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Institutions of Expert Judgment: The Production and Use of Objectivity in Public Expertise

Brice Laurent

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Abstract

This chapter discusses the relationships between objectivity and expert judgment in public bodies. Building on science and technology studies (STS), it looks at how the manufacturing of objectivity and the definition of appropriate expert judgment have been jointly undertaken in public institutions of expertise. The analyses of objectivity as a historical and social construct invite us to consider that public expertise always relies on operations that actively shape human subjects and social organizations, yet in ways that differ across various institutional settings. The chapter discusses the case of the European institutions, which have struggled to stabilize a unique expert voice while also being accused of being overly technocratic. Instead of considering this case as a failure of expertise, the chapter shows that it offers a magnifying lens into the current difficulties of expertise, and provides elements to explore potential ways forward.

Keywords: public expertise, institutions, objectivity, expert judgment, Europe

Introduction

How to define the appropriate expertise for policymaking? This question traditionally receives an answer in the terms of objectivity. Objective facts are described as the main ingredients of the sound scientific advice required making decisions about complex policy matters. A central issue, then, is to integrate the contribution of individual experts. The judgment of experts is a component of the production of objective knowledge that is both necessary and potentially problematic, as it is tied to the personal experience of the expert as a human being who is bound to be subjected to various limitations and potential bias.

How experts are then expected to behave to produce objective facts for policymaking has thus proven to be controversial. In recent years, the trustfulness of public expertise and its ability to convincingly ground objectivity in the judgment of public experts have been questioned. Events such as Brexit and the 2016 election of Donald Trump as US president have been interpreted as outcomes of a pervasive mistrust of the ability of public experts to provide convincing advice. These events can be (and have been) read as signs of a re-imagination of expert judgment, as the question of whether to reserve them to certain authorized people appears more problematic than ever. The expression “alternative facts,” used by Trump adviser Kellyanne Conway, was a clear attack on the uniqueness of the voice of objectivity. It seemed to indicate an opening of the ownership of the production of facts, at the risk of suggesting that any judgment could be considered “expert.”

In parallel with a growing mistrust in experts, other actors claim that new ways of producing objective knowledge could insulate the production of claims from subjective interventions and

individual bias. “Evidence-based policy” has been used as an umbrella term to point to a range of methods, from cost-benefit analysis to randomized controlled trials, meant to insulate policymaking from the tribulations of politics. The pervasive reference to machine learning can be situated in that context as well, as algorithms are said to be able to finally provide an automated channel toward the objective description of reality. Thus, Facebook’s recent claim that artificial intelligence could be used as a tool to identify “fake news” ties together the broadening of the definition of expert judgment with the calls for new mechanical ways of ensuring objectivity.

Kellyanne Conway’s and Facebook’s interventions are two opposite reactions to the fact that the ability of expert judgment to provide objective knowledge is being questioned. The former points toward the limitless extension of who has the ability to be trusted as experts, and the latter supposes that the automation of expert judgment could eliminate persistent, and necessarily biased, subjective elements. The former is not very satisfactory: if anyone can be an expert, then no one in particular can be trusted as one. But neither is the recourse to an even more technologized version of expertise because that can only exacerbate the democratic issues arising from the restriction of expert advice to a well-defined group of people. The first reaction gets rid of the problem of objectivity by turning to a whole mass of individual subjects. The second one hopes to make the human subject disappear behind automatized tools that are expected to ensure objectivity.

For all their situatedness in the era of the former Trump presidency, Brexit, and the alleged influence of social media in the growing mistrust of expertise, these reactions are not entirely foreign to a long-term debate in science-policy circles about the potential widening of the sources of public expertise. In 1979, a report by the Organisation for Economic Change Co-operation and Development (OECD) discussed public participation in science and technology in the wake of what was already construed as a delegitimation of public expertise, and explored the ways in which such participation could be articulated with the production of objective expertise (OECD 1979). Since then, the issue of the finding the appropriate balance between opening up the circles of expertise and maintaining a control over what counts as objective knowledge has been widely discussed in theoretical and practical terms.

Both these discussions and the current difficult situation that expertise faces are invitations to theorize the relationships between objectivity and expert judgment. This chapter builds on the important body of work in science and technology studies (STS) to discuss some analytical perspectives that can be useful in theorizing these relationships and, eventually, in tackling the current challenges that public expertise faces. Central to the argument here is that objectivity for the sake of expertise is manufactured in public institutions in ways that also determine the type of expert judgment considered acceptable. In that sense, objectivity is not gained despite the subjective human component, but relies on operations that actively shape human subjects and social organizations.

The chapter is organized in two sections. The first one reviews the STS works that have analyzed objectivity as a historical and social construct. These works invite us to consider that public expertise always articulates objectivity and expert judgment, yet in ways that differ in various institutional settings. The second section discusses the specific case of European expertise. The European institutions have struggled to stabilize a unique expert voice, at the same time they are accused of being overly technocratic. But instead of considering the European case as an illustration of failed attempts at manufacturing public expertise, I show that it proposes an original, if unstable, articulation of objectivity and expert judgment. As such, the European example offers a magnifying lens on the current difficulties of expertise, and may provide elements for exploring the potential ways forward.

Manufacturing Objectivity, Shaping Scientific Subjects

Objectivity in Historical Perspective

A first step in reflecting on the relationships between objectivity and expert judgment consists in problematizing objectivity itself. History is a powerful resource in this regard because it helps us to situate a version of objectivity that we might consider straightforward. Lorraine Daston and Peter Galison's (1992, 2006) works on the history of scientific images have demonstrated that objectivity has a history. They analyze the historical evolution of scientific atlases in Western countries, covering various scientific fields, including botany, biology, paleontology, and astronomy. They show that the quality of the scientific image as a convincing representation of reality has been diversely evaluated over time. Early scientific images were the product of individual craftsmanship, and the outcome of the ability of an individual to correct direct observations, complement them with additional elements, or combine several of them to produce a fictitious "type." Daston and Galison then document the gradual emergence, in the nineteenth century, of what they call "mechanical objectivity." Whereas the earlier understandings of objectivity associated the production of the scientific image with the personal intervention of the scientist, mechanical objectivity supposes that the individuality of the scientist can be erased, so that scientific representation is only obtained by mechanical means. The emergence of mechanical objectivity, in Daston and Galison's account, is directly linked to the growing importance of technical instruments in scientific practice. It means that scientific images are expected to be unmitigated reflections of a natural reality on which the individuality of the observer is not expected to act. Although mechanical objectivity has been dominant since the nineteenth century, it can be contrasted with contemporary scientific disciplines that require the active intervention of the individual scientist in the production of representations of nature. Nanotechnology, for instance, is a domain where the scientist's manipulation of atoms is a way of both learning about physical laws and making new properties emerge. In this case, objectivity is not only mechanical but also relies on the personal intervention of a scientist who seeks to obtain original physical features for future practical applications, if not economic gain.

The history of objectivity is a crucial element in our reflection on objectivity and expert judgment. First, it shows that defining good practices for objectivity implies a set of expectations about scientific selves. Mechanical objectivity is based on a series of hypotheses about how the scientist is expected to behave. It cannot exist without an understanding of the subjectivity of the individual scientist, defined precisely by his or her ability to disappear behind a neutral instrument that will provide a faithful representation of nature uncorrupted by human intervention. The "moral economy of science" (Daston 1995) that goes with mechanical objectivity is a kind of asceticism, requiring the scientist to make an abstraction of the mundane contingency that might corrupt the work of the instrument. In doing so, it also introduces expectations about the audience for the scientific image, who will then be required to interpret the image based on professional knowledge. Along with a scientific self in charge of producing images go other imaginations of individual scientists, tasked with mustering their own professional abilities to read information that is inaccessible to lay people. What this shows is that objectivity is not produced in spite of expert judgment but requires particular forms of expert judgment.

A second significant contribution of the historical works on objectivity is that they situate an understanding of objectivity that has become dominant in contemporary liberal democracies. Philosopher Thomas Nagel (1989) spoke of the "view from nowhere" that would characterize objectivity. He wrote: "A view or form of thought is more objective than another if it relies less on the specifics of the individual's makeup and position in the world, or on the character of the

particular type of creature he is" (5). From there, Nagel could then consider that "the standpoint of morality is more objective than that of private life, but less objective than the standpoint of physics" (5). The "view from nowhere" can then be considered as a condition for a particular kind of objectivity—namely, mechanical objectivity. The historical situatedness of mechanical objectivity also suggests exploring the material conditions under which it is possible to craft it. Daston and Galison's works on scientific instruments can be related to a rich landscape of STS studies of scientific practices that have examined how the circulation and the standardization of instruments result in the production of the view from nowhere. Thus, historian of science Ted Porter (1993) spoke of "a 'kind of objectivity' that is more nearly identical to impersonality, or standardization" (89; see also Latour 1990) and is produced by the construction of standardized instruments. The dominant understanding of objectivity has a history, and requires active work to be produced. How it translates in the world of expert advice is the question we will now examine, by extending these reflections to institutional settings.

Objectivity in Scientific Institutions

The historical and sociological works about objectivity have illuminated the tight connection between the making of objective knowledge and the construction of the scientific self. Thinking about expertise requires adding another dimension, though. The history of science has shown that the production of facts relies not only on material and literary technologies, but also on social technologies. Shapin and Schaffer's (1985) seminal study of the birth of the experimental practice in seventeenth-century England has shown that when Robert Boyle invented a set of material practices around such instruments as the air pump and a type of experimental discourse, he also defined a social organization whereby only certain individuals were able to act as witnesses in charge of attesting experimental results

This historical work has an important consequence for our reflection—namely, that expertise necessarily ties together the problem of scientific objectivity with the social organization of the institutions in charge of delivering knowledge. We can now develop our considerations about mechanical objectivity and the view from nowhere by examining the institutional work they require. What historical studies such as Shapin and Schaffer's suggest is that boundary work is one of such techniques. Ever since sociologist Thomas Gieryn (1983) pointed the analytical attention toward the work needed to differentiate "science" from "non-science," empirical studies have illuminated the work of the institutions that are expected to ensure that this boundary is well maintained. Among these institutions are the scientific bodies in charge of regulating scientific publication. Thus, one can consider peer reviewing as a social technology in charge of delimitating what counts as knowledge. This social technology, in the guise of Boyle's process of selecting who can be a witness in charge of evaluating scientific experiments, relies on a definition on who is authorized to say what counts as knowledge.

The recent history of the practice of anonymity in scientific publications is a fascinating lens through which to not only examine the empirical practice of peer reviewing, but also, and more importantly for our concern here, to discuss how the institutions of scientific publishing articulate the production of objectivity with the practices of expert judgment. David Pontille and Didier Torny (2014; 2015) have shown that anonymity, particularly under its "double blind" guise, is a relatively recent invention, marked by pervasive issues about who should be "blind," and under what conditions. Pontille and Torny's works discuss the various approaches used in different scientific journals, as well as recent episodes that mark a reconfiguration of the sources of scientific objectivity and the practice of expert judgment. One of these episodes is the case of Donna Haraway, who chose to reveal her identity as a reviewer for a paper in *Social Studies of Science*, and was then quoted by name in the

acknowledgments. Pontille and Torny note that Haraway, the author of “Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective” (Haraway, 1988) and a critic of objectivity as imagined in the terms of a universal category, was, indeed, a perfect advocate for a situated expert judgment, fully embodied in the individual person of the known reviewer. Other telling episodes are provided by academic journals in economics, which publish papers that have already circulated widely as working papers or conference papers, and which use metrics of circulation, readership, and popularity as basis for granting publication. While the Haraway case is one of the resingularization of the universal voice of the blind expert, this latter is one of the extension of the community of peers to a wide and not pre-circumscribed audience.

From Scientific Institutions to Expert Institutions

The scholarly analysis of peer reviewing extends the analysis of objectivity and expert judgment to the institutional organizations expected to manufacture objectivity. It has the interest of explicitly thematizing the role of expert judgment. Here, the “expert” is the reviewer in charge of evaluating the scientific value of the paper. He or she might be anonymous or a known contributor, a member of a delimited discipline or of an extended community of interested people. His or her works is tied to an institution expected to maintain boundaries between what is scientific and what is not, between who can exercise scientific judgment and who cannot. How these operations are conducted in some cases directly echo a view from nowhere—and one can situate the conditions of anonymity in this framework. In others, the view of the expert is expected to be situated, either in a known individual (as in the Haraway example) or in a broader collective (as in that of the economics journals). In all cases, institutional rules tie together the practices of objectivity and the definition of the appropriate expert judgment.

The operations of boundary-making are remarkably similar in the institutions of expertise that are the main focus of this chapter—namely, that of the public bodies in charge of providing expert advice for decision-making purposes, or “public expertise.” These institutions, like those discussed earlier, tie together the production of objectivity with the practices of expert judgment. But they add another crucial element to this already complex mix—namely, the expected legitimacy of the public institutions in charge of providing advice for decision-making purposes.

When we shift our analytical focus from scientific institutions (such as those related to peer reviewing in scientific journals) to policy ones, the issue of political legitimacy becomes crucial. One of the main results of STS in the analysis of public expertise has been to theorize the joint production of scientific objectivity and political legitimacy. Sheila Jasanoff (2005) has written extensively about expert advice in policy settings, and has reflected on what she calls the “three body problem” of expert legitimacy. Jasanoff explains that the legitimacy of expertise, in the eyes of decision-makers and the wider public expected to trust it, relies on three different kinds of “bodies.” It needs a consistent “body of knowledge,” to be used by the “body of the expert” as a human being. One can understand the view from nowhere in the context of this dual requirement: here, the body of the expert has to disappear for the body of knowledge to be used in acceptable ways. She also underlines the importance of the third dimension—namely, the “public body” of the institutions in charge of providing expert advice. Thus, if the view from nowhere is seen as a desirable basis for public expertise, then it requires corresponding public institutions. The American institutions of public expertise are good illustrations of this position, and its associated tensions (Jasanoff 1990, 2011). They rely on operations of boundary-making between what is expected to be the domain of expert advice (supposedly purely scientific) and what is expected to be the domain of policymaking (Jasanoff 1987). A telling illustration of this process is provided by the case of the public presentations of reports written by the US National Academy of Science. STS scholar Steve Hilgartner

(2000) has shown that maintaining a boundary between what scientists do behind closed doors and what is presented to the public is a crucial operation for the academy, seen as a condition for producing objective work and legitimate advice. The diagnostic of the pervasiveness of the view from nowhere in the American regulatory system can be nuanced when considering the practice of expertise in the court system. American courts require each party to summon their experts; these experts are then tied to the interests of the party that brings them in. The confrontation of expertise here is about who can produce facts before the court, which is expected to side with science, can rule (see e.g., Jasanoff 1997). Legal scholars have noted the specificity of American courts, where the adversarial system of expert witnessing is accompanied by “a special penchant for fact finding,” as opposed to other legal systems in which “judges are more willing to recognize the limits of fact-finding, using presumptions when necessary to bridge the gaps in the evidence.”¹

A Variety of Institutional Constructs

The American situation provides a telling illustration of how the view from nowhere is institutionalized. It is one particular solution to the three-body problem of expertise, and not necessarily the only one. One can, indeed, compare it to the case of other public institutions of expertise in national and international contexts. Sheila Jasanoff’s (2005) comparative study of biotechnology policy has analyzed the British and German cases. In the United Kingdom, a public demonstration conducted by a known professional appears to be an essential condition for claims to credibility. In Germany, collecting representative viewpoints from various social actors proved to be crucial in the production of expert advice. Instead of the desirable view from nowhere, the British and German cases suggest that a view from “somewhere” or a view from “anywhere” might be a basis for public expertise. These examples are useful for our reflections here because they force us to theorize objectivity in other terms than those of the view from nowhere. The British and German public institutions of expertise show that public facts can be grounded in the judgment of a known individual or on the representations of social groups. In both cases, objectivity is manufactured by known and active human subjects. One can then contrast the view from nowhere with other approaches to objectivity in public institutions. The British “view from somewhere” and the German “view from anywhere” are two examples of the other approaches, but there is no reason to limit the landscape of possible articulations between objectivity and expert judgment.

One can extend this analytical thread by examining international organizations. Some of them adopt the discursive and institutional practices of the view from nowhere. The World Trade Organization (WTO) and the OECD, for example, strategically problematize the conditions of legitimacy of the expertise they produce by drawing rigorous boundaries between international scientific expertise and the national regulatory choices of sovereign member countries (Bonneuil and Levidow 2012, on the WTO; Laurent 2016a on the OECD). By contrast, the Intergovernmental Panel on Climate Change (IPPC) is a hybrid institution; it is expected to provide scientific knowledge while serving as an arena for international negotiations. Doing so relies on a complex organization whereby scientific and diplomatic operations are carefully distributed (Beck 2011; Miller 2001). The example of the IPCC shows that international organizations may favor procedural approaches to define the conditions under which objective knowledge can be produced and experts are expected to behave. Alberto Cambrosio and Peter Keating speak of “regulatory objectivity” to refer to situations in which public and private institutions need to agree on the procedures according to which various regulatory entities can be crafted. Regulatory objectivity “consistently results in the production of conventions, sometimes tacit and unintentional but most often arrived at through concerted programs of collective action” (Cambrosio et al. 2006, 190). Describing various standardization and regulatory interventions related to biomedicine, Cambrosio and Keating analyze the ways in which public and

private actors coordinate with each other to produce procedural instruments (“conventions” or “protocols”) that allow them to stabilize the use of technological tools that might otherwise vary across the local sites where they are applied. The notion of “regulatory objectivity” points to an institutional configuration whereby objectivity and expert judgment are articulated through a set of agreed principles that provide experts with common references to base their actions on.

The diversity of the institutions in charge of providing expert advice is not only about organizational choices. It also points to the plurality of approaches used to define what counts as credible knowledge and legitimate policy. These approaches can be characterized as “institutionalized practices by which members of a given society test and deploy knowledge claims used as a basis for making collective choices,” or, in Sheila Jasanoff’s (2005) terms, “civic epistemology” (255). The term “civic epistemology” can be read as a proposition for theorizing the articulation between objectivity and expert judgment in public institutions. Examining various civic epistemologies in national or international contexts, then, shows that the role of the public institutions of expertise is less to tame subjective expert judgment for the sake of objectivity (as if the two were opposed) than to solidify practices of defining who the experts should be and how they should behave.

Cracks in the Public Institutions of Expertise

The contrasts I just sketched among several civic epistemologies might point to an overall landscape of geographical zones, neatly distinguished according to how they define the sources of the objectivity and legitimacy of expert advice. The situation, however, is less stable, and the challenges for the institutional production of expert advice are numerous.

Some of these challenges can be situated in the institutional constructs described above. Thus, the American public bodies have often struggled to maintain the boundary between science and policy. As soon as that boundary between risk assessment (i.e., the scientific phase) and risk management (i.e., the policy phase) was affirmed as a necessary basis for producing credible expert advice, particularly in the document that became known as the Red Book (National Research Council 1983), it was also nuanced as necessarily porous in practice (Jasanoff 1990). Accordingly, controversies in the American institutional context revolve around the possibilities of producing expert advice seen as detached from political bias. A telling illustration of the dynamics of these controversies, and of their institutional consequences, is that of the Office of Technology Assessment (OTA), as described by political scientist Bruce Bimber (1996). Created in 1972 and closed in 1995, the OTA’s short history is marked by pervasive controversies about its alleged political bias. Eager to ensure the office would be seen as a neutral provider of expert advice, successive institutional reforms established a firm boundary between the OTA’s contributions and policy decisions. Eventually, in 1995, as the newly elected Republican majority in Congress was looking for ways to cut the budget, it could argue that no policy use could be identified for the OTA. In other institutional contexts, controversies about public expertise might take a different form. In the United Kingdom, for instance, episodes when known professionals fail to convince the public of the value of their knowledge claims can be read as failures to stabilize institutions of public expertise that give so much weight to the intervention of the individual and known public expert (Jasanoff 2005).

Other difficulties arise in sites where different civic epistemologies might clash. This is especially the case in international organizations, where the oppositions between member countries are arbitrated in ways that might favor one civic epistemology over others. That the WTO tends to reason in the terms of the view from nowhere makes it more difficult for European countries to make their position appear to be objective (Jasanoff 2011; Winickoff et al. 2005). The framing of the OECD reports about science policy in terms of international expert advice that is neatly distinguished from

national regulatory choices makes it impossible to envision new risk-governance instruments, such as public engagement, in terms that would significantly transform the relationships between science and society (Laurent 2016a).

Less described in the STS literature are current situations where the very terms under which public expertise is expected to be produced are questioned. The French bodies of public expertise provide an illustration of one such situation. Historically marked by the crucial role of the public expert who is able to manipulate technical tools and was trained in state-controlled grandes écoles (Porter 1991), French public expertise now faces challenges about its ability to include unruly people and objects (Joly 2009; Laurent 2016b, 2017). Recent debates about technological programs, such as biotechnology, nanotechnology, and synthetic biology, have seen attempts by the French public bodies of expertise to rethink the terms under which public expertise is crafted and deemed legitimate (or, in Jasanoff's terms, its civic epistemology). Public debates have been organized to make dialogue between public experts and various concerned groups possible, and regulatory decisions have been made to allow the public administration to characterize technical and legal uncertainties about objects such as nanomaterials or synthetic organisms. These initiatives are not consensual, and the new missions undertaken by the French public experts are far from clear. Political scientists and practitioners have identified institutional weaknesses in the ability of the French public institutions to manage their stated objectives to govern uncertain risks and ensure public participation (Besançon and Benamouzig 2005; Dab and Salomon 2013). This shows that the integration of new publics and objects on the perimeter of the French public expertise is still very much in transition.

The French transition situation is an illustration of the new instabilities that institutions of public expertise face, and which have accelerated with the help of digital technologies. These instabilities show a current lack of institutions able to stabilize the conditions under which expert knowledge can be considered acceptable. The emergence of individual skepticism channeled by social media is often read as a threat to the existing expertise institutions. In this case, the current unease about the uncontrolled circulation of information on social media shows the consequences when institutions meant to stabilize the criteria for granting credibility are lacking. Symmetrically, digital technologies are often claimed to be resources for crafting new technical tools for ensuring public objectivity. A good illustration is how Facebook refers to artificial intelligence as the solution to eliminate fake news.² Here again, a crucial issue, though one not often made explicit, is the absence of institutions that would ensure that what Facebook does is appropriately kept in check.

At this stage in our reflection we cannot pretend that solely a call for objectivity could solve the current problems that public expertise faces. It is not that objectivity is not worth looking after or useful as a common reference point for public discourse. But a simple call for objectivity has little chance of settling the subtle constructs that are necessary to stabilize the public institutions of expertise. Because the terms under which objectivity should be produced are situated in institutional contexts, there is an institutional work to undertake if the production of objective knowledge is to be reimagined.

There is a real-world laboratory in which to explore both the challenges of manufacturing institutions for expert advice and the complexity of the allure of the unproblematized reference to objectivity. This real-world laboratory is that of the European institutions, where the question of the appropriate institutional format for public expertise has been debated for years, and where it is still far from solved.

A Laboratory for Objectivity and Expert Judgment: The European Institutions of Public Expertise

European Expertise: Objectivity and the Representation of Interests

The European project was initially, and still is, an economic one, so much so that legal scholars speak of the unwritten “economic constitution” of the European institutions, whereby the source of political and legal legitimacy is the construction of the common market, and the imagined beneficiary of the European project is an economic agent, either a consumer being offered a variety of choices at reasonable prices, or a producer free to engage in business activities across the member states (Streit and Mussler 1995). The economic constitution of the European Union acquired a new layer of meaning with the addition of the Monetary Union. It should not, then, be a surprise that the European economic expertise produced by the European Central Bank has adopted the view from nowhere (Hall and Franzese 1998; McNamara 2002; Vauchez, 2016).

Scientific expertise is an entirely different story, though. Scientific expertise started to become a European concern when the construction of the single market in the 1980s made the harmonization of consumer goods a central European objective. After the 1986 Single European Act, health and safety matters became part of the scope of the European competences. The 1997 Amsterdam Treaty then asked the European Commission to “take as a base a high level of protection, taking account in particular of any new development based on scientific facts” in domains related to “health, safety, environmental protection and consumer protection.”³ In many respects, scientific expertise is now everywhere in Europe, as the rich scholarly literature on the topic shows. The conduct of European regulation has been characterized by a growing mobilization of scientific advice via committees that are expected to provide technical information and expertise, particularly in the health and safety sectors (Demortain 2009; Vos 1997); and networks of experts based in national institutions routinely exchange information and thereby take part in shaping European regulations (Dehousse 1997). Political scientists have produced detailed analyses of the composition of the European expert groups and the way they operate. They have talked about “technicization” or “depoliticization” to point to the mechanisms whereby large-scale policy issues are turned into matters of expert examination by groups that are, if not entirely secluded from public view, then at least extremely difficult for members of nongovernmental organizations or other civil society groups to access (Robert 2010; Radaelli 1999). As these expert groups strengthen the executive power of the European Commission at the expense, so the analyses show, of political discussions taking place in institutions such as the European Parliament, national parliaments, or in publicly held negotiation arenas, they may well contribute to the Union’s democratic deficit and the prevalence of technocracy.

The pervasiveness of scientific expertise in the European institutions can hardly be described in the terms of the view from nowhere, though. In the practice of European expertise, expert judgment is directly tied to the political representation of the interests of the actors involved. A prime reason for this is that the production of European expertise is tightly and explicitly articulated with lobbying activities in Brussels. Many expert groups are also supposed to be platforms for negotiating with stakeholders (Saurugger 2002). If expertise is everywhere in Europe, it does not usually result in a single authoritative voice of the kind that would originate from a well-defined expertise body subsuming the contributions of individual experts under a common reference to objective science. Rather, the production of expertise is distributed in many places, which also serve as sites for collective bargaining.

This articulation between objectivity and the representation of interests has not been fundamentally transformed by the growing importance of the European technical agencies. The independence of the European Central Bank is very peculiar, in fact, when compared with other EU agencies and authorities that have been created since the 1990s to provide independent scientific advice to European institutions, above all, the European Commission. Consider, for instance, the case of pharmaceutical products. This has traditionally been a difficult domain for market harmonization, as already recognized in the 1985 White Paper on Completing the Internal Market (European Commission, 1985). Since then, many attempts have been made to harmonize the pharmaceuticals market, including the “multi-state approach,” whereby each Member State recognizes the decisions taken elsewhere by virtue of a principle of “mutual recognition,” was deemed unsatisfactory for market harmonization (Orzack et al. 1992). As part of this ongoing attempt at harmonization, a European expertise agency about pharmaceuticals, the European Medicines Evaluation Products Agency, was created in 1995, renamed the European Medicines Agency (EMA) in 2004. The EMA has not approached harmonization as requiring the sudden replacement of national expert bodies with a centralized European epistemic authority. Instead, the agency introduced a centralized authorization procedure focused on innovative medicine products that would not replace the whole range of activities undertaken by national expert bodies⁴, and the European approach is primarily based on coordination between member states and the European level for deciding on the authorization of medicines (Groenleer 2011; Orzack et al. 1992; Permand and Mossialos 2005).

The EMA illustrates the European approach to public expertise characterized by a distribution of action among experts tied to their national origins and institutional coordination between European and national expert bodies. One sees this approach in other European agencies, such as the European Chemicals Agency (ECHA). The work of the ECHA has been described, as the EMA’s could be, as an illustration of epistemic subsidiarity (Jasanoff 2013; Boullier 2016)—that is, an institutional arrangement whereby the production of expertise is the outcome of carefully orchestrated exchanges between European and national sources of expertise. Epistemic subsidiarity is a useful way to characterize the articulation between objectivity and expert judgment that is seen in the European institutions of expertise. Here, objectivity is the outcome of coordinated operations, related to both science and politics. Many experts are involved. Some come from national public bodies; others, from private companies or civil society organizations that participate in the Commission’s technical working groups. Eventually, the role of the European expert working in agencies such as the EMA or the ECHA is to orchestrate the distribution of roles and the circulation of knowledge. The European expert uses procedural or technical tools to assess knowledge claims (such as those presented by companies wishing to register chemicals at ECHA) but also needs to coordinate with evaluations undertaken at national levels or in private organizations. In that context, attempts to mechanize expert judgment, for instance, by using models, require that European experts reopen technical black-boxes and use their personal experience (Laurent and Thoreau 2019). These attempts do not signal an institutionalization of mechanical objectivity, but rather, an extension of the coordinating role of the European expert.

The Instability of Epistemic Subsidiarity

The landscape of European expertise that appears through the numerous expert committees of the European Commission, and technical agencies such as EMA and ECHA ties the production of objective knowledge to the negotiation between national and European, public and private interests. In this context, expert judgment is not expected to ensure a view from nowhere but, rather, a distributed gaze, itself a product of epistemic and political practices. This European approach to

expertise faces pervasive issues, including its problematic legitimacy and a persistent uncertainty about its institutional format.

First, that European expertise relies on the articulation between knowledge production and political negotiation does not imply that anyone can participate in the production of European expertise. Rather than publicly visible deliberative bodies, European expert groups are sites marked by unequal powers of influence, as shown by the numerous studies that have examined lobbying practices in Europe.⁵ As such, European expertise is characterized by a pervasive legitimacy issue. This issue relates to the management of the relationships between European regulatory decisions, and the interests of private economic actors, or individual member states. For instance, a regular source of controversy about EMA has been the close relations between the agency and the pharmaceutical industry.⁶

Second, the institutional organization of the European expertise is far from stable. A sign of this instability is the profusion of scholarly works about the institutional nature of European expertise, particularly as it is produced by European agencies. Since the 1990s, scholars of European integration have discussed the form of regulation “by information” that European agencies propose (e.g., Majone 1997), how these agencies are controlled (e.g., Dehousse 2008), the way they appear out of networks of European experts and functioned in conjunction with them (e.g., Borrás et al. 2007; Chiti 2000; Levi-Faur 2011), and how certain modes of organization circulate from one agency to the next (e.g., Demortain 2008). The problematic institutional nature of European expertise is not merely an academic issue. It also manifests itself in numerous public controversies about seemingly arcane bureaucratic evolutions inside the European Commission. For instance, the relevance of the “science adviser” of the president of the European Commission, a position created in 2012 by José-Manuel Barroso, was vigorously debated. NGOs argued that the position added a layer of opacity to an already complex decision-making process, which, though allegedly aimed at ensuring that European policy was “evidence-based,” gave industrial interests privileged access to the president of the Commission (Parr 2015). Others saw the NGOs’ position as merely a reaction against the alleged pro-GMO position of Barroso’s science adviser, Anne Glover.⁷ Eventually, Jean-Claude Juncker scrapped the position, to the dismay of science-policy scholars, who had hoped to turn it into a vehicle for renewed dialogue about the relationships between science and policy in Europe.⁸ This episode is revelatory. It shows that if European expertise proposes an original articulation between objectivity and expert judgment, this proposition is not clearly stabilized in institutional terms.

This instability also manifests itself in international settings. A good illustration here is the case of GMOs. The ban of certain GMOs in Europe was contested at the WTO by Argentina, Canada, and the United States (Winickoff et al. 2005). The opponents of the European regulation believed that the evaluation of the risks should be the product of a universal science expected to serve as a judge of international trade conflicts. The ban, for them, was nothing but a political move meant solely to protect the interests of European farmers at the expense of international trade. As STS scholars have shown, the challengers of the European ban imagined objectivity in the terms of the view from nowhere, as the outcome of mechanistic processes able to eliminate uncertainty and stabilize a technical assessment of risks, free of political considerations (Winickoff et al. 2005). By contrast, one could have framed the European ban as an attempt to deal with pervasive uncertainties about both the scientific evaluation of GMOs and the social expectations about them. That Argentina, Canada, and the United States won their case against Europe is a sign that this framing failed to be articulated in convincing ways.⁹

A European View from Nowhere?

The proposition for European expertise based on an original articulation between objectivity and expert judgment is barely stable. In that context, the reference to a form of public expertise based on the uniqueness of the voice of objectivity that is expected to be free of any subjective influence (or, in other words, a variation on the view from nowhere) has often appealed to European actors. Consider, for instance, the case of the European Food Safety Authority (EFSA). EFSA was created in 2002 as an institutional response to the BSE (bovine spongiform encephalopathy) “mad cow” crisis.¹⁰ The crisis had propelled far-ranging reflections about how the European Commission had based its action on scientific facts, and how it had used scientific expertise. The 2000 White Paper on Food Safety (European Commission, 2000) called for the creation of a European expert authority on food safety to prevent another crisis like the mad cow scandal by ensuring that food products were properly assessed before being circulated on the European market. The reorganization of the European expertise about food safety eventually led to the creation of EFSA, a centralized European expert body that would identify the food products that were safe for consumption across Europe (Vos 2000).¹¹ The new agency would isolate European decision-making from the economic interests of particular member states or private actors. Because member states were said to have influenced the delayed reaction to the BSE crisis,¹² the EFSA would be composed of individual experts, and not based on national representation.¹³ EFSA, contrary to propositions that saw a need for the agency to be granted regulatory power, was conceived as a public body whose power would be restricted to “risk assessment” (Demortain 2009). EFSA, in short, would be the locus of a renewed European objectivity on food safety, based on the ability to independently assess food products. The new agency was to “restore trust” in the European institutions’ ability to deal with technical risks. Yet the Authority has been the object of much criticism, pertaining to the quality of the scientific advice it provides, the transparency of its functioning, and its independence from special interests. Criticisms have been voiced by NGOs¹⁴ about EFSA’s proximity to industrial interests. The value of EFSA’s advice on GMOs has been heavily contested, as the standardized tests it used have themselves been controversial (Demortain 2013). If EFSA’s objective was to “restore trust,” it fell well short of that goal.

EFSA introduced several changes were at in response to the criticism. EFSA asked its experts to disclose their financial and institutional ties and launched a “glass house” policy of opening scientific meetings to the public in 2012. It introduced a “stakeholder consultative platform” in 2005, tasked to “assist the Authority in developing its overall relations and policy with regard to ‘civil society stakeholders’” and launched several “public consultations” (Dreyer and Renn 2013, 332). This evolution is consistent with a growing discourse of the “democratization of expertise” adopted by the European Commission in the 2000s (Moodie and Holst 2014). But it did not free EFSA from public controversies. Endocrine disruptors have been one recent instance of a controversial domain about which EFSA’s contributions have been severely criticized by environmental organizations (Bozzini 2017; Horel 2016). Construed as an entity that could adjudicate controversies thanks to expert knowledge based on the view from nowhere, EFSA has itself become a topic of controversies.

The difficult construction of European expertise through agencies such as EFSA is telling. It can be read as yet another example of contested science and policy boundary-making in public institutions (Jasanoff 1987), rendered even more difficult by the dual objective of ensuring that science is purified from political discussion and is open to public participation.¹⁵ The EFSA situation might be a reaction to the instability of epistemic subsidiarity by attempting to centralize European expertise. But instead of providing a single authoritative voice that is able to ensure the legitimacy of European decision, EFSA has become perhaps the most visible illustration of the impossibility of basing European expertise on the view from nowhere.

A Path Forward for Public Expertise?

The European situation provides an original and unstable institutional configuration meant to produce public expertise. This configuration is based on epistemic subsidiarity. It does not separate the production of scientific advice from policymaking but ties them together. It has consequences for the definition of objectivity and expert judgment. Here, objectivity is inherently tied to regulatory objectives, on the one hand, and to the concerns and needs of the actors involved in its production, on the other. As such, it can be labeled an “interested objectivity.” The expert judgment that participates in manufacturing interested objectivity is explicitly political, in that it serves both to produce technical advice and to represent interested parties, be they member states or concerned stakeholders.

Getting back to the current difficulties that expertise faces, one might want to turn to the European situation to provide theoretical and practical elements for identifying what a path forward would be. The debates about European expertise, indeed, resonate with the current and more general crisis of expertise. The questions raised today are about who has the ability to be an expert, and what the bases for ensuring objectivity are. These questions underscore the political character of expertise by suggesting that it is either hopelessly biased or in need of being “freed” from politics. In Europe, what I have described here as interested objectivity can be seen as an attempt to define public expertise in explicitly political terms, for the sake of both robust technical advice and legitimate decision-making. Because the European context makes expertise a matter of both epistemic production and political negotiation, the question of how to organize public expertise is bound to receive sophisticated answers. Thus, configurations that are characterized by epistemic subsidiarity are based on an unlimited opening of the possibility for expertise production nor on a tight delimitation of expertise to technical means.

Perhaps because of its originality, this approach faces pervasive instability, and is regularly confronted with the persistent allure of the view from nowhere, as the example of EFSA shows. There are two potential readings of this situation. The first one diagnoses a persistent failure to ensure that a true European expertise can convince member states, and possibly the European public at large, of its value. It sees a need to make yet other attempts to stabilize a centralized body of European expertise, which, at last, would be able to provide a unified voice of science. The second reading also identifies a failure, although not in the same terms (see e.g., Carr and Levidow 2009; Jasanoff 2013; Wickson and Wynne 2012). Often inspired by STS, this second reading sees epistemic subsidiarity as a way of recognizing that the production of expert advice is a scientific process and a political process, which should more explicitly associate the exploration of scientific uncertainties with that of social concerns. In this reading, the specificities of European expertise are not to be erased but further cultivated. If we adopt this second reading, we are to consider that if there is a failure, it is related to the inability to publicly account for European expertise in ways that would convince international audiences (for instance, at the WTO) and European ones that it can be scientifically robust and politically legitimate.

While the mechanism of European expertise suggests that original institutional constructs might produce objective expert advice and sound expert judgment, it also illustrates the amount of work needed to ensure that new propositions such as interested objectivity are both scientifically robust and politically legitimate. In Europe, this work implies correcting the asymmetries of access that make participating in regulatory circles far easier for skilled lobbyists representing corporate interests than for concerned environmental protection groups. But it also implies a more fundamental theoretical and institutional task, which pertains to the mode of scientific and political representation. There are resources in the science studies literature at this point, particularly Bruno

Latour's (2004a, 2004b) discussions of "matters of concerns" as potential entry points for rethinking the sources of scientific objectivity and democratic legitimacy. As their main activities all relate to technical entities, such as energy, chemicals or data, the European expertise institutions are already connected to the main public concerns of contemporary societies. As such, they might provide institutional paths for making interested objectivity a vehicle, if not for renewing the European project, at least for ensuring the scientific quality and the political legitimacy of expert advice.

At this point, the failure of EFSA to provide a European view from nowhere is a forceful reminder of the limited value of calling for an unproblematized "objective expertise" to solve the issues faced by European expertise. By contrast, what the instability of European expertise and its contestations in international settings make visible is the dual necessity of an analytical repertoire and institutional support to ensure the scientific and political robustness of epistemic subsidiarity. Although this situation is specific to the European context, it can also help us understand the current difficulties of public expertise. As public expertise is contested on scientific and political grounds, the call for "objectivity" is tempting. What the European example suggests is that a reimagination of the institutional organization of expertise might be, if theoretically and practically more challenging, also more relevant to ensure the public credibility of expertise.

Conclusion

How to define the appropriate expert judgment in institutions that are in charge of producing objective facts for policymaking? This question seems to be particularly problematic as current challenges to the voices of official expertise often prompt public and private actors to call for "objective knowledge" and "trustful experts" without clarifying those terms.

The contemporary issues about objectivity and expert judgment are not qualitatively different from the problem of how public institutions of expertise ought to function, about which STS works offer crucial resources. These works have shown that the production of expert advice necessarily brings together knowledge production and legitimacy building. They have commented on the institutionalized practices whereby particular expert claims are considered trustworthy, or "civic epistemologies." They have illuminated the variety of civic epistemologies, and analyzed various sources of instability in the public institutions of expertise. Europe is a particularly interesting laboratory in which to reflect on these instabilities. How to organize the European public expertise has been a topic of concern for years. On technical committees and in agencies such as EMA or ECHA, it originates from distributed processes whereby the production and use of knowledge is undertaken by member states and at the European level. This "epistemic subsidiarity" also means that negotiations with the involved stakeholders occur in processes that are expected to provide to the European institutions with expert advice. In that context, experts come from national institutions, private organizations, and European bodies, and their judgment is tied to their positions.

The difficulties in stabilizing the institutions of European expertise reveal both that sophisticated institutional constructs are possible and that their stabilization requires significant scientific and political investments. They signal a crucial need for inventing institutional formats, as well as analytical repertoires that are able to account for practices of expertise that attempt to redefine the relationships between science and policy.

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Notes

- 1 Jasanoff (1990, 45). Jasanoff refers to legal scholar Martin Shapiro (1981), in particular.
- 2 "AI is 'Part of the Answer' to Fake News, Facebook Scientist Says". *Bloomberg Europe Edition*, May 23, 2018, last accessed October 29, 2022, <https://www.bloomberg.com/news/articles/2018-05-23/ai-part-of-the-answer-to-fake-news-facebook-scientist-says>.
- 3 Article 95(3) of the Amsterdam Treaty.
- 4 See "The Centralized Procedure," European Medicines Agency, February 2010, available at http://www.ema.europa.eu/docs/en_GB/document_library/Presentation/2010/03/WC500074885.pdf, accessed September 22, 2018.
- 5 See, for instance, among others in a prolific literature, Coen (1998); Coen and Richardson (2009); Laurens (2015, 202–209; 2017).
- 6 See (Permanand and Mossialos 2005). Two opposite movements have been at stake here, because the agency tried not to exclude experts because of distant industry ties (see "Medicines Regulator

Amends Conflict of Interest Rules to Ensure Suitability of Experts,” *The Pharmaceutical Journal*, November 25, 2014, last accessed June 3, 2018, <https://www.pharmaceutical-journal.com/news-and-analysis/medicines-regulator-amends-conflict-of-interest-rules-to-ensure-suitability-of-experts/20067248.article>, while being criticized for providing confidential yet profitable “advice” to companies to help them produce development plans. See “The EMA’s Scientific Advice to Pharma Companies Is a Conflict of Interest, Says Industry Coalition,” *Thepharmaletter.com*, July 15, 2014, last accessed June 3, 2018, <https://www.thepharmaletter.com/article/the-ema-s-scientific-advice-to-pharma-companies-undermines-is-a-conflict-of-interest-says-industry-coalition>.

7 Chief Greenpeace scientist Doug Parr (2015) opposed this interpretation.

8 See the tribute written by science-policy scholar James Wilsdon: “Juncker axes Europe’s chief scientific adviser,” *The Guardian*, November 13, 2014, last accessed June 3, 2018, <https://www.theguardian.com/science/political-science/2014/nov/13/juncker-axes-europes-chief-scientific-adviser>. The debate about the chief scientific adviser position has been presented in a collective volume edited by Wilsdon, Doubleday, and Stirling (2015).

9 In other cases, the European institutions adopt the language expected by the international organization. Thus, the European Commission introduced a moratorium on the use of recombinant bovine growth hormone for reasons related to agricultural price controls; the moratorium was challenged at the WTO, and the European Commission eventually explained it to be “exclusively motivated by reasons of animal welfare and health.” These reasons could be described as “ostensibly objective, scientific concerns” (Kinchy and Kleinman 2003, 584).

10 The discussions within the European Commission about the need for a food-safety agency had been ongoing since the mid-1980s (Demortain 2009).

11 Before that, the European regulation of foodstuffs was only partially harmonized, through mutual recognition and comitology systems, and no centralized body existed (Kraphol 2007).

12 See a discussion in Kraphol (2007) about the United Kingdom. The UK also contested the intervention of the European Commission at the European Court of Justice.

13 See Levidow and Carr (2007). The composition of the board, however, became a strategic concern of member states (Demortain 2009).

14 See, for instance, “Can EFSA Ever Cut Ties with Industry,” *Foodnavigator*, May 3, 2017, last accessed June 3, 2018, <https://www.foodnavigator.com/Article/2017/05/04/Analysis-Can-EFSA-ever-cut-ties-with-industry>. For an account of these criticisms that sees them as impetus for EFSA to maintain its scientific integrity, see Kupferschmidt (2012).

15 Studies of the European attempts at public participation in expertise have shown that the potential contradiction in this tension is often resolved by denying public participation the possibility to challenge the framing of what counts as “science” or what should be discussed in the first place (Wynne 2006). The conflicted institutionalization of expertise at EFSA might also be related to the fact that boundary-making has to be conducted inside the agency, EFSA being in charge of risk assessment and risk management (Dreyer and Renn 2013).