Expertise

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Expertise refers to knowledge, skills and/or proficiencies that enable purposively rational actions. It is achieved as part of a social process, namely the inclusion in a network of carriers of expertise, and is attributed to its bearers by others (relational phenomenon). Expertise – particularly scientific expertise – is of importance especially for liberal democracies to ensure the safety and well-being of its citizens and to enable rational political decision-making that may be legitimised. However, due to the complexity and specialisation of scientific knowledge, scientific expertise cannot find its way into political decision-making processes and political communication easily.

Experts; Scientific expertise; Knowledge; Political advice; Political decision-making; Policymaking

This entry starts with a very general definition of expertise. It then outlines the special role of scientific expertise in particular, the general significance of which for politics is then shown. Finally, we look at the significance of scientific expertise specifically in political communication and news coverage.

Expertise

Expertise refers very generally to knowledge, skills and/or proficiencies that enable its bearers to act in a purposively rational manner. If one follows a definition by Jürgen Habermas (1969, p. 62), then purposively rational action comprises instrumental and strategic action. Instrumental action, on the one hand, is based on the knowledge and practical exercise of technical rules that are based on experience and whose knowledge includes predictions directed at the consequences of action: "You have to do it this way, then it will work!" Strategic action, on the other hand, describes the rational choice between alternatives. It is based on analytical knowledge, i.e. comprehensive understanding of the concepts, theories, principles and techniques relevant in a specific domain. It also implies an orientation towards fundamental beliefs or ideals that a society considers important and desirable (values) or/and towards general maxims: "Do it this way, not that way, then it will be easier and/or faster and/or more resource-efficient, will safe more lifes...". In a nutshell: Having expertise means being able to give concrete advice on decision-making problems (Peters, 2014). People who have expertise are usually referred to as experts. While there are many different expert definitions from different research fields, most definitions distinguish experts from laypeople, the main differentiator being that experts have a knowledge advantage over laypeople or have skills respectively proficiencies that laypeople do not have. The acquisition of expertise is considered as a social process (Collins & Evans, 2007, p. 2). It is formed through inclusion in a network of carriers of expertise, so it is seen as the result of socialisation with practices and knowledge of experts and can be lost over time if contact with this group breaks off. This view is based on the assumption that the acquisition of expertise involves the acquisition of tacit knowledge to an appreciable extent. This acquisition cannot take place merely through theoretical studies; it requires practical guidance. This view can be plausibilised, for example, by the fact that hardly any student is able to see algae and protozoa under the microscope in a pond water sample merely by studying textbooks.

Scientific expertise

Basically, expertise is not limited to a specific domain, such as science and technology. Expertise also exists in sport, in music and art, in management, and so on. Scientific expertise nevertheless has a special role to play in politics (see next section), which is why the focus of this entry lies on scientific expertise.

It should be noted that there is a structural tension between scientific knowledge and scientific expertise. On the one hand, the acquisition of scientific knowledge is essentially aimed at identifying generally valid cause-effect-relationships and abstracts from special cases wherever possible. Scientific expertise, on the other hand, should be used to analyse and solve practical political decision-making problems in specific situations. Because of this tension, scientific knowledge is considered necessary, but not sufficient on its own to be relevant. This makes plausible why scientific knowledge cannot, as a rule, find its way into political and legal decision-making without pre-processing. Suitable, i.e. politically useful expertise has to be synthesised first. This is usually achieved through political advisory bodies or expert commissions, who produce a new form of knowledge, the so-called political advisory knowledge, whose epistemic status may sometimes be precarious from a scientific point of view because compromises are made on the truth value with a view to usefulness (Weingart & Lentsch, 2008, pp. 19–20).

This makes it understandable why scientific expertise is not considered mere translation of objectifiable facts, but are interspersed with value judgements. This in turn explains why the lines between science communication and political communication are sometimes blurring and why two (or more) experts often deliver different expertises, although both refer to the same state of knowledge. Nevertheless, these expertises are not considered mere opinions, but different assessments of a specific state of knowledge.

Relevance of scientific expertise in politics

Scientific expertise especially in liberal democracies, where political decisions have to be legitimised, holds substantial significance. One simple reason is the complexity of modern societies. Political decisions can have undesirable consequences that are difficult to assess. Summarising an existing body of knowledge and applying it to a specific political decision-making problem is generally regarded as very challenging. This has to do with the scope of knowledge and its complexity, but also with its speciality. Thus, political decisions require

domain-specific and highly specialised expertise. This applies in particular to the governance of new technologies, some of which are being developed or refined at a rapid pace. One example is artificial intelligence.

Apart from this, the importance of scientific expertise arises from the dual legitimisation of political regulations. They must be passed by a majority in formalised procedures. And they must be rationally justifiable because, for example, restrictions on personal freedoms (e.g. smoking bans, lock downs etc.) must stand up in court (Münkler, 2020). It must at least be made plausible that, for example, certain restrictions of personal freedom (the means) are also suitable for achieving a defined end. For this plausibility check, scientific expertise is particularly suitable, because the knowledge that feeds this expertise is generated in an organised process. This process is characterised by scepticism, openness (a result is not a foregone conclusion) and the disinterest of the actors (it is not the interest of the actors that determines what comes out) (Merton, 1957). Due to its reference to knowledge gained in this way, scientific expertise should be accorded greater authority and legitimacy in political decision-making processes and related public debates.

The fundamental state task of ensuring the safety and well-being of its citizens is also shaped to a considerable extent by dependence on scientific expertise. This is due to the fact that many dangers cannot even be recognised without a highly developed technical-scientific apparatus, because these dangers cannot be experienced sensually, for example because they do not cause damage immediately, but only after a long time. Many such dangers (e.g. air pollution, radioactive radiation, climate change, etc.) can be described as modernisation risks. They are risks that continue to arise as unintended side-effects of a progress dynamic geared towards growth and increased prosperity (Beck et al., 1994).

Scientific expertise in public political debates

The importance of scientific expertise in politics in particular is also echoed in the political communication conveyed by offline and online media. However, the current state of research does not yet allow us to assume a general, topic-independent increase in the importance of scientific expertise in political communication. Instead, scenarios can be identified in which scientific expertise is accorded particular public relevance. These include valuable technology and research policy debates in which specialised scientists are also stakeholders because they are directly affected by political regulations. This is likely to have a direct negative impact on the credibility of their expertise with the public. In addition, scientific

expertise is extremely important in risk-related political debates. Research suggests a phase model for these topics. Scientific expertise is particularly important in the phase in which societies agree on the relevance of risks and on suitable means of mitigating them. Once a risk has been accepted as relevant, the importance of scientific expertise in political communication is relativised, because it is primarily a matter of balancing the interests of stakeholders who are affected by risk-mitigating regulations. Climate change is probably the best-studied example of this (Schäfer, 2015).

As in all public debates, the selectivity of journalism is also of considerable social relevance in the dissemination of scientific expertise. The journalistic selection of experts as sources of information for news coverage determines, which positions on an issue or problem become public and/or how controversial or urgent an issue appears – which may influence political decision-making. To legitimise the selection of expert sources, it is irrefutably relevant that in news media coverage actors have their say who know what they are talking about. The attribution of expertise through journalism is an important social process because it influences, among others, the chances of access for experts in public discourses. However, it is precisely this assessment of who can be considered an expert that is relatively difficult. Expertise can in principle be regarded as an objectifiable property, but the criteria that can be used to determine expertise are not clearly defined and not always unambiguous. The actual competence of the expert often only becomes apparent ex post, i.e. when instrumental action actually leads to the desired result or when the choice of an alternative proves to be correct. In view of the difficulty of being able to infer the actual competence of an expert in a concrete situation ex ante, expertise, especially in political and public contexts, is de facto a relational phenomenon (Collins & Evans, 2018), i.e. expertise is attributed to others, for example by political actors or journalists, on the basis of secondary characteristics, such as (academic) titles, for example.

Empirical studies suggest that the attribution of expertise by journalists, for example, is not particularly elaborated, whereby there seem to be differences depending on the journalistic department considered. While in specialised science departments it seems important that scientific experts have domain-specific "contributory" expertise , i.e. have published thematically relevant articles in peer-reviewed scientific journals, this does not seem to play a significant role in other departments, where "interactional" expertise (i.e. enough knowledge to be able to converse with others on a scientific level on a subject or to be able to understand and convey the scientific thoughts and activities of others) may be sufficient (Leidecker-Sandmann et al., 2022). This is matched by the fact that journalistic references to expert

sources do not regularly contain information that enables recipients to assess what the attribution of expertise by journalism is actually based on (Nölleke, 2013). Accordingly, it can be assumed that journalism can usually only insufficiently legitimise the selection of expert sources through a well-founded assessment of their expertise.

Nevertheless, experts' appearance in public or political contexts is not only influenced by the attribution of expertise to them by others. The experts' self-assessment of their own expertise also influences their willingness to be interviewed. Differences in self-assessment of expertise have been identified as one of the reasons why female experts are underrepresented in journalistically mediated publics (Niemi & Pitkänen, 2017).

Relativising conclusion

Despite the relevance of scientific expertise in particular for the legitimisation and communication of political decisions, a relativising conclusion should be drawn at the end. Firstly, due to the complexity and specialisation of scientific knowledge, scientific expertise cannot find its way into political decision-making processes and political communication easily, as described above. Secondly, though important, scientific expertise alone may not be regarded sufficient for policymaking, as policymakers should also take social, ideological and cultural values into account and weigh up the costs and benefits of different decision options. Far-reaching hopes that have interpreted a growing potency of modern science and the growing importance of expertise based on it as the starting point for a more pragmatic and technocratic style of government, or even as the starting point for an end of ideologies (Lane, 1966), must be viewed with scepticism. It is true that one may assume that in many policy fields pragmatic, evidence-oriented policy approaches prevail rather than a strict orientation towards an ideological framework, if only because of the rule of law principle. However, in the light of the limited usefulness of scientific expertise alone, one will have to doubt that expertise could take the place of ideology. Instead of an "expertocratisation" of politics, one must rather assume a "politicisation" of expertise.

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