NGOs which had been working on investment and trade prior to TTIP took the lead in producing research, training and capacity-building for other NGOs (interview with CEO representative, December 2017; interview with Nature et Progrès representative, March 2017). In short, because many people were generally unaware of even the existence of ISDS, let alone what it was, NGOs' first step was to inform each other and the public in order to prime the ground for public opposition. This in turn allowed NGOs to emphasise the aspects of the issue that they considered important for their campaign; in contrast to business groups, NGOs were active very early on ISDS, and were thus able to shape public debate on the issue.

At the same time as informing the public through reports and research, NGOs worked to politicise the issue of ISDS using strong symbolism and framing. Indeed, ISDS provided a good combination of 'politicisable' features: it was relatively unknown (for many people, this was the first time they had heard of ISDS); it featured large sums of money and corporate power; and it links to issues of democracy. A recurring image throughout the campaign was that of TTIP as a 'Trojan Horse', with hidden dangers that would only become apparent after the agreement entered into force. This referred particularly to the risk of regulatory chill posed by ISDS and regulatory cooperation. Notably, Friends of the Earth Europe took an eight-metre high inflatable horse on tour across the EU

in 2014–2015 to raise awareness and publicity of TTIP in different countries, and similar horses appeared at protests in Brussels, Vienna and Paris. Although this symbol was used by EU and national NGOs, it is worth noting that this too related to the sharing of expertise by NGOS: the Trojan Horse symbol was used by Canadian NGOs to describe CETA as far back as 2011 (The Council of Canadians 2011).

Perhaps the most evident example of the potential drawbacks of combining inside strategies (particularly providing technical information) and outside strategies is the 2014 public consultation on ISDS. When the European Commission suspended negotiations to hold a public consultation on ISDS, NGOs organised a mass response to the consultation, in which members of the public could submit a pre-written response to the consultation through NGO websites. These pre-written responses were developed and checked with the help of NGOs with higher technical expertise on trade (interview with Nature et Progrès representative, 2017; interview with CEO representative, 2017). The high number of responses led to the consultation website crashing and an extension of the response deadline. Out of the 149,399 responses to the consultation, 97% were against ISDS, and 131,352 (88% were submitted through the online platform set up by Friends of the Earth Europe and other groups (FOE EU 2014a). These automated responses fell into different batches: 70,000 were from 8 different NGOs, with each 'batch' containing similar answers to all 13 questions; 50,000 were submitted by one NGO, where questions 1–12 were answered with 'no comment', followed by individual answers to the last question; 25,000 replies only answered question 13, the 'own comments' question (European Commission 2015a).

In short, NGOs used a tool which was originally created to 'democratise' expertise by getting the input of civil society groups and other stakeholders, to expand conflict, generate public debate and further politicise the topic of ISDS. They complained that while these consultation mechanisms are labelled 'public' and are an opportunity for citizens to participate in the policymaking process, the questions that they ask—and the expertise they seek—limit the ways that the public can participate. For example, the consultation did not ask *whether* ISDS should be included in TTIP but were limited to the technical aspects of how ISDS should look in the agreement. By ignoring the aim of the consultation and responding

using mass mechanisms and opinion-based answers, NGOs rejected this format.[2]

While NGOs did have the technical expertise required to contribute to the public consultation—indeed, almost all of the groups also submitted their own individual responses to the public consultation, which contained more technical details—the point of the mass response to the public consultation was not to provide any sort of expertise, otherwise the responses would not have read 'no comment'. Rather, the aim of the response was to signal the strength of public opposition to TTIP to policymakers, and to further politicise the issue. This led to strong criticism of groups' 'hijacking' of the contribution process, with then-Commissioner for Trade Karel De Gucht labelling the mass responses as an 'outright attack' (Jarvinen 2014). This underlines the risk involved in using politicising strategies, particularly the possibility of being cut out of the political process or losing legitimacy in the eyes of policymakers. The semi-hostile, contemptuous relation between the Commission and (certain) NGOs would continue throughout the TTIP negotiations.

Ultimately, however, NGOs were quite successful on the ISDS issue, with the European Commission scrapping the original ISDS plan when the acronym proved too toxic and creating a new 'Investment Court System'—although many NGOs agreed that this was 'ISDS under another name' (Cingotti et al. 2016). This seems counterintuitive: NGOs were strongly criticised by both the Commission and other TTIP proponents, yet were still successful, highlighting the possible benefits of using outside strategies. In the next section we continue our discussion by reflecting on the flipside of the situation—the Commission's contestation of *NGO's* expertise—before a broader discussion of what this case can tell us about the choices groups have between politicisation and technical expertise.

Contesting the Legitimacy of NGOs

While we have so far examined the strategies that NGOs used during TTIP negotiations, particularly how they contested the structure of policymaking and politicised the issue, it is interesting to examine the

[2] Of course, this leads to normative questions about whether the public *should* have a say in highly technical issues, and to what extent public consultations are a useful format for this type of topic—questions that are beyond the scope of this chapter.

reaction of Commission and pro-TTIP groups, which retaliated by questioning NGOs' legitimacy and capacity to provide expertise. As we have mentioned, throughout the negotiations the Commission and other pro-TTIP groups accused NGOs of spreading myths and misconceptions about TTIP, generally referring to the frames that certain NGOs used to politicise TTIP and to gain a public following—emotive frames such as chlorine-washed chicken, hormone-fed beef or GMO maize making their way onto European supermarket shelves (see, e.g. European Commission 2015c).[3]

Current Commissioner for Trade Cecilia Malmström, for example, declared in a speech that 'the price of admission to a discussion as important as this is that you base your arguments on facts, not distortions'—an at least implicit accusation of NGO falsehood (Malmström 2015). Other TTIP advocates went further in their reports and position papers, accusing NGOs of 'simplistic narratives on TTIP' and 'provoking emotional responses among citizens by spreading lies, myths and anti-TTIP hate speech on the Internet and beyond' (Bauer 2016b, p. 207) or using 'catch phrases…based on myths, fear-mongering and creative guesswork' (Bauer 2016a, p. 14). The breadth and quantity of these accusations was significant enough for Corporate Europe Observatory to write a report detailing (and refuting) the claims (Tansey 2017).

Another development linked to the politicised campaign against TTIP was the suggestions in the European Parliament's Budgetary Committee's own-initiative report on EU funding of NGOs. The most controversial paragraph of this text suggested that the European Parliament fund only NGOs which 'argue by means of verifiable facts', and 'reject any funding of organisations which demonstrably disseminate *untruths* and/or whose objectives are contrary to the fundamental values of the European Union, democracy, human rights and/or strategic commercial and security-policy objectives of the European Union Institutions' (European Parliament 2017). While this had been planned and prepared since before TTIP, MEP Tomáš Zdechovský (EPP), who helped in drafting the report, specifically mentioned NGO lobbying on TTIP as an example of the type of situation that the regulation would prevent (Michalopoulos 2017). This shows that highly politicising campaigns like TTIP contributed to other actors' contestation of the legitimacy of (some) NGOs and their ability to

[3] See e.g. the Commission's *The Top 10 Myths About TTIP: Separating Fact from Fiction* (available at http://trade.ec.europa.eu/doclib/docs/2015/march/tradoc_153266.pdf).

produce expertise and participate in the policymaking process, essentially the culmination of the anti-NGO sentiment which grew throughout the TTIP negotiations.

Yet, as discussed above, NGOs have now been permanently included in the Commission's Expert Group on Trade Agreements, and they were, by all accounts, quite successful in changing TTIP. In the final section, we discuss why this might be and reflect on the broader lessons it can show us about the link between politicisation, expertise and contestation.

Anti-TTIP Campaigns, Politicisation and the Contestation of Expertise

NGOs had both technical expertise and the ability to frame TTIP to draw public attention to and politicise the issue, and they used both types of strategies, as discussed above. This led to some choices which can be seen either as a trade-off or as complementary.

As we have highlighted, each time a group lobbies it faces a choice between aiming to draw public attention to an issue and to provide their expertise directly to policymakers (although the two are not necessarily mutually exclusive). Both may have advantages: providing technical expertise is a means to gain access to policymakers, but politicising an issue may be important for smaller groups or minority groups with less structural power to have their voice heard, particularly in issues traditionally dominated by larger or more resourceful business groups. Moreover, while inside strategies are useful for incremental change such as changing details of a proposal, they are not as useful for disruptive change such as rejecting or stopping the proposal altogether. For this sort of change outside strategies may be necessary to show that 'public' opinion supports change and to break with the status quo.

When choosing to politicise an issue, however, groups also face drawbacks: using outside strategies to politicise an issue may make future inside strategies and technical expertise more difficult as a group loses legitimacy in the eyes of policymakers—seen in the TTIP debate by the reactions from the Commission and pro-TTIP groups questioning NGOs' legitimacy because of the 'myths' and narratives that the NGOs were using. Moreover, once an issue is politicised, the debate moves to a public level and a larger scale with more simplified messages, again contributing to a potential loss of legitimacy due to the move away from technical expertise.

While NGOs' legitimacy was questioned during the TTIP campaign, they were also successful on several fronts. Specific aspects of TTIP—such as the ISDS chapter explored above—were blocked and eventually fell through, and the TTIP negotiations had stalled even before the US elections at least partly because of public resistance. Moreover, NGOs were included in the policy process through the TTIP Advisory Group. As we have already highlighted, this has been institutionalised beyond TTIP into the Expert Group on EU Trade Agreements, in which 10 of the 28 members are NGOs and 4 are trade unions. While we cannot expect to see the same broad mobilisation in all trade negotiations, the institutionalisation of civil society's participation and the 50/50 split between civil society and business indicates at least an outward shift in approach towards future trade agreements.

What can this tell us about how politicisation and NGOs' contestation of expertise more generally? First, TTIP shows the importance and utility of politicising an issue for groups with less structural power. Certain groups such as CEO and the TNI had been working on multilateral investment agreements for decades and had thus gained expertise in working on these topics; however, prior to the 'hijacking' of the public consultation and the emergence of ISDS as an issue in the public sphere, the Commission could more easily ignore the submissions of these groups. Politicising the issue and creating public debate made their message impossible to ignore, as it meant that their members and followers were essentially following what the Commission would do. Moreover, as we discussed in the section on ISDS, politicisation seems to have been the only way to create more radical change (i.e. removing or radically altering ISDS from the proposal), as the public consultation mechanism in itself only asked about technical details. Using outside strategies thus helped groups to create radical change.

Second, TTIP seems to provide some evidence for a radical flank effect. Despite pro-TTIP parties' criticisms of NGOs, NGOs were included in the TTIP Advisory Group and are now in the Expert Group on Trade Agreements. However, the groups included in these advisory bodies tend to be more moderate groups, which do not generally run strong outside campaigns and did not do so during TTIP. For example, the TTIP Advisory Group included BEUC, Transport and Environment and the European Environmental Bureau—three NGOs with high levels of technical expertise, a history of working with the institutions' advisory bodies and of (generally) avoiding outside strategies. The groups which led the

Stop TTIP coalition (notably Friends of the Earth Europe, TNI and CEO) and whose pressure on issues of transparency led to the creation of the group were not included in the advisory group.

The public debate that more radical groups generated around (transparency in) TTIP meant that the Commission was essentially forced to increase transparency and civil society participation in the policymaking process, leading to more moderate groups' inclusion. Politicising the issue was thus structurally beneficial for the anti-TTIP movement as a whole, even if more radical groups' legitimacy vis-à-vis policymakers was undermined. However, these groups have less to lose from this, as their legitimacy in the eyes of institutions may be less important than legitimacy in the eyes of their members. This reiterates previous findings that groups for whom members are more important choose strategies with not only policymakers but also the public in mind.

Conclusion

In the introduction to this book the editors suggest that expertise can be contested in three ways: epistemically, through a discussion of the facts; structurally, by drawing attention to how the facts were created; or politically, through strategic framing and rhetoric. This chapter has shown the contradictions and complementarities involved in NGOs' use of these three forms of contestation during their campaigns against TTIP. Their calls for transparency were based on structural critiques of the actors involved in creating trade policy, while they simultaneously politicised issues within TTIP, using strong symbols to play upon the public's emotions and draw attention to the topic. Finally, NGOs also contested standard expertise on trade policy, contributing to consultation and drawing upon their own past and ongoing research. An analysis of the case of TTIP has shown that rather than being mutually exclusive or detrimental to each other, these types of contestation complemented each other.

Providing and contesting expertise is a vital part of lobbying, and when an issue is politicised it can affect the types of strategies that groups can use. Politicising an issue can be a powerful way to draw public attention and change policy, particularly when social media and the 'echo chamber' effect lends itself to polarising opinions. In TTIP, the politicisation of technical issues like ISDS made the NGOs' message unable to be ignored, and ultimately successful. However, these effects seem to have

taken place among different groups in the coalition: more radical groups put pressure on policymakers, drawing public attention to the issue and creating the possibility for more moderate groups to be included in policymaking (in the Advisory Group on Trade) as a way to appease the movement's demands. Nonetheless, choosing to politicise an issue also has its risks. In TTIP, it seems to have led the Commission and business groups to attack NGOs' legitimacy by calling into question their expertise, proving that there is a fine line between providing information to citizens and providing strategically-framed information to convince people to participate in a campaign. Thus, while taking a political route to contest expertise may be effective for a group with less structural power, it is also risky.

Of course, TTIP is rather an extraordinary case, so a discussion of the external validity and generalisability of this case is warranted. TTIP was almost unprecedented in the EU for the amount of public attention that it drew and also for the fact that it was the first time that there had been such an EU-wide movement, as highlighted by interviewees and shown by the size of the Stop TTIP coalition. Nonetheless, there is no reason to think that the mechanisms at play here would not also apply to other trade agreements—and indeed to other policy debates involving expertise—*if* groups are able to politicise the issue. This condition, however, is quite a difficult one to fulfil, as most policies and trade agreements do not contain the right elements to become politicised and capture public attention for long enough for this sort of campaign. Other FTAs being negotiated at the same time as TTIP, such as EU-Japan and EU-Singapore, did not reach the same level of public attention. While this is partly because they are economically smaller countries than the US and because the trade agreements themselves were not as deep, it is also because of the "perfect storm" of issues involved in TTIP, from fears of the US to big business and regulatory laxity (Gheyle 2016). Interviewees pointed out that even CETA, which was subsequently drawn into the debate on ISDS, was only really politicised after the debate began on TTIP. Thus, while it is relatively rare for policies to face the same level of politicisation as TTIP, there is no reason for the relation between politicisation and contestation of expertise to be any different. Indeed, past politicised debate over GMO authorisation and the recent reauthorisation of glyphosate in the EU shows that similar mechanisms apply in more scientific policy fields as well.

Furthermore, while we have referred to the stalling and 'failure' of TTIP and attributed this partly to public campaigning by NGOs, we should be wary of attributing success too quickly. There were many contributing factors to TTIP's demise, including internal issues—election year in the US and the 'Brexit' vote in the UK meant that both negotiating parties had other priorities. Moreover, concerns about the level of business lobbying in the US led to reluctance from certain EU countries and slowed negotiations. We can, nonetheless, point out that without NGOs' "noise" during the negotiations, it is likely that certain compromises would have been reached, which became impossible after the public campaign. Certainly in the case of ISDS, for example, NGO campaigning was a decisive factor in preventing the chapter's conclusion. While it is important to take any declarative claims of success with a grain of salt, NGOs certainly did have some impact on bringing these issues to public attention and, ultimately, in holding up the negotiations.

In this chapter we have worked towards a deeper understanding of the role of politicisation in the contestation of expertise in a non-typical case study, trade, which can nonetheless highlight the importance of expertise in a broad range of policy areas. Understanding politicisation's effects on the ways that expertise is contested, including how it can include the public, is important in today's highly polarised political atmosphere for various actors. Policymakers should be aware of public opinion and the potential pushbacks against their actions when issues are highly politicised. NGOs and other lobby groups should realise how politicisation may help (or hinder) their cause and lead to success—but also other groups to contest their legitimacy. Finally, researchers should continue researching the processes of politicisation, including the factors that make politicisation more likely, how it plays out in real policy debates, and the ways that politicisation and expertise interact.

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CHAPTER 5

The European Commission's Expert Groups: Adapting to the Contestation of Expertise

Elissaveta Radulova, Johanna Breuer, and Aneta Spendzharova

Introduction

Policy-makers have to find feasible solutions to ever more complex and multi-faceted problems, ranging from the need to foster social integration in increasingly diverse societies to protecting critical infrastructures from cyber-attacks and regulating the use of digital currencies, to name just a few. To tackle these challenges, policy-makers seek out expert advice, which has become indispensable, considering the persisting complexity

E. Radulova · A. Spendzharova (✉)
Maastricht University, Maastricht, The Netherlands
e-mail: a.spendzharova@maastrichtuniversity.nl

E. Radulova
e-mail: e.radulova@maastrichtuniversity.nl

J. Breuer
European University Institute (EUI), Florence, Italy
e-mail: Johanna.Breuer@eui.eu

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and uncertainty in the policy environment. Experts[1] possess specialised knowledge and can reduce complexity by appropriately framing the problems and putting forward policy solutions, drawing on their accumulated theoretical and practical knowledge. They can help to manage uncertainly by providing detailed analysis and by applying standard routines based on previous experience (Craft and Howlett 2013, p. 191). Experts also offer "a methodology for arbitrating between competing truth claims" (Herwig 2014, p. 197). According to Ambrus et al. (2014), expert involvement is an important tool for increasing the legitimacy of decision-making. On the one hand, the inclusion of experts leads to a careful consideration of various policy alternatives and to a higher quality of the adopted decisions, thus ensuring *input and output legitimacy*. On the other hand, experts' involvement enhances *throughput legitimacy* due to the inclusiveness, transparency and the deliberative nature of the decision-making process (Ambrus et al. 2014, pp. 5–6). Owing to this effect of increased legitimacy, over time, the systematic inclusion of expert advice has become a key component of contemporary governance.

The legitimacy of expert advice has, however, come under attack in the current post-truth debate which challenges the assumption about the positive role of expertise in the policy-making process. Political actors such as Michael Gove (see Mance 2016; White 2016) have questioned the authoritative position of experts and countered evidence-based arguments with "alternative facts," as exemplified by Nigel Farage (Gillet 2017) and Donald Trump (for an extensive discussion see Nichols 2017). In essence, this indicates a strong perception among some politicians that experts are strategically used by policy-makers to justify political choices—a message which they have also expressed in election rallies and media campaigns aimed at the general public. Particularly successful in this context was Beppe Grillo in Italy who amplified the message that expert-based technocratic policy solutions are several steps removed from the concerns of 'ordinary citizens'. These rhetorical 'efforts' have led to undermining the authority of expert advice in public debates and have important implications for the general public's trust in political institutions.

[1] According to Grundmann and Stehr (2011, p. 40) experts are "mediators between producers of knowledge and users of knowledge; and thus, between those who create the capacity to take action, and those whose task it is to act."

Considering all of the above, it is important to investigate the main adaptation pathways undertaken in the EU political institutions in response to these challenges. In this chapter, we zoom onto a core source of expertise at the EU institutional level—the European Commission's expert groups (EGs)—and we aim to capture the trends during the period 2013–2018. Given the Commission's extensive use of and heavy dependence on expert advice the puzzle inspiring this research is to investigate empirically how the European Commission has adapted its expert group structures to the current shift toward greater contestation of expertise and expert advice in the public sphere. We selected the European Commission as the focus of our study due to its central role in the EU agenda-setting process: "in any political system, how policies are initially formulated and packaged has a strong bearing on eventual outcomes" (Princen and Rhinard 2006, p. 1119). Moreover, this is the institution that relies most extensively on expert input while drafting legislative and policy proposals. The five-year period was selected to capture any changes that have taken place while the complex system of EGs has experienced increased scrutiny and legitimacy critiques. We take into account the growing *structural contestation* in the European policy environment (see Introduction to this volume). This form of contestation is raised by stakeholder groups which criticise the lack of transparency, the structural biases or the privileged position of certain expert views over others in institutionalised decision-making. Typically, the contestation lines are between representatives of non-governmental organisations (NGOs) and civil society groups on the one hand and business interests or industrial capital on the other hand.

This chapter is structured as follows: to begin with, sect. "State of the Art and Research Design" outlines the state of the art, the research design of the study, the case selection and the data sources. In sect. "The (Changing) Landscape of the European Commission Expert Groups", we examine the broad trends in the entire EG system and across all Commission DGs. Section "The Commission's Register of Expert Groups as an Instrument of Transparency and Accountability in EU Expert Governance" presents two case studies which allow us to investigate the concrete adaptation pathways to the contestation of expertise at the level of individual expert groups. Lastly, sect. "A Better Balance in the Representation of Corporate and Civil Society Interests?" summarises the main findings of the chapter.

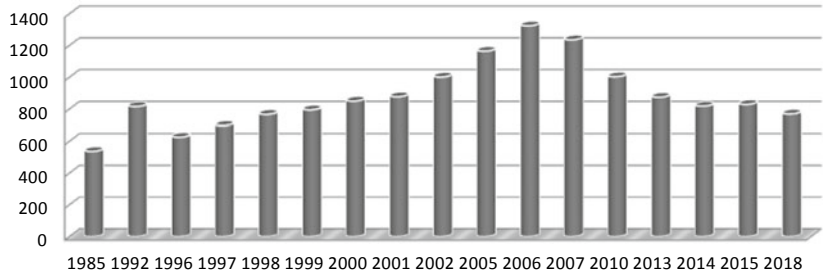

Fig. 5.1 Number of Commission expert groups, 1985–2018 (*Sources* Metz [2013]; Blomeyer and Sanz [2015]; authors' own calculation based on Commission data)

State of the Art and Research Design

The Commission is at the heart of EU policy-making, charged with the crucial role to initiate legislation for the complex EU system of multi-level governance. Throughout the decades of European integration, the Commission has systematically resorted to external expert advice. Its permanent staff of about 33,000 civil servants (European Commission, 2018b) is advised by 23,491 experts[2] divided among 770 expert groups. In other words, the Commission is a relatively small bureaucratic organisation, which has to address the "functional demands of an ever-expanding European Community for technical information and expertise" (Vos 1999, p. 19) and, therefore, depends on input from external experts. Figure 5.1 displays the total number of Commission expert groups since 1985.

As highlighted by Metz (2013, p. 269), expert groups can be viewed as an important asset for the Commission to manage its complex policy environment and to acquire the resources demanded to perform its tasks. One of the core functions of the expert groups is to increase the problem-solving capacity of the Commission's decision-making. This mode of knowledge utilisation is known as *instrumental* (Schrefler 2010, p. 315), meaning that scientific expertise provides specialised information that fosters a collective discussion and search for scientifically-based

[2] Data from the Register of European Commission Expert Groups extracted on 6 February 2018.

solutions to existing problems. In this context, information is used as factual evidence to solve a policy problem (Weiss 1979). Scholars have also identified other forms of expert knowledge utilisation. Next to instrumental, there is also a *strategic* use of expertise with two modalities—a substantiating and a legitimising one (Schrefler 2010, p. 315). A substantiating function is observed when expert advice is used to promote and/or justify predetermined policy preferences and provide reasons for an already defined course of action. A legitimising function is observed when expert advice is used to lend greater credibility to the decision-making process and policy outcomes. In this context, the involvement of experts is symbolic and primarily taps into the experts' reputation for reliable scientific advice, rather than into their substantive knowledge and careful analysis. Based on Schrefler's analysis (2010, p. 321), under conditions of high contestation, such as in the current period of post-truth politics, we expect to find less instrumental and a more strategic use of expertise.

Similarly to Schrefler's (2010) approach, Metz (2013, p. 270) views the expert groups as an important arena for the articulation of policy opinions of a variety of relevant stakeholders. She highlights three different uses of expertise in the policy process: a problem-solving use, a substantiating one and a consensus-building one. Firstly, the problem-solving use is rather technocratic and refers to drawing on experts' factual and practical knowledge and insights when drafting legislation (Metz 2013, p. 271). Secondly, in the substantiating mode, the Commission uses the information provided more strategically to substantiate its positions and justify a preferred course of action. Thirdly, in the consensus-building mode, the Commission values experts and their knowledge, but it primarily seeks to bring together diverse viewpoints in a more formal institutional setting and identify possible agreements that can serve as the basis for widely accepted legislation (Metz 2013, p. 272). In the third mode, the expert groups' institutional context facilitates negotiations based on open communication and trust, thus, helping to accommodate diverging interests.

Existing studies have reached different conclusions about the observed mix of the *instrumental* and *strategic* use of expert knowledge by the Commission. Rimkute and Haverland (2015) find that the strategic use of knowledge, albeit present, is not highly prominent in the process of legislative proposal drafting. On the contrary, they report that the instrumental use is perceived as dominant by the scientific contributors to

deliberations. By contrast, other scholars (Hartlapp 2015; Radulova and Mkheidze 2015) have found increasing politicisation of the Commission and, consequently, a more strategic political use of external experts.

Against this backdrop, the aim of our contribution is to provide a theoretically-informed exploratory study of how the Commission has adapted its expert group structures to the contestation of expertise against the backdrop of the post-truth debates. Particularly, we focus on one commonly advanced claim when contesting expert advice, namely, that expert groups are prone to "corporate capture" by powerful industry groups. If this claim is valid, the composition of the expert groups would show a dominance of corporate or business interests vis-à-vis smaller companies, public actors, NGOs or academic experts. We probe the claim at two levels of analysis: first, in sect. "The (Changing) Landscape of the European Commission Expert Groups" we survey macro level changes and, second, in sect. "The Commission's Register of Expert Groups as an Instrument of Transparency and Accountability in EU Expert Governance" we investigate in-depth the micro level dynamics in two specific expert groups. This set-up allows us to examine systematically the adaptation pathways of the Commission's expert groups system to the greater contestation of expertise.

To conduct the analysis, sect. "The (Changing) Landscape of the European Commission Expert Groups" examines the system of expert groups as a whole, based on primary Commission documents, quantitative data extracted[3] from the Register of the Commission's expert groups, interviews and the existing academic literature. We draw on statistical data about the number and composition of the expert groups found in: Larsson (2003), Larsson and Murk (2007), Gornitzka and Sverdrup (2008, 2011) and Metz (2013, 2015). The most recent and comprehensive study on this topic was commissioned by the European Parliament and executed by Blomeyer and Sanz (2015), which we supplemented with the most recent data from 2018.

After the survey of macro level changes in sect. "The (Changing) Landscape of the European Commission Expert Groups", sect. "The Commission's Register of Expert Groups as an Instrument of Transparency and Accountability in EU Expert Governance" focuses on the micro level dynamics in two expert groups. The case selection is based

[3] The Register data are from the 6 February 2018 and were provided by the General Secretariat of the Commission Unit B2.

on high societal interest and media attention. Moreover, the selected expert groups advise on important sectors of the economy, which deal with highly specialised and complex issues and generate a high level of structural contestation. Given the high contestation and the large degree of public scrutiny, these can be considered most likely cases to find systematic adaptation in the work of the expert groups. The concrete EGs were selected from the Register of Commission Expert Groups applying the search criteria for an active expert group and containing type C experts (the category encompassing corporate actors). The following two expert groups were selected for further examination after excluding ad hoc and informal or too narrowly technical EGs:

- ***E03485***—High-Level Expert Group on Sustainable Finance
- ***E02611***—Expert Group on the exchange of information on Best Available Techniques related to industrial emissions (IED Article 13 Forum).

Next to high issue salience and contestation, the two case studies represent Commission Directorate-Generals (DGs) which are quite active in the EU legislative process: DG FISMA and DG ENV (see Fig. 5.2). In DG FISMA we observe a pronounced reduction in the consulted expert groups from 26 in 2013 to 17 in 2018. While in the past DG ENV was one of the most active DGs to consult expert groups, during the studied period the number of EGs for this DG has oscillated between 50 and 60.

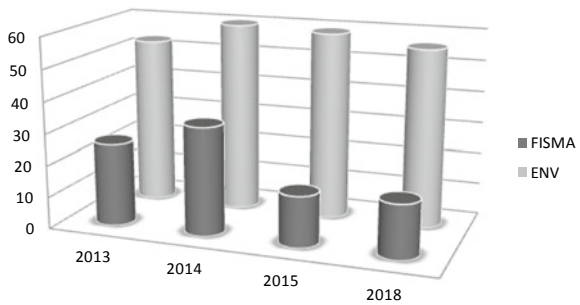

Fig. 5.2 Number of expert groups consulted by DG ENV and DG FISMA, 2013–2018 (*Sources* Authors' calculation based on Blomeyer and Sanz [2015] and Commission data [2018a])

The (Changing) Landscape of the European Commission Expert Groups

The Commission expert groups play an important advisory role in the agenda-setting and policy formulation stages of the policy process when the Commission drafts legislative and policy proposals.[4] This section examines the changes in the pre-legislative advisory structures of the Commission in response to the challenges of the post-truth period. In sub-sect. 3.1. we summarise the efforts to ensure *greater transparency*, such as the establishment and subsequent reforms of the Commission's Register of Expert Groups. The most notable reform in this context was the adoption of new Horizontal Rules on the creation and operation of Commission Expert Group in 2016 and establishing an obligatory link between the Transparency Register and the Register of Expert Groups. Secondly, in sub-sect. 3.2. we trace the efforts to achieve a *more balanced composition* between representatives of industrial/corporate and civil society/non-governmental interests. The key evidence in this respect is the recruitment of experts via public calls as well as the new obligatory link between the Transparency Register and the Register of Expert Groups. These measures are intended to reduce the likelihood of "corporate capture" of the expert groups.

The Commission's Register of Expert Groups as an Instrument of Transparency and Accountability in EU Expert Governance

Blom (this volume) discerns two waves in the scholarship of EU committees—the first wave focused on comitology committees, while the second one examines the expert groups. Scholarly attention to the Commission's pre-legislative advisory structures is relatively new (Larsson 2003, p. 127) and it has been particularly challenging to obtain reliable data about the active expert groups and their composition. The launch of the Commission's Register of Expert Groups in 2005 considerably improved the access to this data (Larsson and Murk 2007, p. 66) and, hence, it also enhanced the transparency of advice provision. In fact, it has made

[4]Van Ballaert (2015) estimated that expert groups assisted the Commmission in preparing about a third of the legislative proposals, especially in dossiers of more transversal nature and/or when the legislative proposal concerned standard-setting.

new research possible, allowing more systematic and also more critical studies (Gornitzka and Sverdrup 2008, p. 726). The Register currently offers information about the active and "on hold" expert groups, their members, mandate, topics of discussion and the respective lead DG (European Commission 2016b, pp. 15–17). All in all, the 2016 reform of the Register, accomplished through the adoption of the new Horizontal Rules on the creation and operation of Commission Expert Groups aimed at a high level of transparency.

While the statutory transparency provisions are adequate, their application varies substantially between the Commission's different DGs. Under the current Horizontal Rules, the DGs are expected to "ensure publication of the agenda and other relevant background documents in due time ahead of the meeting, followed by the timely publication of the minutes" (ibid., Article 26). However, there is a big variation in how different DGs implement the provisions. During our own work with the Register, we found that regular updates of the documents and information about a group's activity were often lacking and sometimes already uploaded documents were eventually removed.

In sum, the launching and continuous improvement of the Register via the different releases has brought the pre-legislative expert groups into the spotlight and, therefore, it has considerably improved access to data. However, the sheer existence of data is not enough—it should also be easily extractable and comparable over time in order to enable systematic comparisons and analysis of the trends over time. At present, the General Secretariat is considering how to provide to all interested parties standardised reports with structured data in regular time intervals (Interview no. 2).

There are also challenges with the reliability of data (see Blomeyer and Sanz 2015, p. 30 on organisation name entries). Data reliability is safeguarded by the formal rules of the Register. In practice, however, there are duplications and divergence in reporting the group membership due to the lack of formal cross-checking among the different DGs convening the expert group (Interview no. 2). Taking measures to ensure that the Commission's Secretariat General has the mandate and resources to achieve data accuracy and reliability is still a very important priority. Otherwise, the advantages of better information provision cannot be fully converted into a better understanding of who actually participates in the expert groups.

A Better Balance in the Representation of Corporate and Civil Society Interests?

In this sub-section we take stock of the measures undertaken by the Commission to address the frequent critiques regarding the composition and operation of its expert groups. Civil society organisations (ALTER-EU 2008, 2013, 2016), the European Parliament (see Blomeyer and Sanz 2015) and the European Ombudsman (2016, 2017) have systematically raised concerns about major deficiencies in the advisory structures of the EU executive, such as an inconsistent categorisation of expert group members, an overrepresentation of corporate interests and, notably, frequent instances of conflict of interest for individual experts appointed in their personal capacity (the so-called type A experts in Table 5.1). The instances of conflict of interest are a key concern for NGO stakeholders, observers and academics alike, because they show that representatives of business interests can assume the position of "experts," while in practice these actors engage in policy advocacy. Such practices may eventually lead to corporate dominance and may skew legislation toward the preferences of the most well-organised business interests. The strategic use of the "corporate capture" message in the media and in election rallies has contributed to the gradual erosion of the general public's trust in expert judgment and policy proposals.

Table 5.1 Categorisation of experts for the purposes of the register of Commission expert groups

Type A	Individuals appointed in a personal capacity, acting independently and expressing their own personal views
Type B	Individuals appointed to represent a common interest shared by stakeholder organisations in a particular policy area. They do not represent individual stakeholders, but a particular orientation common to different stakeholder organisations. They may be proposed by stakeholder organisations
Type C	Organisations in the broad sense of the word including companies, associations, NGOs, trade unions, universities, research institutes, law firms and consultancies
Type D	Member States' authorities—national, regional or local
Type E	Other public entities, such as authorities from non-EU countries (including candidate countries), EU bodies, offices or agencies, and international organisations

Source European Commission (2016b)

The Brussels-based Alliance for Lobbying Transparency and Ethics Regulation, commonly known as ALTER-EU, has been particularly concerned about instances of corporate capture in EU policy-making and has collected evidence of such activities. According to their assessment, "big business interests, meaning corporate lobbyists dominate EGs" (ALTER-EU 2013, p. 3). For example, they estimated that in 2013 almost 80% of the new appointments to the EGs of the DG Taxation and Customs Union represented corporate interests (ALTER-EU 2013, p. 3). Similarly, Chalmers (2014, p. 976) has found that being a member in an expert group depends on "superior resources, EU-level interests and existing institutionalised ties to decision-makers." In 2018, ALTER-EU still continues to encounter business and industry-dominated EGs (Interview no. 3).

The potential problem with type A experts outlined above is not unique. The other expert categories are also open to corporate overrepresentation and, hence, to potential bias in the issued expert advice. While it is challenging to produce an exact estimate of the degree of domestic corporate capture in the EU member states, it cannot be ruled out that the representatives of the member states (type D) and of other public authorities (type E) could be advocating for particular business interest despite the signed conflict of interest declaration (Interview no. 3). Such model of influence would additionally amplify business/industry preferences during the expert deliberations. While the avenues of advocacy of private interests via the type A or type D/E categories is rather indirect, type B and C experts are overt and direct channels for representation of special interests in Commission EGs. This is why our analysis now turns to examining the composition of experts per type and DG.

Table 5.2 shows considerable variation in the composition of the expert groups, and respectively in the proportion of the five types of experts, across DGs and policy sectors. Moreover, the variation is even greater at the level of the individual experts: within the type B and type C experts, there are further categories to be explored, such as trade/business association, company, NGO, academia or research institute. Critical observers, such as ALTER-EU or the Ombudsman, suspect that "corporate capture" is facilitated precisely by the (dis)balance at this sub-category level. For these reasons, in November 2011, the European Parliament put a reserve on the Expert Group Budget and posed to the Commission four conditions under which the reserve would be lifted (Blomeyer and Sanz 2015, p. 16). Additionally, the Ombudsman, Emily O'Reilly, insisted in 2014

Table 5.2 Number of experts per type and per Commission DG

DG	*Type A*	*Type B*	*Type C*	*Type D*	*Type E*	*Total*
AGRI	62		461	308		831
BUDG	5			56		61
CLIMA			42	112	10	164
CNECT	63	1	109	527	10	710
COMP				28		28
DEVCO			56	364	1	421
DGT	10					10
EAC	21		63	460	101	645
ECFIN			16	159	7	182
ECHO				192	28	220
EMPL	21	191	276	879	119	1486
ENER	4		64	557	10	635
ENV	23		299	1501	100	1923
EPSO				28		28
ESTAT	6		1	2229	97	2333
FISMA	18	48	125	263	12	466
FPI				28		28
GROW	49	26	777	2279	191	3322
HOME	31		58	751	67	907
HR				55		55
JRC	12		1	27		40
JUST	129	67	87	780	47	1110
MARE	32	4	58	205	11	310
MOVE	17	2	567	1031	100	1717
OLAF				112	3	115
REGIO	30		60	196	15	301
RTD	625	65	99	201	59	1049
SANTE	119		277	1360	93	1849
SG	5	18	22	112	4	161
TAXUD	14		217	1805	66	2102
TRADE		30	28	224		282
Grand total	1296	452	3763	16,829	1151	23,491

Source European Commission, register of EGs, compiled by the European Commission on authors' request (6.02.2018)

and again in 2016 on several measures with regard to the Commission's EGs (European Ombudsman 2017, p. 5). Among the demands is the achievement of a balanced composition of the expert groups, linking the Register of EGs with the Transparency Register and releasing regular public calls for applications.

In principle, the Commission DGs have full discretion regarding whether to convene an EG and who will participate in it. Unlike the Commission's comitology committees, which have a stronger legal basis, the pre-legislative EGs do not have to follow a strictly prescribed process of group selection. Still, some adjustments have taken place despite the DGs' relatively high discretion in the convening and management of the EGs. Particularly, the Juncker Commission (in office since 2014) declared transparency and accountability to be a high priority and, therefore, it has undertaken a number of measures to achieve these objectives. For example, it releases a public call for applications for every expert group, with a four-week minimum[5] deadline for all calls. Furthermore, type B and C experts are now obliged to also register themselves in the EU's Transparency Register. Lastly, the Commission has put in place new and more systematic checks of potential conflict of interest for individual experts appointed in their personal capacity to make sure that type A experts do not represent industrial/private sector interest under the guise of "serving in a personal capacity."

These measures have been recommended by the European Ombudsman (2017, p. 5) and have gradually taken concrete shape through the revised Horizontal Rules (2016), the consecutive new releases of the Register and by establishing a link between the Register of EGs and the Transparency Register (2017). The changes fit well with the renewed emphasis that the Juncker administration has placed on the ethical aspects of EU governance, such as the publication of meeting agendas of the Commissioners, their cabinet members, and of the Directors-General as well as the requirement that Commissioners do not to meet with organisations (or self-employed individuals) which are not registered in the Transparency Register. Another step toward greater transparency is the Commission's commitment to come forward with a proposal for a mandatory Transparency Register (Interview no. 1). Furthermore, the revised Horizontal Rules oblige each expert group (or rather its designated administrative support from the DG) to timely provide the agenda and the relevant other documents on the respective EGs webpage. This can be considered as adjustment in line with the requests for greater accountability and transparency in the functioning of the EGs (Interview no. 2).

[5] Exceptions are made in case of emergency and also for the member state authorities which can appoint their own EG representatives.

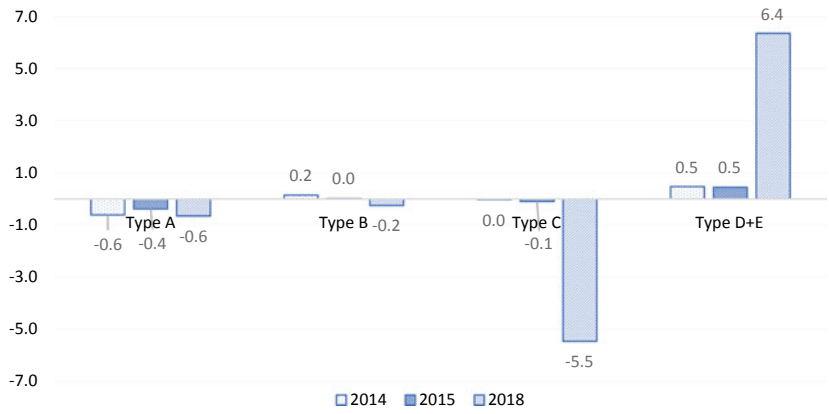

Fig. 5.3 Percentage change in types of experts in the Commission expert groups, 2014–2018 (*Source* European Commission data, register of EGs [2018a]; authors' calculations)

Have the changes outlined above led to a better balance in the expert groups? Next we evaluate the effects of the recent changes on the composition of the expert groups to supplement recent findings (Gornitzka and Sverdrup 2011; Metz 2015; Blomeyer and Sanz 2015) with new evidence about variation in the consulted types of experts.

Figures 5.3 and 5.4 suggest that the demands to re-label type A experts have been largely addressed, as shown by the decreased number of consulted type A experts in the period 2013–2018. There is an indication that the number of consulted type C experts also decreased in 2018 compared to 2015. To explore these insights more in-depth, we need the breakdown per subcategory of experts and policy sector, which is not available from the Register of EGs but from the EU's Transparency Register.[6] This register contains data in six categories, depending on the type of represented interest:

[6] The requirement that all type B and C experts should be registered in the Transparency Register allows cross-checking between the two registers and collecting more detailed data per sub-category.

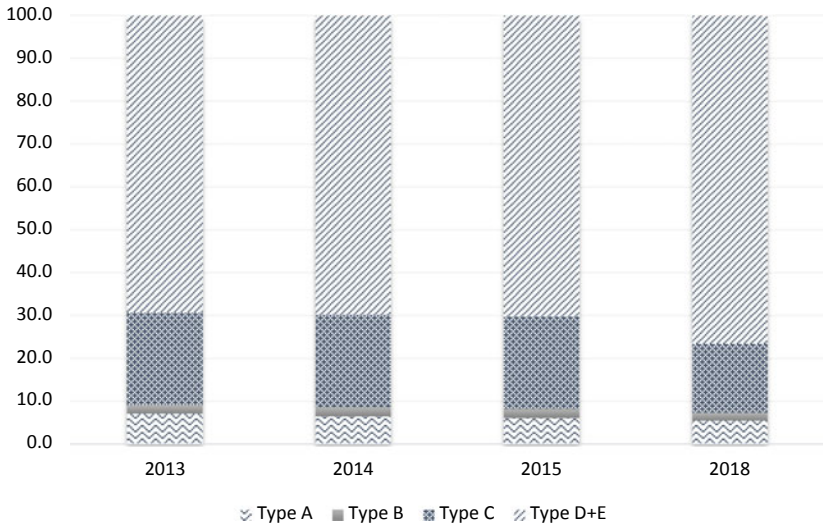

Fig. 5.4 The balance between different types of exerts in the Commission expert groups, 2014–2018 (*Source* European Commission data, register of EGs [2018a]; authors' calculations)

I. Professional consultancies/law firms/self-employed consultants
II. In-house lobbyists and trade/business/professional associations
III. Non-governmental organisations
IV. Think tanks, research and academic institutions
V. Organisations representing churches and religious communities
VI. Organisations representing local, regional and municipal authorities, other public or mixed entities

According to the Transparency Register classification, the type I and II categories stand for business and corporate interests, while types III, IV, V and VI indicate public and NGO interest representation. Focusing on the policy sectors of the two case studies in sect. "The Commission's Register of Expert Groups as an Instrument of Transparency and Accountability in EU Expert Governance", Finance and Environment, we cluster the data in two categories to gauge the balance between private business interests, on the one hand, and public and NGO interests on the other hand. The results presented in Table 5.3 indicate a two to one prevalence of private

Table 5.3 Distribution of interest representation per category of the transparency register for the sectors of environment and finance (March 2018)

	Types I and II	*Types III, IV, V and VI*
Finance	41 (66%)	21 (34%)
Environment	188 (63%)	110 (37%)
All policy domains (entire transparency register)	7085 (60%)	4600 (40%)

Source European Commission data, transparency register (2018a); Authors' calculations

business interests over public and NGO ones.

While the general distribution of interest representation in the two analysed sectors showed that business interests have a more substantial representation, it is unclear what the implications of this trend may be for the composition of expert groups and the deliberations and decision-making in individual EGs. Therefore, the next two sections focus on unpacking expert group advice in two particular cases.

Adaptation Pathways at the Level of Individual Expert Groups

After reviewing the macro level adaptations, we now turn to concrete adjustment pathways at the micro level. We examine two highly salient policy areas where recent legislative changes have been introduced. The key questions are how the Commission manages the heterogeneity of actors and views, in particular among type C experts, and how it copes with the growing structural contestation of expert advice. In addition, we assess the relationship between the Commission and its expert groups using Metz (2013, 2015) typology of: (1) problem-solving, (2) substantiating and (3) consensus-building use of expertise.

Case study of the High-Level Expert Group on Sustainable Finance

Firstly, we investigate the High-Level Expert Group (HLEG) on Sustainable Finance (Expert Group E03485). This advisory expert group was created with a Commission decision and tasked with presenting "policy recommendations that: (a) sets out the scale and dimensions of the

challenges and opportunities that sustainable finance presents; and (b) recommends a comprehensive programme of reforms to the EU financial policy framework, including a clear prioritisation and sequencing" (European Commission 2016d, p. 3). The group had a year to submit a final report, including carrying out a stakeholder questionnaire and preparing an interim report. The case analysis draws on the HLEG's reports, the minutes for each meeting obtained from the Register of the Commission's Expert Groups as well as additional press releases and Commission documents.

The HLEG consisted of 20 members and nine observers. Seven of the members were from the UK, four—from France, two—from the Netherlands, two—from Germany and one—from Sweden, Italy, Finland, Luxembourg and Poland, respectively. These are type B members: "individual expert appointed as a representative of a common interest" (Register, "Expert Group explained"). In terms of professional affiliation, the 20 members broadly belong to three groups: (i) one academic, (ii) three members from non-banks or non-profit organisations with a strong research interest in sustainability and (iii) fourteen members from banks, funds or other private entities. The third group is the most numerous one and includes primarily banks and funds which see sustainability and the protection of the environment as a fundamental part of their business model, such as APG Group, Mirova, Climate Bonds, Eurosif, Novethic, Trucost, 2°initiative. Other members in the third group represent the more general banking sector landscape, such as ALECTA, the Polish Bank Association, Deka, Finance Finland, AMC Strategy, London Stock Exchange, Luxembourg Stock Exchange and Aviva. The HLEG members did not include individuals working in a personal capacity or representatives of the member states' authorities.

The observer members of the HLEG could take part in all meetings and can be categorised as type C and type E experts. It is evident from meeting documents that the observers also participated actively in the discussions, which is in line with point 8 of the Rules of Procedure (Register, "HLEG", Agenda 11–12 September 2017). The type C expert observers were the European Association of Long-Term Investors, the International Capital Market Association and the Nordic-Investment Bank. Participating type E observers were European agencies and international institutions, such as the European Environment Agency, the European Investment Bank, the European Systemic Risk Board, the Single Resolution Board, the United Nations Environment Programme

and the United Nations Principles for Responsible Investment. In sum, the financial industry was well-represented in the composition of the HLEG group. In addition, type C and E observers came from more heterogeneous international backgrounds.

The Commission' selection procedure for the HLEG defined that the group's composition should ensure "a geographical and a gender balance, as well as a balanced representation of relevant know how and areas of interest" (European Commission 2016c, p. 7). However, more than half of the members were from the UK and France, which suggests an over-representation of member states with large banking sectors. In terms of gender balance, there were seven female and thirteen male experts. The prevalence of male experts and the male leadership of the HLEG is somewhat surprising, considering that sustainable finance generally exhibits more gender equality (Robinson-Tillett 2017).

The HLEG included experts from banks and funds which are interested in sustainability issues. However, the group did not include stakeholders that hold more "exceptional" views about sustainability in finance. Jeucken and Bouma (2001, p. 34) explain that in sustainable banking, the "bank does not look for the highest financial rate of return, but for the highest sustainable rate of return, while being profitable in the long run." Organisations advocating this view and more radical policy change, such as introducing capital requirements with sustainability weightings, are the Global Alliance for Banking on Values (GABV), Finance Watch and Mission 2020. Due to the exclusion of these more "extreme" actors and the resulting more mainstream industry composition, the expert group reflected more "mainstream" business interests. In turn, this led to less contestation in the group deliberations and outcomes.

The HLEG's mandate was quite broad. The European Commission (2016d, p. 3) requested a "set of policy recommendations […] [with] a comprehensive programme of reforms to the EU financial policy framework". Content-wise, the aim was to achieve increased investment in sustainable investment projects as well as to ensure that financial institutions and supervisors "protect the stability of the financial system from risks related to the environment" (European Commission 2016d, p. 3). Lastly, the Commission was interested in policies applicable to the entire EU in the context of the single market and, especially, geared toward consolidating the EU's leadership in sustainable finance.

The HLEG's broad scope is also reflected in the group's initial search for an appropriate definition of "sustainable finance". A clear

definition sets boundaries to what will be included or excluded in the discussions. With the first meeting the DG FISMA introduced "relevant issues/challenges to enhancing sustainable finance such as definitions and analytical tools/processes" (Register, HLEG, Minutes 25 January 2017, p. 2). Subsequently, multiple definitions of "sustainable finance" were given in the interim report but they still remained rather broad, such as "[f]inance fostering sustainable economic, social and environmental development" (HLEG 2017, p. 12).

A distinctive feature of the HLEG's deliberations is that there is no evidence of a high level of contestation within the group during the discussions. In the group's second meeting, the participants agreed on "[i]ntegrating sustainability into the functioning of the EU Financial System" (Register, E03485, Minutes 6 March 2017, p. 2). This would be achieved through three sets of actions: first, the adoption of different procedures in the "investment and lending chain", second, reducing "long-term and sustainability risks" and, third, answering to "structural obstacles and time misalignments" (ibid.). The early HLEG recommendations in the interim report further elaborated on these three sets of actions. Table 5.4 summarises the interim and final list of recommendations, including the extent of change observed. The HLEG's final report, published in January 2018, contained five key recommendations, effectively omitting some of the more controversial recommendations formulated in the interim report. One possible explanation for the shorter list in the final report is feasibility, given the group's mandate: "The group will need to prioritise those areas where the highest leverage impact can be, particularly since urgent change is needed" (Register, HLEG, Minutes 24 January 2017, p. 2). The final list of recommendations is geared toward more harmonisation in sustainable financial products and working methods across the EU and matches the indicated priorities well.

In sum, considering the high contestation of financial sector legislation since 2008, we expected to find more strategic use of expertise (Schrefler 2010) in the case of the HLEG, which was indeed the case. The relatively homogenous composition of the expert group enabled the chair to steer the deliberations and, subsequently, the policy recommendations toward more moderate and pragmatic goals. Revisiting Metz' (2013) typology of the uses of expertise, this is in line with a substantiating use in order to further strengthen and harmonise the internal market in financial services as well as a consensus-building use in order to identify broad areas of agreement on key priorities shared among the different HLEG members.

Table 5.4 Interim and final recommendations of the HLEG on sustainable finance

	Recommendations in the interim report (2017)	*Extent of change*	*Recommendations in the final report (January 2018)*
1	"A classification system for sustainable assets" (p. 55)	No change	"Establish and maintain a common sustainability taxonomy at the EU level" (p. 15)
2	"A European standard and label for green bonds and other sustainable assets, as well as labels for sustainable funds" (p. 56)	No change	"Develop and implement official European sustainability standards and labels, starting with green bonds" (p. 30) "Key elements of a retail strategy on sustainable finance: investment advice, ecolabel and SRI minimum standards" (p. 27)
3	"Fiduciary duty that encompasses sustainability" (p. 57)	Rephrased and weakened	"Clarify investor duties to better embrace long-term horizon and sustainability preferences" (p. 20)
4	"Disclosures for sustainability" (p. 57)		"Upgrade disclosure rules to make sustainability risks fully transparent, starting with climate change" (p. 23)
5	"A sustainability test in financial legislation" (p. 58)	Deleted	–
6	"Create ´Sustainable Infrastructure Europe'" (p. 58)	No change	"Establish 'Sustainable Infrastructure Europe'" (p. 34)
7	"Position the European supervisory agencies on sustainability" (p. 59)	Deleted	–
8	"Accounting standards for energy efficiency" (p. 59)	Deleted and allocated to "other actions"	"Accelerate action to finance energy efficiency investments" (p. 59)
9			"Governance and Leadership" (p. 38)

(continued)

Table 5.4 (continued)

	Recommendations in the interim report (2017)	*Extent of change*	*Recommendations in the final report (January 2018)*
10			"Include sustainability in the supervisory mandate of the ESAs and extend the horizon of risk monitoring" (p. 41)

Source Authors

Case Study of the Industrial Emissions Directive Article 13 Forum

The expert group E02611 is formally called "Expert Group on the exchange of information on Best Available Techniques related to industrial emissions" but it is commonly known as "IED Article 13 Forum." The group was established in 2011, in compliance with Article 13 of the Industrial Emissions Directive (IED)—2010/75/EU Recast. It is the successor to the Information Exchange Forum, created under the previous Integrated Pollution Prevention and Control Directive 2008/1/EC. Both Directives define the framework for issuing environmental permits to large industrial installations (refineries, iron and steel plants, etc.) on the territory of the European Union, and aim to control and reduce pollution from these largest industrial sources.

The regulatory approach pursued in the IED is co-regulatory—the regulated parties actively participate in the process of standard-setting which has to be complied with—through the provision of data about levels of industrial emissions released in the environment (air, water and soil). This mode of steering brings many advantages: it is more inclusive, ensures active stakeholder participation and a more deliberative nature of the governance process. Furthermore, it brings about lower transaction costs of negotiating an agreement between heterogeneous actors, higher levels of compliance and lower costs of the regulatory process itself (Koutalakis et al. 2010, pp. 330–331). The IED previews (Article 13) an information exchange about the levels of industrial emissions between member states, the industries concerned, non-governmental organisations promoting environmental protection and the Commission. This exchange

takes place via the IED Article 13 Forum, which was created as a formal expert group through Commission decision (2011/C 146/03) of 16 May 2011, whereby the lead DG is Environment and the Joint Research Centre (JRC) is the associated DG. The main function of the Forum is to assure the largest possible consensus regarding the BAT reference documents described below (known as BREF). The BREFs are drafted in a complex procedure known as the Sevilla process led by the European Integrated Pollution Prevention and Control Bureau (EIPPCB), which is part of the Joint Research Centre. The Forum plays a coordinative role and steers the general and horizontal aspects of the information exchange (Schoenberger 2009, p. 1527). Furthermore, the Technical Working Groups (TWGs) are made up technical experts representing the member states, industry or NGOs and play an important role in drawing up and reviewing the BREFs.

There are more than 50,000 large industrial installations in the EU which must operate according to the EU standards for prevention and control of pollution, and therefore obtain an environmental permit that certifies that. The permit confirms compliance with binding emission limits (e.g. for sulphur dioxide) based on a set of Best Available Techniques (BATs) endorsed for the Union as a whole. The primary function of the expert group IED Article 13 Forum is to draw up, review and update BAT reference documents (BREFs). The BREFs are complex technical manuals of hundreds of pages which set out norms and good practices in the management of industrial emissions. Once drafted with the largest possible consensus (Article 13 IED) and adopted—by a Comitology committee (Article 75 IED)—the BREFs are used by the member state authorities as the reference standard for setting permit conditions to large industrial installations. Clearly, the content of a BREF and especially the emission reference standards it endorses have far-reaching (material) consequences for the EU member states and their regulated industries. Therefore, the process of BREF endorsement is highly political.

The main data sources used in the case study in order to reconstruct this contestation and the coping strategies on the side of the Commission are the available constitutive documents (e.g. the founding Commission decision, the Rules of Procedure) and the minutes of the IED Article 13 Forum available from the Register of Expert Groups. Moreover, an interview was conducted in the Unit C4 (Industrial Emissions) of DG Environment.

In principle, all interested parties can express their interest in joining the TWGs or the Forum. The access is open and the selection starts with an expression of interest procedure which is managed by the Unit C4 of DG Environment. This is why there is a relatively large number of sectoral TWGs, encompassing more than 350 representatives, working on the various BREFs, of which more than 30 have already been endorsed. The Forum participants (European Commission 2018c)[7]vary between 90 and 100, whereby the majority of more than 50 are type C corporate experts next to the 28 experts from the member states (type D). There are about 10 type E experts—observers from the candidate and associated to the EU countries. The access to the exert group is thus open and not formally restricted, but experts must be knowledgeable about industrial emissions and be able to evaluate the underlying industrial installations and production processes. This is a serious hurdle for environmental NGOs, which are not able to collect data comprehensively, especially not about all member states. This is why the NGOs join forces and are represented by one umbrella NGO—the European Environmental Bureau (EEB). According to DG Environment, the EU-wide NGO platforms which aim to influence the decision-making process have acquired certain specialisation in order to concentrate resources and accumulate sufficient knowledge and expertise (Interview no. 4). Industrial emissions are thus "covered" by the EEB. Indeed, this is the NGO present at all ten Forum meetings conducted so far. For seven of them, it is the only NGO, while for three of them it is joined by the Climate Action Network (CAN Europe).

The main line of contestation in the expert group is between the environmentally progressive and the environmentally conservative coalition (Interview no. 4). These are not homogenous groups, as beyond the traditionally protective NGOs environmentally progressive positions are defended also by several Northern European member states and also by the representatives of the industrial sector which have invested in expensive state-of-the art environmentally-friendly production technologies and smaller industrial emissions processes. Assessed from a purely quantitative perspective, this coalition has fewer members than the coalition advocating for the preservation of the status quo. However, the process is not strongly influenced by this numerical headcount because neither the

[7]Eropean Commission (2018c) (http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=2611)

TWG nor the Forum use voting to take decisions. On the contrary, expert discussions are often geared toward finding a middle ground between the progressive and the conservative coalitions. Moreover, only robustly documented evidence is considered, regardless of the source. Hence, the quantitative disparity in this EG is not seen as a disadvantage for the environmentally progressive coalition (Interview no. 4).

According to the Commission (2018a), the BREFs are "determined in a transparent manner, based on sound techno-economic information." Indeed, the process is entirely based on documents and verifiable data, which can be and are challenged within the TWG discussions. The chances for the Commission to be misled are minimal because in the process of open deliberations among such a large group of experts, potential inaccuracies are cancelled out (Interview no. 4). The middle-ground identified after the TWG expert discussions is spelled out by the EIPPCB and incorporated in the part of the draft BREFs which is labelled "under consensus." All dissenting views are reported under the part of the document labelled "split views." The BREF is then submitted to the IED Article 13 Forum, which is required to provide its opinion to the Article 75 committee no later than eight weeks prior to the meeting of the committee.

As already mentioned, the main function of the Forum discussions is to generate the broadest possible consensus to underpin the draft BREF, as submitted by the TWG. The discussions at this level are not technical but oriented toward finding an agreement—the Forum looks for the feasible concessions to even out the so-called "split views." When the Forum succeeds in reconciling the different views, the Commission reports the comments as "consensual within the Forum." The remaining comments are categorised as "representing the views of certain Forum members." This categorisation at the level of the TWG and of the Forum allows a single BREF to be proposed to the Article 75 committee, which votes on an implementing act that incorporates it. Given the open access to the expert group and the ensuing heterogeneity of views, it is only via robust documentation of the lines of agreement and disagreement that the process of contestation can be feasibly managed. The non-consensual comments are annexed to the opinion of the Article 13 Forum and

offered to the Article 75 committee. Moreover, the opinion of the Forum is publicly available, and minutes[8] are kept of every meeting.

High Contestation and Strategic Use of Expertise

Overall, referring to the conceptualisation of Metz (2013, 2015) about problem-solving, substantiating and consensus-building uses of expertise, the two case studies show a frequent interplay between the different uses. In the finance case study (Expert Group E03485), we observe some problem-solving use: the experts' factual and practical knowledge of sustainable finance products was used when drafting the EG's recommendations. Intertwined with this use, we find substantiating use to achieve greater market harmonisation. The very selection of experts with more moderate views when the HLEG was set up limited the range of debated views and policy options to more modest measures which help to expand the single market in finance with a new range of sustainable finance products and working methods, but which do not require a big revision of the status quo. This indicates a consensus-building use of expertise intertwined with the substantiating one.

The use of expertise in the IED Article 13 Forum (or Expert group E02611) is also of mixed nature. In the case of the IED Article 13 Forum (Expert Group E02611), the predominant use of expertise is for consensus-building, but the problem-solving use is prevalent in the TWGs. In fact, the TWGs are the core arena of the discussions requiring technical expertise, while the Forum aims to clarify and to achieve the broadest possible consensus alongside the draft BREF proposed by the TWG. If compared to the vertical negotiations in the Council of the European Union, the work of the Forum is similar to the political role of COREPER (Interview no. 4), while the Technical Working Group (TWG)—functioning under the Forum and chaired by the EIPPCB—conducts the detailed and more technocratic expert analysis.

[8] Available from the Register of Commission Expert Groups at: http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=2611, accessed in March 2018.

Conclusion

Some level of acknowledgment that expertise has a political function or that "the technical is political" (Bijker et al. 2009; see also Weiss 1979; Schrefler 2010) has always been present in social science scholarship. The post-truth debates have emphasized and mainstreamed such claims and pointed to the interconnectedness between the instrumental and strategic uses of expert advice in the practice of public administrations. This chapter examined how the central technocratic institution of the EU—the European Commission—has sought to better legitimise its usage of expertise, considering the mobilization by some politicians of the message that experts are strategically used by policy-makers to justify political choices and the resulting policy does not respond to the concerns of the "ordinary citizen." While the Commission is still searching for the right mix between a technical and a political use of expertise in its advisory structures, our analysis shows that experts continue to play an important problem-solving role in the European policy process.

We investigated one important line of contestation of expert advice, namely, that expert groups are more responsive to corporate interests, compared to other stakeholders. The main finding is that neither at the macro nor at the micro level of analysis was there decisive evidence of "corporate capture." The macro level analysis in sect. "The (Changing) Landscape of the European Commission Expert Groups" showed that the Commission has made substantial investment in increasing the procedural transparency of the system of expert groups through implementing the new Horizontal Rules (2016), establishing a link between the Transparency Register and the Register of Expert Groups (2017), reducing the number of type A experts and rebalancing the prevalence of type B and C experts. These efforts aim to enhance the transparency of the expert groups' work and to address critiques about experts making decisions "behind closed doors." Relating our findings to more general studies of organisational change in the EU, our results confirm the thesis of Moodie (2016, p. 236) that the Commission is responsive toward the policy environment and pro-actively adapts to new challenges, such as the greater structural contestation of expert advice. Nevertheless, the adjustment approach is rather formal and aims to keep the established models and administrative routines. The observed adjustments are in line with what Boswell (2008) has labelled a "reinterpretation strategy," namely, reform

measures which do not introduce a thorough in-depth revision of administrative practices, routines and internal working processes and, thus, do not affect the "deep core" of an organisation's set-up and operations.

Furthermore, the micro level analysis in the two case studies of sect. "The Commission's Register of Expert Groups as an Instrument of Transparency and Accountability in EU Expert Governance" showed that there is a reliance on a more strategic (consensus-building) use of expertise, which helped to narrow down the range of viewpoints and, consequently, the issues within the scope of the EG deliberations. Eventually, this facilitates the identification of compromises and acceptable policy solutions rather than overturning the status quo. The overall outcome of the expert groups' advice in the case studies is a gradual progress toward reaching the overarching policy goals: making the financial sector more sustainable and setting lower limits of industrial pollution.

List of Conducted Interviews

Interview no. 1 with Commission Official from the Transparency Unit (B4) of the Secretariat-General of the European Commission, Brussels on 22 January 2018.

Interview no. 2 with Commission Official from the Institutional Affairs Unit (B2) of the Secretariat-General of the European Commission, Brussels on 22 January 2018.

Interview no. 3 with representative of the Alliance for Lobbying Transparency and Ethics Regulation (ALTER-EU), Skype interview on 1 February 2018.

Interview no. 4 with Commission Official from Industrial Emissions Unit (C4) of the DG Environment of the European Commission, Telephone interview on 23 March 2018.

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CHAPTER 6

The Role of Expertise in the EU's Emerging Diplomatic System

Tannelie Blom and Sophie Vanhoonacker

Introduction

The focus of this chapter is on the organisation and role of expertise in the Common Foreign and Security Policy (CFSP) as it has gradually taken shape since the entering into force of the Lisbon Treaty (December 2010) and the subsequent creation of the European External Action Service (EEAS). A separate chapter dedicated to CFSP is justified for a variety of reasons. Firstly, the decision making process in this sensitive policy field differs from that in other EU policy fields where in most cases the European Commission has the exclusive right of initiative and the European Parliament is co-legislator together with the Council. In this primarily intergovernmental field, the member states and the High Representative for Foreign Affairs and Security Policy (HRVP) are in the

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T. Blom (✉) · S. Vanhoonacker
Maastricht University, Maastricht, The Netherlands
e-mail: blom@maastrichtuniversity.nl

S. Vanhoonacker
e-mail: s.vanhoonacker@maastrichtuniversity.nl

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lead. This set-up has also implications for the organisation and sources of expertise, with the European Commission occupying a much less central role than in other policy fields.

Secondly, the creation of the EEAS is a watershed for the organisation of European foreign policy expertise. For most of the history of European foreign policy cooperation, the member states served as the main source of foreign policy expertise. The bigger ones, supported by well-established national foreign ministries and a wide network of embassies, were generally better placed than the small ones. The establishment of a Policy and Early Warning Unit following the entering into force of the Treaty of Amsterdam (May 1999) was a first attempt to complement the national expertise with an autonomous body for European-level information gathering and analysis. It is however only with the Treaty of Lisbon and the establishment of the EEAS that we see the rise of a significant Brussels-based player in the foreign policy field (Dijkstra and Vanhoonacker 2011). The question arises how this new actor has dealt with the challenge of gathering expertise for its day-to-day decision making.

Thirdly, the question of expertise in CFSP is interesting because of its specific character. The expertise required in the area of foreign policy is related to international developments and countries, regions and organisations that are situated outside the European Union. Although part of the expertise is available on the basis of open sources, it also requires presence on the ground. It is therefore interesting to explore how the Union delegations, who now have competences in all aspects of external relations, fulfil a role as sources of expertise.

Last but not least, it is interesting to see how the EU is responding to the changing needs as a result of processes of globalisation and the increasingly complex and technical nature of international dossiers. While the traditional diplomat used to be a generalist with strong negotiation skills and a high sense of cultural sensitivity, the new international context often also requires technical knowledge. In other words, the required expertise needs to be much more multi-faceted than it used to be.

The central question addressed in this chapter is how the HRVP and the EEAS have organised the gathering and processing of European foreign policy expertise and whether this has led to contestation, either from the member states, the Commission, or the broader public. We start by conceptualising the current use and organisation of expertise in the field of EU external action. In line with earlier work conducted on the politics of information (Blom and Vanhoonacker 2014), we make a

distinction between the rules of the game underlying the organisation of expertise in the EEAS and the day-to-day practice of these rules. Building on social psychology, we motivate our choice to focus on expert groups rather than on individual experts as our basic unit of analysis. We do not limit ourselves to subject matter expertise but also include political expertise, procedural expertise, policy expertise and expertise on experts (Garret et al. 2009) (see also Blom in this volume). As a second step, we examine how the EEAS acquires and processes expertise in the concrete case of the Asia-Pacific department. As the organisation and role of expertise in the EEAS has not been researched so far, our research is very much of an exploratory nature.

Conceptualising Expertise in the EEAS

In *The politics of Information—The Case of the European Union* (Blom and Vanhoonacker 2014) a conceptual distinction is introduced between the 'constitutional politics of information' and the 'operational politics of information'. *Constitutive politics* of information, "concerns first of all the formal institutionalization of the way in which policy relevant information has to be accessed, distributed and processed, possibly including the standardization of its provision and its statistical quantification. As such, 'constitutive politics of information' is about the choices that have to be made in the institutionalization of the provision of information and advice and about the contestability of these choices and the interests involved. *Operational* politics of information concerns the ways in which the actors who are involved in the daily processing of policy relevant information actually go about thanks to and despite the formal instructions and formats decided upon in the constitutive process. As such it also includes strategic and manipulative acts of 'informing'" (Blom and Vanhoonacker 2014, p. 9). This distinction can be specified with a view to the use of expertise in policy processes. 'Constitutive politics of expertise' then refers to the (sometimes politically contested) processes by which political principals formally decide on the rules covering the use of expert groups by their bureaucratic agents. Political principals may for example decide on who is formally eligible for positions in expert groups/committees; on recruitment procedures; on the overall composition of the expert group (e.g. on gender, interests, or geographical balance); on how broad or restricted the mandate of an expert group should be—inspection and assessment of the 'evidence base' of policy

proposals only ('diagnostic' use of expert groups), or also the evaluation and formulation of policy alternatives?; on whether, if in-house expertise is not sufficiently available or suspect in the eyes of the outer world, the commissioning organizational unit should rely on independent epistemic communities, or on expert groups purposively established by the organization self (cf. Dunlop 2010); on during which phase of the policymaking process expert groups have to be consulted and when exactly expert reports have to be delivered; on how binding expert advice will be (strict coupling), or whether it can be taken into consideration as just one of the informational inputs (loose coupling); etc.

How fixed and detailed prescriptions on the intake and use of experts may be, there usually will still be room for 'operational politics of expertise'. 'Operational politics of expertise' refers to the actual organizing and maneuvering of expert groups by civil servants in order to get the desired outcomes/advices—and this thanks to, and in spite of the rules fixed during the constitutional phase. For a start, representatives of the commissioning bureaucracy may claim the role of chair in order to stay in charge of the agenda and minutes, of how uncertainty and dissent come to the fore in the final advisory reports, and to act as gate-keeper between the expert group and the political level. Bureaucracies that fear 'expert drift'—i.e. expert groups developing and following their own agenda and preferences—, may counter that by inviting experts who do not know each other personally and/or who don't have a common agenda, or simply by establishing expert groups on an interdisciplinary basis. Against expert pressure commissioning bureaucracies may establish different expert groups, preferably with different disciplinary/professional backgrounds in order to insulate themselves from each particular expert group and to create more leeway. The representative of the commissioning bureaucracy can furthermore attempt to frame the mandate or objectives of the expert group in a way that suggests political infeasibilities.

Scholars working in this field have also noted that "The lone analyst working in isolation to extract the meaning from a set of data is the exception rather than the rule" (Woolley et al. 2008, p. 353). Inspired by research on the internal role differentiation and dynamics of expert groups (e.g. Woolley et al. 2008; Franz and Larson 2002; Majchrzak et al. 2007; Stasser et al. 1995; Garret et al. 2009), we distinguish the following five dimensions of expertise/expert roles relevant for policy expert groups:

1. **Subject matter expertise** is related to the content of the issue at hand, more specifically to the scientific, technical and normative aspects of policy problems and their proposed solutions. It refers to intimate knowledge of the cause-effect relationships between the variables pertaining to a specific domain, or to the skill of interpreting the normative aspects of possible political courses of action against the background of more general and widely accepted moral frameworks (cf. Lindvall 2009).
2. **Political expertise** refers to the ability to assess the political feasibility of possible courses of action/policies—what are the preferences of the formally competent decision makers, what is their combined win-set—and to the 'skills to effectively steer negotiations to an outcome' (Beach 2005).
3. **Procedural expertise** refers to extensive knowledge about the legal parameters and requirements of possible policy solutions and about the formal procedures policy-making and –implementation are subject to: which institutions/actors have to be involved in which capacity, when, and how? (cf. Beach 2005; Talberg 2008; Haverland 2009).
4. **Policy expertise** refers to "knowledge of the range of policies and instruments, past and current, proposed and enacted, governing a particular policy area as well as knowledge of how they work" (Page 2010).
5. **'Expertise on experts'** refers to the ability to identify experts—knowing who has what kind of expertise—and to handle expert groups with a view to elicit expertise opinion/information and getting shared *and* unshared information at the table (to uncover 'hidden profiles') (Stasser et al. 1995; Garret et al. 2009, p. 101).

We also take note of the observation by Garret et al. (2009) that in order to be an expert, "any one individual must be able to perform well on multiple dimensions at the same time; however it is likely that specific individuals' job functionality will require more expertise in some dimension than others" (Garret et al. 2009, p. 101).

This five-fold classification of expertise dimensions relevant for policy expert groups enables more explicit reflections on the operational dynamics between policy expert groups and their socio-political and legal environments. For example, within the EU context 'expertise on experts', and political expertise seem (prima facie) qualities that typically inhere in

representatives of the EU bureaucracies who normally establish, compose, and chair the EU's expert groups, while performing at the same time the role of gate keeper between the group and the wider bureaucratic and political environment.

In what follows, we will make use of the above-mentioned distinction between constitutive and operational politics of expertise and a multi-dimensional understanding of expert roles to get a better understanding of the barely researched sources and role of expertise in the European External Action Service. As mentioned, the main focus will be on the Asia-Pacific department, one of the five regional departments in the EEAS, responsible for a total of forty-two countries (excluding Central Asia) and the Association of Southeast Asian Nations (ASEAN).[1] Headed by a managing director, it consists of seven geographical divisions as well as a horizontal division dealing with cross-cutting thematic issues. Additionally, it is the first point of contact for 19 Union Delegations. The choice to concentrate on the Asia and Pacific department was prompted, amongst others, by the fact that the EEAS is predominantly structured along geographical/regional lines and that this department, with its 7 geographical divisions, 1 horizontal division and 70 to 80 desk and support officers, is the biggest department of the EEAS. Moreover, compared to the crisis management pillar of the EEAS, the geographical departments are strongly under-researched.

From a methodological point of view, the research on which this chapter is based is of a qualitative character, its 'raw' empirical materials being distilled from documents related to the establishment and functioning of the EEAS, and from 17 interviews. These were conducted in the period 2014–2017 with staff of the EEAS, the Commission, Permanent Representations and with representatives from non-governmental organisations (NGOs). Most of the EEAS interviewees were staff working for the Asia-Pacific department, while a few were based at the Human Resources department.[2]

[1] The other regional departments deal with Africa, Europe and Central Asia, the Greater Middle East, and the Americas. In addition there are also horizontal departments covering global and multilateral issues, crisis management and financial and administrative matters. For more information, see: http://collections.internetmemory.org/haeu/content/20160313172652/http://eeas.europa.eu/background/organisation/index_en.htm.

[2] See the appendix for an anonymised list of interviews, including dates and place. Interviews will be referred to in-text by using a # followed by a number corresponding with the interview number as given in the appendix.

Expertise and the EEAS: The Case of the Asia Pacific Department

The EEAS: Some Introductory Observations

Created in December 2010, the EEAS is still a relatively young body. Headed by the High Representative for Foreign Affairs and Security Policy who also is Vice President of the European Commission (HRVP), it has its headquarters in Brussels and is in addition supported by approximately 140 Union delegations all over the world. The Union Delegations are comparable to the national embassies to third countries and replace the former Commission delegations to third countries (Drieskens 2012; Austermann 2014). The heads of the Delegations fall under the direct authority of the HRVP. The staff of the EEAS, in both the headquarters and delegations, consists of officials of the Council General Secretariat, the European Commission and the Member States (Council Decision of 26 July 2010).

Although specialized scholars, member state representatives, and EEAS staff are still hesitant to positively identify the role, functioning, and core business of the EEAS, they all seem to agree that it is not the Foreign Ministry of the EU. It can in other words not be considered as a supranational replica of the Foreign Ministries of the member states and their traditional tasks (cf. e.g. Schmidt 2014; Wouters and Duquet 2012). As an EEAS staff member notes: "We are so many other things more. The EEAS has a much broader remit than any FM of a member state" (#4). Indeed, a quick glance on the organization chart of the EEAS suffices to confirm this. Tasks usually delegated to sectoral ministries, like security policy, crisis management, counter terrorism, and development policy are all covered by the EEAS, as well as the more traditional diplomatic undertakings of regular ministries of foreign affairs. This reflects the more general recognition in the diplomatic and academic world that under the condition of an ongoing globalization erstwhile 'domestic' policy issues acquire an importance that stretches far beyond the boundaries of the nation state and become entangled with the requirements and aims of 'classic' diplomatic foreign policy. Concentrating these new external challenges and responsibilities in the EEAS is at the same time an organizational expression of the 'officially declared' attempt to integrate the EU's external policies and actions into a coherent whole—halfheartedly as

this may be executed, according to some internal and external observers (Duke 2012; Marangoni and Raube 2014).

As recognized for example by Kinney (2000) with a view to US foreign policy and by Duke (2009) when it comes to EU-level external action after Lisbon, this march of new policy areas into the field of foreign politics requires the availability or at least the development and cultivation of skills and expertise which never belonged to the armory of the traditional diplomat. The EEAS must indeed be able to tap military, police, legal, and administrative expertise due to its responsibility for the Common Security and Defence Policy (CSDP) and more particularly crisis management missions. Development cooperation and neighborhood policy requires project management skills and often highly technical subject matter expertise. Even though the EEAS shares responsibilities for the foreign policy 'financial instruments' with the Commission, its contribution to the strategic planning of the implementation of these instruments also presumes management skills and expert knowledge.

Against this background it is puzzling that the EEAS has opted for, and sticks to a 'rotation' or 'mobilization' scheme which obliges almost all staff members to change every four years of department—even to the extent that staff working on the Southern Africa unit of the Africa department may be allocated to the EEAS Intelligence Analysis Centre (INTCEN). In other words, it seems that the EEAS is sticking to the traditional set-up whereby diplomats are in the first place generalists who have to be able to quickly familiarise themselves with new subjects and have the capacity to know where to find the relevant data and expertise. This does not seem to be a recipe for nurturing specific skills and expertise. Especially not in the light of the general literature on experts and expertise which estimates that it takes about 10 years of intensive experience and training in a specialized professional practice to become a genuine expert (cf. Simon and Chase 1973; Ericsson et al. 1993; Ericsson and Charness 1994). As one interviewee (#4) remarked: "there is an anti-expertise drive in the EEAS as it is now managed. [-] this is fueled by the mobility policy."

The choice for a policy of rotation and the reliance on generalists rather than highly specialized staff has inevitably important consequences for the sources of expertise. For their proper functioning, generalists need the capacity to find and handle the required expertise. As a first step in our empirical research, we have therefore explored how in the case of the Asia-Pacific department, policy-makers deal with the challenge of acquiring

and processing the relevant expertise. More in particular, we have tried to identify the sources of their expertise and in line with our interest for the constitutive and operational politics of expertise, investigated the 'rules of the game' and the day-to-day practices.

Sources of Expertise

It should be noted that the seemingly negative effect of the rotation policy on the development and cultivation of expertise has first and foremost an impact on the permanent staff originally recruited from the EU institutions—the Commission and the Council Secretariat. Member state diplomats (MSDs)—forming, according to the 'Council decision establishing the organization and the functioning of the EEAS' of July 2010, at least 1/3 of the total EEAS staff—are predominantly located in the civilian and military crisis management branch of the EEAS (Council Decision 2010). Although they are on the payroll of the EU, it is understood that they will anyhow return home after three or six years, to be replaced by fellow-countrymen who will again bring with them the military, police, legal, etc. expertise developed 'at home'. On top of this contingent of MSDs, the member states also second national experts, so-called SNEs ('seconded national experts'). According to an employee of the human resources division of the EEAS, interviewed on 13 November 20015 (#6), the number of MSDs is around 320, while the number of SNEs around 430. While the MSDs tend to be more generalists in line with the classic diplomat, the SNEs are the specialized experts with half of them being military personnel or coming from intelligence services. They are paid by the seconding member state but do not necessarily come from domestic ministries. They operate, among others, in the fields of cybercrime, international climate policy, and counterterrorism.

A regularly used recipe for access to expertise from the member states consists in organizing a workshop on a particular topic and asking them to send their experts. Also staff from international organisations (IOs) are sometimes invited. One of the advantages is that MSs and IOs take care of traveling and eventual lodging costs. The downside of this approach however is that the level of thematic expertise collected in this manner is uncertain. Often MSs do not send their sector specialists, but someone who happens to be already in Brussels. As an interviewee recalls his experience with organizing an expert conference on the Lower Mekong: "I called the MSs to invite experts. One third sent me a thematic expert.

Two thirds sent their people from Brussels. Of course we had different levels of contribution. The people coming from the ministry of sector specialists, they were much more able to contribute" (#7). Therefore such an expert workshop may be of a more consensual than instrumental use. It helps to get a sense of the preferences and interests of the MSs while floating ideas and policy proposals to explore a possible consensus (cf. Metz 2013; Krick 2014) As another interviewee narrated: "I have already done a little bit of sounding of think tanks and then I will have an informal group of experts from MSs" (#9).

Clearly, the members states of the EU form together a very important external source of specialized expertise. Still, the expertise required for the EEAS as a whole is more wide-ranging than the expertise needed in the field of military and civilian crisis management branch, or the expertise delivered by the SNEs (cf. Eriksen 2011, p. 1177). This holds especially for expertise needed in the geographically organized departments and in the horizontal department for Human Rights, Global and Multilateral Issues. The question of the sources of EEAS expertise becomes all the more intriguing when realising that the operational budget of the EEAS (controlled by the Commission) is too scanty to allow for a reimbursement of traveling and lodging costs of invited external experts. It is certainly not at the same level that of the European Commission, with its about 1000 expert groups gravitating around the Directorates General, can permit itself (cf. Gornitzka and Sverdrup 2008, 2011). Moreover, the EEAS has over the past years suffered from a staff-reduction policy, meaning, inter alia, that exactly those with a lot of experience are not succeeded by new staff upon their retirement.

In light of the above, it is therefore not surprising that besides the member states, the EEAS has also been hunting for other sources of expertise. A key player hereby are the NGOs, and more in particular networks of NGOs (#2, #4, #6, #7, #8). They may either be of a more general kind, like Amnesty International and its worldwide network of regional and national representations, or else are more specialized like those in the fields of conflict mediation, advocacy against the death penalty, or campaigning for freedom of religion and belief. The advantages of inviting (networks of) NGOs to workshops and conferences—sometimes three to four times a year with the same group (#7)—are rather straightforward. For a start, they often dispose of highly specialized expertise in their field and may count renowned academics to their ranks. Moreover, 'Brussels' functions as a magnet, attracting numerous

NGOs or their representations. As one interviewee put it: "The good thing is that in Brussels you have networks on everything." "Since we are in Brussels, we have a dedicated network on human rights NGOs, which we call the human rights and democracy network, comprising about 48 NGOs led by a troika" (#8). A final advantage is that the costs of acquiring substantive expertise via NGOs are minimal to nil, since they are in the vicinity exactly to lobby the EU institutions and to be heard by them. Umbrella organizations will often take care of the invitations of their members and provide conference rooms and the like. Since the EEAS uses a secure video conferencing system with limited access, this is rather practical especially when conferences have partly to rely on Skype. It may sound anecdotic, but the way in which one interviewee recalled a workshop housed by Amnesty International is rather telling: "Amnesty offered the coffee and on my way to Amnesty I stopped by the nearby supermarket and bought some cookies" (#8).

Other sources of expertise are think tanks and academic institutions. The Asia-Pacific department has framework agreements with certain think tanks through which it can at any moment consult "a consortium of think tanks and experts … in a very swift way and [who] can respond very quickly when we request expertise" (#8). It is for this type of agreements that the budget to attract expertise is first and foremost spent. Especially the high flexibility of this type of cooperation is very much appreciated. As succinctly put by one of the interviewees: "I can order what I want" (#9). In contrast, contacts with academic experts are limited and seem to depend largely on personal initiative. One staff member, for example, asked DG Research and Innovation of the European Commission to identify academic groups doing research related to South-East Asia and ASEAN and ended up being served by 6 groups, all costs covered by the DG (#7).

The European Commission herself is undeniably also an important source of expertise for the EEAS, yet the relations between the Commission and the EEAS are complex. As Wouters et al. observed "the set-up of the EEAS to support the HR/VP in conducting CFSP and in ensuring coherence in the EU's external action leaves the Commission running a parallel organisational structure in many policies related to EU external action" (Wouters et al. 2013, p. 46) This parallelism "is often seen as detrimental to bringing about more coherent and affective EU external action" (idem), and, so one could add, is sometimes a source of strain between the EEAS and the Commission. Trade policy, is firmly in the

hands of the Commission, and de facto this also holds for (international) energy policy, if only because the Commission saw to it that the high level of expertise available in the field of energy policy did not go to the EEAS but went to DG Energy (Wouters et al. 2013). Development cooperation policy is a different story. When the EEAS was established, it was claimed by the Commission as being its own turf, yet the EEAS formally has a strategic guidance function in the programming of development policy, including the Development Cooperation Instrument (Council Decision 2010), and the same holds for the European Neighborhood Policy and its instruments. Defective coordination between the competences and functions of the Commission and the EEAS easily leads to tensions and suspicions of holding back information and expertise (Blom and Vanhoonacker 2015), Yet, as will be shown below, via the Union Delegations the EEAS can indirectly profit from the expertise available to the Commission in a way that would not that easily be secured in Brussels. These Delegations, composed of staff from the Commission, the member states and the Council General Secretariat, take advantage of the expertise brought in by staff of the Commission, sent to delegations to support for example the implementation of development projects or neighbourhood policies. Once belonging to the staff of a Union Delegation these Commission civil servants formally fall under the authority of the Head of the Delegation, and not under a Commissioner. So via its delegations the EEAS can indirectly profit from the expertise available to the Commission and this in a way that would not that easily be secured in Brussels. As an interviewee put it: "If you are in Brussels, development is done by the Commission. It is another institute, you have another relation" (#6).

Although our research has mainly focused on the gathering and processing of expertise at the EEAS headquarters itself, our interviews also revealed some interesting findings on the expertise gathering of the Union delegations which are worth mentioning. As a matter of fact, it appeared that the reliance on external expertise was not just a matter of the Brussels HQs but also of the Delegations, who very much cope with a lack of capacity. As almost every EU institution can ask the Union Delegations for information or expert advice, these delegations are rather overloaded. As an old hand of the Commission, who has his experience with the former Commission delegations and now is the head of a Union Delegation put it: "The delegations are under constant flow of ad hoc requests of reporting and sometimes the right hand in HQ does not know what the left hand is doing" (#8). The essential problem is that the rising

work pressure within the delegation is not compensated by a reinforcement of the staff; on the contrary, the staff of the delegations is even reduced, partly because of shrinking development programs. Therefore, and also because diplomats cannot always interfere openly in the interior affairs of the host country, the delegations become more and more dependent on networks of local think tanks, civil society organizations, Chambers of Commerce, and the like (#8).

Summarising, the Asia-Pacific department EEAS accumulates its expertise from a wide scope of sources ranging from the member states, NGO's, think tanks, academics and last but not least the European Commission. The next section reflects more broadly what we can learn from our mapping exercise by linking our empirical findings to the earlier proposed conceptualisation.

Lessons Learned

Overlooking the collection of external expertise from a more general perspective, it becomes clear that processes of expertise gathering and expert group creation are little formalized and rather ad hoc. They are basically dependent on personal initiative, decentralized, and without much interference by the hierarchical administrative and political top level. Put differently, what we learn from our case study on the Asia Pacific department, is that so far the *constitutive politics of expertise* has been rather lenient if not just weak. General rules or guidelines applicable to the entire organization are missing. The interviewees see this as an advantage rather than as a handicap because it gives them a lot of leeway. As one of them put it: "The good thing about this job is, that I really have few things I cannot do, that I think should be done" (#7). Asked whether the Commission guidelines for recruiting expertise—also not very strict and uniform—would not offer a useful template, the answers are evasive, if not simply negative: "Do we need instructions? I hope not because then you get into the bureaucratic way. I am not sure that we need it to have added value by systematizing or formalizing that" (#8).

Robert (2010, p. 251) has argued that, notwithstanding the Commission's guideline on the formation and use of expert groups, the de facto little formalized practices of expert group creation by the Commission's DGs underlines the perception of expert groups "as one of the instruments and guarantors of the autonomy of the European administration". If that observation is valid, the expert recruitment practices of the EEAS

would be even more supportive of its self-perception as an autonomous Service.

The lack of formal rules also has implications for the *operational politics of expertise*. It means that the actors involved have a lot of leeway to organize their search for expertise in the way they want. The case study on the Asia-Pacific department shows that this is not necessarily negative or problematic. On the contrary: the interviewees seem to be perfectly able to handle their needs and as mentioned above, they very much appreciate the high degree of flexibility and leeway in their day-to-day operations. A further finding with regard to the operational politics of expertise relates to the timing of the gathering process. From the interviews it transpires that expert groups are consulted in the early phases of policy development, sometimes even at the earliest moment just to get informed about the general context: "I need these academic encounters not for detail, but for shaping my opinion" (#7). Expert groups may of course also come in for discussing early policy drafts (#8), but typically not when it comes to the concretization and practical implementation of EEAS policies: "Think tankers are not good at translating things into action. Analytical work and bringing facts together, yes. But it is rare that you can develop with think tanks policy and make it operational" (#9).

EEAS staffers are moreover well aware of their role as those who commission expertise. Typically they will chair the expert workshops and conferences (#6) and if on particular occasions this is not feasible "we have a meeting before and then a post mortem after" (#7). They are conscious to take the lead, having an idea of how to steer expert group meetings in the direction of relevant/desired results:

> A very important thing here is that you need to know your objectives. They will not set the objectives you will set the objectives. That is an important precept. These objectives derive from the political level and your own thinking. In the consultation process your starting point is clear. You can have as many experts as you want but if the workshop or the seminar is not structured properly the output will be next to zero.. [-] The setup of your report should be there. (#4)

Last but not least, our empirical findings also shed some light on the type of expertise respectively provided by the EEAS itself and the third parties with whom it is working. When presenting our classification of dimensions of expertise/roles of experts to interviewees and asking how they

would classify their own expertise, they had no trouble to identify themselves as (1) 'experts on experts', (2) 'political experts' and (3) 'procedural experts' (e.g. #3, #4, #6, #9). In their capacity as '*experts on expertise*', they proved well versed into identifying the sources that can complement the gaps in their own knowledge and as we have seen before, they tap on a broad scope of suppliers ranging from the member states and the European Commission to NGOs, think tanks and academics. Their role as 'experts on expertise' is furthermore exemplified by the capacity to critically reflect on the process of expertise gathering, making use of best practices such as working with experts from different professional and disciplinary backgrounds.

The bridging role characteristic for *political expertise* is illustrated by the awareness of the need to process and translate the input of the various sources into proposals that are understandable and acceptable to the political level (#4). One interviewee put it as follows:

> The civilian report to politicians needs to offer an interpretation of what the expert has said. Experts often cannot put their ideas into the politician's language. (#4)

"Bridging" means of course also to fulfill a gate-keeping role between the expert groups and those 'political' actors who are responsible for final decisions on policies. Thirdly, the interviewees also seem to be well aware of the importance of their knowledge of the formal and informal procedures underlying the decision making process (procedural expertise). One of the interviewees formulates it as follows: "You need people who know how to handle the European institutions. That is what you (meaning: the interviewers) call more precisely the procedural role. I have to know my competences. What are the shared competences and how to get the decision out of Brussels or how to get information out of Brussels?" (#9).

This identification with the roles of 'experts on experts', 'political experts' and 'procedural experts' leaves those on 'subject matter expertise' and 'policy expertise' uncovered. In our case study, we indeed see that it is precisely for these two functions that the EEAS staff regularly builds on external expertise. For the *subject matter expertise*, it is, as we have learned from our case study, common practice to rely on a wide range of sources, ranging from the member states and the Commission to NGOs, think tanks and academics. Although the EEAS is certainly

not a blank sheet when it comes to subject expertise and the headquarters in Brussels can benefit from the knowledge of the Union delegations directly reporting from relevant third countries, there are always gaps and deficiencies in the level of detail. When it comes to *policy expertise*, the European Commission is particularly useful. This is especially the case in the area of development policy where the EEAS is mainly in charge of the strategic direction and not of policy formulation. As Wouters et al. (2013) observe: "policy expertise still lies in the Commission in many areas such as development cooperation, energy and trade."

Conclusion

This chapter has sought to explore an intellectually stimulating puzzle, namely the seeming discrepancy between what the EEAS, as a contemporary bureaucracy of globalised foreign policy, may need in terms of expertise, and its management of human resources based on a policy of rotation. Its broad scope of responsibilities ranging from diplomacy to development and crisis management means that the EEAS must be able to draw on foreign policy, legal, military, technical and administrative expertise. It is therefore puzzling that the EEAS has opted for, and sticks to, a 'rotation' scheme which obliges almost all staff members to change every four years of department. At first sight, this does not seem to be the right recipe for nurturing specific skills and expertise.

The empirical sections based on a case study of the Asia-Pacific department however have shown that the EEAS is in general able to manage its need for subject matter expertise, notwithstanding its limited operational budget, successive reductions in staff numbers, and its staff rotating policy. Making use of our conceptualisation we have shown in a principled and systematic manner why the EEAS is indeed able to perform as an expertise driven organization. This has also demonstrated why the—initially rather puzzling—statement from a member of the HR department, that the rotation policy is there "to be able not to lose the expertise gained in a number of years but to be able to recycle that into the wider EU general interest" (#8), is after all convincing. To begin with, the distinction between 'constitutive' and 'operational' politics of expertise has proven useful when identifying and explaining the discretion officials in the Asia-Pacific department have in managing the access to expertise that they need. There are hardly any stumbling blocks in terms of setting up expert groups. As a consequence of this rather lenient

attitude towards the constitutive politics of expertise, also the operational use of experts is rather smooth. EEAS staff members seem to be able to find the required sources rather easily and know in which phase of the policy process expertise will be organized.

Our distinction between five different expert roles provides insights into the specific expert roles required of officials in the Asia-Pacific department. We have shown how these roles are established, how officials are trained for these and how these are strengthened by the institutions rotation policy. As long as subject matter and policy expertise can be sourced externally if and when needed, EEAS staff can concentrate on expert, political and process expertise. Expertise on these three roles is seen to be essential to utilize the more content related forms of external expertise towards politically meaningful advice.

In line with the broader focus of this volume, we have in the introduction to this chapter also asked whether the way in which the EEAS has organized the gathering and processing of European foreign policy expertise has led to contestation, either from the member states, the Commission, or the broader public. Although we have to be careful to draw general conclusions from a single case study, our empirical research did not reveal any signals in that direction. There are occasional frictions between the EEAS and the member states, including between the EU delegations and member state embassies, as well as between the EEAS and the Commission. However, such tensions are not so much about the use of expertise but rather concern issues such as the delineation of competences, political reliability, and different degrees of openness (Bicchi 2014; Blom and Vanhoonacker 2015).

While further research is necessary to understand the reasons for this low level of contestation of expert information, the literatures on expertise and on foreign policy-making give us some indications. For a start, historically the contestation of the use of expertise, and in particular scientific expertise, has mainly occurred around risk policies, especially around risks concerning human health and damage to the natural environment (cf. Bimber 1996, p. 97; Jasanoff 1987; Weingart 1999). Foreign policy by contrast has never been classified as a form of risk policy. Moreover, foreign policy has traditionally not been a central focus of democratic politics, if only because foreign policy makers have generally resisted, and sometimes with good arguments, the kind of openness and transparency that facilitates citizens' participation in democratic life (Lord 2011).

Much of the academic research on the—still relatively young—EEAS so far has been focusing on the set-up phase and early policy results (see for example Pomorska and Vanhoonacker 2016; Smith et al. 2016; Wouters et al. 2013). With a case study on the Asia-Pacific department, this chapter provides first insights into how the EEAS handles the gathering and processing of expertise. More extensive research on the EEAS's reliance on expertise more broadly, and the degree of contestation that this may engender, will be necessary in order to arrive at a more complete picture.

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List of Interviews

#1) Interview with member of Nicolaides group, national Permanent Representation; Brussels, 16 May 2014.
#2) Interview with EEAS staff member of the Department on Europe and Central Asia; Brussels, 16 May 2014
#3) Interview with EEAS member speaking on behalf of an EEAS trade union; Brussels, 18 May 2017.
#4) Interview with EEAS staff member of the Department on Europe and Central Asia; Brussels, 7 October 2015.
#5) Interview with EEAS staff member of DG Budget and Administration, HR division; Brussels, 18 November 2015
#6) Interview with EEAS staff member of DG Budget and Administration, HR division; Brussels, 18 November 2015
#7) Interview with EEAS staff member of the Asia-Pacific Department; Brussels, 17 December 2015.
#8) Interview with EEAS staff member of the Asia-Pacific Department; Brussels, 12 July 2015.
#9) Interview with EEAS staff member of the Asia-Pacific Department; Brussels, 8 January 2015.
#10) Interview with Deputy Permanent Representative; Brussels, 3 July 2016.
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#12) Interview with representative of 'World Coalition against the Death Penalty'; Brussels, 16 March 2016.
#13) Interview with member of Political and Security Committee; Brussels, 16 May 2014.
#14) Interview with representative of Fundraising for 'Ensemble Mondiale Contre La Peine de Mort', Brussels, 16 March 2016.
#15) Interview with member of Political and Security Committee; Brussels, 8 May 2015.
#16) Interview with representative of EU-Asia Centre; Brussels, 12 May 2017.
#17) Interview with staff member of DG Development, European Commission; Brussels, 13 May 2016.

CHAPTER 7

Climate Science in the Courts

Marjan Peeters

Introduction

This chapter explores the use of climate science in the courtroom.[1] While already many claims arguing for more ambitious climate action are brought to national courts across the world, also the EU faces a fundamental legal challenge filed by a group of citizens and their families, most of them living in EU member states, but some of them even outside the EU. These people state that they are affected by climate change—experiencing consequences for their homes, livelihoods, traditional family occupation and culture—and with the court procedure they aim to

[1]The research for this contribution was finished in March 2018; only some later developments could only be concisely included.

M. Peeters (✉)
Environmental Policy and Law, Maastricht University, Maastricht, The Netherlands
e-mail: marjan.peeters@maastrichtuniversity.nl

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enforce a sharpening of existing EU climate change legislation.[2] Their claim is largely based on scientific insights such as produced by the Intergovernmental Panel on Climate Change (IPCC) (The People's Climate Case 2018). The Panel's main task is to make the enormous amount of scientific articles and reports, particularly in the field of natural science, accessible for policy-making. In this way, the IPCC aims to provide insight into the state of affairs of knowledge regarding climate change so that well-informed governmental decisions can be made, and, consequently, it provides key input for international negotiations in the context of the United Nations Framework Convention on Climate Change (Meyer 2016). However, reports from the IPCC (and other scientific reports) may also be used in the courtroom. The influence of climate science on judicial decisions that intervene into governmental decision-making regarding emission reduction policies can already be identified, as can be illustrated with two seminal court decisions laid down in the US and Europe. This trend may increase in the near future, particularly if governments will not adopt greenhouse gas reduction policies and laws that according to potential claimants are necessary for achieving the objectives of the Paris Agreement.[3] If the center of decision-making for greenhouse gas emissions reductions indeed would move from the political sphere to the courtroom, with judges finding ground for their verdicts in scientific reports, there is a need to observe and discuss how this shift of power takes place, and how then the power of science in this respect can be legitimized and controlled. Hence, while verdicts ordering governments to adopt more ambitious climate action may be of great value for implementing the goals of the Paris Agreement, the potential strong and influential role of the judiciary—which may evolve into a shift of the center of decision-making to courts instead of the democratically elected institutions—needs examination by legal scholarship. More

[2] Carvalho and Others v Parliament and Council, Case T-330/18 (date of lodging 23 May 2018). See for further Information from the claimants The People's Climate Case (2018) about the claim and the claimants.

[3] The Paris Agreement was adopted on 12 December 2015 by the Parties to the United Nations Framework Convention on Climate Change (Decision FCCC/CP/2015/L.9, "Adoption of the Paris Agreement", 12 December 2015) and discussed by *inter alia* Bodansky (2016) and Montini (2015) The objectives of the Paris Agreement are formulated in article 2, including the aim to hold "(…) the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C above pre-industrial levels (…)".

particularly, by identifying to what extent and under which circumstances judicial interventions into governmental decision-making are made, it can be revealed whether or not judgments tend to be activistic (see about complications for identifying judicial activism, particularly with regard to the Court of Justice of the EU: Dawson 2014). In course of this, one of the relevant elements to be explored is investigating to what extent and how scientific arguments play a role in the judicial argumentation in climate litigation cases. More particularly, it can be revealed to what extent climatic science gets debated and, perhaps, even contested in the courtroom. However, thus far, there is only limited attention to this specific issue in the climate law literature, and this chapter aims to further the debate. Section "A Legal Perspective on the IPCC" sets off by putting a legal perspective on the IPCC, thereby revealing some critical observations on the IPCC, hereby illustrating the need to find out against which legal principles this influential organisation can or should be hold to account. Section "Case Law Regarding the Mitigation of Greenhouse Gas Emissions: The Role of Climate Science" proceeds with an orientation of how in some selected cases climate science has played out in the courtroom. In these cases interventions in governmental decision-making were made, and it will be presented how legal literature has assessed the role of science in this regard. Section "Reflection" will present some preliminary reflections on the potential shift of power for decision-making from governments to the reinforcing set of climate science and the courts. Section "Conclusion" concludes, stipulating the need for systematic surveys on the use of the (global) climate science in (national but also EU and other international) litigation, and presenting two main research perspectives.

A Legal Perspective on the IPCC

A Hybrid Global Administrative Law Construct: How to Hold It to Account?

The IPCC was established in 1988 under the auspices of the United Nations Environment Program and the World Meteorological Organization, and its establishment was endorsed by the United Nations General Assembly (United Nations General Assembly 1988). The objective of the IPCC is broad: it has to "assess on a comprehensive, objective, open and transparent basis the scientific, technical and socio-economic information

relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts and options for adaptation and mitigation" (Intergovernmental Panel on Climate Change 1990/2013, para. 2). Meanwhile, the IPCC has manifested itself as the most important informational source for climate change policy making. This important position does not mean that the IPCC's credibility has not been called into question (Meyer 2016). Also in literature, critical observations are discussed (Ravindranath 2010; and, earlier, Henderson 2007). Illustrative is that as a result of mistakes in IPCC reports, the InterAcademy Council assessed the IPCC in 2010, suggesting a reform of its procedures (InterAcademy Council 2010). Also in literature suggestions for reform are presented, such as a greater integration of the IPCC with the UNFCCC (Meyer 2016). Zorita called for an even more dramatic reform, particularly by turning the IPCC into an independent international agency (Zorita 2010, p. 731). Furthermore, one of the critical observations on the IPCC decision-making is that the consensus-based approach may imply that scientific findings deviating from the mainstream are ignored or excluded (Beck et al. 2014). It is also argued that deviations from agreed procedures may impact negatively on the credibility of the IPCC (Lohan 2006, p. 308). Furthermore, the practice of keeping the meeting of the Summary for Policymakers secret has been criticised (French and Pontin 2016, p 18; Beck 2012, p. 165).

An important principle is that IPCC-reports should be "policy neutral" (IPCC 1990/2013, para. 2). The principle of policy neutrality can be put in perspective of the principle of sovereignty of states. The IPCC is constructed in a rather informal way; it is not established by means of a treaty among states, which is the traditional legal construct under which states may give away part of its sovereignty—such as the freedom to design the ambition and form of its national climate policies—to international decision-making bodies. In essence, the IPCC cannot be qualified as a formal international authority with administrative power that can bind states. Instead, it tends to be an international soft-law construct with participation by scientists and governmental representatives—the latter convening in the plenary that adopts IPCC reports. The fact that governments participate in the IPCC may even be required from an international law perspective, particularly in view of the international law principle that states have the duty to co-operate with each other, which includes scientific cooperation (Stoll 1996, pp. 72–73). It can however be questioned to what extent governments may have an influence on scientific output from

the IPCC. Although practice may be different by now, it was observed there is a scientific core in the working groups of the IPCC, a balance between science and policy in the working group plenaries, and political dominance in the full IPCC plenary (Andresen and Skjaerseth 2007, p. 192). More recently, Meyer observed that despite various provisions "(…) doubts remain of the political influence (…)" (Meyer 2016, p. 445).

Furthermore, it seems inevitable that IPCC reports may need to deal with factors relevant to the design and application of particular policies: if that is the case, such discussion have then to be done "objectively" (Intergovernmental Panel on Climate Change 1990/2013, para. 2). In this vein, a working group of the IPCC has observed the important policy dimension the IPCC faces since many areas of climate decision-making involve value judgments and ethical considerations (Edenhofer et al. 2014, p. 5). Nonetheless, the working group holds that research can still provide input to such policy-making: "Social, economic and ethical analyses may be used to inform value judgements and may take into account values of various sorts, including human wellbeing, cultural values and non-human values" (Edenhofer et al. 2014, p. 5).

A core question is whether governments are bound by IPCC reports. Navraj Singh Galeigh argued that, given the specific informal construct of the IPCC, the "regulatory activities of the IPCC" do not affect—along the lines of international law—states either by binding norms or "soft" obligations (Singh Ghaleigh 2016, p. 59). However, while in this sense no legal bindingness can be derived from IPCC reports, it is not to be excluded that they may have a large impact on governmental policy development or even discussions and adjudications in the courtrooms. In this sense, the question of how the current IPCC can be hold to account deserves attention from a legal perspective. In course of searching for a methodology to discuss the IPCC from a legal perspective, several authors have pointed at the possibility to assess the IPCC through the lens of the emerging "Global Administrative Law" theory, with which the IPCC could be assessed in view of core legal values such as accountability and transparency (Singh Ghaleigh 2016). Daniella Hanna Rached holds that "Global Administrative Law" is useful to pinpoint a set of legitimacy and effectiveness-building devices for the IPCC decision-making routines (Rached 2014, p. 34). However, more legal research is needed in order to "catch" the hybrid, soft law construct of the IPCC into a legal perspective, thereby keeping in mind to avoid "rigid legalistic thinking" that could take away necessary flexibility (Jasanoff 2013, p. 452).

This relates to the more fundamental issue of whether indeed a common global administrative law set of administrative law principles can be identified, and whether such a common set of principles even would be desirable (critically: Harlow 2006). While it needs to be further examined against which principles the IPCC can be held to account, the influence of the IPCC increases. The progression of governmental policies across the world for taking action to combat climate change, which can be illustrated by the conclusion of the Paris Agreement in December 2015, finds its basis in IPCC reports pointing at the fact that "Human influence on the climate system is clear" (Stocker et al. 2013, p. 15). Also for the near future, input from the IPCC for international policy-making is asked: the parties to the UNFCCC have invited the IPCC to provide a special report in 2018 on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways (United Nations 2015, para. 21).

Scientific (Un)Certainty in IPCC Reports and Policy Decisions

The principle of "policy neutrality", discussed above, implies that the IPCC should not suggest which decisions are the best ones to be adopted by governments, let alone judges. However, if an IPCC report, or, more specifically, a statement in such a report (or in any scientific article), presents indisputable facts, particularly regarding the cause and effects of the climate change problem, this can be used as a factual argument to justify governmental intervention into freedoms of private actors, particularly if this aims to protect human rights, or to support a legal claim submitted before the court requesting for more protective climate action.[4] However, if IPPC statements concern issues for which scientific uncertainty is yet the case, there is room for different policy decisions, including choosing different levels of risk.[5] Particularly in environmental law, scientific uncertainty as such does not mean that no legal action

[4] Also regulations refer to the obligation to take "scientific evidence" from the IPCC into account, see for instance article 14(3) from Directive 2003/87 from the European Parliament and the Council, as amended by Directive 209/29.

[5] In this respect, it needs to be examined whether and, if so, to what extent from a human rights perspective, governments have discretion to set the acceptable risk level, both with respect to potential damage to nature and to human health. See for human rights and climate change: Foster and Galizzi (2016).

can be undertaken: in various jurisdictions the precautionary principle has emerged, with may justify action in case of scientific uncertainty. At the international level, the UN Rio Declaration on Environment and Development from 1992 formulated the precautionary approach in its article 15: "In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation". The precautionary principle is for instance codified (but without definition) in article 191 TFEU. Also the UNFCCC refers to precautionary action: Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects (UNFCCC, art. 3(3)). This principle is however subjected to an intense scholarly debate, with on the one hand warnings against over-regulation and on the other hand recommendations for its use in order to adopt preventative action (Wiener 2007; De Sadeleer 2016).

Also the judicial testing of the precautionary principle is much debated (Marchant and Mossman [2004] take a very critical approach; a positive appreciation is given by Trouwborst [2006]). Part of the concern can be that judgments on the ambition of environmental decisions in cases of uncertainty may be inspired by personal beliefs, for instance on the urgency of the environmental problem at hand, and the belief that more stringent action is required than legislators do (Dawson [2014, p. 435] discusses more generally that personal beliefs may play a role in judicial decisions). Another concern is—in case courts want to move to an application of the precautionary principle in a situation of identified passivism at the side of the legislature or administrative authorities—that judges may become standard-setters in scientifically complex matters. Question is then whether judges are capable to set the appropriate norm (see for the struggle judges may face in understanding complex health or environmental issues: Vos 2004; Michanek 2007).

Given the uncertainty that is still inherently embedded into the climate science, a related question is to what extent the IPCC itself explicitly or more implicitly suggests in what ways the policy room can be filled in when uncertainty is the case, and, moreover, to what extent the international community convened into the UNFCCC is actually asking for such advice. For example, the fact that the IPCC is asked by the parties

to the UNFCCC to inform about "related global greenhouse gas emission pathways" in view of the impacts of global warming of 1.5 °C above pre-industrial levels seems to enable the IPCC to suggest what emission reduction ambition at a minimum has to be pursued. Such suggestions take clearly place in a context of uncertainty, assuming that it is difficult to predict precisely the (various) impacts of global warming of 1.5 °C in advance, let alone to predict what global emission level causes a precise temperature rise.

Given that the international public law community expects the IPCC to give important advice, its reports may (depending on their content and formulations) play an important and perhaps even decisive role in future case law, particularly if governments are not living up to the scientific insights. While it is hard to predict future developments, also in view of the question of how much discretion will be given by judges to policymakers, the next section will review, in retrospect, the role that IPCC reports have played thus far in a few selected seminal court decisions.

Case Law Regarding the Mitigation of Greenhouse Gas Emissions: The Role of Climate Science

Methodological Observation: The Specific Characteristics of Jurisdictions Matter

In practice, case law referring to IPCC reports has emerged and it may be expected that more has yet to come. While important overviews of case law exist, such as the charts on climate litigation produced by the Sabin Centre of Climate Change Law at Columbia Law School, in depth and comprehensive examinations of the different aspects of cases from several jurisdictions, among which particularly the scientific dimension, have yet to be carried out.

A methodological challenge for reviewing the influence of IPCC-reports on judicial decision-making is the existence of many different jurisdictions with their own specific legal frameworks for judicial adjudication across the world. A discussion of the role of IPCC-reports for case law development cannot be separated of how, in the specific legal systems in which the courts function, procedural rules and judicial practices have been developed that regulate the use of expertise by judges and, in a wider constitutional context, whether scientific reports may legitimate the judge to use its power to intervene into governmental decision-making. By

contrast, while national legal systems for judicial adjudication may largely differ, the IPCC-reports have by nature a global outreach and are the ultimate product of a single, global, organisation. Hence, the *same* organization, and perhaps even the *same* report, may have different influences on judicial decisions across jurisdictions. Moreover, not only the characteristics of a specific jurisdiction, but also the specific circumstances of the cases will be important to unravel the role of IPCC-reports in the courtroom: the specific claim submitted to the court delineates the dispute, and the specific information and arguments that the claiming and defending party share with the judges may have a large impact on the court decision as well. In this respect, also standing rules and the capacity of potential claimants (like environmental non-governmental organisations) may be of large influence whether cases will be started asking for more climate action. Nonetheless, in order to get some first understanding on how climate science has already played a role in court cases, this section will discuss a few selected seminal court decisions and related legal literature from the US (sect. "The US: Science as a Starting Point for Judging the Need for Regulating Greenhouse Gases") and Europe (sect. "Europe")[6] The aim of this discussion is not to draw a complete and detailed picture of how climate science plays out in the courtroom, but is rather to sketch how in important cases judges thus far have dealt with the scientific dimension.

The US: Science as a Starting Point for Judging the Need for Regulating Greenhouse Gases

The "Massachusetts v EPA" decision from 2 April 2007 is the first case heard by the US Supreme Court regarding governmental regulation of greenhouse gas emissions, and concerned the determination of the existence of legal authority of the Environmental Protection Agency (EPA) to regulate greenhouse gases from transport. With a 5–4 majority the

[6] The US court decision that will be discussed in sect. "The US: Science as a Starting Point for Judging the Need for Regulating Greenhouse Gases" is framed as a "gateway case" and is characterised (in 2012) as the most significant environmental law decision of all time in the US (Markell and Ruhl 2012, p. 51); the Dutch Urgenda case to be discussed in sect. 3.4 is commonly called a revolutionary court decision since, for the first time, a court ordered a nation state to reduce its emissions more ambitiously. The lawyer co- defending the claim in first appeal wrote a book, titled *Revolution Justified* (Cox 2012).

Supreme Court held that the EPA had failed to justify adequately its denial that carbon dioxide and other greenhouse gases[7] were "pollutants" to be regulated under the Clean Air Act (Massachusetts et al. v. Environmental Protection Agency et al. 2007). In fact, the EPA did not want to assess whether greenhouse gases can be qualified as "air pollution … reasonably … anticipated to endanger public health or welfare" (Freeman and Vermeule 2007, p. 63). The Agency used various arguments, among which that regulation would be unwise because, at that time, "a causal link between greenhouse gases and the increase in global surface air temperatures was not unequivocally established", thereby referring to a report from the National Research Council (Massachusetts et al. v. Environmental Protection Agency et al. 2007, pp. 1, 10).[8] Furthermore, part of the reasoning was based on the effectiveness of domestic regulatory action: "predicted increases in greenhouse gas emissions from developing nations, particularly China and India, are likely to offset any marginal domestic decrease."[9] These considerations by the EPA were made before the Fourth Assessment Report of the IPCC was published in February 2007.[10] The Court, deciding just after the publication of the Summary for Policymakers for the Fourth Assessment Report,[11] found that the EPA cannot avoid its statutory obligation and noted: "If the scientific uncertainty is so profound that it precludes EPA from making a reasoned judgment, it must say so. The statutory question is whether sufficient information exists for it to make an endangerment finding" (ibid., p. 5).[12]

[7] Methane, nitrous oxide, and hydro-fluorocarbons.

[8] See however also page 20: "EPA does not dispute the existence of a causal connection between man-made greenhouse gas emissions and global warming."

[9] This reasoning takes place in the consideration of standing of the plaintiffs. See Massachusetts et al. v. Environmental Protection Agency et al. (2007, p. 21).

[10] The petition for regulation was filed in 1999, see the Massachusetts et al. v. Environmental Protection Agency et al. (2007, p. 6).

[11] The "Summary for Policymakers" of the fourth IPCC report was published in February 2007, so its major findings were well known and publicized prior to the Court's decision in Massachusetts et al. v EPA (Freeman and Vermeule 2007, p. 60).

[12] The dissenting opinion written by judge Scalia holds that the EPA has already said so (Massachusetts et al. v. Environmental Protection Agency et al. 2007, p. 8).

The Supreme Court put in its decision explicitly attention to science: "A well-documented rise in global temperatures has coincided with a significant increase in the concentration of carbon dioxide in the atmosphere. Respected scientists believe the two trends are related" (ibid., p. 1). By referring to what respected scientists "believe", the Court set a firm basis for its judgment. The Court also described the history of the developments of scientific insights into climate change, referring to a report from 1979 from the National Research Council: "If carbon dioxide continues to increase, the study group finds no reason to doubt that climate changes will result and no reason to believe that these changes will be negligible. … A wait-and-see policy may mean waiting until it is too late" (ibid., p. 4). Moreover, the Court also referred to the earlier second assessment report of the IPCC from 1995, which stated "… the balance of evidence suggests there is a discernible human influence on global climate" (ibid., p. 6).The Supreme Court moreover considered that "A reduction in domestic emissions would slow the pace of global emissions increases, no matter what happens elsewhere" (ibid., p. 23).[13]

The outcome of the Supreme Court decision is particularly interesting since judicial review of a refusal to promulgate rules is traditionally "extremely limited" and "highly deferential" (ibid., p. 25). The Court however found that the Clean Air Act would become obsolete if changing circumstances and scientific developments would not matter (ibid., p. 29). Since the main criterion for regulation is whether the air pollutants are "reasonably … anticipated to endanger public health or welfare", and given the development of science, the Supreme Court found the refusal to regulate illegal.

Clearly, the development of science has played a core role in this court decision, and the fact that uncertainties existed did not provide an opportunity for the EPA to refuse regulation. This can be linked to the statutory text which provides a competence to regulate even while full causal relationship lacks (since the statute includes the word "reasonably").

The legal literature largely favours the outcome of this dispute (Freeman and Vermeule 2007; Sugar 2007; Osofsky 2007). Particularly

[13] This consideration was part of the reasoning whether the Court could hear the case, particularly seen from the requirement of redressability: it must be likely that a favourable court decision will redress the injury.

Freeman and Vermeule put the court decision in the context of the perceived manipulation of science by the then G.W. Bush administration.[14] In other words, these authors do not critically review how the court has used the science, but provide the context that might have stimulated the judges to favour the claim (Freeman and Vermeule 2007, p. 54). Regarding the role that science, and scientists, played in the court room, Freeman and Vermeule point out that the agency relied on selective and somewhat misleading excerpts from a 2001 report by the National Research Council which emphasized uncertainty while downplaying many statements of certainty or near-certainty (Freeman and Vermeule, 2007, p. 63). Scientists themselves even tried to inform the court that there was a misunderstanding or misrepresentation of science, pointing out EPA's mishandling of a scientific report and disregard of weight of evidence (Freeman and Vermeule 2007, in their footnote 43).

The 'Massachusetts v EPA' decision paved the way for the further development of climate law since judges, thereby referring to climate science, have found a denial of greenhouse gas regulation legally problematic. However, this does not imply that lawyers are per se sufficiently educated and equipped to deal with climate science. David S. Caudill has—already before the Supreme Court laid down its decision—discussed in a more general way how science is understood by judges (Caudill 2007). He distinguishes between (1) judges that have a realistic idea of science and (2) judges that may have a more romantic idea of science, expecting that scientists produce stable knowledge and that not much uncertainty remains. The first category seems to make better decisions:[15] "they do not expect too much from science, and they understand that the inevitable, pragmatic features of all science do not take anything away from scientific utility and progress" (Caudill 2007, p. 190). In the case at hand, the Supreme Court seems to have followed the realistic path and accepted that some uncertainty may exist for accepting the need to regulate, for which it was also important that the statute did not demand for full scientific certainty.

[14] "[A]dministration had been altering scientific reports, silencing its own experts, and suppressing scientific information that was politically inconvenient" (Freeman and Vermeule 2007, p. 57).

[15] At least in the case study that Caudell conducted, which was not related to climate change.

Europe: Litigation at EU Level and at National Level

The European Union: Approving Climate Action Without Referring to Science

Until now, IPCC reports have not yet played a prominent role in the case law of the Court of Justice of the European Union (CJEU), [16] while as such important court decisions related to the climate change problem have been laid down.[17] Already in 2001 the CJEU acknowledged that the emissions of greenhouse gases is one of the most important causes of climate change (Case C-379/98 *PreussenElektra AG v. Schleswag AG*, 2001, para. 73). This consideration was made in a case concerning the legality of a German national support system for renewable energy in view of the provisions on the internal market (ibid., para. 71). Different from the US Supreme Court in the Massachusetts v EPA case, the CJEU did not refer to IPCC reports, or any other climate science, nor did it enter into a discussion of the causal relationship between anthropogenic emissions of greenhouse gases and the likely change of the climate, which phenomenon could justify the negative impact of national renewable energy support measures on the internal market. Instead, the Court points at the fact that the European Community (now the European Union) is a party to the UNFCCC from 1992 and the Kyoto Protocol, even though the latter was not yet into force at the time of the court decision and hence did not yet imply legal commitments for the Community. The Court notes that the "policy" (thereby referring to international and European climate measures) is also designed to protect the health and life of humans, animals and plants (ibid., para. 75), and that a European Directive expressly stated that it is 'for reasons of environmental protection' to authorize Member States to give priority to the production of electricity from renewable sources (Directive 96/92/EC of the European Parliament and of the Council of 19 December 1996 concerning common rules for the internal market in electricity). In sum, the Court accepts, albeit only with general statements and without any reference to science, that renewable energy measures are needed as part of

[16] By then the court was called the Court of Justice of the European Communities, this court is called the Court of Justice of the European Union since the Treaty of Lisbon that entered into force on 1 December 2009.

[17] Only in a very technical manner, references are made to IPCC guidelines in two cases (C-80/16, with reference to IPCC in opinion, and C-460/15, with reference to IPCC in opinion and judgment).

climate change protection measures.[18] The approach by the Court based on rather opaque reasoning but leading to an environmentally friendly outcome has been criticized in literature. More specifically, Jacobs has argued that the court "… can only be found to have environmental friendly credentials but to have failed to provide an adequate conceptual basis for its approach" (Jacobs 2006, p. 194). From a legal perspective, it becomes worrisome if a clear and consistent basis for court reasoning lacks: the outcome of future judicial decision-making (and, basically, the insight into the law and its consequences) becomes uncertain. Since the use of expertise is a more general question of EU law that also takes place outside EU environmental, such as in food safety law, the question of how the court uses science and expert advice has got fundamental discussion in literature. In this respect, legal scholars have expressed some concerns on how the CJEU deals with (environmental) science. Barbier de La Serre and Sibony stated that the applicable law "does not guarantee a systematic, meaningful scrutiny of reliability of scientific evidence by the EC courts" (Barbier de la Serre and Sibony 2008, p. 94). Also Vos pointed at the fact that the question which role EU courts and experts should have in litigation gets limited attention in the EU (Vos 2013, p. 145). While positing that "judges should remain judges" she argues that the question of whether courts need to be assisted by appointed scientists or whether specialized courts need to be established merits further discussion (Vos 2013, pp. 161, 164). This may also become relevant in future climate change cases that may possibly be submitted to the CJEU. Related to this, it also remains to be seen how much deferral the CJEU will continue to give to the EU legislative institutions, particularly if it would be argued—on the basis of science—that more climate action is needed compared to what EU decision-making entails. Such legal action is now started before the CJEU (lodged on 23 May 2018), by means of a claim for annulment of three key EU climate laws pursuant to article 263 TFEU, and, in addition, a claim for non-contractual liability pursuant to articles 268 and 340 TFEU. Regarding the latter, it is argued that the EU has already been in breach of climate protection duties in the past (People's Climate Case, legal summary, para. 6). The claim makes amply use of scientific insights,

[18] This approach has not changed, see C-573/12, (1 July 2014) Ålands Vindkraft AB v Energimyndigheten, para. 78, also referring to Article 194 TFEU (para. 81) and then followed by a proportionality test; C 204/12 to C 208/12 (11 September 2014) Essent Belgium NV v Vlaamse Reguleringsinstantie voor de Elektriciteits- en Gasmarkt, para. 91.

including insights from a non-profit institution aiming to support science-based policy to prevent dangerous climate change (paras. 14 and 258 of the application). Moreover, the applicants invite the Court to consider whether it is appropriate to commission an expert's report, for instance related on the evidence for the damage caused by climate change to the applicants (para. 7 of the application).

The Netherlands: Translation of a Scientific Emission Scenario into a Binding Norm

In a seminal decision from 24 June 2015, a lower civil court in the Netherlands orders the State of The Netherlands to adopt more stringent emission reduction measures compared to what is required according to EU secondary climate law (Urgenda v The State of the Netherlands, Civil court of The Hague, the Netherlands, 24 June 2015, para. 4.43).[19] In its argumentation, the court heavily relies on IPCC reports and other science-related documents. This can be largely explained because of the circumstance of the case: the claim—submitted by an Environmental Non-Governmental Organisation (called "Urgenda") together with 886 citizens referred intensively to a range of scientific reports (Urgenda). Important weight is given to the IPCC Working Group III report from 2007 in which an emission reduction scenario of 25–40% by 2020 (compared to 1990 emission levels) by developed countries as a group was projected alongside other emission reduction trajectories, with different risk levels (Metz et al. 2007, box 13.7, p. 776).[20] The claim also puts large emphasis on the fact that the 25–40% scenario—with which according to para. 21 of the claim there would a 50% probability that it will be possible to stay within a 2-degree Celsius temperature increase—has been adhered to by The Netherlands and the EU in several important political documents, also in the ambit of the UN Framework Convention on Climate Change (this concerns particularly the Bali Action Plan from 2007 adopted by the parties to the UNFCCC).[21] Moreover, a previous Dutch government adhered politically (but not by means of a legally

[19] The case is under appeal.

[20] This statement needs to be linked to a strategy that would keep the PPM below 450, see the claim paras. 136 and 203.

[21] Inter alia para's 21 and 27 of the claim, see Decision 1/CP.13; reference has been made to this table in the context of "emphasizing the urgency to address climate change".

binding act) to the goal of 30% emission reductions in 2020,[22] which goal has been relaxed by a later government since it wanted to follow the EU goal: the EU has adopted legislation with the aim to achieve 20% reductions in 2020,[23] and expressed to be (only) willing to move to 30% reduction in 2020 if, shortly said, other countries also take meaningful action (Communication from the Commission to the European parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Towards a comprehensive climate change agreement in Copenhagen, 2009, p. 3).

The court decided positively on the claim asking for more ambitious mitigation action, finding a legal basis for constituting this in the unwritten standard of the duty to take care, which is a specific element of Dutch civil law (Peeters 2016). The court itself qualifies this rule as an 'open-ended private-law standard' and identifies there is an obligation to reduce at least 25% in 2020 (thereby not rewarding the upper end of the claim, consisting 40% reduction in 2020). The court refers to the international and EU legal context, which mainly consists of principles at the time of the judicial decision, since there is no binding norm at international or EU level prescribing that states all developed countries, or specifically the Netherlands, has to adhere to 25% (or 40%) emission reduction in 2020 (Urgenda v The State of the Netherlands, Civil court of The Hague, the Netherlands, 24 June 2015, para. 4.46).

In its decision, the court amply considers climate science, and observes for instance:

> The foregoing leads to the further intermediate conclusion that according to *the current scientific position*, the prevention of dangerous climate change calls for a 450 scenario with an associated reduction target for the Annex I countries, which includes the Netherlands and the EU as a whole, of 25-40% in 2020, and 80-95% in 2050. (emphasis added) (ibid., para. 4.29)

In addition, the court also states that the IPCC (and UNEP) support that immediate action is more cost-effective, although this is only superficially explained in the court decision (ibid., para. 4.71).[24]

[22] To be measured against the emissions in the year 1990.

[23] Partly to be achieved by international emission trading.

[24] With however no precise reference in this para to the specific IPCC statement. A more in depth discussion would be needed to scrutinize how the court dealt with the

Immediately after the publication of the "revolutionary" court decision, a lot of legal commentaries have been published, in English and in Dutch.[25] The case deals with fundamental legal issues, among most prominently the question of whether the court, in view of the prevailing Dutch constitutional balance of powers, overstepped its competence by ordering the government (in fact, the executive and the legislator) to reduce the national emissions more ambitiously than it has to do according to EU law. The way how the court dealt with the scientific component has been less critically examined. One publication stands out for criticizing how the court dealt with the scientific component. The authors of this article, Lucas Bergkamp and Jaap C. Hanekamp qualify the court's approach towards science as a "short-cut"—with which these authors *inter alia* mean that the court did not call on scientific experts to explain climatic science (Bergkamp and Hanekamp 2015, p. 107). Related to this, the authors argue that the court has overlooked that the IPCC itself states that defining what a dangerous interference with the climate system is involves normative judgments and that science "does not and cannot dictate norms or any action, let alone court rulings" (Bergkamp and Hanekamp 2015, p. 107). In their opinion, the court's decision may be an example of "scientism" which points at potential failures to understand the limits of science, and, moreover, that it should be better understood that the "scientific consensus" has been "socially constructed" (Bergkamp and Hanekamp 2015, pp. 108, 109). In fact, they express the concern that if courts deal with science as has been done in the Urgenda case, an increased politicization of science may occur. In line with this, another author (Ted Thurlings) argues that translating the 25-40% by 2020 into a legal norm misrepresents the political character of the issue at stake: "The distribution of the necessary reduction [among countries] is thus not just a legal question, but also, and one could argue even foremost, a political one" (Thurlings 2015, p. 4).

The Dutch government appealed against the court decision thereby denying a call from a group of scientists not to do so. The group stated that the court "simply applied existing law and science in order to protect

cost-effectiveness argument and to what extent scientific reports played a role, this falls outside the scope of this article.

[25] It would already be interesting to make a meta-analysis to explore which different perspectives are used in the legal commentaries to the Urgenda court decision. For instance, the position of the court vis-à-vis the executive is one important dimension.

present and future generations from harm" (Avaaz). However, the letter is very general and does not explain the scientific component in detail (particularly the need to follow the 25–40% scenario pointed out by WGG III in 2007).

Reflection

Climate Science and the Judiciary: Towards a Shift of Power?

In both court cases discussed above, claims for more climate change mitigation action by the government have been accepted, and in both cases climate science has seemingly played an important role. Also, in both cases, the judges did not critically call into question the climate science, or, more specifically, the legitimacy or authority of the IPCC. Meanwhile, some important differences can be identified. In the US case (Massachusetts v EPA), a claim for regulatory action (to be precise: the competence for regulation of reduction of greenhouse gas emissions cannot be rejected by the EPA) was awarded. According to the judgment, the specific statute itself gave room for regulatory action despite lack of full scientific evidence of the danger of an air pollutant. Here, the court, *with the help of science*, did act in a way which is normally very sensitive, namely to correct an agency decision. Nonetheless, the Dutch case shows a far more dramatic intervention into governmental policies with wide implications for the society as a whole, since the court ordered, on the basis of an unwritten rule of the duty to take care, the State of The Netherlands to increase its mitigation policy to 25% emissions reduction by 2020 to be measured against the base year 1990. While the court developed its reasoning on the basis of various arguments, such as the specific international climate policy and law context, *science constituted an important basis of the court's decision,* particularly a specific statement of the IPCC indicating a 25–40% emission reduction scenario for the group of developed countries, where the court chose to follow the lower range of the 25–40% projection. The fact that this percentage had been endorsed in political statements, including decisions from the Conference of Parties to the UNFCCC, played an important role for the court, but still the choice to translate the 25–40% emission pathway from a scientific report into a legally binding norm constitutes a tremendous development in climate law. The illustrates the large standard-setting influence that an IPCC statement providing concrete percentages for emission reduction

may have if it is taken over and endorsed in political statements—but not yet put, through applicable procedures involving the legislature branch—in binding commitments. This combination of two on first glance separate 'powers' (on the one hand climate science, on the other hand the courts) may lead to a decrease of governmental power—at least from the legislature—where it comes to deciding on respectively the need and intensity of regulation of greenhouse gases. Although it remains to be seen how, in different jurisdictions and depending on the specific claims, such judicial decision-making will further emerge, the observed trend necessitates legal scholarship to map and examine the potential shift of power from the legislative and/or executive branch to the combined force of science and the courts.

Towards Activist Case Law?

Meanwhile, legal literature calls for reflection about the nature of adjudication given the "disruptive phenomenon" of climate change. Fisher and others point at the normative challenge for courts to resolve climate disputes "well"—but how to define then what is "well"? (Fisher et al. 2017, pp. 180, 197). And how to view in this respect judicial activism, which may become manifest when judges do not adjudicate in conformity with the will of the democratically elected governments but order them, thereby referring to scientific reports, to adopt more ambitious climate action than politically decided? Further research is needed to clarify the room for policy-making that is left in scientific reports, such as the choice among different risk scenario's, and the expected benefits and costs related to such risk scenario's, and, furthermore, also the choice between the intensity of reducing greenhouse and on the other hand taking and funding adaptation measures to protect against negative effects of global warming. Question then is to what extent courts may or should correct such policy choices. In this respect, courts may function as a fall back option if governments fall short in taking responsibility for protecting human rights and the environment.

Indeed, while it may be much appreciated from an environmental and human rights perspective that protective action is ordered in order to address climate change and a defensive use of uncertain science can be found undesirable (see also Osofsky 2007), the fact that courts would intervene into governmental policies raises itself the question of how judges then justify their own "policy-making", and merits attention to the

reasoning of the courts with respect to the scientific basis that they have used. One of the questions that need to be examined is whether climate science reports that are referred to in the verdicts are "well" understood and referred to. In this sense, it seems to be necessary that also scientists themselves comment upon court decisions, in order to discuss whether the scientific reports are properly included in the reasoning by the judges—who are obviously in most cases not trained as climate scientists. One may wonder to what extent judges (lawyers) are anyway able to deal with complex climate science, and how use of experts could be helpful in this respect. In both cases discussed above, the judges did not invite climate scientists, or the IPCC representatives, in the courtroom to explain for instance how the 25–40% emission pathway projection can be interpreted also in view of potential damages. This should lead to further discussion in legal scholarship on how courts should use specific climate expertise in the courtroom, and how this could be arranged.

To What Extent Are External Circumstances Influential, Such as Media Coverage?

Freeman and Vermeule state that it was the political, cultural, and legal context in which the Supreme Court decided *MA v EPA:* ".. it would have been impossible for the Justices not to know of the growing scientific consensus on climate change, or to be unaware of accusations that the administration was trying to suppress and manipulate agency science" (Freeman and Vermeule 2007, p. 61). It would be interesting to assess, to the extent possible, whether and how the judges in the Urgenda case have been influenced by external circumstances such as the media that have widely covered the Urgenda claim, and, related to that, the dramatic consequences of climate change. While judicial work is conducted by qualified lawyers, this may not prevent them from influences and may also not take away personal beliefs—which may play a role when judges have to determine how they deal with the uncertainty left by science. For instance, Bergkamp and Hanekamp argue in their article about the Urgenda judgment that the judiciary in The Netherlands tends to gravitate towards the centre and left side of the political spectrum (Bergkamp and Hanekamp 2015, p. 103).

Given the fact that judges cannot be hold to account for their decisions, except from the requirement to state the arguments for their decision which can then be reviewed in appeal (and of course can also

be discussed by legal scholars, media and hence civil society), it may be difficult to detect the precise influences that personal beliefs and external circumstances like media attention have played for reaching this decision. To get a further understanding, social science research may investigate whether the media provide balanced coverage on climate science and the climate change problem. In connection to this, research towards the beliefs and attitudes among the judiciary towards the climate problem and climate science may be relevant to conduct.

The Rebound Effect of Using IPCC Reports in the Courtroom

The Urgenda case represents a dramatic new step in climate law, since it is the first court decision worldwide where the court demands a state to act more ambitiously with regard to greenhouse gas reduction. It remains to be seen whether the court decision will be uphold in appeal and, moreover, whether courts in other jurisdictions will adopt similar approaches. However, a larger use of IPCC reports in the courtroom, if this trend would become manifest, may have some rebound effect on how scientific reports will be formulated. For example, it would be interesting to explore whether the knowledge that courts may use IPCC reports may have some repercussion on how the IPCC—and particularly also its plenary consisting of governmental representatives and that adopts the major decisions of the IPCC[26]—will decide or formulate specific emission trajectories. At the same time, there is also a need at the side of politicians to get well informed about climate science, and, more specifically, about mitigation options. Section "A Legal Perspective on the IPCC" of this chapter already explained that the international political community convened under the UNFCCC even wants the IPCC to clarify emission pathways, given that the IPCC is invited by the Conference of the Parties to the UNFCCC to develop "a special report in 2018 on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways".[27] Depending on its formulation and level of detail, an indication of emission pathways may amount to a kind of a normative indication on what emission reduction needs to be applied by

[26] Principles Governing IPCC Work, principle 4, says "Major decisions of the IPCC will be taken by the Panel in plenary meetings".

[27] Conference of the Parties to the UNFCCC, Decision 1/CP.21, FCCC/CP/2015/10/Add.1 (2015), para. 21.

the international community—or perhaps by subgroups of this community such as developed countries. In other words, this invitation puts the IPCC to the challenge of how and with what precision and detail to formulate global emission pathways, thereby knowing that its texts may be used by claims submitted to courts. This illustrates that while the IPCC, according to its objective, should provide policy-neutral statements, it may not be easy for the IPCC to stay away from statements that may include some policy, and hence, normative direction.[28] At the same time, it may be of great value that the IPCC, with its specific construct of scientists and governmental representatives, plays some role in the formulation of climate change policy ambitions and in the development of legal obligations. However, the extent to which this happens, and whether courts (should) use IPCC reports in order to order more ambitious climate action, thereby replacing governmental decision-making, requires further, preferably multidisciplinary, research.

Conclusion

The mere fact that particularly IPCC reports and also other climate science documents may play an important role in the courtroom leads to fundamental questions that have yet to be comprehensively examined by legal scholarship. What has become clear is that in two seminal decisions, courts have relied on climate science, albeit in different ways also depending on the content of the claim to be adjudicated. It can be expected that, given the rise of climate litigation across the world, and given the fact that the international public law community convening in international treaty negotiations under the umbrella of the UNFCCC invites the IPCC to provide further advice on emission pathways in order to comply with the objectives of the Paris Agreement, the role of climate science will stay important, also in courtrooms. At the same time, as discussed in sect. "A Legal Perspective on the IPCC", the IPCC itself has not been uncontested, and also legal literature has provided some critical observations on the decision-making by the IPCC. Also for the future, fundamental legal questions regarding the production of climate

[28] As observed by French and Pontin (2016) who illustrate that the IPCC may have to deal increasingly with this challenge, particularly in Working Group III where the politics of climate change are less translated into authoritative science.

science by the IPCC have to be examined in tandem with the important role taken or given to the IPCC. In this respect, the concept of "global administrative law" may be useful since it examines the legitimacy and accountability of international decision-making, and hence may provide insight into principles according to which the IPCC can be hold to account, which may help to prevent the IPCC from further serious contestation. Next to this, systematic research is needed for understanding how science plays an influential role for judicial decision-making, and whether judges pose any conditions when relying on scientific reports. In this respect, it will be interesting to see whether experts will be invited in the courtroom, as has been requested in the claim brought by a group of families against the European Parliament and the Council for strengthening EU climate legislation. Since case law is emerging across the world, research has to be carried out taking the various characteristics of jurisdictions across the world into account. In sum, at least two fundamental legal perspectives should be addressed:

1. How can, from a legal perspective, the production and communication of climate science reports, including IPCC reports, be assessed, and, more precisely, to what extent is the concept of global administrative law a useful approach to check the accountability and legitimacy of the IPCC?
2. To what extent and under which specific circumstances can and should IPCC reports be used in the courtroom to overturn governmental decision-making?

The discussion of these two perspectives is interrelated: how more credibility is given, from a legal perspective, to the IPCC process, how more it may be expected (or, to put it differently, how more it is justified) that courts rely on IPCC reports when judging upon the adequacy of governmental climate decision-making.

The research towards these two major perspectives will need to be broken down in a wide range of specific questions. For instance, the examination of the accountability of the IPCC by means of investigating its transparency needs to include the question of to what extent the procedural right of access to environmental information hold by scientists is applicable, and, if so, how it then should be applied or is already being applied by the courts. Another example is the question of what differences

may appear in judicial adjudication and the role that science thereby plays between for instance developed Western countries and developing Asian countries such as India and the Philippines, where judicial activism in the field of environmental law is already more common practice.

In conclusion, if climate science will be increasingly used in the courtroom for adjudicating claims for more stringent climate action, the credibility of this climate science may find itself in the spotlights. If courts are indeed willing to follow statements from the IPCC or from peer reviewed articles in such a way that this amounts to standard-setting, like a specific emission pathway, the rule-making power of the executive and legislative branch will clearly become less important and may be overturned, as the Urgenda court decision (in first instance) has showed. While this can be an enormous victory for climate protection, this shift of power—or the extent to which it probably takes place—still needs to be objectively identified and discussed, particularly also in view of helping to avoid unjustified contestation of climate science.

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CHAPTER 8

Judicial Review of Science-Based Measures Under WTO Law

Lukasz Gruszczynski

Introduction

Is it safe to eat bovine meat that has been treated with growth promotion hormones? The United States (US) apparently thinks so, as it permits those products on its market. The European Union (EU) takes a different view. It considers that such meat may pose certain health risks for specific consumer groups and consequently prohibits its importation and sale. The regulatory treatment of electronic cigarettes also varies. Some countries classify those products as ordinary consumer goods that do not require any special regulatory response, while others believe that because

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L. Gruszczynski (✉)
Kozminski University, Warsaw, Poland

Institute for Legal Studies of the Centre for Social Sciences, Budapest, Hungary

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of their properties they should either be banned (e.g. as they may facilitate the development of a nicotine addiction), or at least strictly regulated. Depending on the decision adopted by a particular country a different set of rules will apply, resulting in different levels of market access. In both examples countries may (and actually do) claim to have scientific evidence that sufficiently supports their regulatory choices.

Such differences in regulatory approaches can obviously create trade tensions at the international level. For example, while US-based producers would like to see their exports of hormone-treated beef expanded,[1] the EU regulators are interested in preserving the ban, thus restricting access to the European market. This is exactly where the law of the World Trade Organization (WTO) enters the scene, providing a legal and institutional framework within which such trade disputes can be peacefully settled. Interestingly, the different agreements that form a part of the WTO *acquis* require, implicitly or explicitly, recourse to science in order to determine the legality of national health and environmental measures that have an impact on international trade. The most elaborate framework in this context is provided by the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement),[2] but science may also play an important role in the context of other WTO treaties,[3] such as the General Agreement on Tariffs and Trade (GATT 1994)[4] or the Agreement on Technical Barriers to Trade (TBT Agreement).[5] In the context of these agreements science operates as a

[1] Hormone-treated beef is actually very competitive. The application of growth hormones accelerates the production process and thus decreases the overall costs of production.

[2] Agreement on the Application of Sanitary and Phytosanitary Measures, Marrakesh Agreement Establishing the World Trade Organization, Annex 1, 15 April 1994, 1867 UNTS 493.

[3] Note that the early GATT 1994 case law was concerned more with the external legitimacy of national measures (i.e. the absence of alternative less trade-restrictive measures that could meet the health or environmental policy objectives) than with the internal aspect (e.g. the existence of a scientific justification). For a detailed analysis of the changes that took place in the approach of the WTO dispute settlement bodies, see Gruszczynski (2014a, pp. 11–29).

[4] General Agreement on Tariffs and Trade, Marrakesh Agreement Establishing the World Trade Organization, Annex 1, 15 April 1994, 1867 UNTS 187.

[5] Agreement on Technical Barriers to Trade, Marrakesh Agreement Establishing the World Trade Organization, Annex 1, 15 April 1994, 1868 UNTS 120.

kind of a normative benchmark that helps the WTO dispute settlement bodies, with the assistance of their own scientific experts, to distinguish between legal and illegal national measures. Consequently, it may be either regarded as a sophisticated proxy for the detection of protectionist measures (if a measure is scientifically irrational how can it serve any legitimate objective protected under WTO law?), or a criterion that aims at introducing a certain—scientific—rationality in the regulatory activities of WTO Members.

At first glance the employment of science and scientific experts in a dispute settlement process may seem to be an attractive option. It helps, at least on its face, to depoliticize the process, since disputes are decided on technical rather than on other grounds. This not only shields WTO panels and the Appellate Body from accusations of judicial activism (note that the WTO rules are formulated in general terms and leave the dispute settlement bodies with considerable leeway for interpretation), but may also bestow their decisions with an additional layer of legitimacy, emanating from the objectivity and universality embedded in science. Not surprisingly, some scholars argue that a science-based regime is capable of producing more just decisions. Irrational measures are eliminated, while measures that may actually reduce health and environmental risks are protected from internal and external challenges (Atik 1996–1997, p. 752).

In reality, however, the reliance on science-based criteria has proven to be controversial. The WTO has even been labelled by some as the 'World Trans-Science Organization' (Walker 1998)—an organization that imposes an artificial and one-sided conception of scientific rationality on its Members. Others have argued that the application of science-based WTO rules, particularly those in the SPS Agreement, and heavy reliance on scientific experts can sometimes lead to a reduction of the overall socio-economic welfare (the promotion of which is the ultimate goal of the organization) because WTO Members can be precluded from regulating perceived risks.[6] There are also those who see both scientific benchmark and involvement of scientific experts as a potential threat to democratic choices made by relevant political communities, arguing that even if the people are wrong from the scientific point of view, they nevertheless should have a right to express their preferences,

[6] E.g. various 'risks' associated by the general public with the cultivation and consumption of genetically modified plants (cf. also Bohanes 2002, p. 355).

while under the WTO science-based criteria science their voice will be always marginalized (Howse 1999–2000, p. 2337). Finally, there are many social scientists questioning the objectivity of regulatory science and neutrality of experts. In this context, they indicate that regulatory science is always infiltrated with non-scientific assumptions, policy considerations, and value judgements (Winickoff et al. 2005, p. 95). An overly narrow conception of science, i.e. one that does not recognize those elements, produces outcomes that are not only undesirable but also incorrect from the scientific point of view.

Against this background, this chapter looks at the various ways in which the WTO dispute settlement bodies have engaged with science and scientific expertise when deciding trade disputes between WTO Members. In this context, special attention is paid to their treatment of scientific uncertainties, the development of specific science-based standards (such as insufficiency of scientific evidence or the specificity of risk assessment), and the conceptualization of the applicable standard of review. On that basis, the chapter critically assesses the directions that have been taken by the WTO dispute settlement bodies and indicates existing deficiencies.

The chapter is organised as follows. The following Section 'Science and the WTO Disciplines' briefly introduces the science-based criteria established in WTO law. In this context, the main focus is on the SPS Agreement, which has the most developed set of obligations relating to the use of science in national regulatory processes. Section 'Science in the Practice of the WTO Dispute Settlement Bodies' examines the actual practice of the WTO dispute settlement bodies and analyses the developments that have taken place over the last 25 years. The SPS Agreement is again of prime importance here. Finally, Section 'Conclusions' summarizes the main arguments of this chapter and draws some overall conclusions.

Science and the WTO Disciplines

The SPS Agreement is a WTO treaty that regulates the use of sanitary and phytosanitary (SPS) measures by WTO Members.[7] Unlike many other WTO agreements, it goes beyond the non-discrimination principles and

[7] SPS measures are defined as measures applied to protect human, animal and plant life and health from certain enumerated risks (e.g. those which arise from additives, contaminants, toxins or disease-causing organisms in foods, beverages or feedstuffs). The

attempts to harmonize national regulatory SPS activities, with the aim of limiting their impact on international trade. To this end, it requires WTO Members to base their SPS measures on international standards, guidelines, and recommendations (Art. 3.1), and refers the Members to the work of the relevant international standard-setting bodies—a group which includes the Codex Alimentarius (for food safety), the World Organization for Animal Health (for animal health matters), and the International Plant Protection Convention (for plant health). However, the agreement not only provides a stick, but also a carrot. Those measures that conform to international standards benefit from the presumption (in practice an irrefutable one) of their consistency with the relevant provisions of the SPS Agreement and GATT 1994 (Art. 3.2).

The obligation to base national measures on international standards is not absolute. WTO Members may still deviate from them if they are not satisfied with the level of protection reflected in such standards. i.e. when they regard the level as being too low. In such a case, or in instances where there is no international standard at all, a measure must be supported by sufficient scientific justification in order to be compatible with the SPS Agreement. This rule closely corresponds with the general obligations contained in Art. 2.2, which requires all SPS measures to be based on scientific principles and not be maintained without sufficient scientific evidence. This requirement is further clarified in Art. 5, which stipulates that measures have to be supported by an appropriate risk assessment. In practice, this is the most common way to ensure that SPS measures are not implemented without sufficient scientific evidence.

Risk assessment as such is a heavily science-based procedure[8] and consists of either: (a) an evaluation of the likelihood (i.e. probability) of the entry, establishment, or spread of a pest or disease within the territory of an importing Member to which the SPS measures which may be applied, and of associated potential biological and economic consequences (for quarantine risks); or (b) evaluation of the potential (i.e. possibility) of adverse effects on human or animal health arising from the presence of additives, contaminants, toxins or disease-causing organisms in food,

notion of a 'measure' is very broad and includes all relevant laws, decrees, regulations, requirements and procedures (cf. Annex A.1 of the SPS Agreement).

[8] Note, however, that every risk assessment also involves a number of semi-scientific and non-scientific elements (cf. e.g. Silbergeld 1991).

beverages or feedstuffs (for food-borne risks).[9] The SPS Agreement also makes clear that a Member may act even if no risk assessment is possible due to insufficient scientific evidence. In such a case, it can adopt a provisional measure on the basis of the available pertinent information, but at the same time it needs to look for additional evidence—with the ultimate goal of performing a regular risk assessment—and review its measure within a reasonable period of time (Art. 5.7).

Considering the prominent role that is played by science in the SPS Agreement, it is not surprising that the treaty contains some specific rules on the participation of scientific experts in the dispute settlement process. Note that WTO panels are composed of trade specialists (mainly economists and lawyers) that are not necessarily proficient in complex scientific problems related to health and environmental protection. In this context, the agreement stipulates that a panel (as the sole fact-finder in the WTO dispute settlement framework) should seek assistance from relevant experts.[10] These experts are expected to provide a panel with impartial advice on the scientific claims advanced by the parties (see generally Gruszczynski 2014b, pp. 216–237).[11] Indeed, this option is used regularly in practice, with most of the panels consulting individual experts. In practice, due to highly technical nature of the SPS disputes, experts tend to be ultimate arbiters over many specific claims made by the parties in the course of proceedings.

The SPS Agreement contains a number of other obligations that go beyond the science-based requirements and which relate to risk management and risk communication activities, but science and scientific expertise may be relevant in this context as well (e.g. Appellate Body Report, *Russia—Pigs*, fn. 196 and 197, analyzing the role of the appropriate national level of protection for scientific determination of areas of low pest or disease prevalence). In this context, the agreement

[9] Annex A.4 of the SPS Agreement.

[10] Participation of experts in the SPS dispute settlement process is governed by ad hoc guidelines adopted by each panel for the purpose of a specific dispute (cf. e.g. The Working Procedures for Consultations with Scientific and/or Technical Experts [Annex A-5] in Panel Report, *US—Continued Suspension*).

[11] The latter chapter identifies a number of problems that can emerge in the process of communication between a panel and its experts (i.e. those which result from differences between legal and scientific logic and their respective methodologies, or the use of non-scientific terms as objective categories of a scientific nature).

confirms, at least nominally, the sovereign right of each WTO Member to establish its own level of protection, provided that a certain consistency across different risks is ensured. It also repeats, among other things, the traditional GATT non-discrimination principles in the form of national treatment and most-favoured nation. Moreover, it requires Members to ensure that their SPS measures are applied only to the extent necessary to protect human, animal or plant life or health, and that they constitute the least-trade restrictive alternative (without however a need to compromise the desired level of protection). Risk communication provisions relate to notification obligations with respect to national SPS draft laws and already adopted measures.

As mentioned above, the assessment of national measures under other WTO agreements may also require recourse to science, although none of them go so far as to require a scientific risk assessment. The TBT Agreement[12] is a good example of this, as it openly refers to science in the context of its necessity requirement (Art. 2.2). In particular, it provides that technical regulations cannot be more trade-restrictive than necessary to fulfil a specific objective pursued by a WTO Member. The catalogue of those objectives is open-ended and includes protection of human health and safety and animal and plant life and health, as well as the environment, taking into account the risks non-fulfilment would create. Science may be used here: (i) to assess the degree of the contribution made by the measure to the legitimate objective at issue, (ii) to determine the nature of the risks at issue and the gravity of consequences that would arise from non-fulfilment of the objective(s) pursued by a Member through the measure, and (iii) to identify alternatives that are less trade restrictive, but which make an equal contribution to the relevant legitimate objective(s).[13] The TBT Agreement also confirms the right of a panel to seek advice from experts—in the form of an expert group or on an individual

[12] The TBT Agreement applies to technical regulations, standards, and conformity assessment procedures (for the definition of those terms see its Annex 1) that may affect international trade. The TBT and SPS Agreements are mutually exclusive. If a specific measure is qualified as an SPS measure, it is only assessed under the SPS Agreement (and vice versa with respect to the TBT Agreement).

[13] In *US—Clove Cigarette* (a dispute concerning the US ban on production and sale of flavoured cigarettes), the WTO panel was confronted, under the necessity analysis, with the question about the effectiveness of US measure. In answering this question, the panel engaged in the detailed analysis of scientific evidence and ultimately found that scientific research supported the conclusion that banning clove and other flavoured cigarettes could

basis—and sets out a relatively detailed procedure for the operation of such a group (Annex 2). A panel can also relay on the expertise provided by specialized international organizations or other inter-state cooperation platforms.

Science may be relevant for the necessity analysis under the GATT 1994 as well.[14] Unlike the TBT Agreement, necessity is not formulated here as a positive obligation, but rather as a part of the general exception which allows WTO Members to justify otherwise GATT-inconsistent measures (e.g. those which violate the most-favoured nation treatment, national treatment, or the prohibition of quantitative restrictions), provided that they serve one of the legitimate objectives.[15] The list of those objectives is closed and includes protection of human, animal and plant life and health and the conservation of exhaustible—both living and non-living—natural resources. A particular measure, in order to be permissible under the GATT 1994, must in the first place be necessary to achieve a specific objective (or relate to such achievement). This not only means that there needs to be a certain causal link between a measure and the objective, but also that a measure must be the least trade restrictive option among various available alternatives (but again without the need to compromise a Member's level of protection). Science can play an important role in this examination, helping to establish the existence of a specific risk, a causal link between a measure and the risk, and the availability and effectiveness of other regulatory options.

While science may be also relevant when assessing national measures under other WTO agreements, the existing jurisprudence is very limited. In this context, the plain packaging dispute stands out,[16] where science

contribute to the achievement of regulatory objectives sought by the US (i.e. reducing youth smoking).

[14] The GATT 1994 applies to all measures that have an impact on trade in goods between WTO Members. Its scope is broad as it covers both TBT and SPS measures.

[15] Art. XX of the GATT 1994. Note that science may be also used for the purpose of the Art. III analysis (i.e. the national treatment principle which prohibits discrimination between domestic and imported like products). In the *Asbestos* case, the Appellate Body relied on scientific evidence in order to determine likeness of two products (domestic cellulose fibres/PVA/glass fibres v. imported asbestos) (Appellate Body Report, *EC—Asbestos*, para. 125).

[16] Panels Reports, *Australia—Certain Measures Concerning Trademarks, Geographical Indications and Other Plain Packaging Requirements Applicable to Tobacco Products and Packaging*, 28 June 2018, WT/DS435/R, WT/DS441/R, WT/DS458/R, and

was a crucial threshold against which the Australian law was assessed in order to determine its legality under the Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS)[17] In particular, the panel examined whether the plain packaging requirement could be regarded as an unjustifiable encumbrance on the use of a trademark in the course of trade, which is explicitly prohibited by Art. 20 of the TRIPS. In this context, the panel concluded that Australia provided sufficient evidence (of scientific character) that restriction was not unjust (i.e. that plain packaging could be seen as a legitimate part of comprehensive and effective tobacco control strategy). The panel followed in its analysis the standards developed in the context of the TBT and GATT 1994 case law.

Science in the Practice of the WTO Dispute Settlement Bodies

WTO law sets some very general standards for the science-based assessment of national health and environment-related trade measures. The real meaning of these standards has evolved in the WTO jurisprudence via an incremental process of interpretation (and re-interpretation) of the relevant rules. It is worth recalling that the leading role in this context is played by the SPS case law, which constitutes a source of inspiration for panels deciding disputes over health and environment-related measures under other agreements. The subsequent discussion reflects this predominance.

This section looks at the practice the WTO dispute settlement bodies with respect to the science-related obligations and analyses some specific standards that have been developed. In particular, it focuses on those aspects that have proven to be particularly problematic: (i) treatment of scientific uncertainties, (ii) conceptualization of the insufficiency of scientific evidence, and (iii) the applicable standard of review. In this context, it is postulated that one may witness a progressive sophistication

WT/DS467/R. The Australian law requires all tobacco products to be marketed in plain packaging. This means, among other things, that trademark owners are prevented from using their graphic trademarks on such products.

[17] Agreement on Trade-related Aspects of Intellectual Property Rights, Marrakesh Agreement Establishing the World Trade Organization, 15 April 1994, Annex 1C, 1869 UNTS 299.

in the application of science-based criteria by the WTO dispute settlement bodies. At the same time certain problems, in particular relating to the applicable standard of review, still persist.

Dealing with Scientific Uncertainties

The WTO dispute settlement bodies are consistent in holding that any risk which is scientifically ascertainable (i.e. having some indication of potentiality) may be regulated by WTO Members (e.g. Appellate Body Report, *EC—Hormones*, para. 186). However, in the earlier case law at least one of the panels refused to recognize what it labelled as 'negligible risk' (which in the specific case was defined as a risk ranging between 0 and 1 in a million) as a legitimate object of regulation (Panel Report, *Japan—Apples*, paras. 8.149 and 8.153).[18] A number of panels have also found (and this was confirmed by the Appellate Body) that theoretical uncertainty relating to the safety of a specific product cannot constitute a ground for regulatory actions by WTO Members. This concept of uncertainty was defined as being 'inherent in the scientific method and which stems from the intrinsic limits of experiments, methodologies, or instruments deployed by scientists to explain a given phenomenon' (Appellate Body Report, *Japan—Apples*, para. 241).

Not surprisingly, the borderline between 'theoretical' and 'legitimate' uncertainty—the latter being an uncertainty which may be properly addressed, one way or another, by WTO Members—remains unclear. Certain forms of uncertainty,[19] caused for example by variability problems or systemic and random measurement errors, can be dealt with by Members through traditional risk assessment techniques. These may include, for example, the inclusion of conservative assumptions, use of additional safety factors, or performance of an assessment which is based on worst-case scenario(s) (Panel Report, *US—Continued Suspension*, para. 7.635). In addition, under the SPS Agreement there is no need to perform quantitative risk assessment and a qualitative assessment

[18] The panel was not overruled in this respect by the Appellate Body. Interestingly in another dispute the Appellate Body rejected the concept of a 'not scientifically identifiable risk' that was also characterized by a risk range between 0 and 1 to a million (see Appellate Body Report, *EC—Hormones*, para. 186).

[19] Uncertainty may be defined as the 'lack of precise knowledge as to what the truth is, whether quantitative or qualitative' (National Research Council 1994, p. 161).

is acceptable as well, which may provide some additional flexibility when dealing with scientific uncertainties (Appellate Body Report, *Australia—Salmon*, para. 124). In this context, it is worth adding that a similar approach has been taken in the GATT/TBT case law, where the WTO dispute settlement bodies have recognized that the existence of risk can be shown not only quantitatively, but also qualitatively.[20]

WTO Members may also account for existing uncertainties when deciding on specific risk management options. As noted by the panel in *EC—Biotech Products*, the requirement that Members need to base their measures on risk assessment leaves them with a certain freedom as to their choice of a specific regulatory response (in the words of the panel: 'a given risk assessment may well support a range of possible measures', Panel Report, *EC—Biotech Products*, para. 7.1525).

With respect to uncertainty caused by conflicting scientific evidence or competing theories, neither the SPS nor general WTO case law (e.g. Appellate Body Report, *EC—Asbestos*, para. 178) require national measures to be based on mainstream scientific views and Members may also rely on divergent scientific opinions. As explained by the Appellate Body in the *EC—Hormones* case: '[i]n most cases, responsible and representative governments tend to base their legislative and administrative measures on "mainstream" scientific opinion. In other cases, equally responsible and representative governments may act in good faith on the basis of what, at a given time, may be a divergent opinion coming from qualified and respected sources' (Appellate Body Report, *EC—Hormones*, para. 194).

It is clear, however, that not every minority opinion can qualify as a sufficient scientific justification. While in case of majority views their epistemic value may be presumed, scientific minority opinions need to meet a certain quality threshold, i.e. they 'must … have the necessary scientific and methodological rigour to be considered reputable science' (Appellate Body Report, *US—Continued Suspension*, para. 591). In other words, while they may differ from mainstream science as to their conclusions, they still have to be recognized by a relevant scientific community as

[20] See e.g. Panel Report, *US—Tuna (Second recourse to Art. 21.5 DSU)* (noting that '[i]n relation to the issue of whether our analysis should be qualitative, quantitative, or a mix of the two, we agree with the parties that, given the inherent difficulties of quantifying unobservable harms, our approach should encompass both a quantitative and a qualitative dimension').

scientifically defendable claims (i.e. rational, internally consistent, based on plausible assumptions, etc.). The aim of this requirement is to eliminate evidence that is nothing more than 'junk' science. At the same time, it worth noting that in practice some panels have actually failed to apply the standard that they explicitly pronounced. Instead of verifying the methodological and formal aspects of various claims, they instead aimed at determining the best science in a particular field, for example by arbitrarily selecting among competing scientific claims.[21] As a consequence, certain evidence and/or voices of dissenting experts have been partially or completely ignored.

Minority scientific opinions may be also marginalized through the requirement of specificity. Note that the SPS case law requires a risk assessment to be specific, meaning that it needs to assess a specific potential or likelihood of harm arising from an identified SPS risk. For example, in the *EC—Hormones* dispute, the panel looked for an evaluation of the carcinogenic and genotoxic potential of residues of five types of growth promotion hormones that were present in meat and meat products to be exported to the EU (Appellate Body Report, *EC—Hormones*, para. 200). A general discussion on hormones as such, without considering variables such as the levels and patterns of consumption, risk exposure of specific consumer groups, etc., was deemed insufficient. However, the potential problem here is that minority scientific opinions are frequently based on suggestive and indirect, rather than definitive, evidence (Peel 2004, p. 71). Sometimes this may prevent WTO Members from performing a risk assessment which is sufficiently specific.

The more recent SPS case law recognizes, however, that in certain circumstances the required level of specificity may be lowered. The Appellate Body noted that methodological difficulties posed by the nature and characteristics of a particular substance and the risk being evaluated may constitute such an instance. In particular, the Appellate Body observed in *Continued Suspension* that 'where multiple factors may contribute to a particular risk, a risk assessor is not required to differentiate the individual contribution made by each factor' (Appellate Body Report, *US—Continued Suspension*, para. 562). This was relevant in the context of the methodological problems encountered by the EU when assessing risks from oestradiol-17β in a situation where people are exposed to

[21] Cf. e.g. panel's analysis of the genotoxicity of oestradiol-17β in the *US—Continued Suspension* dispute (Appellate Body Report, *US—Continued Suspension*, para. 610).

multiple sources of hormones and hormone residues (both endogenous and artificial).

On the other hand, under other WTO agreements panels do not ask for such a high degree of specificity (at least not to the extent required under the SPS Agreement). For example, in *Brazil—Retreated Tyres* the panel did not require any specific evaluation of the risks posed by the improper management of used tyres in Brazil and was satisfied with evidence of a general nature (e.g. the Basel Convention Technical Guidelines on the Identification and Management of Used Tyres), indirect or relating to other WTO Members (e.g. the EU, the United Kingdom) (para. 7.77).[22] This difference can probably be explained by the fact that the SPS Agreement explicitly requires a risk assessment, which is defined as highly structured and heavily scientific-based procedure. As already mentioned, neither the TBT Agreement nor GATT 1994 contain such a requirement. This obviously leaves a panel with greater freedom when it comes to the evaluation of scientific evidence.

Insufficiency of Scientific Evidence

Scientific uncertainty may be also addressed under Art. 5.7 of the SPS Agreement, a provision which specifically was drafted for such situations. Although neither the SPS Agreement nor the WTO dispute settlement bodies speak in this context about uncertainty (in the WTO jargon Art. 5.7 applies whenever there is an 'insufficiency' of scientific evidence), some of its forms[23] clearly fall with the scope of this provision. For example, a lack of observations and measurement data, practical immeasurability, or an identified indeterminacy that precludes a meaningful risk assessment can be easily classified as specific forms of insufficiency.

In the early SPS case law, Art. 5.7 was interpreted quite narrowly. The WTO panels saw the assessment of sufficiency/insufficiency as a static and objective task of a purely technical character, i.e. a specific set of

[22] Noting that 'the Panel does not consider that a detailed proof of actual tyre fires and associated negative impacts on health within the territory of Brazil is required'.

[23] The distinction between different types of uncertainty is based on Klinke and Renn (2002).

data could be objectively determined as either sufficient or insufficient.[24] It should be noted, however, that this concept has a strong normative and subjective component. In particular, such an assessment cannot be completely separated from the preferences of the risk assessor, which may reflect his or her attitude towards a particular risk, the values of the community in which the expert is operating, or the level of protection that is sought by a particular national regulator. While for well-researched scientific problems this subjective component may of secondary importance, its relevance becomes more visible in borderline situations (e.g. when a risk is relatively new, complex, or under-researched). As consequence, 'evidence deemed reliable enough to generate a sufficient risk assessment in one regulatory context may fail in other contexts because of the different concerns, risk frames, and particular circumstances' (Winickoff et al. 2005, p. 114).

The above misunderstanding of the concept of insufficiency is also visible in some other contexts. For example, one of the panels came to the conclusion that the existence of a relevant international standard de facto precludes WTO Members from relying on Art. 5.7—not only because of the evidentiary value of such a standard, but also because of its special normative position under the SPS Agreement. The panel particularly observed in this context that there needs to be a 'critical mass' of new evidence and information which undermines the previous findings which formed the basis for the international standard in question. It further explained that this means: '[e]vidence [that] becomes quantitatively and qualitatively sufficient to call into question the *fundamental precepts* of previous knowledge and evidence. The Panel does not mean that there must be sufficient evidence to perform a new risk assessment. Otherwise, Article 5.7 of the SPS Agreement would become meaningless. It used the term "critical mass" very much in its common scientific usage, i.e. the new scientific information and evidence must be such that they are *at the origin of a change in the understanding of a scientific issue*' (Panel Report, *US—Continued Suspension*, para. 6.141, emphasis added).

The approach of the WTO dispute settlement bodies changed with the Appellate Body report in the *US—Continued Suspension* dispute. The Appellate Body, in more nuanced way, recognized that an assessment of insufficiency is not a purely scientific task and may be influenced

[24] Cf. Panel Report, *EC—Biotech Products*, para. 7.3243; Panel Report, *US—Continued Suspension*, para. 7.612. See also Gruszczynski (2010, pp. 194–196).

by other non-scientific factors. In particular, it explained that the appropriate level of protection sought by a particular country may play a role in framing the scope and the methods used in a risk assessment (Appellate Body Report, *US—Continued Suspension*, para. 685).[25] The Appellate Body also rejected the idea of a 'critical mass of evidence'. Of course, this does not mean that every development in science can turn previous knowledge into insufficient evidence. What is required is that 'evidence from a qualified and respected source [which may also include minority scientific views—LG] puts into question the relationship between the pre-existing body of scientific evidence and the conclusions regarding the risks' (ibidem, para. 703). Finally, according to the Appellate Body neither the existence of international standards nor some other risk assessment precludes a finding of the insufficiency of scientific evidence. In other words, they do not have any normative value per se, as they are simply evidence of specific scientific information which may help to establish a *prima facie* case of sufficiency/insufficiency of scientific evidence for the purpose of Article 5.7.

Applicable Standard of Review

The standard of review to be applied by panels to factual (scientific) determinations made at the national level is an issue which has proven to be particularly controversial in the SPS case law. At the same time, this problem seems to have a limited importance under other WTO agreements, where panels tend to be more deferential when confronted with scientific evidence. The concept of the standard of review, which has its origins in common law, can be generally described in the WTO context as the level of the scrutiny that is used by panels and the Appellate Body when assessing certain determinations of a legal, factual, or mixed nature made by WTO Members.[26] The standard of review as such does not call for any specific level of scrutiny; it is simply a framework that allows describing the intensity of the review employed by (or expected from) a

[25] Of course, this is not to say that under the Appellate Body's approach the assessment of insufficiency is a purely subjective exercise. Its statement should be read simply as recognition of the complex nature of such an assessment, which encompasses both scientific and non-scientific elements.

[26] For detailed discussion on the concept of standard of review in different international fora, see Gruszczynski and Werner (2014, pp. 1–15).

supervising body. In theory, the extent of review falls within two polar extremes: de novo review at one end of the spectrum, and full deference at the other, with various intermediate options in between. Under the de novo approach, a WTO panel would be expected to reassess all the factual determinations, including scientific findings made by a WTO Member, as to their correctness and could substitute them with its own assessment. Under the full deference extreme, a panel would be prohibited from going into the substance of factual claims made by a WTO Member and could only check procedural compliance (e.g. did the WTO Member perform a risk assessment before its adoption of a measure?). Depending on the level of scrutiny the panel will obviously enjoy broader or more limited supervisory powers.

The WTO treaties, including the SPS Agreement, are silent on applicable standard of review.[27] The Appellate Body, to the surprise of many scholars (e.g. Button 2004, p. 171), recognized Art. 11 of the Understanding on Rules and Procedures Governing the Settlement of Disputes[28] as providing the relevant instruction for all WTO agreements. As it famously noted in *EC—Hormones*, the provision 'articulates with great succinctness but with sufficient clarity the appropriate standard of review for panels in respect of both the ascertainment of facts and the legal characterization of such facts under the relevant agreements,' and added that such a standard is 'neither de novo review as such nor "total deference", but rather the "objective assessment" of the facts' (Appellate Body Report, *EC—Hormones*, para. 117). It also explicitly rejected the deferential standard of reasonableness (which would resemble the standard of Art. 17.6 of the Anti-Dumping Agreement) advocated by the European Commission (ibidem, para. 114). These findings, while delimiting the boundaries of the review, actually said very little about the precise standard (note that both de novo review and deferential review may be

[27] The only exception is the Agreement on Implementation of Article VI of the General Agreement on Tariffs and Trade 1994 (Anti-Dumping Agreement), which provides for the applicable standard of review in its Art. 17.6.

[28] Understanding on Rules and Procedures Governing the Settlement of Disputes, Marrakesh Agreement Establishing the World Trade Organization, Annex 2, 15 April 1994, 1869 UNTS 401. Art. 11 specifically provides in the relevant part that 'a panel should make an objective assessment of the matter before it, including an objective assessment of the facts of the case and the applicability of and conformity with the relevant covered agreements, and make such other findings as will assist the DSB in making the recommendations or in giving the rulings provided for in the covered agreements.'

objective). Consequently, one has to look at the relevant case law to see how the WTO dispute settlement bodies have actually implemented this issue in practice.

In *EC—Hormones* the Appellate Body eventually took a rather deferential approach. It accepted the relevance of minority scientific opinions; confirmed that risk assessment does not need to be limited to risks 'which are ascertainable in a science laboratory operating under strictly controlled conditions' but may also deal with real life risks (and include, for example, issues such as human error); and recognized that prudence and precaution may play an important role when dealing with irreversible human health risks (ibidem, para. 181). Although the examination was not limited to procedural compliance and also involved a substantive analysis of the scientific evidence, the overall approach left a considerable margin of discretion to WTO Members in their assessment of the facts. The subsequent case law, however, went in the opposite direction. While formally the panels still follow the standards set out in the *EC—Hormones* report (e.g. minority scientific views as legitimate grounds for regulation), on various occasions they have employed an ever more intrusive approach, inquiring into the quality, persuasive force, and correctness of the scientific determinations that formed the basis for national SPS measures. These developments found their culmination in two panel reports, e.g.: *EC—Biotech Products* and *US—Continued Suspension*. Both panels viewed their role as ultimate arbiters of the scientific claims made by the parties during the course of the proceedings, and conducted an intrusive analysis of the scientific underpinnings of the relevant measures. The *Biotech* panel's examination into the insufficiency/sufficiency of scientific evidence for the purpose of Art. 5.7 may serve here as a useful example. The panel looked at various evidentiary submissions by the parties and consulted several independent experts in order to establish whether it was possible for the EU to rely on Art. 5.7 with respect to some measures adopted by its Member States. Although a part of the evidence indicated that the information was insufficient to perform a risk assessment (which was also confirmed by some experts advising the panel),[29]

[29] Panel Report, *EC—Biotech Products*, Annex H, 'Replies by the Scientific Experts Advising the Panel to Questions Posed by the Panel', H-171, paras. 785–786, 791 (one of the experts particularly noted that 'France had valid reasons … to carry out more research to 'supplement existing scientific knowledge and validate methods for managing the cultivation of genetically modified oilseed rape').

ultimately the panel found that Art. 5.7 was inapplicable (meaning that evidence was sufficient). In doing so, it privileged (without explaining why) some scientific evidence and expert opinions over others and effectively re-performed an analysis of the available scientific data (e.g. Panel Report, *EC—Biotech Products*, para. 7.3300).[30]

A very similar approach was taken in the *Continued Suspension* case. Although the panel stressed on several occasions its limited role, in fact it engaged in a detailed assessment of the scientific evidence. It is worth recalling that the panel particularly noted that '[a]lthough [it] is not carrying out its own risk assessment, its situation is similar in that it may benefit from hearing the full spectrum of experts' views and thus obtain a more complete picture both of the mainstream scientific opinion and of any divergent views.' In this context, it also added that: 'while, on some occasions, we followed the majority of experts expressing concurrent views, in some others the divergence of views were such that we could not follow that approach and decided to accept the position(s) which appeared, in our view, to be the most specific in relation to the question at issue and to be best supported by arguments and evidence' (Panel Report, *US—Continued Suspension*, para. 7.420).

The above description clearly shows that the panel saw itself as the ultimate arbiter of the scientific controversies involved in this particular dispute.[31] Such an approach obviously comes close to a de novo review.

The Appellate Body in the same dispute took a more careful approach. It criticized the panel for being overly intrusive and explained that the role of the panel in the evaluation of scientific evidence was limited. In this context, it explained that 'the review power of a panel is not to determine whether the risk assessment undertaken by a WTO Member is correct, but rather to determine whether that risk assessment is supported by *coherent reasoning and respectable scientific evidence*' (Appellate Body Report, *US—Continued Suspension*, para. 590, emphasis added). The Appellate Body also described specific steps that should be taken by a panel. First, it

[30] For a more detailed discussion, see Gruszczynski (2010, pp. 194–195).

[31] Cf. e.g. the treatment by the panel of the opinions provided by its own experts with respect to the question of the existence of a threshold for substances having genotoxic potential (in this case for oestradiol-17β). Despite genuine disagreement between them, the panel found some answers to be the most straightforward, and as a consequence correct according to the panel. For a more detailed analysis, see Gruszczynski (2013, pp. 744–745).

needs to identify the scientific basis of an SPS measure under examination. If the basis consists of minority views, a panel is expected to verify whether they come from respected and qualified sources (in other words, the views need to be regarded as legitimate science according to the standards of the relevant scientific community). As a next step, a panel should assess whether the reasoning articulated on the basis of the scientific evidence is objective and coherent, i.e. whether there is rational link between the scientific evidence and the conclusion reached by a WTO Member. As the final step of the examination, a panel needs to assess whether the results of the risk assessment 'sufficiently warrant' the SPS measure at issue, which again requires an assessment of the relationship between the two (ibidem). Overall this approach gives a picture of relatively deferential review that is concentrated on the scientific defendability of a risk assessment rather than its correctness.

However, this conclusion was proven hasty, as the Appellate Body in a subsequent dispute re-introduced elements of a de novo review into its *Continued Suspension* approach. In particular, it explained that the task of the panel, when examining whether the reasoning articulated on the basis of the scientific evidence is objective and coherent, goes beyond the mere establishment that such reasoning, together with the intermediate conclusions, falls 'within a range that could be considered legitimate according to the standards of the scientific community' (Appellate Body Report, *Australia—Apples*, para. 28), i.e. whether a specific interference is justified in the light of a particular methodology that may be described as scientific, and/or whether an interference is objective or biased. This approach obviously opens the door for a more intrusive investigation into the reasoning contained in a risk assessment—including its assumptions and intermediate and final conclusions—and apparently allows a panel to substitute its own judgments for those of the national risk assessor. However, if one of the main concerns of the Appellate Body in *Continued Suspension* was the limited epistemic competence of panels to assess scientific evidence (ibid., para. 225), it is difficult to understand how a panel is better placed to evaluate the scientific value (rather than the coherence) of the reasoning.

Outside the SPS case law the standard of review has proved to be less controversial, with the panels following the initial approach advocated

by the Appellate Body in *EC—Hormones*.[32] One of the panels explicitly stated in the context of its analysis under Art. XX GATT 1994 that 'it is not its function to settle a scientific debate, not being composed of experts in the field of the possible human health risks posed by asbestos. Consequently, the Panel does not intend to set itself up as an arbiter of the opinions expressed by the scientific community' (Panel Report, *EC—Asbestos*, para. 8.181). This limited role only required assessing whether the evidence was sufficient to conclude that there was a human health risk and whether the measure was necessary to achieve the regulatory goal of France. The panel was not expected to determine whether a risk 'objectively' exists, e.g. according to the best available science. In the previously mentioned *Brazil—Retreated Tyres* dispute the WTO dispute settlement bodies took a similar approach. The panel was satisfied with the evidence, which merely suggested a correlation between the spread of different diseases and the improper accumulation of waste tyres. This was enough to establish that this part of the Brazilian defence (i.e. the necessity of the measure) was rational, and in consequence legal. In another case, the panel referred to formal criteria—such as the methodological rigour of studies, publication in peer-reviewed journals, and recognition of experts—to assess the competing scientific claims made by the parties (Panel Report, *EC—Seal Products*, para. 7.184, n. 245).[33] Although the case involved a moral question (which probably calls for a very deferential standard of review), it also required an analysis of the scientific evidence, as science was used to inform the judgments made on the moral questions raised by a seal hunt.[34]

A similar approach can be found in the TBT case law. For example, one of the panels—when assessing the extent to which setting on tuna may have an adverse effect on dolphins beyond observed mortality—agreed that the US had sufficient grounds (in the form of scientific evidence) to be concerned. In other words, it did not look into whether such adverse effects indeed existed, but rather whether there were rational grounds for the defendant to believe so (Panel Report, *US—Tuna*, para. 7.504). In another TBT case, the panel required Mexico (the initial complainant)

[32] It should be noted, however, that the problem of the applicable standard of review is rarely directly addressed.

[33] See also Panel Report, *US—Tuna (II) (Second recourse to Art. 21.5 DSU)*, para. 7.238.

[34] See generally Sykes (2016).

to prove that a certain methodology used by the US was unscientific or non-objective, rather than that there were some better methodologies that should have been followed (Panel Report, *US—Tuna (II) [Second recourse to Art. 21.5 DSU]*, para. 7.151). In the same case the panel also noted, in line with *EC—Hormones*, that 'our task is to conduct a thorough and objective review of the evidence on the record, and not necessarily to come to conclusions aiming to establish scientific or environmental truth' (ibidem, fn. 503).

Conclusions

In the context of WTO law, science has become an important and, in some instances, decisive element in the assessment of any national health and environmental-related trade measure. The SPS Agreement provides the strictest framework, which goes beyond the mere detection of protectionism and is aimed at the elimination of all irrational—from the scientific point of view—domestic measures. Such measures are tested against various science-based requirements and may withstand the scrutiny of the WTO dispute settlement bodies only if a defending Member is able to show that they are supported by sufficient scientific evidence, irrespective of their discriminatory character. Scientific experts that assist panels in this task play an important role by falsifying various claims made by the parties and shedding the light on complexities of scientific problems involved.

Interestingly, even outside the SPS Agreement the WTO dispute settlement bodies seem to be equally concerned with the external (i.e. the absence of alternative less-trade-restrictive measures) and internal (i.e. existence of a sufficient scientific basis) legitimacy of domestic measures. There are arguably a number of reasons that may explain this trend (Gruszczynski 2014a, pp. 22–25). Firstly, the entry into force of the SPS Agreement with its science-based disciplines has definitely been a vital factor—in order to guarantee a certain level of internal consistency the dispute settlement bodies have had to adjust their approach under other WTO treaties as well. In this process, the SPS Agreement has served as a natural point of reference and its standards (or at least some of them) have been transplanted to other agreements (e.g. the concept of scientific justification; the possibility of quantitative and qualitative presentations of risk; treatment of minority scientific opinions; lack of a requirement of minimum magnitude of risk). Secondly, the progressive expansion and formalization of the WTO dispute settlement process as a legal system

has been important as well. The arguments of the parties now tend to be more developed, with all factual claims comprehensively substantiated by relevant evidence, including scientific data. Panels are expected to regularly and efficiently deal with this mass of evidence, and in this context science may be seen as an attractive organizing tool that helps to weigh competing claims. Current disputes are also more complicated than in the past. Due to the success of the GATT liberalizing rounds, tariff barriers have lost their significance in international trade and non-tariff barriers are now the main preoccupation of the WTO.[35] They are normally adopted to serve some legitimate regulatory objective(s), but sometimes they are also disguised forms of protectionism. The assessment of these barriers is more difficult as compared to traditional trade restrictions and may require the employment of a new and sophisticated instrumentarium (such as assessment of the science-based criteria). Finally, this change may be connected with the progressive technicization and scientification of contemporary societies, with science and expertise conventionally seen as being the final authority with respect to different societal disagreements.[36]

The last observation brings us to the issue of the legitimizing character of science and scientific expertise. Note that the WTO (similarly as the EU) as an international organization lacks democratic credentials and needs to use some other compensatory mechanisms to ensure that its decisions are recognized as legitimate. This need is further strengthened by the fact that the WTO dispute settlement bodies operate in a legal environment which is characterised by the existence of general obligations and unclear legal standards. As a consequence, the dispute settlement bodies frequently need to create, rather than merely apply, WTO rules, and risk being criticised or accused of judicial activism.[37]

[35] But note that we may currently be witnessing an opposite tendency, with the US imposing punitive tariffs on its trading partners (with corresponding retaliatory measures introduced or planned by other WTO Members). It is difficult to say whether this is beginning of a new trend or merely a temporary deviation.

[36] This role of science is however, as explained in the introductory chapter of this book, increasingly contested in the contemporary world.

[37] This aspect has been highlighted numerous times by the current US administration and has been one reason (at least formally) for the US blocking of the appointment of Appellate Body members (see e.g. Center for Strategic and International Studies 2017). In this context, the USTR Lighthizer particularly mentioned the WTO dumping and countervailing-duty cases. See also footnote 40 below.

Science and scientific expertise may be very helpful in this regard. One possible way to strengthen the legitimacy of the rendered decisions is through an emphasis on the expertise and special qualifications possessed by the bodies acting on behalf of the organization. One may also build legitimacy on the basis of the output of the dispute settlement process ('quality, efficiency, or general acceptability of the norms that have been created') (de Búrca 2007–2008, p. 245).[38] As correctly noted by Peel 'expertise based on scientific and technical knowledge is typically viewed as a plausible basis for legitimating the authority' (Peel 2010, p. 14) of international bodies and the rules that they apply. As a consequence, decisions based on science and scientific evidence may be seen as being not only of a higher quality but also more widely acceptable based on the claim that science is objective, neutral, and universal. Moreover, deciding disputes based on science-based criteria allows WTO dispute settlement bodies to depoliticize (at least on its face) a particular trade controversy. The specific issue is decided one way or another not because of certain policy preferences on the part of the WTO, but rather because of the higher command of science.

The experience so far, particularly in the context of the SPS Agreement, clearly shows that the above expectations have only been partially fulfilled. Regulatory science has not turned out to be as value- and policy-free as the drafters and WTO dispute settlement bodies would have us believe. The construction of scientific knowledge is in part a social process that is culture-dependent, while the assessment of risks relies on a number of normative non-scientific approximations and assumptions. Strictly construed scientific benchmarks (e.g. narrow and overly technical conceptions of the sufficiency/insufficiency of scientific evidence) fail to capture the multidimensional character of regulatory science. Moreover, disputes that are highly politicized remain contentious, irrespective of the criteria that are used to resolve them. In particular cases the parties tend to disagree about what science actually says, and highlight or downplay existing uncertainties, and even manipulate the complexities involved.[39] It

[38] See also the discussion in the introductory chapter. The editors particularly note in the context of the EU that 'reliance on technocratic expertise has traditionally been considered as a key factor legitimating an emerging polity'.

[39] Cf. also with the discussion in the introductory chapter, particularly with the observation by Weingart (1999): 'the intensified use of scientific expertise has not increased the degree of certainty on the part of judges, administrators and policy-makers; on the

is therefore not surprising to see some forms of contestation of scientific expertise relied on by the panels in the dispute settlement proceedings. The criticism comes not only from States (not necessary a party that lose a specific dispute) but from the Science, Technology and Society community (e.g. Winickoff et al. 2005) or civil society (e.g. *EC—Biotech Products*) and sometimes may take extreme forms of non-compliance (e.g. *EC—Hormones* and *EC—Biotech Products*). One may only wonder whether (and to what extent) this experience has contributed to the creation of the current anti-establishment and anti-expert sentiment.[40]

The WTO dispute settlement bodies have tried to respond to these challenges by adjusting their science-based standards to the reality of risk regulation. Sometimes they have been successful (e.g. softening the specificity requirements, acceptance of the concept that there is no minimum risk threshold), but on other occasions specific problems remain either still unrecognized or have been addressed only partially (e.g. the standard of review applicable to scientific determinations). It is therefore remains to be seen whether the WTO dispute settlement bodies, assuming the organization survives the current crisis, will be able to elucidate science-based standards that will satisfy the expectations of the different constituencies. These standards, while recognizing the limitations of the expertise and knowledge in the area of regulatory science, should not however lead to the complete marginalization of experts' input. Such a strategy would amount to throwing the baby out with the bathwater. As the introductory chapters highlight, there are better ways of addressing these challenges. At the same time, it would be naïve to think that the current existential crisis of the WTO could be addressed by more sophisticated and nuanced involvement of science and scientific expertise in the dispute settlement process. Considering the obvious disrespect expressed by President Trump towards expertise and experts' knowledge and the fact the crisis is connected with the paradigm shift in the US trade policy,[41]

contrary, it has left them witnessing the ongoing debates among scientific experts and forces them to decide between conflicting advice.'

[40] See also Introductory chapter.

[41] This new strategy (from multilateralism to bilateralism, from an international free trade regime to protectionism, and from a rule-based to power-based system) is reflected in the approach taken by the US towards the WTO. In particular, the Trump administration is blocking the election of new members of the Appellate Body. Currently, there are only four members, leaving three open unfilled seats. The lack of Appellate Body members has

it is unlikely that any such changes could improve the situation in a meaningful way.

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already led to delays in the consideration of appeals. If the situation is not remedied by 2019, when the terms of office of two of the remaining members expire, the Appellate Body will be completely paralyzed, as the remaining two members will be unable to form a three-person bench. For additional details, see M. Elsig et al. (2017).

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CHAPTER 9

Contesting Concentrated Scientific Power: The Case of the European Commission's Chief Scientific Adviser

Shelly Tsui

Introduction

In 2009, following the economic crisis, former President of the European Commission José Manuel Barroso declared in his plenary speech to the European Parliament that Europe needed to rebuild itself, and develop a strategy in order for Europe to move forward (Barroso 2009). He emphasized that appropriate measures needed to be developed in order to formulate better policies that support research and innovation. In order to do so, one of Barroso's suggestions for organizational change in the European Union (EU) was "to set up a *chief scientific adviser* who has the power to deliver proactive, scientific advice throughout all stages of policy development and delivery" [emphasis added] (European Commission 2009, para. 23). Three years later, the position of Chief Scientific Adviser (CSA) was officially established in 2012 and appointed

S. Tsui (✉)
Eindhoven University of Technology, Eindhoven, The Netherlands
e-mail: s.tsui@tue.nl

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to biologist Anne Glover, who had held a similar position as the former CSA to Scotland (2006–2011). As the Commission's CSA, the first line of her mandate stated that she was "to provide independent expert advice on any aspect of science, technology and innovation as requested by the President" (European Commission 2011, para. 6). The CSA personally reported to, and only to, the President of the Commission.

Despite the grand plans that the Commission had in store for the CSA, which was to strengthen the science and policy-making nexus by institutionalizing the delivery of timely and expert scientific advice to the EU regulation and decision-making process, the position was abruptly discontinued in late 2014 amid public criticism by several non-governmental organizations (NGOs). Spearheaded by Corporate Europe Observatory (CEO), a research and campaign group based in Brussels, and the European unit of Greenpeace, in two public letters (co-signed by a number of scientific organizations and individuals) to then-incoming President Jean-Claude Juncker, they raised concerns about the problematic issues surrounding the position, which were; one, the concentration of power and influence on a single adviser and two, the lack of transparency (i.e. no public documentation) on the scientific advice delivered to Barroso (Muilerman et al. 2014; Stoczkiewicz et al. 2014).

While these were serious charges raised by the NGOs, and was followed by extensive media coverage, astonishingly, there was very little reaction by the Commission, specifically by Barroso, on the controversy. There was no official address on the CSA by the Commission and following the end of Barroso's presidency in 2014, the position was succeeded by a new scientific advisory institution, the Scientific Advice Mechanism (SAM) (European Commission 2015). The SAM is a stark contrast to the CSA's one-person adviser; it consists of a panel of seven eminent scientists in charge of delivering scientific advice for policy to the College of Commissioners, rather than just the President. Indeed, while it is common for institutions, especially newly established ones, to change and adapt over time to new needs and concerns, the abrupt discontinuation of the CSA divided policy-makers and the scientific community, with reactions ranging on the termination as being "a non-issue" by the Director-General of the Commission's Joint Research Centre, Vladimir Šucha (Kelly 2015, para. 6) to scientists from all around the globe lamenting that the decision was a step backwards for Europe and science (BBC 2014).

Although the reaction towards the CSA's importance and its discontinuation was ambivalent, one thing is clear however; the controversy is an example of the broader global trend of contesting the role of expertise in policy-making, how such experts are appointed and how their advice should be used and shared with the public. This can be troubling as expertise is seen as a vital resource for decisions on policy issues. As such, should there be a fear towards the phenomenon of increasing contestation? While such a worry is warranted, the chapter argues that the CSA controversy is an opportunity to view contestation as more than only an attempt to undermine scientific expertise. In fact, contestation can be an opportunity to explore the politics on how scientific advisory bodies are established, the basis of their legitimacy, and how scientific expertise is used in a democratic policy-making context.

To illustrate this, the chapter first briefly discusses the politicisation of scientific expertise and experts i.e., how they became an important resource for policy- and decision-making in democratic societies, and the current challenges faced by their role. The second part reconstructs the public controversy between the CSA and the NGOs by looking into the exchange of letters and past interviews with Glover. By looking into the media coverage, interviews, and the publicly shared letters by CEO and Greenpeace that challenged the CSA's role, the chapter highlights how the contestation of the CSA, rather than undermined the role of scientific expertise in the EU's decision-making, it in fact led the Commission to re-evaluate its current scientific advisory set-up and establish a new advisory institution that addressed the points raised by the NGOs. To show this, the CSA's and its successor, the SAM is briefly compared. By way of conclusion, the chapter argues that through exploring the controversy between the CSA and NGOs, the contestation of scientific expertise, rather than be viewed solely as a threat to the continued use of scientific expertise in policy-making, presents an opportunity to critically review current practices of how scientific expertise is established and utilised. This can lead to the strengthening of the case for recognising the value of using scientific expertise in policy-making.

The Politicisation of Scientific Expertise

Scientific expertise, which collectively refers to people and institutions deemed qualified to offer advice and knowledge on a given matter, is considered by scholars to be an indispensable part of governing democratic societies (Jasanoff 1990; Weingart 1999). With the multitude of interests, needs, and values present in society, a means by which these various elements be translated into practice, such as through developing and implementing policies, is vital to the success of a functioning government. Political theorist Yaron Ezrahi (1990) argued that "scientific knowledge can render the actions of democratic governments more rational and effective" (p. vii). In other words, expertise has become a political resource for politicians in that they use it as a basis to propose and justify policies. Furthermore, by utilising scientific expertise in their discourse, politicians and policy-makers benefit from the 'standard' image of science i.e. the notion that science, and the expertise based on it, is objective and neutral, which in turn serves to portray their public image, and by extension their policies, as being free of hidden political motives and grounded on facts (Bijker et al. 2009; Douglas 2009). Thus, science has the power to depoliticize, which Ezrahi actually identified as one of the "most potent *political* strategies" (p. 51) to resist, or at least hinder, challenges to policies that are supported by scientific expertise.

Despite this portrayal of science as a means to depoliticize government actions, concurrently, the contestation of scientific expertise still occurs, especially in the recent decades. Scientific experts, who were once regarded as objective and reliable dispensers of knowledge, are now commonly subjected to intense public scrutiny as consequences stemming from their research have been recognized as not just a concern for experts but also for society (Jasanoff 1990; Bijker et al. 2009). For example, the atomic bomb was, and remains, one of the most ingenious developments of humankind. The creation of nuclear weapons has not only invariably changed the nature of warfare but has also demonstrated the devastating might that science is capable of. Following the bombing of Hiroshima and Nagasaki in 1945, the public became more aware of the impact of their government, and the scientists involved, and started to protest *en masse* against nuclear weapons (Weingart 1999).

Not limited to nuclear weapons, overtime it has been observed that there is a global trend of contesting scientific expertise and the advice dispensed on standards of food safety, health, and other issues related

to human well-being. Common examples where there is much mistrust towards experts include the anti- movements towards vaccines, genetically modified foods, and climate change (Burnside 2017). Specifically characterising the reasons for the rise of such movements are cases of scientific misconduct by experts (e.g. fraudulent data), scandals involving scientific research and corporations, but more importantly, the lack of consensus within the scientific community itself on said issues (Kabat 2017).

With this in mind, there is very little wonder that such mistrust permeates to the policy-making context. Scientific expertise has been challenged as to whether or not it is a legitimate basis for policy- and decision-making, and more generally, whether or not expertise has any value or future role in society. Yet, it was, and still is, recognised that science and scientific experts were increasingly important, and necessary, in governing human affairs such as defining standards of food safety, health, and other domains in human welfare. In fact, scientific experts have been studied as a category of their own in light of the extent of their influence on managing and controlling society (Jasanoff 1990). As such, while the understanding of science as being free from values, biases, or other subjectivities has been long debunked by sociologists of science (Bijker et al. 1987), scientific experts are still regarded as trustworthy and command much authority.

This seeming contradiction raises the following question: how have scientific experts and organizations 'defended' themselves against rising challenges to their reliability, legitimacy, and value as an important resource for policy? Research in Science and Technology Studies (STS) have long addressed these very challenges faced by scientific advisory experts and institutions by showing how the construction of the image of authority manifests in their very architecture and organizational practices (Jasanoff 1990, 2005; Hilgartner 2000; Bijker et al. 2009). Researchers have analysed how membership of advisory organisations, the contents in publications, the information disclosed during media appearances, and other features are deliberate acts designed to convey a certain image of authority and credibility to the public.

In other words, through the examination and analysis of seemingly superficial features of a scientific advisory institution, one is able to glean from it the hidden mechanisms surrounding the construction of scientific expertise and how the establishment of expertise is a far more complex, strategic, and political enterprise than it first appears. Scientific expertise,

and its numerous aspects such as who is an expert, how is expertise determined, and how is the knowledge produced by experts shared and used, is in fact not just about communities of scientists that conduct research to reach objective findings. The nature of expertise a phenomenon that reflects a broader constellation of complex social agreements, negotiations, and discussions on the political organisation and utilisation of scientific knowledge (Bijker et al. 2009). As such, contestation can be understood as not always pertaining questions about whether or not scientific knowledge and experts have value or if they should be used, in policy or otherwise, but how the institutions dispense advice i.e. the procedural aspects, can influence the perception of legitimate scientific expertise.

To make clearer how these insights, when applied to the case study of the CSA, illustrate the complex politics surrounding scientific expertise, the next section first provides background information on the CSA before delving into the contents of the controversy involving the organisations, and the aftermath, which was the dissolution of the CSA and the establishment of a new advisory institution.

The Establishment and Dissolution of the Chief Scientific Adviser

As mentioned earlier, the CSA was a scientific advisory institution established in 2012 by the European Commission order to provide policy advice to then-President Barroso. It was abruptly discontinued after just two years due to being embroiled in a widely publicised controversy between the CSA and the broader scientific community, collectively voiced by CEO and the European unit of Greenpeace, regarding the comments made by the CSA on there being an international scientific consensus on the safety of genetically modified organisms (GMOs). The CEO and Greenpeace not only challenged this claim but in addition, challenged the *legitimacy* of the adviser by problematising the organizational features of the position.

As such, the case study of the CSA controversy presents an interesting opportunity to look back and understand how contestation of scientific expertise is not solely an attempt to undermine or reject the role, use, and value of science in policy-making but rather, to reveal the varied political assumptions *surrounding* scientific expertise. In other words, to look into the controversy is to not only to know the particular details

of what happened between the relevant actors but to also see the broader conflict that occurred away from the public's eye—that scientific expertise had come under critical scrutiny for two specific reasons: the presence of just a single adviser occupying and being the literal face of the influential and powerful role, and second, the procedure surrounding to whom and how the advice is delivered. As it will be established later in the chapter, these two points can be understood not as undermining the use of scientific expertise but rather, they point broader issues, namely bringing into scrutiny the Commission's process of creating and establishing the legitimacy a scientific advisory body for policy-making.

As previously argued, whilst there is a broad consensus on the importance of scientific advice, research has shown that how this is put into practice i.e. how scientific expertise is dispensed and used in the policy-making process is not the same across the globe. In a cross-national of the US, Germany, and France, study Sheila Jasanoff (2005) showed how national differences in how scientific advice and expertise are present in the institutional design of an advisory body, decision-making styles (e.g. centralised versus democratic), and definition of expertise when it comes to biotechnology, specifically in the use of stem cells, GMOs, and reproductive technologies.

To zoom in on a particular context, the EU has established a specific position and vision on how scientific advice and expertise should be used in policy-making for the EU. In 2002, the Commission published a document titled "Improving the knowledge base for better policies" that contained principles and guidelines on how to utilise expertise and scientific advice in the different stages of policy-making (2002). At its core, the document emphasises, while recognising that "expertise forms an integral part of a dynamic knowledge-based society" (p. 3), that the Commission will inevitably be encounter differing and "conflicting expert opinions…and from those with direct stakes in the policy issue" (p. 3). As such, it is paramount that "interested parties and the public at large are themselves convinced that decisions are sound" by ensuring that due diligence is given "not just on *policy outcome* but also on the *process* following" [original emphasis] (p. 3). From the aforementioned quotes, it can be said that the Commission is aware of the fact that scientific research can lead to conflicting findings on a given issue, and that can be conflicts of interests from the participation of different stakeholders in the policy-making process. As such, they explicitly mention the importance of the process in which expertise is used in policy-making. This point will be

returned to later in the chapter as it is first pertinent to discuss how the CSA came to be.

The advisory position of the CSA is the first of its kind for the EU and had a major influence on setting a precedent for the importance of incorporating scientific advice in stages of the policy-making process (Alemanno 2014; Wilsdon 2014). That is not to say that prior to the CSA, there existed no formal structures of science advice. However, with the previous state of science and policy-making, a number of advisory bodies existed but there was no clear connection or manner of interaction between them, the College of European Commissioners or the President (Alemanno 2014). Furthermore, the EU consists of many Member States, each with their own approach towards science advice and policy-making. The task of the CSA was to ensure that she represented the state of the art knowledge on a scientific issue, which should also reflect the consensus the broader international expert and scientific community, while adhering to the rules and regulations of her position.

Even before the Commission decided on who they would assign the position of CSA to, the context for establishing the role was made clear: in order for Europe to begin its recovery process from the financial crisis, focus should be given to research and innovation. In order to achieve this, President Barroso declared that a CSA, a model of scientific advisory institution and practiced in countries such as Canada, Australia, Ireland, Scotland and New Zealand (Wilsdon 2014), was needed. Barroso's decision to adopt the CSA model was in part by the urging by the United Kingdom as well as a broader commitment to better integrate the use of science advice into EU policy-making (Alemanno 2014). This motive is more clearly articulated in the Better Regulation initiative established during his presidency and in general, a growing recognition of the importance of incorporating science in policy-making across the EU.

As of 2012, the CSA position was instated with Anne Glover appointed to the role. Previously, from 2006 to 2011, Glover was the Scottish Government's CSA for Scotland. Compared to this role as a national adviser, Glover's position in the Commission was to "provide high-level and independent scientific advice throughout all stages of policy development and delivery" (European Commission 2011) to the President, according to the official press release. In the same press release, Barroso highlighted Glover's background as a scientist and experience as scientific advice advisor as important to carrying out the position. The CSA was provided administrative support by the former Bureau of European

Policy Advisors (currently renamed as the European Political Strategy Centre) but is otherwise not affiliated from the other advisory bodies in the Commission's institutional setup such as the Joint Research Centre (JRC), or the Impact Assessment Board. The CSA reported only to the Commission President but could collaborate with, and would be advised by, the other advisory bodies, national scientific academies, universities, and the wider public.

The CSA's mandate is public and is outlined on the website (now archived) and consist of seven points, of which they can be summarized into broadly into: to provide advice at the request of the President of the Commission on any pertinent scientific or technological issue and to foster cooperation among the existing high-level advisory groups and EU agencies such as the European Food and Safety Authority (EFSA), European Medicine Agency (EMA), and the committees; (European Commission 2010).

Aside from the mandate, there was no additional information on the CSA's role such as how scientific advice is collected and from which sources, or how the CSA interacts with other advisory bodies other than the expectation that she is to cooperate with them. In fact, other than the website, there are no available reports from the CSA on any research undertaken for a specific policy or updates from the Commission itself on the CSA's activities. While information from official channels i.e., the CSA herself or the Commission, is not available, Glover has given many media appearances and interviews, especially on EURACTIV, a pan-European media network that specialises in EU policy. It was due to one particular interview (and the focal controversial issue of the analysis) on GMOs that propelled Glover and the position of the CSA into the spotlight.

Preceding the abolishment of the CSA was the heavily reported and polarising public spectacle between the CSA and the scientific community (represented collectively by CEO and Greenpeace) that centred on Glover's statements[1] regarding on GMOs. CEO is Brussels-based research and campaign organisation that investigates instances where there might have been corporate lobbying in European policy. They receive private donations from individuals and civil organisations, and represent civil interests. As for Greenpeace, it is an international organisation that represents both the scientific and civil society on raising

[1] The views of the CSA do not necessarily reflect that of the European Commission unless specified otherwise.

awareness on environmental issues, from climate change to nature conservation. To add, while it is not entirely clear why CEO and Greenpeace have chosen to publicise their contention a few years later (around 2014) with the CSA and rally the support of similar scientific organisations, the controversy turned into a public spectacle, with these two NGOs being the most prominent faces and their letters were circulated heavily by the media, and attracted much attention by the European scientific community.

On the GMO controversy, it began with an interview published on July 24th, 2012 by Jeremy Fleming on EURACTIV titled "*No risk with GMO food, says EU chief scientific advisor*". It contained Glover's statements on GMOs and she is quoted as having said that "there is no more risk in GMO food than conventionally farmed food" (Fleming 2012, para. 12). It should be noted that the interview and its contents were expressed not in Glover's capacity as the CSA nor as scientific advice but as a private individual. Regardless of this distinction being stated the CSA's website, this does not prevent the public from reading more into it. "While the CSA acts as an ambassador of science, her voice is heard well beyond the institutional walls and may be amplified by the media and possibly influence citizens' understanding of a particular scientific dispute" (Alemanno 2014, p. 290). In other words, it is difficult to separate what Glover says as a private citizen and as CSA, especially on controversial matters.

Two years later, in response to both the perceived vulnerability to the influence of lobbyists and Glover's controversial opinion on GMOs, two letters written and signed by several NGOs[2] were sent to then-incoming Commission president Jean-Claude Juncker requesting that the position be "scrapped" as it "concentrates too much influence in one person" (Muilerman et al. 2014). In the first letter sent to Juncker on July 22nd, 2014, it was signed by nine NGOs, including Corporate European Observatory, which published the letter. It is comprised of two pages and four short paragraphs. The nine NGOs summarize their criticisms of the CSA in the following excerpt:

> Until now, the role of Chief Scientific Adviser has been unaccountable, intransparent [*sic*] and controversial. While the current CSA and her opinions were very present in the media, **the nature of her advice to the**

[2] Nine NGOs signed the (first) letter, including influential organizations such as Greenpeace European Unit, Fondation Sciences Citoyennes, and Pesticide Action Network.

> **President of the European Commission remains unknown**. We have not been able to obtain any information on what the Commission President has requested advice on, let alone what advice has been given. **To the media, the current CSA presented one-sided, partial opinions in the debate on the use of genetically modified organisms in agriculture**, repeatedly claiming that there was a scientific consensus about their safety[3] whereas this claim is contradicted by an international statement of scientists (currently 297 signatories) saying that it "misrepresents the currently available scientific evidence and the broad diversity of opinion among scientists on this issue[4] [*bold emphasis added*]." (Muilerman et al. 2014, para. 3)

The main point of criticism appears to be the lack of transparency on the advice given to the President. Indeed, no information is made public on the nature or contents of the advice. As such, it is understandable that the issue of transparency becomes even more pressing in light of publicly-made controversial statements such as there being a scientific consensus on the safety of GMOs in agriculture. In the eyes of the NGOs, if scientifically unsound statements such as that on GMOs are made public, what then does the CSA's advice to the President consist of?

The letter sparked strong reactions from many European scientific organisations, with them writing their own letters to Juncker in defence of Glover and the CSA position. In one of first reactionary letters, led by the Executive Director of Policy and Information Sarah Woolnough of Cancer Research UK, nine NGOs, including the director of the National Health Services (NHS), Wellcome Trust, and Alzheimer's Research UK signed their support for maintaining the position (Woolnough et al. 2014). In another letter led by Jos van der Meer, the president of the European Academies' Science Advisory Council, they criticized Greenpeace and the other eight NGOs for their failure to recognize that a conclusive consensus on the safety of agricultural GMOs "is reiterated by, among others, the scientific academies of Africa, Europe and elsewhere, the World Health Organisation [sic] and the American Association for the Advancement of Science" (Van der Meer et al. 2014, para. 3). This letter was backed by over 40 organisations and 773 individuals from the global scientific community.[3]

[3] A full list of signatories can be found in the source (Van der Meer et al. 2014) in the list of references.

In addition to there being a disagreement on the safety of GMOs, there was also a more fundamental disagreement between the NGOs on the position of the CSA. Through a closer reading, the letters in defence of the CSA did not address the issues outlined by the letter led by Muilerman on the concentration of power in a single individual and the lack of transparency on the advice given to the Commission President. Instead, the reactionary letters focused on the defending the use of scientific advice, which was not the point of contention for the NGOs' two letters.

But in one letter, it stated: "It is crucial that science and innovation concerns and an evidence-based approach are embedded into all aspects of policy making" (Woolnough et al. 2014, para. 3) and "Policy makers or lobbyists who seek to remove scientists because they don't like their findings or advice do so at the peril of their citizens [*sic*]" (Van der Meer et al. 2014, para. 4). These two responses to the letters show the lack of clearly addressing the concerns outlined by each group of NGOs is not entirely unsurprising. To be clear, CEO, Greenpeace, and signatories are not against the position because they distrust scientific advice. In fact, for them, the incorporation of scientific advice into policy-making is considered to be a hallmark of modern democratic governance. Scientific expertise ensures that sound policies are created. Those who dismissed the letters reflected a different worry and debate. For them, for scientific advice to be challenged so openly and publicly by prominent NGOs could have a negative impact on the image of scientific expertise world-wide. In times where which there is waning public trust in experts and science, challenging a powerful advisory institution could have contributed to fanning the flames of distrust. Based on the contents of letters defending the CSA, this concern appears to be very much the main reason for a large number of scientific organisations, but misses the points raised by CEO and Greenpeace.

How should the controversy between CSA and NGOs be understood in light of the contradiction that seems to plague the relationship between science and policy-making and the role of advisory institutions? On the one hand, the contestation of scientific expertise used in policy-making is necessary in order to hold scientists, government official, and policy-makers accountable. On the other hand, the very same contestation can foster distrust, especially if those under question do not argue convincingly of their use of science.

Contestation of scientific expertise and advisory bodies, however, should not only be understood as a means to legitimatise or delegitimise

its use in policy-making. There are various ways in which contestation can be framed, leading to a more productive interaction between and outcome for advisory bodies and critics. As was mentioned earlier, contestation can be a useful means by which implicit issues and values can be uprooted i.e. that which is actually being debated. By understanding more fundamentally the basis behind contestation rather than start with the assumption, and fear, about science's fragile role in policy-making, or politics more generally, they can serve as lessons on how to make advisory bodies more ethical, transparent, and accountable.

In this case, by focusing on the problematisation of the CSA's institutional set up, mainly the authority of a single person and the lack of public documentation and publication of the advice dispensed, the controversy has brought to the surface underlying institutional issues that, rather than diminish the importance of science in policy-making, it can be used as an opportunity to re-evaluate how advisory bodies are currently designed and how they should be designed in order to be more democratic, accountable, and transparent. This sentiment is neatly summed up in a letter, following closely the first one sent to Juncker criticising the CSA.

> The intention of that letter was to stimulate debate about how scientific policy advice should be structured, and the risks that continuing the CSA position poses to scientific policy advice in general. The NGO signatories have since been accused of trying to undermine the integrity and independence of scientific advice received by the Commission. In fact, it is precisely this *integrity and independence* that we are seeking to uphold. Far from being anti-science, our message is that there should *be more objective* and diverse expertise available to policy-makers than any single adviser could reasonably be expected to provide [*emphasis added*]. (Stoczkiewicz et al. 2014, para. 2)

In the second letter by NGOs, as they clarified that they are not criticizing the CSA for reasons relating to the belief that science has no place in policy-making:

> Far from being anti-science, our message is that there should *be more objective* and diverse expertise available to policy-makers than any single adviser could reasonably be expected to provide [*emphasis added*]. (Stoczkiewicz et al. 2014, para. 2)

What they are in fact criticizing is not necessarily even Glover herself but the institutional set-up of the position. From this, the tensions arising between the CSA and the NGOs can be attributed to a different understanding of what constituted 'good' i.e. legitimate and perhaps even ethical, science advisory practices, which is part of a broader issues on EU procedures for the appointment and organization of scientific advice. To illustrate this, short excerpts from interviews with Glover, again speaking not as her capacity as the CSA nor were the views endorsed by the Commission, are highlighted. In a 2014 EURACTIV interview titled "EU twisting facts to fit political agenda, chief scientist says", she discussed the issue about the transparency of her role, specifically with regard to making public her scientific advice.

> When I spoke to president Barroso about taking up this role, I said to him that for me it would only be attractive if I was regarded as an *independent* chief scientific advisor…What I said to him was that, *for me to have any value or credibility*, I need to *focus on evidence* and not on *political considerations* [emphasis added]. (Simon 2014, para. 6–7)

Glover's understanding of science's role in policy-making is made explicit here: as she has said, in order for her to maintain the veneer of a respected and independent (i.e. politically neutral), her work has to be conducted outside of political imperatives. Glover, in conducting these interviews, conveys the following message to the audience: first, her adherence to evidence generated by science should make her credible and reliable as a scientific advisor because science, in her definition, is capable of demarcating itself from non-science, which is in this case politics.

Prior to this, on November 5, 2012, EURACTIV published an article containing the transcript of the interview they had conducted with Glover. Titled "EU Science Advisor: 'Lots of policies are not based on evidence'", Glover discussed in detail her position within the EU's science advisory set-up and summarized her mandate. When asked to give an example of a policy that appeared not to have used scientific evidence, Glover responded with the example of GMOs:

> It would apply to how we implement regulations around genetically modified organism (GMO) foods, because we have so much very robust evidence, and the precautionary principle is no longer relevant with GMO foods or crops. If we look at evidence from [more than] 15 years of

> growing and consuming GMO foods globally, then there is no substantiated case of any adverse impact on human health, animal health or environmental health, so that's pretty robust evidence, and I would be confident in saying that there is no more risk in eating GMO food than eating conventionally farmed food [original additions]. (Fleming 2012, para. 11–12)

The interviewer followed up with a question to clarify her stance on GMOs. When asked if she thought GMOs can conclusively be said to be safe for consumption, Glover responded: "The bottom line for me is that there is no more risk in GMO food than conventionally farmed food" (para. 12). Given that this was an (informal) interview and not the publication or debate on scientific advice Glover has published, the interview does not contain references by which she based her statements.

The standard image and view of science posits that it is politically neutral and objective, meaning that it can have access to 'true' knowledge about the natural world. The standard view of science is commonly associated with the 'hard sciences' such as chemistry, physics and biology (Bijker et al. 2009). This view appears to be expressed in Glover's response to when asked about how she intends to promote evidence-based policy-making as the CSA of Europe:

> Sometimes you hear my role referred to as an 'independent' CSA, that's not because I am operating entirely independent of the Commission, *but because the evidence with which I work is independent, the evidence with which I work does not change according to political philosophy*. And that should give people a lot of confidence, that there is a stable platform, and surely evidence does evolve but we've got a really secure platform on which to examine the evidence [*emphasis added*]. (Fleming 2012, para. 18)

Glover is an employee of the Commission but declared her independence from them as well as other interests in her statement of conflict on the website. In the quote above, Glover's conceptualisation of evidence is that it "does not change according to political philosophy" (Fleming 2012, para. 18). In other words, for Glover, science produces objective knowledge about the natural world.

This is where Glover, in her capacity as a scientist and not the CSA, appears to blur the boundaries of her role as the CSA and as a private person. A private person does not refer necessarily to her personal qualities but specifically, to her role outside of the CSA, which is her professional

expertise as a scientist. To clarify, the role and function of the CSA is not that of a scientist, despite being occupied by one: it is a science advisor and has its own distinct norms and values about connecting science and policy (as communicated by the Commission). In other words, the CSA has been given a specific identity through its mandate and the guidelines on how expertise and scientific advice is to be utilized, emphasizing principles such as openness, transparency, and willingness to consider alternate views, which reflects the democratic principles the Commission, and the whole EU, is committed to. However, the CSA also relied upon Glover's experience as a scientist and former policy advisor to construct the CSA's authority. In one respect, the CSA can be seen as embodying two roles: the public persona that the Commission had envisioned, who is defined as the independent science advisor for public policy; and that of Glover's, a biologist who is trained in the principles and methods of the science (based on her understanding of scientific evidence as objective). Thus, the CSA, by analyzing its institutional features, reveals that it is the embodiment of two social roles, standing between the private (Glover) and public (role of CSA).

The implications from how the CSA was established, the person appointed the role, and their function to the world has a significant impact on how science and policy-making in the EU is perceived by the public, with the NGOs criticism representing one end of the spectrum. The hybridity of the post, as both advisor to the President, and the representative (also literally the face) of scientific advice in the EU, poses a challenge for the Commission and the CSA to maintain a clear image of the role. Despite expressing her opinions outside of a formal context, the NGOs used the contents of the interviews as strong evidence in their case against the CSA as a legitimate authority.

To conclude, the controversy between the CSA and NGOs have been based on several misunderstandings. The point of CEO and Greenpeace were not to challenge scientific advice but *how* scientific advice was organised and dispensed, which was through a single advisor that did not publish her advice. Those in defence of Glover read the letters to be a direct attack on scientific advice, and misconstrued the debate when at their core, all the voices involved are in agreement about the importance of scientific advice in policy-making. However, CEO and Greenpeace pointed out problems of the procedure and organisation, which was lost in the chaos.

The following section discusses the aftermath of the CSA and focuses on its replacement, the SAM. As the section shows, that despite the controversy generated by the scientific community, te Commission interpreted the criticism by the NGOs not as a loss of faith in science in policy-making but rather used them as an opportunity to re-evaluate how scientific advisory bodies operate vis-à-vis not only a democratic setting but also in light of an increasingly critical society that demands transparency.

From CSA to SAM

Before the position of the CSA was terminated, which coincided with the end of Barroso's term as Commission president, there was much discussion as to whether or not the position would be continued in under Juncker's presidency. While there were rumours about continuing the position of CSA were abound, not necessarily with Glover as its holder, eventually, a new advisory institution, the SAM replaced the chief scientist role place starting in 2015 under Juncker's presidency. This section discusses how SAM's institutional set-up reveals insights on how the Commission dealt with the critique and how the change in institutional set-up reflects a fluid and evolving definition of legitimate scientific authority in democracies following the dissolution of the CSA.

Ultimately, the criticisms appeared to be significant enough that the CSA was replaced by the SAM. Similar to the CSA, the role of the SAM is to provide scientific advice for policy-making. There are, however, stark differences between the two advisory bodies. To make clearer why turning to and analysing the institutional features of the CSA allows one to better the significance of the controversy, Table 9.1 compares the positions of CSA and SAM and identify the key ways in which they differ institutionally.

Of the three institutional features of the CSA, two were problematized by the NGOs. The single advisor is problematic because it presents the image of there being a consensus on controversial issues such as the GMOs. And secondly, the issue of transparency was raised because the scientific advice is not published. In response, the Commission designed for the next advisory body to have not one but seven "eminent scientists" from various European countries to compile and dispense scientific advice to the College of Commissioners, rather than just the President. But more importantly, the biggest change is the transparency of information. On

Table 9.1 Comparison of institutional features between the CSA and SAM

Chief Scientific Adviser	*Scientific Advice Mechanism*
Represented by one person	Represented by High Level Group (7 individuals)
Delivers advice to the Commission President	Delivers advice to the College of Commissioners
Does not publish advice	Publishes advice (scientific and citizen summary)

Source Author

the SAM's website, much information is published on the advisory body, activities, and their agenda in addition to the scientific advice delivered to the College of Commissioners. It is worth nothing that a citizen summary of the advice is also available.

These institutional features of the new advisory body strongly suggest that the controversy resulted in the Commission re-evaluating how scientific advice and policy-making is to be organized in order to be a legitimate advisory body. Specifically, the establishment of the SAM indicates that the Commission sees the value of scientific advice for policy but more important than just that is that they realized that setting up an advisory body cannot be done without adhering to certain principles. In other words, scientific expertise and its related organizations are political, and can be debated in such a way that the discussion no longer about whether or not science is objective or not but whether the procedure that establishes the authority and legitimacy of such institutions have followed due procedure. Scientific advice and the institution that dispenses it is intrinsically linked, and can have implications for how broader and important issues such as transparency, democracy, and 'sound' scientific advice for policy ought to look like.

Conclusion

At the crux of the contestation of the CSA's role by the NGOs was not just a disagreement on the safety of GMOs but on what is considered sound scientific advice for policy. In this case, the NGOs pointed out transparency and democracy to be two key elements that should be

present in the delivery of scientific advice. The case study shows that contestation, though on a scientific issue, can be politicised. Contestation is in this case politicised: not a battle between facts versus non-facts but what is considered proper execution and organisation of how scientific expertise is to be dispensed.

Through a more in-depth look at the controversy by analysing the contents of the contestation, several key issues were raised: the understanding of science and scientific expert's role in policy-making and secondly, how institutions can represent these roles through its infrastructure. The analysis reveals things below the surface namely highlighting the existence of different perspectives on how scientific advice functions within a democratic policy-making context through an institutionalist analysis of the advisory institutions.

As shown reflecting on the contents of the letters, the findings argued that the organisational design of an advisory body requires critical consideration because it reflects certain values, norms, and political positions. The examination of the CSA controversy is rather about (with calls to improve) the EU decision-making processes about how such experts are appointed and how their advice should be used and shared with the be public. In other words, there is actually support for scientific advice, but the two main NGOs challenge the procedures for how such advice is organised in the EU. As such, policy-makers can have a better understanding of how and why advisory bodies are publicly challenged and how they can use the opportunity to develop a more reflective approach to dealing with the contestation while still preserving the message of the importance and necessity of scientific expertise in policy-making.

To conclude, the contestation of scientific expertise need not be a sign that science is no longer an important resource for policy-making. As the research here aims to show, the public controversy led to institutional changes in the Commission's scientific advice set-up. With the new SAM, a multi-panel core of scientists has been established in place of one, and documents containing the advice presented to the College of Commissioners is made publicly available. These changes support democratic practices of information sharing and transparency to policy-makers, the scientific community, and civil society. The overall lesson from the controversy is that the Commission needs to carefully consider how scientific authorities are to be established, and to be aware of broader principles and understanding of what is considered to be appropriate

approaches in establishing authoritative scientific advisory bodies, and what and how scientific advice is to be disseminated and used.

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CHAPTER 10

Conclusion: The Contestation of Expertise in the EU

Vigjilenca Abazi, Johan Adriaensen, and Thomas Christiansen

Introduction

Key events during the 2010s—the campaign for Brexit, the election of Donald Trump as US President and the rise of populist politics in Europe and globally—have shaken up the central role that expertise was presumed to have in public policy-making. By the end of the 2010s, this trend had not shown any signs of diminishing, with populists in several countries moving from the fringes to becoming part of governments. In this climate, experts have readily been cast aside as part of "the establishment"

V. Abazi (✉) · J. Adriaensen
Maastricht University, Maastricht, The Netherlands
e-mail: v.abazi@maastrichtuniversity.nl

J. Adriaensen
e-mail: j.adriaensen@maastrichtuniversity.nl

T. Christiansen
Luiss University, Rome, Italy
e-mail: tchristiansen@luiss.it

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and their informed advice replaced by the "will of the people". Identifying the role that expertise can continue to play in public policy-making in this era of disruptive politics and global transformation constitutes a key challenge for scholars and practitioners alike.

The EU is particularly affected by this challenge. Having relied—perhaps for too long—on output legitimacy and the authority of its (bureaucratic) expertise, the EU has arguably developed an entire governance model that is based on the use of expertise. The rise of populist politics in general and the concomitant contestation of expertise, in particular, reinforces critiques against the EU, its institutions and its policies (Stoker 2019). More so than for nation-states, in the case of the EU such critiques easily take an existentialist form: rather than questioning the outcome of political decision-making, the populist critique of "the establishment" and of "the experts" strikes at the very nature of the EU, questioning its overall legitimacy and threatening its ultimate survival. As long as such an 'attack' is limited to individual member-states, it leads to a debate about that country's membership, as exemplified by the experience of 'Brexit'. But a more generalised advance of such sentiments across the European continent could have much deeper ramifications for European integration and EU institutions.

It is for these reasons that this volume has sought to take a closer look at the process by which expertise is contested in EU policy-making and more global issues of international trade and climate change. The contributions to this volume have studied the contestation of expertise in a variety of guises. This brief conclusion seeks to synthesise the diverse findings presented in the preceding chapters. The resulting insights are relevant not only to students of European integration but also speak to similar concerns affecting international organisations and individual states (see Peeters 2020; Gruszczynski 2020).

Three themes provide guidance in this exercise: first, we will look at the various ways in which the contestation of expertise manifests itself, implying a look in turn—as indicated in the introduction to this volume—at the role played by actors, logics and forums of contestation. Second, we will look at the consequences of such contestation. This pertains not only to the immediate effects on, say, specific policy outcomes, or the position and authority of individual experts affected, but also to the identification of coping mechanisms to prevent, circumvent or remedy the effects of contestation. Third, these observations will inform some final reflections on the manner in which the role of expertise may evolve and change in the EU in the future.

Patterns in the Contestation of Expertise in the European Union

At the outset of this volume, three logics of contestation were identified: *Epistemic* critiques focus on the process through which (scientific) knowledge is created; *normative* critique takes aim at the political implications of expert opinions, and *structural* critiques focus on contextual features and procedures through which expert positions are being created and—most commonly—aggregated.

Due to the focus of this book on institutions, it is not surprising that structural critiques were most commonly the subject of study (see e.g. Radulova et al. 2020; Tsui 2020; Colli and Kerremans 2020). Still, in many of the cases covered here, the structural critique followed highly politicised debates in EU policy-making. This was the case for the negotiations on the Transatlantic Trade and Investment Partnership (Colli and Kerremans 2020) or in the debates on the admissibility of GMOs (Tsui 2020; Gruszczynski 2020). Epistemic critiques were rarely the central motive for contestation. Yet in most cases contestation relied on the absence of a clear scientific consensus on a particular issue, or at least a sufficiently high degree of uncertainty to warrant multiple policy options. Navigating such areas of uncertainty has presented pertinent challenges to (international) courts if they are asked to rule on such matters (Gruszczynski 2020)

Three insights derive from the patterns in the contestation of expertise identified in this volume. First and foremost, the logics of contestation described above are not independent from one another. Colli and Kerremans (2020) particularly raise this issue when discussing how NGOs—as part of their political critique—questioned the impact assessments on which the Commission relies in its negotiations. They show that political opposition thus expanded into the economic science that provided support to the policy initiative. However, the story does not end there. By focusing specifically on variation amongst NGO opposition, they showed how these debates spilled over into a structural critique (and reform) of the expert group system on which the Commission relied during the TTIP negotiations. In other contributions, it also became apparent how notions of scientific uncertainty provide the room for political contestation (Gruszczynski 2020) and how politically contested expertise can transform into a structural critiques (Tsui 2020).

A second observation emphasizes the procedural component of the structural critique. Tsui (2020) clarifies that the structural critique is not constrained to the composition of bodies that provide expertise but also the procedural quality by which they operate. The lack of transparency in the Commission's Scientific Advisor's assessment aggravated initial concerns and contributed to the eventual reform. Blom and Vanhoonacker (2020) in studying the EEAS also highlight the discretionary power policy-makers dispose of when using the expert system. Their empirical research not only reveals a multitude of motives for consulting with expert groups but also the formal and informal procedures governing this exercise—and the opportunities they provide to officials and diplomats.

A third and final observation pertains to the multi-level nature in which expertise finds its way in EU policy-making. Both the creation and political use of expertise are strongly linked to the polity it serves, and yet policy-making in the EU stretches across multiple levels. Moving beyond the logics of contestation as originally described in our introduction, Christensen and Holst (2020) suggest contestation may also result from a tension between the knowledge regimes at the domestic and European level. In a similar vein, Peeters (2020) draws attention to the different roles attributed to expertise in different jurisdictions. Thus, while political and judicial contestation may be focused on one or the other level—national, European, global—such patterns exacerbate tensions in a multilevel system where policy-making relies on the inter-action of actors on various levels.

In looking at these different logics of contestation, it is also interesting to observe the various patterns of agency involved in the contestation of expertise: who attacks, and who defends, the role of experts in EU policy-making. While remaining conscious of the structures which facilitate or limit contestation, it is important to recognise the actors involved in such processes, and the arenas in which contestation takes place. In this regard, it is evident that the EU institutions, and the European Commission in particular, rely heavily on the input from experts. Conscious of their own fragile legitimacy as 'technocrats', Commission officials are familiar with, and indeed frequently dependent on, the use of expert advisory groups (Radulova et al. 2020). The creation of the position of Chief Scientific Advisor within the European Commission institutionalised this apparent primacy of science in the decision-making process, only for it then to become a source for contestation in itself (Tsui 2020).

While business interests in Europe have appeared to be comfortable with this arrangement, even in the absence of "corporate capture" (Radulova et al. 2020), NGOs have tended to be more critical of both the process and the outcome of this heavy reliance on expert opinions—something which was observed with regard to both the TTIP negotiations (Colli and Kerremans 2020) and the authorisation of GMOs (Tsui 2020). It would appear that those who have more limited resources to commission scientific expertise of their own—social movements and civil society organisations—are more likely to contest the science that is put forward by governments, EU institutions and corporations.

A picture similar to that of the European Commission emerges with respect to the EEAS: EU officials make frequent use of expert opinions, in a way that is not subject to much contestation internally—it has become a standard part of the policy-making process in the institution (Blom and Vanhoonacker 2020). However, here the absence of legislative and regulatory activity in the area of foreign and security presumably explains why there are fewer societal interests that then contest such expertise afterwards.

Following on from the point made above about the multi-level nature of how expertise is generated in the EU system, there is also the observation that contestation more often than not originates from domestic rather than EU level actors (Christensen and Holst 2020)—it is within national political and judicial systems that politicisation and hence contestation tends to occur, before on occasion spilling over into the European realm. This also explains how the Council of the European Union can become a forum for contestation on occasions when scientific expertise provided by the EU institutions clashes with particular national interests.

More common, however, are two forums for contestation: on the one hand, the public domain, i.e. the press and increasingly social media, and, on the other hand, the courts at the various levels of policy-making. These loci of contestation are not mutually exclusive, but depend on the stage that has been in the policy-process. While policies are being proposed and being publicly debated, contestation takes place in the public domain, with organised interests, NGOs and social movements not only contesting the actual policy, but also the production of scientific knowledge on which these are based (Colli and Kerremans 2020; Radulova et al. 2020; Tsui 2020).

Once policy-decisions are being taken, and formal rules are being established, courts provide a further arena for contestation. It is here that judges then have to grapple with legal provisions as well as with political preferences and scientific advice that has gone into the making of rules. Interestingly, we observe that judicial contestation turns courts into both recipients and—through the presentation of evidence and the generation of new studies—producers of scientific expertise. The examples discussed here from trade law (Gruszczynski 2020) and climate science (Peeters 2020) demonstrate the pivotal role that judges play in this kind of contestation: the kind of scientific expertise that is admitted into the judicial process, the weight that scientific reports play in adjudication, and the degree to which scientific experts are permitted to feature as witnesses in the courtroom—these are all decisions that have a significant bearing on the way in which courts have become arenas for the contestation of expertise.

Consequences of the Contestation of Expertise

Contestation of expertise has consequences for the institutional design of different agencies and bodies as well as the decision-making processes. Many contributions in this volume have provided a deeper understanding of changes in the course of actions as a result of contesting expertise. For example, Christensen and Holst show the adjustment in design of national bodies and agencies as they face the EU requirements on scientific expertise, whilst at the same time dealing with national level pressures of contestation of such scientific requirements (2020). At the EU level too, the consequences are felt particularly when decisions and negotiations of significant value are at stake, as was the case of the TTIP negotiations. As Colli and Kerremans show, the NGOs were able to help shift the course of negations and the process of negotiations (2020). By contesting the facts that formed the basis of the negotiations and by drawing attention to how such facts were created, the NGOs affected the process and negotiations were deemed impossible to continue without opening up to the public rather than claiming merely an involvement of policy-makers and trade experts.

Related to this issue is another consequence that arises from contestation of expertise, namely the fact that not all challenges of expertise have resulted in an increase of public knowledge even if, as discussed below, contestation is often addressed through procedural transparency.

Contesting expertise has at times come at the expense of challenging fact-based understanding and knowledge by the general public. As discussed with respect to the European Commission by Radulova et al. in this volume, neither at the macro nor at the micro level of analysis has there been decisive evidence of "corporate capture", yet the latter is used in debates—and emphasized by populist politicians—with the purpose of delegitimizing processes and outcomes they disagree with (2020). Aiming to sway public perception to one's political advantage is not new, yet doing so in opposition to factual information is. Contestation of expertise works by creating perceptions in the public debate and in the decision-making process of institutions that are not support by facts, which in turn has deeper consequences for what could ultimately be deemed legitimate—and illegitimate—in the eyes of the public.

The third consequence we observe is the impact that contestation has on the power dynamics among different arenas of governance. The discussion of climate science shows how the reliance of courts on expertise enables them to adjust policy choices made by executive actors. As Peeters shows, both in the cases of the US and in the Netherlands, courts have to a large extent relied on scientific evidence to correct agency decisions or to require increased efforts towards mitigation, respectively (2020). According to Peeters, if courts follow scientific advice to the extent that it overrides agency decisions, the rule-making power of the executive and legislative branches becomes less important and may be overturned. While this may be positive from a climate action perspective, the 'shift' in power, as Peeters argues, should be identified and discussed objectively in order to avoid unjustified contestation of climate science.

These shifts of power, and their impacts on how institutions function, happens at the international level as well. Indeed, the fourth significant consequence of the contestation of expertise is limiting the ability of international bodies to claim that their decisions are apolitical. For example, as Gruszczynski showed, deciding disputes based on science-based criteria has allowed WTO dispute settlement bodies to depoliticize (at least on the face of it) particular trade controversies (2020). The issue in question is decided in one way or another not because of certain policy preferences on the part of the WTO, but rather because of the higher command of science. The contestation of expertise—both as the basis of a particular decision and as the foundation of being non-political, challenges the legitimacy of organisations like the WTO reaching certain conclusions.

In the face of these significant consequences of changing institutional designs, shifting institutional powers, challenges to the legitimacy of international organisations and the emergence of public debate ignorant of facts, serious question arise about the coping mechanisms of public policy-making in the EU: are European institutions able to meet and indeed respond to the scale of these challenges? In this respect, one first coping mechanism has been an increase in transparency. The problem of contested expertise can be addressed through improved transparency mechanisms or some form of procedural transparency. From a bureaucratic perspective, several contributions to this book show that institutions (whether governing executives, courts or independent agencies) tie the contestation of expertise to the general public's lack of understanding of the value of experts. The experience of the TTIP negotiations are a prime example in this regard: instead of shielding decisions and negotiations with professional or technical jargon it became imperative for negotiators to publicly explain and discuss the issues and thereby shore up public support for the decision-making process and its outcomes (Colli and Kerremans 2020).

In addition to increasing transparency, institutions have also sought to adapt by aiming to be more responsive to the challenges, yet the volume shows that sometimes these adjustments tend to be formalistic. For example, whilst the Commission may have aimed to be more responsive towards a particular policy environment, the adjustments could be viewed as more of a "reinterpretation strategy" (Boswell 2008)—reforming measures superficially but not introducing a thorough or in-depth revision of administrative practices, routines and internal working processes. Consequently, such changes do not affect the "deep core" of an organisation's set-up and operations (Radulova et al. 2020).

Lastly, we have observed how institutions have aimed to cope with the contestation of expertise by re-thinking how better to incorporate science in society, seeking to pre-empt the potential antagonism of experts vs. the people, as the relationship is often framed in populist rhetoric. In fact, as Tsui in this volume shows, the contestation of scientific expertise need not be a sign that science is no longer an important resource for policy-making (2020). Rather, challenging expertise has been a signifier that there is a call by the public to better rebalance how scientific issues are addressed and create decision-making processes that are not exclusionary of the general public but also do not mean they ought to replace the role and knowledge of science and expertise. Creating institutions

and decision-making processes that allow better for such an integrated approach is one way of moving forward. For example, contesting the Scientific Advice Mechanism ultimately led to changes that support democratic practices of information sharing and transparency to policy-makers, the scientific community, and civil society. It was also a lesson for the Commission that the design of scientific authority should not merely be viewed from the perspective of science, but also from a democratic viewpoint that understands and meets the demands of public knowledge.

Whether these coping mechanisms are sufficient remains to be seen. In any case, it is evident from the contributions to this volume that a deeper re-thinking is needed. In an era of increased information flows, higher demands for transparency and public expectations of often being part of the table of decision-making rather than only at the receiving end, the role of experts and expertise is deeply challenged. The contestation of expertise may have brought about positive change through more opportunities for active citizen involvement in public policy-making, yet the significant risks remains that such public participation comes at the expense of establishing 'fact-free' discourses, which is profoundly corrosive for the role of science in policy-making and in society at large—and ultimately threatening the democratic and constitutional politics.

Re-thinking the Role of Expertise in a Post-Factual World

The growing contestation of expertise has drawn increasing attention from political commentators, academics and societal actors involved in the development, application or dissemination of expert knowledge. While the various challenges, and the responses to them evolve, it remains to be seen which direction matters will take. In the following we explore several scenarios of possible future developments.

A first scenario considers recent developments and current problems as something of a temporary phenomenon that will correct itself. In this view, the role of expertise in policy-making, and its current contestation, is subject to a pendulum-like motion, most of the time overshooting an ideal steady state, rarely in balance. While expertise may have become highly contested in the 2010s, decision-makers and the public, once confronted with the consequences of policy-making removed from expertise and facts, will re-embrace the earlier reliance on expertise. According to this logic, as the implications of decisions such as Brexit or the effects

of the climate crisis become apparent, the merit of experts and their value to the policy process will be vindicated. As Stacey wrote "It seems we have reached a fork in the road of political history. We can place our bets on politics as usual and hope that ordinary people see the danger of populist politics before it is too late, opting to return to a more moderate politics in which they are disempowered but nonetheless more secure. Or we can reform politics to be more inclusive of the hopeful reactions glimpsed in public assemblies" (Stacey 2018). However, this 'self-correcting' scenario hinges on an—arguably naïve—assumption—that those who have been contesting expertise will acquiesce and 'see the errors of their ways'. Instead, the experience with the populists during the 2010s is that they will double down, deflect or change the discussion, rather than quietly going away and leaving politics to reason.

A second scenario is one of (incremental) reform. Such reforms have been proposed and implemented in the three broad communities we have identified. In the scientific community this refers to debates on the importance of science communication, the use of meta-studies (Gurevitch et al. 2018; but see De Vrieze 2018), or revisions to the peer-review mechanism. In the political and administrative community—following structural critiques—there have been reforms to ensure expert groups are more balanced (Moodie 2016; Radulova et al. 2020), procedures to procure expertise are made more transparent (but see Blom and Vanhoonacker 2020), and the design of public consultations seek to avoid bias (Bunea 2017). In the public realm, calls for reforms largely pertain to the role of (social) media in spreading of 'fake news'—and the need for greater (self-) regulation in this regard. This ranges from practices of fact-checking, the need for proper science reporting, but also the possibilities for introducing tighter regulations on the combatting of misinformation, foreign interference and hate speech on social media. Yet, many of these reforms are either cosmetic, too itemized or completely beside the point.

A third scenario pleads for a more radical conceptualization of expertise in policy-making. The starting point of these claims is the strong relation between expertise and power. Contestation of such expertise should thus be seen as part of the political struggle for power. Reflecting on the rise of populism and the growing contestation of experts and expertise, Newman and Clarke argue:

> In place of authority being grounded in scientific or legitimate knowledge, *expertise was reframed as a symbol of rule, inseparable from the experiences of being ruled*. Expertise was thus embodied authority – and embodied in the wrong sorts of people […] [Events like the Brexit referendum or the election of Donald Trump] reveal the contingent authority of existing forms of expertise: their legitimacy is always conditional, always in the process of being claimed, acceded to, or contested. (Newman and Clarke 2018, p. 44, emphasis added)

Extending this line of reasoning, the debate on the contestation of expertise cannot be studied independently from the political power structures from which it stems and which it seeks to (re-) create. According to this line of thinking, the suggestions put forward in the second scenario are superficial and doomed to fail as they do not engage with the wider—structural—problem. In this view, restoring the authority of expertise cannot be attained without a matching political (r)evolution. In his thought-provoking book, Babones (2018) argues that over the last decades a new authoritarianism had emerged, i.e. the tyranny of the expert class. Taking the populist critique of public policy seriously he contends that "[w]hen experts descend into the public arena to argue their cases in front of the sovereign electorate, democracy flourishes. When expert opinion is elevated into the only politically acceptable point of view, democracy dies" (Babones 2018). Echoing a similar view towards the academic profession, Füller (2018) criticizes the academic profession's "boundary work" by which it tries to exclude rather than include the wider society in processes of knowledge creation and dissemination. Following his line of reasoning, what is needed is not a fine-tuning research practices but a fundamental change in order to ensure that the classroom is not used as a place "to prime a select few to be admitted through the portal to the sacred city, but to help all the others to crash the gates, and aid in the redistribution of the epistemic wealth and social capital guarded within" (Rider 2019).

Each of these scenarios assumed that there will be change to reverse recent trends of contestation of expertise and denial of science in public policy-making. There is, of course, a different scenario in which these trends continue, and even accelerate, in the future. As the past has demonstrated, human history, and indeed European politics, do not follow a particular script towards progress and reason. Developments in the late 2010s created echoes of what had been observed in the 1920s: the rise

of populism, the increasing polarisation of politics, the shrinking of the political centre, and the marginalisation of science and expertise in public policy-making. Another dramatic reference would be to the enlightenment—the era which established scientific method, technical expertise and political reason in the mainstream of European public life. Through its embrace of science in the advancement of public goods, the Renaissance brought an end to the Middle Ages during which the scientific achievements of the ancient world had fallen into disregard. It may be an extreme analogy, but perhaps a sustained and further accelerating contestation of expertise, and the rise of a post-factual world in which this trend is embedded, constitutes the beginning of the end of the enlightenment? After all, the immediate reaction of former European Council President Donald Tusk to the British vote in favour of Brexit was to see this as "the beginning of the end of Western civilisation" (BBC News 2016).

All of these scenarios, utopian or dystopian as they may be, are long-term visions and thus go beyond the horizon of current developments. For now, decision-makers, scientists and citizens in the European Union will have to adapt to the reality of a system in which scientific expertise remains both essential and contested in its contribution to public policy-making. As argued above, the resultant increase in transparency and accountability required from executives, judges and scientists—'elites' in populist jargon—may help to democratise policy-making in the process. However, such a normative gain is bound to come at a price: the tension between institutional reliance on evidence-based policy-making and populist denial of scientific expertise is bound to create uncertainties, delays, policy-reversals and generally more sub-optimal conditions for policy-making.

As we highlighted at the beginning of this volume, the European Union as a novel and traditionally technocratic polity is particularly vulnerable to these challenges. The end of the permissive consensus brought with it a greater politicisation of EU decision-making and a rise in Euroscepticism. It also questions the manner in which the European Commission and other EU institutions have in the past relied on scientific arguments to justify policy-choices. As Jean-Claude Juncker headed a more 'political' Commission, and as Ursula von der Leyen has stated her claim to lead a 'geopolitical' Commission, the contestation of expertise will continue to be a feature of European Union politics and jurisprudence in the 2020s.

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Correction to: The Role of Expertise in the EU's Emerging Diplomatic System

Tannelie Blom and Sophie Vanhoonacker

Correction to:
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The original version of Chapter 6 was inadvertently published as non-open access. It has now been changed to open access under a CC BY 4.0 license, and the copyright holder has been updated to 'The Author(s)'. The correction to the chapter has been updated with the changes.

The updated version of this chapter can be found at
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