## Introduction: The role of experts in democratic societies: In honor of Paul K. Feyerabend

Pierluigi Barrotta, Gustavo Cevolani, Roberto Gronda, Luca Tambolo

Paul K. Feyerabend (1924-1994) was a very prolific writer. In the course of a career that spanned almost five decades, he tackled a wide array of issues, ranging from technical problems in the philosophy of science – such as explanation, the role of experience in scientific theorizing, the importance of alternatives in theory testing, and scientific method - to questions of more general interest such as the proper role of scientific experts in decision-making within democratic societies. As Feverabend's centennial was approaching, in June 2023 the IMT School for Advanced Studies Lucca and the University of Pisa jointly convened a workshop to honor his work, held at the IMT School's campus with the financial support of the Horizon 2020 project Inclusive Science and European Democracies (ISEED) and by the Italian Ministry of Education, University and Research (MUR). The general theme of the workshop, from which the present Focus of *Philosophical Inquiries* stems, was "The Role of Experts in Democratic Societies. In Honor of Paul Feyerabend". However, as readers will readily appreciate, the proceedings covered a wider terrain. This came as no surprise. In fact, Feverabend's views on expert policy advice, which he expounded mainly in writings published from the late 1960s onwards and to which he devoted, for instance, significant chunks of his book Science in a Free Society (1978), were deeply informed by his views on such issues as the importance of theoretical pluralism within scientific inquiry, on which he had been steadily working since the 1950s. The articles included in the present Focus, which we will briefly introduce in what follows, clearly reflect this feature of Feyerabend's philosophical work.

In "Feyerabend, Experts, and Dilettantes", John Preston scrutinizes Feyerabend's paper "Experts in a Free Society" (1970/1999). Comparatively less studied than Feyerabend's most well-known contributions on the issue of sci-

<sup>&</sup>lt;sup>1</sup> Through the PRIN 2017 Project "From Models to Decisions" (grant nr. 201743F9YE) and the PRO3 Project "Understanding Public Data: Experts, Decisions, Epistemic Values" (grant nr. D67G22000130001).

entific expertise, "Experts in a Free Society" certainly makes for an engaging read. In particular, Feyerabend's attempt to ridicule the writing style of contemporary scientific experts, as exemplified by Human Sexual Response (Master et al. 1966), looks pretty successful. At first sight, at least. In fact, as Preston shows, Feyerabend's critique of experts relies on a number of very questionable argumentative moves. To mention but one, passages of Human Sexual Response are contrasted with selected passages due to heroes of past science such as Galilei and Newton. The juxtaposition aims at creating the impression that today's scientific experts write in a dry, impersonal, and dull fashion, while great scientists of the past were lively, non-technical, in-your-face writers capable of connecting with the lay public. Feyerabend takes such a difference in writing style to be a symptom of a more basic difference, that between the narrow-mindedness characterizing contemporary experts and the open-mindedness of great scientists of the past. By virtue of their being well-rounded individuals, Feyerabend maintains, the likes of Galilei and Newton are best described not as experts, but rather as dilettantes. And according to Feverabend, "science was advanced, and is still advanced by *dilettantes*" while "experts are liable to bring it to a standstill" (1970/1999: 112). However, as Preston argues, Feverabend can only reach his conclusions concerning the different writing styles of experts and dilettantes at the price of ignoring the context in which Human Sexual Response appeared, its intended audience, and the liberating effect that it exerted on the way in which sex is discussed in public discourse in the US. Moreover, the impression that Galilei and Newton's writings are easily accessible to the layperson arises because Feyerabend selectively quotes from the non-technical parts of their technical works. And of course, the claim that Galilei and Newton were not experts in their field is utterly untenable.

In terms of critical engagement with Feyerabend's views on experts, Preston's paper offers much more than the short summary above may suggest. Here we would like to draw the attention to one of Preston's take home messages. As Preston hypothesizes, it may well be that when Feyerabend railed against contemporary scientific experts, he had in mind a particular kind of expert, namely, the prototypical (CIA-funded) technocrat to whom at least some of Feyerabend's critical remarks look easily applicable. However, as Preston analysis shows, it is impossible to take the bulk of Feyerabend's critique of experts and simply apply it in our current context.

The question then naturally arises of whether one can incorporate at least some elements of Feyerabend's critique into a constructive philosophy of scientific expertise. In "Wisdom, Scientific Expertise, and Laypeople. Some Remarks on Paul Feyerabend's Philosophy of Expertise", Pierluigi Barrotta and Roberto Gronda answer the question in the positive. Scientific experts

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engaged in policy advice, Barrotta and Gronda emphasize, cannot simply apply existing theoretical knowledge to particular public problems. Quite on the contrary, in order to contribute to the solution of such problems, scientific experts need to acquire the new knowledge that allows them to properly tackle the – often unique – features of the concrete contexts in which they operate. In light of the social values at stake in each specific situation, good scientific experts must be able to help in such crucial tasks as, among others, specifying values, justifying the ends pursued by a certain policy, and handling conflicts between potentially conflicting ends. Thus, good scientific experts cannot take refuge in the specialized knowledge of their discipline. Rather, they need to exhibit a feature that is often overlooked in the description of a good scientific expert. As Barrotta and Gronda put the point, they need to be endowed with wisdom – not unlike the well-rounded individual that Feyerabend envisioned as playing a central role in a free society.

The philosophy of expertise defended in Barrotta and Gronda's essay includes also a second component that has a distinctively Feverabendian flavor. In a fully-functioning democratic society, laypeople have an epistemic contribution to make to the solution of public problems. In fact, the very definition, let alone the possible solution of a public problem hinges on how one defines the relevant concepts. And in many interesting cases, the concepts involved are "thick". For instance, such concepts as biodiversity, risk, and sustainability are thick scientific concepts, such that for the purposes of the public problems in which they are of central importance, their meaning is only partially fixed by scientific inquiry proper. In order to fully fix their meaning, one needs to adopt a normative standpoint, and take into account how lay citizens use the concepts in the understanding of their own actions and social interactions. This means that, as classical pragmatism teaches, when public problems are at stake, the community of inquirers is wider than that of scientific experts: lay citizens have the right to have a say on the meaning of the concepts, in the concrete context in which they are applied. As Barrotta and Gronda argue, the very notion of a community of inquirers that includes as its full members not only scientific experts, but also citizens, politicians, stakeholders, etc. promotes a form of pluralism that can perform the function of a shield against the temptation of scientists to gain complete control over the public sphere – just like in Feverabend's model of a free society.

The inextricable connection of the epistemic and the normative dimensions of science-based policy advice on which Barrotta and Gronda draw the attention also lies at the heart of Karim Bschir's "Feyerabend's Humanitarian Pluralism and Its Relevance for Science-Based Policy".

Bschir provides the reader with an in-depth examination of an issue that

has so far remained largely unexplored in Feyerabend scholarship, namely, the basis for the claim repeatedly made by Feyerabend that a pluralistic method encouraging variety of opinion is the only one "compatible with a humanitarian outlook" (1963/1999: 97). As Bschir documents, since the early 1960s Feyerabend articulated his defense of pluralism via a sustained critical engagement with a number of positions within the philosophy of science – notably Kuhn's theory of scientific change - to which he referred as forms of "monism" and which he scolded for encouraging dogmatism, indoctrination, tyranny, authoritarianism, narrow-mindedness, and anti-humanitarianism. In his battle against monism, Feyerabend then deployed epistemological arguments, which however he supplemented, from the very start, with genuinely normative considerations: Feyerabend unequivocally claimed that pluralism is superior to monism also from the political and social point of view, and that any monistic position should be rejected on normative grounds. As Bschir shows, Feverabend's defense of pluralism was driven by the assumption that the adoption of a certain set of rules for scientific inquiry influences both the kind and the content of the knowledge that inquiry yields. And since that knowledge has implications for society, the decisions made while choosing a certain methodology instead of another must be assessed on ethical grounds.

While consistently harsh in denouncing the flaws of monistic accounts of science, Feyerabend never addressed in a systematic way the question of how precisely one should understand the self-ascribed humanitarianism of his pluralism. Bschir's discussion of his writings nevertheless unearths certain features that reoccur in Feyerabend's description of the beneficial features of pluralism, such as, among others, the emphasis on the cultivation of individuality and the free development of individuals and the tolerance of heterodox, minority views. Moreover, Bschir argues, despite the absence of a full characterization of the humanitarian nature of his pluralism on the part of Feyerabend, his works defend a number of normative principles that are of great value for anyone interested in putting forward an account of science-based policy advice. For instance, such Feyerabendian themes as fallibilism, theory proliferation, and the extension of pluralism beyond the realm of scientific inquiry provide one with the building blocks of the framework required to properly tackle issues of urgent practical interest, such as the response of governments to the COVID-19 pandemic.

Luca Tambolo and Gustavo Cevolani's article also concerns the concrete applicability of Feyerabend's views on pluralism. Their "Feyerabendian Pluralism in Practice: Lessons from the Di Bella Case" is a deep dive into the story of a previously unknown Italian physician who in 1997-1998 became a national celebrity thanks to his alleged ability to treat cancer with an unconventional method of his own devising – the so-called "Di Bella Method"

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(DBM) – presented as a radical alternative to the current standards of care, especially chemotherapy.

Indeed, as Tambolo and Cevolani detail, the DBM exhibited some of the features that Feyerabendian pluralists are bound to find attractive in an alternative to a dominant theory. And in light of Feyerabend's insistence that in order to severely test any theory T, one should deploy at least one alternative to T, it is easy to imagine a Feverabendian pluralist who, faced with the Di Bella case, agrees with the decision made by the Italian Parliament to authorize a series of state-funded phase II clinical trials of the DBM. The decision, however, was to say the least troublesome from the ethical, scientific, and economic point of view. In fact, there was no publicly available evidence of the alleged efficacy of the DBM. Moreover, in the view of the relevant community of experts, there was no reason whatsoever to presume the DBM's possible efficacy. And as it later turned out, Di Bella's claims concerning the several thousands of patients who had undergone successful treatment with the DBM were unsubstantiated. The right thing to do in 1997-1998, Tambolo and Cevolani argue, would have been to vote against the authorization of the trials. But Feyerabendian pluralists could have recommended the correct decision only at the price of dropping the view of knowledge as an ever increasing ocean of mutually incompatible alternatives defended by Feyerabend since the mid-1960s. Tambolo and Cevolani then conclude that in order for pluralism to deliver the goods that Feverabend claimed it can help us to achieve, Feyerabendian pluralists need to do better than Feyerabend himself did, and stick to the more limited, moderate version of pluralism espoused in some of his seminal papers of the early 1960s.

Overall, the papers included in the present Focus suggest that a satisfactory account of expert policy advice requires refined and (sometimes substantially) ameliorated versions of some Feyerabendian insights on the importance of pluralism and on the proper role of scientific experts in public decision-making. This is precisely what Piero Avitabile and Alessandro Demichelis set out to offer in their "Expanding Epistemic Public Trust. What Role for Expert-Lay Communication?". Taking their cue from the distinction between use of experts, trust of experts, and reliance on experts drawn by Feyerabend, Avitabile and Demichelis first introduce the notion of epistemic trust and then go on to discuss some of the difficulties that arise within the relationship between experts and laypeople when the passage of information is involved. As they illustrate, disagreement among experts is a particularly troublesome scenario for laypeople, who by definition lack the competence required to decide for themselves on the issues on which experts disagree. Laypeople then need to resort to "second order" evidence, that is, external indicators and sociological

proxies that allow one, if fallibly, to identify actual expertise, and therefore to assign epistemic trust.

As a blooming literature attests, the best way to systematize the conditions that should be met in order to promote the public's trust in experts is the subject of quite some controversy. Avitabile and Demichelis critically assess the proposal put forward by Gürol Irzik and Faik Kurtulmus (2019), which they claim is largely correct and yet incomplete, since it does not fully take into account epistemic responsibility. Epistemic responsibility, Avitabile and Demichelis argue, is a crucial dimension of an expert's trustworthiness, one which manifests itself in argumentative moves made by the expert operating in the public arena – moves that laypeople can directly assess. In particular, an epistemic responsible expert resorts to argumentative moves that do not hamper the public discussion and expose the expert to the risk of being contradicted not only by other experts providing contradictory testimony, but also by lay citizens, who can report the testimony of other experts. More specifically, on Avitabile and Demichelis' account, what is required of an epistemically responsible expert is the providing not of categorical testimony of the form "p", but rather, of reasoned testimony of the form "p, because q", which allows the discussion to move forward, for instance by the posing of questions concerning q. This way of operationalizing the notion of epistemic responsibility, Avitabile and Demichelis maintain, allows one to properly acknowledge laypeople's role as legitimate interlocutors in public debates – a key ingredient of Feverabend's free society.

As Avitabile and Demichelis openly declare, they are much more confident than Feyerabend ever seemed to be in the possibility to build actual, substantial public trust in scientific experts. Their essay then exemplifies a thread that runs through all the contributions to the present Focus. In fact, the papers briefly introduced here vividly show that despite their flaws and limitations, Feyerabend's ideas continue to be relevant to this day, since they provide us with precious material to continue to perfect our thinking on, among many other things, the role of experts in democratic societies.

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