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COMETS

CNRS Ethics Committee

OPINION n°2023-44

« Freedom and Responsibility: Academic Researchers' Public Advocacy »

Approved at the plenary session of 23 June 2023

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I. SUMMARY

Academic research staff have long been advocates of various causes in the public arena; researchers taking normative positions regarding various moral, political or social issues is nothing new. Today, however, given the many challenges facing our society, the question of public advocacy[1] by researchers has taken on a new dimension. Many of them get involved to support causes or take a stance on societal issues - the fight against pandemics, environmental degradation, the rise of surveillance technologies, and so on. They do so in a variety of ways, from signing op-eds to contributing to the work of NGOs or think tanks, supporting legal action or writing blog posts. Moreover, the development of traditional and social media has significantly increased the public exposure of committed researchers.
At the same time, many in the research community are questioning the modalities of such forms of engagement in the public sphere, its appropriateness and the very idea of it. They wonder whether and how to engage publicly without risking their reputation and the values shared by their research communities, without departing from the neutrality traditionally expected of researchers, and without jeopardising impartiality or credibility.

The present opinion has been written with this context in mind. The result of a self-referral within COMETS, it aims to provide researchers with keys to understanding and ethical guidelines concerning public advocacy.

COMETS emphasises is that there is **no incompatibility between, on the one hand, a researcher's public advocacy and, on the other, the norms attributed to or effectively applicable to research.** This applies in particular to the idea that science is 'neutral', which is often considered an essential condition for the production of objective, reliable knowledge. While we agree with the need to distinguish scientific facts from opinions, it would be naive to think that any researcher could ever entirely set aside their values: all science is a human endeavour, embedded in a social context and, as such, is imbued with values. The main challenge is not to expect researchers to be free of values, but to encourage them to identify and state them explicitly, and to respect the requirements of integrity and rigour that must characterize the scientific process. Research in the public sector requires some form of neutrality on the part of the researcher, however this obligation does not, in principle, stand in the way of intellectual freedom and critical thinking that are an integral part of research work. Similarly, this neutrality does not preclude their involvement in societal debates in which they potentially have a valuable part to play as specialists in their field.

COMETS then believes that public advocacy should be understood as an individual freedom, in two ways:

- on the one hand, each researcher should remain free to decide whether or not to engage in public debate; the fact that they choose not to take a stance in the public sphere does not constitute a breach of any professional or moral obligation incumbent upon them;
- and on the other hand, the researcher who does engage does not necessarily have to solicit the support of broader communities (research groups, scholarly organizations, etc.), even if COMETS

[1] As defined in more detail in the Opinion, 'public advocacy of researchers' is to be understood as 'any public intervention by an academic researcher or a group of academic researchers, whose authority is linked to their position in the scientific field and whose content has a normative aspect, i.e. an evaluative or prescriptive stance on moral, political or social issues'. It is therefore both wider than the classical understanding of 'advocacy' and different from what is referred to as 'public engagement' in English-speaking countries, a commonly required academic activity that has already been widely discussed and documented. To avoid repetition, the terms 'engaged' or 'committed' will also be used.

considers that providing a collective basis for engagement has many advantages (shared reflection, impact of the message delivered, greater protection for the researcher, etc.).

While it constitutes a freedom, commitment to a cause also requires researchers to be aware of the need to take responsibility, not only in terms of legal liability, but also in terms of moral responsibility, due to the credibility conferred by their status and the in-depth knowledge it entails. Indeed, in taking a public stance, researchers are potentially putting their academic reputation and career at risk; they are also involving the reputation of their institution, as well as that, to a certain extent, of academic research as a sector, and, more generally, affecting the quality of the public debate to which they are contributing or that they intend to provoke. Researchers enjoy a unique position that lends unique weight to their words. They must make sure to put this position to the service of the community, and not to abuse it. **COMETS explicitly states that all public advocacy must involve fulfilling certain duties.**

These duties primarily concern the way in which researchers express themselves publicly. In the wake of COMETS Opinion 42 issued on the occasion of the COVID-19 crisis, COMETS reiterates that **researchers must express themselves not only in compliance with the rules of law** (defamation laws, etc.), **but also by offering their audience the opportunity to put their speech into context, at the very least to avoid being misled**. To this end, researchers must:

- 'situate' their statements: are they speaking in their own name, in the name of their research community, or of the organization to which they belong? What is their field of expertise? Are they an expert on the issue on which they are taking a position? What links of interest do they have (with a particular company, association, etc.)? What values underlie their statement?
- put their statement into perspective: what is the status of the scientific findings on which they are relying? Are there any remaining uncertainties? Are there any controversies?

COMETS is aware of the practical difficulties involved in implementing some of these standards (limited speaking time in the media, limited space in written forums, etc.). **However, respecting them is an objective that researchers must systematically strive to achieve.**

Before expressing themselves publicly, researchers must also reflect on their legitimacy to do so. In addition, the knowledge on which the researcher bases their engagement must be sound and must rely on a rigorous scientific approach. Whether committed or not, they **must obey the traditional requirements of integrity and rigour applicable to the production of reliable knowledge - description of the research protocol, referencing of sources, availability of primary findings, peer review, etc.** COMETS reiterates that these requirements are the necessary corollary to the freedom of research, which is a professional freedom, and that nothing, not even the defence of a cause, however noble, justifies compromising these rules or settling for unestablished knowledge. Far from preventing researchers from asserting an idea forcefully in the public arena, these requirements are, on the contrary, an essential component to public advocacy, which can otherwise easily be labelled as activism or militancy.

In order to provide those wishing to become involved with concrete guidelines and tools, COMETS invites the CNRS to work with research staff to draw up a guide to public advocacy. While there are already a number of texts that set out the rights and responsibilities of researchers - the researcher charter, codes of ethics, the COMETS opinions, etc. - they are found in different places, are often difficult to interpret (with respect to the obligation to be neutral, for example) and are difficult to apply in practice (declaration of conflicts of interest in the media, etc.). **A guide to public advocacy should make it possible to provide legible, concrete and realistic content for these standards, which may appear deceptively simple when in fact quite difficult to understand and apply.**

COMETS recommends that the CNRS considers drawing up such a guide in conjunction with other research organizations currently examining the issue. The guide should also be accompanied by initiatives to raise the awareness of researchers on the implications and practical aspects of public engagement (including media training).

Lastly, COMETS has considered the **more general position of the CNRS with regard to public advocacy. COMETS takes the view that, in general, the CNRS should neither encourage nor condemn *a priori* the engagement of researchers, nor should it police such engagement in any way**.

In practice:

- researchers should not be penalised for their public advocacy. The evaluation of a researcher's research activity should focus solely on their research work, and not on any potential statements made in public;
- when public advocacy leads to controversy, it is not the role of CNRS management to intervene in such matters, which should remain primarily a matter of scientific debate among peers;
- **on the other hand, the CNRS must intervene in the event that a researcher breaches integrity or deontology** (when applicable, the relevant officers should be called in), **or in the event that a researcher breaches the legal limits on freedom of expression** (defamation laws, etc.); similarly, the institution should intervene to support engaged researchers who are the subject of personal attacks or gag rules.
- **in the event that a researcher engages in actions of civil disobedience,** the CNRS should not take the place of police or judicial institutions. It should not condemn such actions *ex ante*, nor should it take on the role of the courts and penalize them. *A posteriori*, in the event of a ruling in criminal court against a researcher, the CNRS may consider that its intervention is required and impose a sanction.

More generally speaking, COMETS encourages the CNRS to protect and promote the freedom of expression of its staff. It is indeed the responsibility of research institutions and communities to support the constructive confrontation of ideas, which is based on freedom of expression.

If the CNRS were to decide to take a stance as an institution, i.e., if it were to take public, normative positions on societal issues, COMETS considers that it would have to respect the rules that apply to researchers - making its position clearly known, explaining the objectives and values that underpin it, etc. The institution's position should also be open to debate within the institution.

CONTENTS

I. SUMMARY **2**

CONTENTS **5**
II. ANALYSIS **6**
A. Researchers' public advocacy in question **6**
1. Context 6
2. Scope of the Opinion 8
B. From age-old story to renewed reality **9**
1. An age-old story 9
2. A renewed reality 11
C. Public advocacy and research: no incompatibility in theory **12**
1. An attack on the neutrality of science? 12
2. Transgressing the boundary between science and politics? 13
3. A breach of the legal and ethical standards applicable to research? 14
D. Freedom and responsibility: an ethics for researcher's public advocacy **17**
1. Individual freedom 17
2. Advocacy that is 'situated', honest, and scientifically rigorous 18
E. The role of research communities and institutions **21**
1. A guide to public engagement 21
2. The position of institutions with regard to the researcher's public advocacy 22
3. A committed institution? 23

III. RECOMMENDATIONS **24**

IV. QUALIFIED PERSONS CONSULTED **26**

V. LIST OF ACRONYMS **27**

II. ANALYSIS

A. Researchers' public advocacy in question

1. Context

There have never been so many issues prompting researchers to make public statements, in keeping with the multiple challenges currently facing our societies. Many academic researchers, at various stages of their careers[2] get involved to defend causes or take a stance on societal issues, whether it be the fight against pandemics or endocrine disruptors, the erosion of biodiversity, climate change, the development of artificial intelligence or the rise of surveillance technologies.

In the wake of the environmental crisis and the COVID-19 pandemic, the question of researchers' public advocacy has become a central issue in the world of research, and for society in general. Public advocacy by researchers has now become a major research topic and has given rise to an abundance of academic literature, at the crossroads of philosophy, history, sociology and the anthropology of science.[3]

Advocacy has even become a watchword for some in the research community. Particularly alarmed by what they perceive as a form of inaction with respect to climate change, a number of peers have called on their colleagues to act,[4,5] arguing that they have a 'moral duty' not only to take their knowledge into the public arena and alert society, but also to put pressure on political stakeholders, which may include illegal acts or "civil disobedience". Universities (such as the University of Lausanne[6]), scientific journals (such as The Lancet Planetary Health) and expert groups (such as the IPCC) are also acknowledging the virtues of public advocacy by researchers, and even encouraging them to follow this path.[7]

This mobilisation has given rise to various collectives and activist groups among academic researchers. In France, these include the *Mouvement pour les savoirs engagés et reliés*, the *Ateliers d'écologie politique*, the *Labos 1point5* collective, the *États généraux des sciences et techniques engagées* 'for greater social and economic justice', and groups such as *Effisciences* and there are many others internationally, such as *Scientist's Rebellion*. In keeping with the tradition of politicising science (in the sense of involvement in the community, i.e. not necessarily partisan), these movements provide numerous examples of scientists publicly advocating - via petitions, forums, blogs, interviews,

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[2] In this opinion, the term 'researcher' is taken to mean 'all the men and women who contribute to academic scientific research: scientists, professors, technicians, post-doctoral fellows, PhD students, etc.'.

[3] L. Messling, 'How should climate change scientists engage in policy advocacy?', Doctoral Dissertation in Political Science, University of Reading, 2020; M.-P. Nelson and J. A. Vucetic, 'On Advocacy by Environmental Scientists: What, Whether, Why, and How', *Conservation Biology*, vol. 23, n° 5, 2009; L. Brière, M. Lieutenant-Gosselon and F. Piron, Dirs., *Et si la recherche scientifique ne pouvait pas être neutre ?*, Québec, Ed. Science et bien commun, 2019.

[4] Op-ed 'Les climatologues sont aussi des citoyens et des êtres humains qui doivent pouvoir s'exprimer librement,' *Le Monde*, January 27, 2023.

[5] On these calls to advocacy, see, J. Tollefson, Nature, n° 599, 2021; J.-F. Green, *Deadalus* n° 149, 2020, N. Oreskes, 'What Is the Social Responsibility of Climate Scientists?', Ibid; W. J. Ripple, et al, 'World Scientists Warning of Climate Emergency', *BioScience*, 70 (1), 8-12, 2020.

[6] UNIL Report: Report of the Task Force on Research and Engagement, 2022.

[7] The IPCC's 6th Assessment Report stresses that forms of engagement involving direct confrontation (boycotts, demonstrations, civil disobedience) help shape climate policies.

demonstrations - for more proactive public action on climate change, or in favour of a more ambitious policy on pesticides, for example. In so doing, they join the ranks of researchers who have long publicly supported a wide range of causes, from workers' struggles to anti-nuclear movements and women's rights and gender equality.

But the advocacy promoted by these movements and collectives raise profound questions. Strictly speaking, these questions are not new, as advocacy has long been the subject of debate and criticism. In the political arena, for example, we regularly hear the antiphon that some research, particularly in the human and social sciences, is tainted by ideology and confuses scientific methods with political opinions. Recently, a French Minister of Research declared that she wanted to order an inquiry into what, within the world of higher education and research, 'is academic research (...) and what is activism and opinion'. In certain disciplines, such as sociology, the question of the 'politicisation' of research and the risks this may entail in terms of 'scientificity' regularly divides the discipline and fuels, both in France and abroad, oppositions between different research traditions.

But it is now in the scientific community as a whole, even in disciplines where it has not traditionally been raised, that the question of advocacy is giving rise to significant study and debate. Many researchers are questioning both the modalities of public advocacy and the very idea of it.[8] Does making a public statement not undermine the credibility of one's research work, and expose one's reputation, career and the values shared by the scientific community? Does this not imply departing from the neutrality traditionally expected of scientists, transgressing the boundary between science and politics, and abusing the authority and legitimacy conferred by the status of researcher? How can we avoid being unwittingly or unwillingly involved (in particular by our listeners or readers, who see, or believe they see in our statements the promotion of certain values deemed to be partisan)? How can we prevent our commitment from being instrumentalised and our intentions from being distorted? We can only note the questions expressed publicly by a number of researchers[9]: 'As an ecologist, I have observed the destruction of biodiversity in the same way a medical researcher would study a disease; I am currently very upset about the collapse of the living world, and I am committed to the cause, but am I still an ecologist or have I become an environmentalist?'; 'What is my role as a scientist, and as a citizen?'; 'Faced with the environmental challenges ahead, should my priority be to publish in prestigious journals, or to put pressure on politicians?'.

As research communities and institutions are regularly called upon to react to public statements or actions by 'their' researchers, they often wonder whether and how they should position themselves on a given issue. Should they accept that researchers, by signing op-eds or articles, 'embroil' the institution in their stance? Should they support those who do? And should they prohibit or sanction certain forms of advocacy or activism?

Taking a public stance and advocating for a cause is not an obvious part of academic research. When asked to choose between 'neutrality' - in the sense that scientists could communicate in their field of specialisation but 'without expressing their opinions' - and advocacy - in the sense that scientists are 'citizens like any others, and it is only natural for them to express their opinions' - 53% of the 2,100 CNRS researchers surveyed in 2022 preferred 'neutrality'.[10]

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[8] 'Éthique et responsabilité de l'engagement public des scientifiques du climat et de l'environnement de l'IPSL', Progress report, summer 2021 ; D. Boy, M. Dubois and C. Guaspare, L'intégrité scientifique et l'éthique de la recherche à l'épreuve de la crise COVID-19, Paris, 2022; Dissertation by Lydia Messling, op. *cit*.

[9] A. Garric, 'Savants ou militants? Le dilemme des chercheurs face à la crise écologique', *Le Monde*, 9 March 2020.

[10] D. Boy et al, *op. cit*. - 36% favour the exercise of freedom of expression, and 10% are undecided.

It is against this backdrop of profound internal questioning in the world of research that the present opinion, the result of a self-referral by COMETS, has been drawn up. **As COMETS is convinced that researchers have a crucial role to play in social debates, it proposes a number of points of reference and guidelines to help those involved in research better navigate the question of public advocacy.** It aims for those who wish to partake in public advocacy to do so in accordance with the values associated with research, and in a safe and responsible manner.

To this end, the opinion begins by pointing out that public advocacy by researchers is by no means a new phenomenon, even if it is now taking on new forms (B). It then analyses why there is, in principle, no incompatibility between public advocacy and the values associated with research (C). While the present opinion highlights the positive aspects of advocacy in science, it does so on the condition that it is set within an ethical framework, that it combines freedom and responsibility, so that it actually achieves its objective, which is to serve the interests of society (D). Finally, the opinion outlines a number of avenues to be explored by research institutions and communities (E).

2. Scope of the Opinion

Public advocacy is defined here as 'any public intervention by a researcher or a group of researchers, whose authority is linked to their position in the scientific field and whose content has a normative aspect, i.e. an evaluative or prescriptive stance on moral, political or social issues'.[11] In accordance with this definition of advocacy, the researcher takes a position - more or less explicitly, more or less consciously and even, sometimes unwillingly - in the field of judgment, prescription or criticism, with the aim of persuading others to act.

The scope of advocacy thus delimited, the opinion encompasses multiple and varied forms of public advocacy and mobilization on political, 'epistemic'[12] or other issues, and those experienced by researchers as being 'beyond conventional academic work'. This includes taking a public stance in the media or orally, signing an op-ed, posting on a blog, being an activist, a militant or an advocate, alerting public authorities or the media, supporting legal action against the state or a private company, and so on.

On the other hand, the definition we have chosen deliberately leaves out certain approaches which are certainly a form of engagement, but which more often than not do not constitute a normative stance and do not give rise to the questions or divided reactions that are of interest to the present COMETS study. These other forms of engagement, such as the decision to pursue a career as a researcher, the choice of a research topic considered to be 'meaningful', the popularization and mediation of science, scientific expertise for policy-making purposes, dialogue with citizens, scientific mediation an education, the refutation of false information and other fake news, participatory research in collaboration with associations or other stakeholders, and involvement in unions will not be at the heart of the opinion, even if they are in the background, and are sometimes affected by the messages and recommendations

[11] In this opinion, COMETS has adopted the definition proposed by the UNIL report *op. cit*. to which it subscribes. The notion of advocacy (*engagement public* in French) is preferred to that of activism or militancy, which can be pejorative and tends to conceal the often virtuous dimension of advocacy (defending a cause); moreover, it is different from British or American 'public advocacy, which also includes 'citizen science' or 'involved science', even if there is a partial overlap. 'Public advocacy' as used in this opinion is therefore both wider than the classical understanding of 'advocacy' and different from what is commonly referred to as 'public engagement' in English-speaking countries, a much required academic activity that has already been widely discussed and documented. See note 1.

[12] For example, a researcher who calls for more research in a given scientific field, or who defends the teaching of their discipline; the normative dimension may in fact concern knowledge itself.

formulated in this opinion.[13] They demonstrate that researchers do not have the sole mission of producing knowledge in a confined world that would be their laboratory, but that at every phase of the scientific process, there are multiple interactions with society, and that the involvement of researchers in the social arena is consubstantial with scientific work.[14] In particular, they reveal a transformation in the way scientists take on social responsibility through their research, in line with the challenges facing society. They are a commitment in line with the public interest to conduct 'relevant' research. While scientists' main motivations remain curiosity and the desire to understand, increasing importance now seems to be given to the 'desire to be of service to society' or 'to change the world', while the 'desire to be the best, to compete with other researchers' is losing ground.[15]

B. From age-old story to renewed reality

While the public advocacy by researchers is a long-standing phenomenon, as the history of science has shown, it is also part of a new context, the main features of which need to be highlighted.

1. An age-old story

Public advocacy by researchers is a long-term reality. There are many examples of researchers taking public stances in an attempt to influence public policy. Without intending to give a complete overview, here are a few highlights.

Social sciences and humanities, by virtue of their objects of research - the history of the working class, the place of women in the labour force, poverty, end-of-life care, etc. - as much as by their scientific methods - field surveys in particular - have often been presented as 'engaged' by definition, responding by their very nature to socio-political questions that it would be difficult not to take a stance on. A number of social science researchers have embraced this situation, asserting their determination to produce knowledge that promotes emancipation. Examples include the sociologist Pierre Bourdieu, who eventually became engaged on behalf of the social causes he studied; the jurist Alexandre Kiss, who forged the concept of the common heritage of mankind and put it to use in the service of ecology; the historian Madeleine Rebérioux, whose militant engagement with the French communist party underpinned all the research into the history of the workers' movement[16]; and the linguist Noam Chomsky, known for his stance against the Vietnam War and the power of the mass media.[17]

Economists who advocate for the 'dismantling of the welfare state', or legal scholars opposed to laws on remembrance or even same-sex marriage, can also be considered as engaged researchers.

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[13] For example, the attitude of engagement considered in this opinion does not concern that of the expert, who generally does not intervene in the public arena; the fact remains that some experts take a public stance on the normative consequences they feel should be drawn from their work, and in this capacity defend an 'action agenda'.

[14] In this sense, L. Coutellec, 'Penser l'indissociabilité de l'éthique de la recherche, de l'intégrité scientifique et de la responsabilité sociale des sciences', in *Revue d'anthropologie des connaissances*, vol. 13, 2, 019. Several phases can be distinguished in the scientific process, even if they overlap and are sometimes highly interdependent.

[15] D. Boy, *et al. op. cit.*

[16] M. Rebérioux, 'Militantisme et recherche historique', *Questions de communication,* no. 4, 2003, p. 279.

[17] N. Chomsky, *Une vie de militantisme*, interviews with Charles Derber, Suren Moodliar and Paul Shannon, trans. by Nicolas Calvé, Éditions Écosociété, 2022.

In natural sciences, there are many examples of engaged researchers. One emblematic example is that of scientists who, like Marie Curie[18], took a stand in favour of peace and against the use of science for military purposes. Examples include Robert Oppenheimer and Hans Bethe, who, after helping to develop the nuclear bomb, campaigned against its use[19]; *Science for the People*, the result of a divide within the American Physical Society, which was opposed to the Vietnam War; the *Union of concerned scientists* in the United States in the 1960s; biologists who, in the 1970s, campaigned in favour of 'abortion'[20]; or, closer to today, ecologists and agronomists taking a stance for or against GMOs.

These different examples illustrate a number of types of advocacy. Science historian Christophe Bonneuil, for example, has identified three main types of advocacy[21], which he associates with three periods: up until the 1960s, the engaged researcher was 'representative of the universal', in the sense that they mobilised their scientific mind in the name of education and the public interest; this was followed by a more collective form of advocacy, until the 1980s, corresponding to the years of debate over the social responsibility of science. Since then, the whistle-blower has become the dominant figure, using their scientific knowledge to denounce the risks and false promises associated with scientific and technical developments. In all three cases, the researcher's actions are part of an ongoing engagement, involving lobbying for the funding of a particular research project, influencing the method and content of expert reports, influencing scientific and technical choices, using their expertise and freedom of speech to assess the effects of the techniques and processes of production, and bringing the issues at hand to the attention of the public.

Some, such as Pierre Cornu, see the First World War as the catalyst for scientific engagement, since it led to the first questioning of science, due to the mechanical and chemical weapons it produced.[22] Others insist on the turning point that came with the 1930s, marked by the determination of engaged scientists, in particular in the Rationalist Union, as well as in the Communist Party, to 'advocating for science'[23] and to lay an institutional foundation for research. The post-Second World War era and the ebullience of the 1960s are also important milestones.

In reality, and beyond these few temporal milestones, the various models of advocacy do not follow a strict chronological sequence, but have tended to coexist even up to the present day.

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[18] Marie Curie is often quoted in this context, even if her position was rather reserved: 'Since I'm not in the habit of speaking publicly when it is not to deal with scientific matters, I attach great importance to ensuring that any opinion expressed publicly and engaging my responsibility be entirely in line with my thoughts and absolutely sincere. I acknowledge that honest expression of thought may, in the times we live in, appear to be a citizen's duty, but I believe that when scientists embark on this path, their actions will best serve if they conform all the more closely to their usual methods of action', 'Letter to Henri Barbusse, 15 May 1919', edited by M. Pinault, *Marie Curie, une intellectuelle engagée,* Clio, 2006.

[19] S. Schweber, *In the Shadow of the Bomb: Oppenheimer, Bethe, and the Moral Responsibility of the Scientist,* Princeton University Press, 2007; H Bernas, *L'île au bonheur*, Le Pommier, 2022. Furthermore, the *Bulletin of Atomic Scientists* or the Pugwash Movement demonstrate the sustainable engagement of a larger community.

[20] J.-P. Gaudillière, 'Intellectuels engagés et experts : biologistes et médecins dans la bataille de l'avortement: Engagement public des chercheurs', *Natures sciences sociétés*, 14, 2006, 239-48.

[21] C. Bonneuil, 'Introduction. De la République des savants à la démocratie technique : conditions et transformations de l'engagement public des chercheurs', *Natures Sciences Sociétés*, 14, n° 3, 2006, p. 235-38 ; C. Bonneuil, 'Cultures épistémiques et engagement public des chercheurs dans la controverse OGM', *Natures Sciences Sociétés*, 14, n° 3, 2006, p. 257-68.

[22] A. Dahan and D. Pestre, dirs, *Les sciences pour la guerre, 1940-1960*, Éditions EHESS, 2004.

[23] S. Laurens, *Militer pour la science*. *Les mouvements rationalistes en France, 1930-2005*, Éditions EHESS, 2019.

2. A renewed reality

While public advocacy by scientists is not a new phenomenon, the context in which it is currently taking place has nonetheless been renewed in several respects.

First of all, scientific issues have come to play an increasingly important role in the public arena. Researchers are more frequently approached by the media than ever before. They are invited to take part in sometimes polarising public debates, and even to 'take a stance' in spite of themselves. At the same time, the development of social media has considerably boosted the exposure of researchers, who are becoming more and more present in these spheres. This can contribute to a blurring of the boundaries between the spheres of professional and personal communication, since the establishment of scientific facts is not the priority of these arenas. We might also mention the COVID-19 crisis, which brought out strong ideologically driven expressions of opinions related to healthcare policy and certain excesses in scientific discourse (on this point, see COMETS Opinion 42).

Second, in the face of the global environmental and health challenges facing our society, many researchers see the need for public advocacy as ever more pressing. For them, it's first and foremost a question of contributing to public debate, with the aim of persuading others to act. Others who are more concerned with the integrity of their discipline, speak out in response to challenges to research findings, so that they can be properly and relevantly applied in society.
Finally, fearing that the bond of trust between science and society is in crisis, and that the voice of science is becoming less and less audible in the world of politics, more and more scientists intend to be present in the public arena and engage in action. This is the rationale behind the activism of some climate scientists, who support legal action taken against the state or call for a 'less neutral'[24] IPCC. They assert that they are not seeking to take the place of decision-makers, but believe that rigorous scientific analysis does indeed have a place in the political and legal arena.

It is at the crossroads of these different factors that we ought to understand the 'involved' or 'engaged' science movement, which aims not only to include citizens in the production of knowledge and the elaboration of research questions ('participatory' or 'citizen science'), but also to cast an outside eye on the 'relevance' of science, its social effects and its framing, to ensure that it responds to issues of actual interest to society. It's in this spirit that 'political ecology workshops' are being developed, and that some researchers are calling upon a 'moral duty to get involved'.[25] In the same vein, many researchers are eager to contribute to the activities of NGOs, think tanks and foundations. Whether in biology, climate science, urban geography or other fields, they intend to put their knowledge to work for society and nurture their own engagement in the community.

To a certain extent, this development has been recommended by the institutions and public authorities themselves. Under the terms of article 2 of the November 1982 decree on the structure of the CNRS, researchers are required to carry out 'research of interest to the advancement of science, as well as to the economic, social and cultural progress of the country'. More recently, the preparatory work for the French research programming law of 24 December 2020, noting that citizens are no longer satisfied

[24] K. Brysse, et al., 'Climate change prediction: Erring on the side of least drama?', *Global Environmental Change*, 23, 1, 327–337, 2013.
[25] There are countless sources on these research developments. See, for example, D. Pestre, *À contre-science : Politiques et savoirs des sociétés contemporaines*, Seuil, 2013 ; L. Coutellec, *La science au pluriel : Essai d'épistémologie pour des sciences impliquées*, Éditions Quae, 2015; L'Atelier d'écologie politique toulousain (Atécopol), « *Pour un engagement scientifique*, Atécopol », in *Natures Sciences Sociétés* 2021/3 (Vol. 29), pages 326-333.

with ‘top-down’ scientific discourse, called on researchers to ‘engage in genuine dialogue through which scientific knowledge as well as analyses of its limitations, doubts and questions are expressed’.

This brief historical analysis reveals that the public advocacy of researchers is recognized for its potential contribution to public policy and society at large: stimulating democratic debate, enriching it with informed points of view - whether considered progressive or conservative - combating misinformation and scientific relativism, encouraging society to question itself, encouraging a diversity of policy ideas and the production of new knowledge likely to help address contemporary challenges.

C. Public advocacy and research: no incompatibility in theory

In addition to the challenges of ‘involved’ or ‘engaged’ science, other challenges often arise from the values and standards traditionally attributed to, or applicable to, the activity of research. The imperative for science to confine itself to the field of knowledge, while remaining free of all values (‘remaining neutral’) and without encroaching on the realm of politics, seems to attribute to research a mission and a role in society which, at first glance, may appear to be incompatible with public advocacy.

In effect, science is never completely free of values, and public advocacy is fully compatible with the legal and ethical obligations imposed on researchers.

1. An attack on the neutrality of science?

One of the concerns often raised by public advocacy by researchers is that it can undermines scientific ‘neutrality’. Neutrality is often understood as an imperative to set aside one’s own opinions and values in order to do ‘good’ science and produce objective knowledge. Personal subjectivity should be removed from scientific reasoning, which should be based solely on objective facts and reasoning. This is generally seen as a guarantee of researchers' impartiality.

The concept of neutrality emerged gradually and became central in the 20th century, both in the natural sciences and in the social sciences.[26] In the philosophy of science, both Hans Reichenbach and Karl Popper distinguished between the ‘context of discovery’, which can be influenced by a number of historical and personal contingencies, including values, and therefore cannot be neutral, and the ‘context of justification’ (the administration of proof), which can and must tend to remain impartial.[27] Max Weber, in *The Politician and the Scientist*, spoke of axiological neutrality - i.e., neutrality as a fundamental value - that should more accurately be called the ‘non-imposition of values’[28], i.e., literally, the need for the ‘scientist’, particularly in their role as teacher, to keep their political convictions at a distance from their teaching, and not to surreptitiously impose them. [29]

[26] S. Carvallo, ‘L’éthique de la recherche entre réglementation et réflexivité’, *Revue d'anthropologie des connaissances*, 13, 2, 2019.
[27] Setting aside one's values in the upstream (choice of subject, funding, etc.) and downstream (valorisation, mediation, public debate, expertise, etc.) phases of knowledge production is therefore not an epistemological injunction; see H. Reichenbach, *Experience and Prediction*, The University of Chicago Press, 1938; K. Popper, *The Logic of Scientific Discovery* [1934], Payot, 1959.
[28] As shown, for example, in I. Kalinowski, ‘Neutralité axiologique’, *Encyclopædia Universalis* [online], consutled 23 November 2022.
[29] M. Weber, *Le savant et le politique* [1917], La Découverte, 2003.

Nonetheless, decades of research in the humanities and social sciences have shown that it is in fact impossible for scientists to completely set aside their social and cultural values, even in the scientific reasoning phase.[30] Indeed, all science is embedded in a social context, and is therefore informed by a multitude of values. For example, Charles Darwin, to whom we owe the theory of evolution, put forth erroneous conclusions about the natural inferiority of women or certain races, which reflected the prevailing ideas of his time. Still today, the world of research is permeated by values such as respect for human dignity, duty towards animals, preservation of the environment and open science. As for the researchers, they are necessarily bound up with social and cultural values that are impossible to totally discard when conducting research.

To therefore ensure that the knowledge produced is reliable and unbiased, rather than expecting researchers to divest themselves of all beliefs, we need to ensure that their work is rigorously supervised. The reliability of scientific knowledge depends on careful, honest and scrupulous compliance with the standards of scientific integrity and ethics, as well as with the methodological tools of the scientific approach, under the supervision of peers. The results of scientific research, the data on which it is based, the methods it uses, its presuppositions and reasoning must be open to discussion in areas recognised by peers. This is the only way to ensure that knowledge is produced as objectively as possible, while at the same time correcting any biases linked to values.[31] As for these values, they must be identified and stated explicitly to ensure the work and conclusions of researchers can be put into perspective.

Rather than the notion of neutrality, which is fragile and ineffective in distinguishing what is scientific from what is not, we should adopt the notions of reliability, the quest for objectivity, the integrity and rigour of the scientific approach, and the transparency of values. Provided these conditions are met, there is no incompatibility with researchers' public advocacy.

2. Transgressing the boundary between science and politics?

Beyond the 'neutrality' of science, the public advocacy of researchers raises more general questions about the relationship between scientific knowledge and political power.[32] On this point, it is generally agreed that the separation of ‘science’ and ‘politics’ is an essential principle of modern political thought. Scientists simply produce facts and should not interfere in political issues.

This idea is strongly asserted with regard to scientific expertise for public decision-making purposes. When scientists are in the position of experts, they are limited to providing the authority responsible for making decisions with the relevant scientific knowledge, or to formulating an opinion on potential decision-making scenarios, but they never venture further into the political arena so as to avoid any confusion of issues or responsibilities. It is precisely for this reason that we fear and seek to limit conflicts

[30] H. Putnam, *The collapse of the fact/value dichotomy and other essays?* Harvard University Press, 2002 ; D. Pestre, *Introduction aux Science Studies*, La Découverte, 2006 ; B. Latour, *L’espoir de Pandore. Pour une version réaliste de l'activité scientifique*, La Découverte, 2007 ; P. Kitcher, *Science in a Democratic Society*, Prometheus Books, 2011. L. Brière et al., *Et si la recherche scientifique ne pouvait pas être neutre?*, *op. cit*.

[31] See in particular H. Longino, *Science as Social Knowledge*, Princeton University Press, 1990; *The Fate of Knowledge*, Princeton University Press, 2002, pages 129-131.

[32] P. Ricoeur, ‘Interview’, *Le Monde*, 29 octobre 1991 ; J. Chevallier, ‘L’entrée en expertise’, *Politix,* n° 36, 1996 ; M.-A. Hermitte, ‘L’expertise scientifique à finalité politique, réflexions sur l’organisation et la responsabilité des experts’, *Justices*, n° 8, 1997; P. Lascoumes, ‘L’expertise, de la recherche d’une action rationnelle à la démocratisation des connaissances et des choix’, *Revue Française d’Administration Publique,* n° 103, 2002 ; F. Bellivier and Ch. Noiville, *Jeux d’acteurs, jeux de miroirs. Comment prendre une décision politique responsable?* in ‘Droit sciences et techniques, quelles responsabilités?’, Litec, collection colloques et débats, 2011.

of interest on the part of experts. Such a separation between expertise and decision-making has its rationales and its advantages. Firstly, it aims to prevent the risk that, on controversial matters, scientists will act as a guarantor or alibi for politicians, or that they will be delegated decisions that politicians are reluctant to take and to take responsibility for. Secondly and most importantly, only governments have the legitimacy to take decisions that require choices to be based on scientific facts as well as on social, economic, cultural, ethical and other considerations. In particular, when scientists act as experts to shed light on the decisions to be taken, society expects them to provide as objective and comprehensive a review as possible of the state of the art (knowledge, uncertainties, scientific controversies, etc.) and not to act as decision-makers. A recent example is the (partly unjustified) criticism levelled at the French Scientific Advisory Board during the COVID-19 health crisis, precisely on the grounds that its members had acquired a quasi-decision-making role in the management of the crisis; this criticism is similar to the recurring criticism of epistocracy, a neologism denouncing a 'seizure of power' by experts that is 'fatal to democracy'[33]. Hence the ever-reiterated need to maintain a 'proper distance' between research, expertise and politics.[34]

But while the principle deserves to be upheld, in practice the boundary between science and policy is hardly watertight. First of all, even if the two fields - science and politics - obey very different logics and standards (objectives, timeframes, methods, etc.) and must be adequately coordinated (the functional separation of expertise and decision-making, for example, is crucial), one cannot claim that science is on one side and politics on the other. The production of knowledge is - and for some, should increasingly be - a political issue in the sense that it is of direct interest to society (should research be carried out on a given subject? How can it be carried out by involving knowledge other than scientific knowledge?). It is in this sense that new forms of discussion (hybrid forums, citizens' conferences, cross-fertilisation of knowledge, etc.) have proliferated over the last few decades as a result of confrontations in the field of nuclear energy, GMOs, environmental challenges, extreme poverty and so on. Moreover, the autonomy of the political is in no way challenged when a researcher, in a forum or through militant action, calls on public authorities to take a particular decision.

3. A breach of the legal and ethical standards applicable to research?

Finally, where do the legal and ethical standards that apply to researchers stand? Do they prevent advocacy? Certainly not, at least not in principle. Researchers enjoy considerable freedom of expression, which is one of the components of the freedom of research.[35]

This freedom is certainly not exercised without boundaries. Firstly, researchers are bound by the limits of ordinary law on freedom of expression – defamation, libel, and slander. Should they breach these laws, they may be penalised. Secondly, if the researcher in question is a civil servant, they are bound

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[33] J. Brennan, *Against Democracy*, Princeton University Press, 2017; A. Vialla, *Demain l'épistocratie*, Mare and Martin, 2022.

[34] See Opinion n° 10 (2017) the INRA-CIRAD-Ifremer Joint Consultative Ethics Committee (since the addition of the IRD in 2019, the committee has been called Éthique en commun), 'On the ethical dimension of major international agreements (objectives for sustainable development and climate policy)' ; according to point 3.1, the main ethical rule for researchers should be (paragraph 3) to 'no longer encroach on the citizen's responsibility'.

[35] As stated in the Law of 13 July 1983 on the rights and obligations of civil servants, freedom of expression is guaranteed by the French Constitution via article 11 of the Declaration of the Rights of Man and of the Citizen, which states that 'freedom of expression benefits every citizen and consequently every researcher'. Academic freedom is mentioned in article L 952-2 of the French Education Code, which states that 'academic freedom is the guarantee of the excellence of French higher education and research; it is exercised in accordance with the constitutional principle of the independence of academics'. Freedom of expression is also guaranteed by the European Convention on Human Rights. On academic freedom of expression, see O. Beaud, *Le savoir en danger. Menaces sur la liberté académique*, PUF, 2021.

by the terms of the French Law of 13 July 1983 on the rights and obligations of civil servants, which is incorporated into the General Civil Service Code. The latter stipulates that civil servants must respect ethical obligations, in particular in terms of 'probity, integrity, secularity, conflicts of interest, independence, impartiality, reserve, neutrality and objectivity' - we will come back to the meaning of this reference to neutrality in a moment. Researchers cannot, therefore, give free rein to the expression of their personal opinions. In particular, the obligation to remain discreet should encourage them to show restraint in the way they express themselves and to be loyal to the institutions to which they belong, failing which they may be liable to disciplinary action. For example, they are obliged to express themselves with restraint about their administration and any disagreements they may have with it.

Nonetheless, researchers' freedom of expression guarantees them a great deal of freedom of speech, which in practice is hardly ever restricted by the legal and ethical rules in force. Researchers must of course 'respect an obligation of neutrality', a notion affirmed by research ethics codes in a somewhat ambiguous manner.[36]
However, under the terms of the law (article L121-2 of the *Code Général de la Fonction Publique*) and case law, the notion of 'neutrality' essentially refers to the functions that the researcher is required to perform as an agent: when recruiting one person rather than another, they must set aside any political, religious or ideological considerations; nor must they compromise the exercise and functioning of the institutions through excessive actions or remarks. In short, the neutrality of public service prohibits researchers from basing a decision or statements about their staff, users or third parties on the opinions they or others in the organisation may have. It does not prohibit public service employees from holding or expressing such opinions, provided that certain conditions are met (tact and moderation, not implying that the employer endorses the statements, etc.). The legislator certainly did not intend for the duty of neutrality to be interpreted as preventing a researcher from taking a public stance on a particular social issue. Moreover, the obligation of neutrality does not stand in the way of the 'freedom and critical thinking, that are inseparable from the task of research' (CNRS Code of Ethics, art. 4). The law takes care to state that researchers enjoy 'full independence' and 'complete' freedom of expression in accordance with the principles of tolerance and objectivity.[37] The scope of the obligation of 'neutrality',

[36] See for example the communication section of the Code of Ethics for Research Professionals: 'Freedom of expression and opinion applies within the legal framework of the public service, with an obligation of discretion, confidentiality, neutrality and transparency on conflicts of interest. At every opportunity, researchers must state in what capacity, whether personal or institutional, they are intervening and distinguish between what belongs to the field of their scientific expertise and what is based on personal convictions. Communication on social networks must obey the same rules'. See also point 4 of the CNRS Code of Ethics: 'The obligation of neutrality implies that the behaviour of all persons participating in a public service mission (civil servants, contract staff, PhD students, apprentices and trainees), in the performance of their duties, should not be dependent on their political, philosophical or religious opinions. However, this obligation does not preclude the freedom and critical thinking that are inseparable from the work of research. It prohibits any discrimination on the grounds of origin, sexual orientation or gender identity, age, surname, family status, state of health, physical appearance, disability, belonging or non-belonging - real or supposed - to an ethnic group or a so-called race, or political, philosophical, religious opinions or connections to trade unions. The persons in question must refrain from using their position to express their personal political and philosophical opinions. However, they retain complete freedom of expression outside the CNRS, provided that they use a method of expression that does not discredit the CNRS. Thus, when they express themselves publicly as part of their mission, they must adopt a cautious and measured approach in what they say or write. As with the obligation of dignity, the intensity of this obligation varies according to the staff member's level of responsibility: the more senior their position, the more they must set an example. The obligation of neutrality also applies to religious beliefs, in accordance with the principle of secularity (...)'. Finally, see INRAE's Charter of Public Expression: '(...) the obligation of neutrality implies that, whatever the body to which one belongs, one must not use one's professional position or make use of it to publicly express personal opinions (whether philosophical, political, religious, etc.)'.

[37] Concerning article L.952-2 of the Education Code ('Academic freedom is the guarantee of excellence in French higher education and research. It is exercised in accordance with the constitutional principle of the independence of academics'),

like that of the 'duty of discretion', depends on the position of the civil servant within the hierarchy, on the circumstances in which they express themselves, and on the manner and form of that expression. Concerning researchers and academics, it has been established that they play a unique role in the public sphere that is conducive to democratic debate and self-reflection in our societies. For this reason, their freedom of speech is generally considered to be more extensive than that of ordinary civil servants, as demonstrated by the ruling of the European Court of Human Rights. It considers that this freedom 'is not limited to research (...) but extends to the freedom (of researchers) to express their views and opinions freely, even if they are controversial or unpopular, in their fields of research, of professional expertise and of competence'. Similarly, it stresses 'the importance of academic freedom, which authorises academics in particular to freely express their opinions on the institution or system in which they work and to disseminate knowledge and truth without restriction', which includes a right to criticise the State and its institutions.[38]

Ultimately, researcher advocacy may well come into conflict with some of the legal and ethical obligations imposed upon them, which calls for clarification. But COMETS notes that none of these obligations prohibits public advocacy in principle. The recommendations set out below are designed to ensure that researchers express themselves publicly in a responsible manner and in accordance with legislation.

One relevant example is civil disobedience, in which some researchers take part.[39] This type of action is illegal - which is the whole point - and divides the scientific world with respect to its relevance, effectiveness, and impact on the image of research in general. However COMETS does not disregard the arguments and ethical issues at hand when researchers resort to strategies involving civil disobedience. In a growing body of academic work in the social sciences, particularly in philosophy and law, some researchers have argued that, given the seriousness of the crises affecting our planet, civil disobedience constitutes a strategy likely to shift the balance where other legal actions have failed or have not worked quickly enough. They believe that civil disobedience is both pragmatically and ethically justified when it is used as a last resort to expose an unfair situation and when it represents the least harmful form of action in the light of the threat. Though the legal system, via the French *jurisprudence,* is far from clear-cut, it has recognised in certain actions of disobedience a form of civic expression and, in so doing, a means of expressing fundamental freedoms that can sometimes justify illegal action in the face of unfair situations or threats that are not properly dealt with.[40] At the very least, this situation should lead to (some) caution on the part of institutions, which should not condemn this type of engagement on principle and should only formulate an opinion on a case-by-case basis.

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the administrative judge recognises that professors and researchers have a great deal of independence, which may lead them to breach their duty of discretion.

[38] See European Court of Human Rights, Mustafa Erdoğan and others v. Turkey, applications no. 346/04 and 39779/04, judgment of 27 May 2014, and Sorguç v Turkey, application no. 17089/03, judgment of 23 June 2009. The law of Quebec on academic freedom in universities, adopted in 2022, states that the right to academic freedom in universities includes the right to express one's opinion on society and on an institution, including the institution to which the person belongs, as well as on any doctrine, dogma or opinion. It is specified, however, that this right must be exercised in accordance with the standards of ethics and scientific rigour generally recognised by the academic community and with due regard for the rights of other members of the academic community.

[39] M. Cervera-Marzal, *Désobéir en démocratie : La pensée désobéissante de Thoreau à Martin Luther King*, Aux forges de Vulcain, 2013.

[40] See for example Court of Cassation. Criminal Division, 22 September 2021, no. 20-85.434.

D. Freedom and responsibility: an ethics for researcher's public advocacy

COMETS believes that the public engagement of researchers is not incompatible with the rules that apply to them and that this engagement can make a real contribution to society, provided that two ethical requirements are respected. Firstly, freedom: each researcher must remain free to decide whether or not to become engaged, without any obligation. Secondly, responsibility: in order to genuinely serve the public interest and avoid undermining public confidence in science and scientists, committed researchers must act responsibly with regards to their status and authority as holders of specialised knowledge; this responsibility concerns both the way they express themselves and the knowledge they draw on. The challenge is to respect both the requirement for quality of knowledge (i.e. the facts, how things are) and the researcher establishing a normative point of view (i.e. how things should be, according to them).

1. Individual freedom

Public engagement must remain **a *personal* choice for researchers**. In the face of pressure or injunctions - from peers, from the media who sometimes expect scientists to have an opinion on everything and even label them as militants - the COMETS points out that there is no professional obligation to commit oneself in the sense defined in this opinion. This is a matter of individual choice. Researchers who choose not to take a stand in the public sphere[41] should in no way be judged as failing in their professional duties or in any moral obligation, even when their research concerns or intersects with divisive social issues that would 'by nature' require them to become engaged.

In the same vein, public involvement should be seen as **an *individual freedom*, in the sense that researchers should not be forced to seek support from groups**. Researchers who want to take a stand in the public arena do not necessarily have to seek the support of colleagues in order to do so.

This said, COMETS believes that there are certainly good reasons and advantages in seeking a collective platform for advocacy and, in so doing, mobilising more broadly, for example at the level of a laboratory, a given scientific community, or even large scientific bodies (learned societies, institutes). A collective approach brings many benefits (the exchange of ideas with peers, the message reaching a wider audience, less individual exposure for the researcher, less focus on an individual voice and therefore damage to an individual reputation within the research community, particularly in situations of low job security). Making a collective commitment can also make sense for scientific communities exercising media monitoring with a critical eye to rectify public statements that do not align with the current state of knowledge.

Organisations that operate on the boundary between science, society, and politics, and who work in one way or another to structure the interface between these spheres, can also provide support or even a framework for the public advocacy of researchers. These many 'boundary organisations'[42] (Regional Health Agencies, the *Royal Society* or *Wellcome Trust*, weather services, etc.) can represent useful relays for researchers looking to take a public position on a subject. The same applies to the Mission for Scientific Expertise recently established at the CNRS.

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[41] For example, this is more often the case for senior researchers.

[42] D H. Guston, Boundary Organizations in Environmental Policy and Science: An Introduction', *Science, Technology, and Human Values*, 26, 4, 2001; and *Reflecting on the Past and Imagining the Future: A contribution to the dialogue on the Science-Policy Interface*, UNEP 2021.

However, the collective should not condition or hinder the individual approach, i.e. prevent researchers from committing themselves individually, or even silence them; it should not grant the monopoly of public expression to an institution. The fact that a scientific collective, learned society or group of expert expresses itself publicly - for example *via* an 'ambassador' or spokesperson to avoid watered down or mixed messages - must not prevent a researcher from also taking an individual stance on the issue in question.

2. Advocacy that is 'situated', honest, and scientifically rigorous

The choice to become a public advocate means researchers must be aware of the responsibility that this entails. First of all, for certain types of advocacy, they may be legally liable (in the event of civil disobedience, defamatory remarks, etc.). Secondly, by making a public statement, researchers are potentially putting at risk not only their academic reputation and career, but also the image of their institution, the image of research and, more generally, the quality of the public debate in which they intend to participate or which they wish to encourage. This responsibility is all the greater because, as experts with specialist knowledge and a status of trusted authority, the expression and actions of researchers carry particular weight in the public arena. They must therefore be aware of this position and make the most of it without abusing it.

With this in mind, compliance with best practices is an ethical imperative. Some of these are already contained in various research ethics rules (notably the Code of Ethics for Research Professionals and the CNRS Expertise Charter) or have given rise to recommendations from COMETS (Opinion 42). When researchers take a public stance on an issue, they must do so transparently, in what is now known as a "situated" manner, and in line with the basic principles of the scientific method which are rigour, honesty, reliability, a description of the methods used, and a peer review process for all publications.

Specify the point of view

Researchers can take a stand and display their opinions, but if they are expressing themselves publicly in their capacity as researchers, and if this position is to be fully intelligible and relevant in the context of public debate, they must do so explicitly and transparently. This is what is meant by the idea that **the engagement must be 'situated in context'.** This requires that they:

- **Consider how to introduce themselves without misleading their audience:** on whose behalf and in what capacity are they speaking and acting? What are their disciplines and specialities?
- **Declare any conflicts of interest** (with a particular company, an association in which they are active, etc.);
- **Explain the values underpinning the stance being taken;** since one must assume the researcher has values and beliefs that operate beyond their scientific method (see above), the researcher should make them transparent to provide the context of their advocacy.[43] This involves distinguishing between judgements of fact and judgements of value, but also developing self-awareness and being able to reflect upon and define one's position in relation to one's research object;

[43] Article 3 of the Code of Ethics for Research Professionals states: 'Researchers must distinguish between knowledge in their field of scientific expertise and what is based on personal conviction'.

- **Put what they say into perspective** with opposing knowledge and arguments: clearly distinguishing between scientific results, their interpretation and resulting options for action; put the scientific results into context: is this an isolated study? Do any uncertainties remain? Is it controversial? The IPCC and IPBES reports, in particular, are built around this principle of contextualisation.[44]

Advocacy with integrity and scientific rigour

Researchers who become publicly engaged generally aim to influence the public debate on a given subject. To do this, they must stay true to their mission which is to produce or present robust knowledge backed up by a rigorous dedication to the scientific method.[45] Engaged scientist collectives are well aware that these imperatives represent a condition of their continued membership of the scientific community. **Ultimately, this is the approach that every researcher must adopt - keeping in mind that the freedom to perform scientific research, which is a professional freedom, implies compliance with the ethical guidelines established to ensure the production and transmission of robust knowledge.[46] Furthermore, this precondition ensures that researcher statements while committed to a position are not regarded as militant**. Of course, this precondition is no guarantee. Indeed, those who seek to criticise the ideological underpinning of an argument often try to delegitimise any argument that does not align with theirs, discounting whole areas of research by labelling them 'militant' even when the research is sound. Since the Rio Summit, the environmental sciences have frequently been labelled as militant and discredited on this basis.[47] Similarly, we are familiar with the strategies of 'creating doubt' (classically deployed with regards to climate change, biodiversity, the health impact of tobacco, etc.), which seek to denigrate certain scientists by denouncing their 'passionate', 'ideological' or 'irrational' use of science. Methodological robustness is not enough to prevent criticism of this kind. It remains nonetheless essential.

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[44] J. O'Reilly, 'Uncertainty', in De Pryck and Hulme (eds.), *A Critical Assessment of the Intergovernmental Panel on Climate Change*, Cambridge University Press, 2022, pages 159-168.

[45]For many researchers, scientific rigour and honesty are the cornerstone of any decision to broadcast their engagement on a given issue. See O. Beaud and A. Lacroix, 'Les cinq règles d'or de la recherche', *Philosophie Magazine*, 23 February 2021; Florence Bellivier and Christine Noiville,' Trois questions à Stéphanie Ruphy, directrice de l'Office français de l'intégrité scientifique (OFIS)', *Cahiers Droit, Sciences & Technologies*, 15, 2022, pages 15-18. . O. Beaud considers that an 'authorised opinion' is based on 'knowledge or know-how'. According to P. Bourdieu, *Interventions, 1961-2001: Science sociale et action politique,* Agone, 2022, 'In the minds of most educated people, especially in social science, there is a dichotomy I consider quite tragic: the dichotomy between scholarship and commitment—between those who devote themselves to scientific work, which is done according to scholarly methods for the benefit of other scholars, and those who commit to a cause and take their knowledge outside into the world. The divide is artificial and, in fact, one has to be an independent scholar working according to the rules of scholarship in order to be able to produce engaged knowledge, i.e. scholarship with commitment. To be a truly engaged scholar, legitimately engaged, you have to engage with knowledge. This knowledge is only acquired through scholarly work that is subject to the rules of the community of scholars.'

[46]Under the terms of articles L 952-2 and L 141-6 of the Education Code, one of the missions assigned to the public research service is to 'strive for the objectivity of knowledge'.

[47] This was the language of the *Heidelberg Appeal* (June 1992), a complex document because it recalled values of rationality that are easily agreed (and it is in this sense that it was approved by many signatories), while denouncing 'irrational' environmental fears, see S. Foucart, 'L'appel d'Heidelberg, une initiative fumeuse', *Le Monde,* 16 June 2012. There is little doubt today that the promoters of this appeal have links with the asbestos industry. See also the Association française pour l'information scientifique (AFIS) and its extensive work to debunk pseudo-sciences noted by S. Laurens *op. cit.*

In practical terms, this means that **any researcher who takes a public stance must respect**:
- The duty of scientific integrity: commitment to a cause, however noble, must not lead researchers to compromise the standards and rules of the scientific method; there is no justification for distorting or biasing data or exploiting scientific knowledge to mislead others;
- A rigorous scientific approach: whatever the discipline, an engaged researcher's advocacy is only legitimate if it is based on science, i.e. on knowledge established to be reliable through rigorous testing. Unreliable knowledge should not be tolerated in order to defend a cause.

The *Code of Ethics for Research Professionals* sets out the criteria for a rigorous and honest scientific approach, particularly in terms of compliance with regulations and the robustness of the research work: using the most appropriate methods, describing the research protocol, referencing sources, describing the raw results, basing conclusions on a critical analysis of the results, not unjustifiably amplifying their possible applications, and finally communicating the results in their entirety as objectively and honestly as possible.

For example, a researcher who signs an op-ed deliberately distorting scientific facts in order to stir up public opinion is committing a breach of ethics. Similarly, when a researcher conducts an appraisal for sponsors who intend to use the conclusions for political purposes (association, think tank, political party, etc.), the researcher cannot become a member of the association or party that commissioned the appraisal. What's more, they must refuse to present their findings as '*researcher and member*', as is sometimes required by certain sponsors. Finally, they must keep a watchful eye on the conclusions and recommendations drawn by the commissioning body, and reserve the right not to sign the report or to adopt a different position.[48]

Situated, honest, and rigorous public advocacy in practice

This reiteration of the requirement for integrity and rigour in the scientific approach, and the quality of the results used, is not intended to restrict or format the public advocacy of researchers. Rigorous methods should not prevent researchers from being strong advocates! On the contrary, this rigour is essential for any kind of engagement with a cause, without which, as mentioned above, that advocacy can be easily undermined on the grounds that the researchers are ‘activist’ or 'militant' and have a partisan attitude.

Furthermore, **scientific rigour does not mean that a researcher must refrain from taking a stance in the public arena without exhaustive scientific evidence** to back up his or her statements. It is legally accepted, for example, to issue a warning to denounce a danger even in the absence of proof, as long as the whistle-blower is acting in good faith and is broadcasting precise information while ensuring transparency with regard to the information available, its source and its level of reliability, i.e. how robust it is.

Similarly, the requirement for scientific rigour must not prevent researchers from expressing themselves publicly outside their strict area of expertise. Researchers should be able to express themselves on subjects outside their own area(s) of expertise if they wish to do so, as public debate can greatly benefit from a pluralistic approach that brings together a variety of disciplines. **However, COMETS recommends that researchers take great care not to mislead the public as to the nature of their professional skills and that they make it clear when they venture outside their specialist**

[48] Conversely, it remains Feynman’s recommendation that researchers should be vigilant with any cases where their expert opinion, if not favourable to the commissioning party, would not be published. See R. Feynman, *Surely You're Joking, Mr. Feynman!: Adventures of a Curious Character*, W. W. Norton, 1985.

field. This presupposes a certain self-reflection on what authority they may have to express themselves in public on the subject, and in which fields they consider their remarks relevant (see COMETS Opinion 42).

Finally, COMETS is aware of the difficulty that researchers may face in complying with the criteria of transparency and scientific rigour in certain contexts. This compliance will be more or less easy to observe depending on whether the researcher is speaking in the context of a parliamentary committee, a think tank report, a newspaper article, on a social network or in the television media. In the case of television, speaking time is limited, simple answers are expected, public broadcasting means the researcher is communicating his point of view to a large audience, and journalists tend to put pressure on guests to provide a personal opinion on issues that go beyond their field of expertise. As a result, researchers are less able to comply with the standards set out above. They may even be pressured by the journalist to commit to a cause despite themselves. This is also why the public engagement of researchers also requires to consider **how scientists generally express themselves in the media, and what actions are in place to train researchers to communicate with the media.**[49] Some of the research community's concerns about advocacy and militancy are shared by the media.[50] Because these media deal with a growing number of scientific subjects, solicit more and more experts, and are themselves regularly contacted by researchers wishing to be heard, they appear to be an important lever for ensuring that researchers' public advocacy is responsible.

This is why the ethical standards proposed or reiterated by COMETS, while sometimes difficult to apply in practice, must be seen as end goals. This also means that a discussion within existing institutions on how best to implement these standards is needed.

Such advocacy - situated in context, honest, and rigorous - will limit the risk of researchers finding themselves committed to a cause against their will, or seeing their engagement exploited, their reputation called into question, or their career undermined.[51]

E. The role of research communities and institutions

While public engagement by researchers remains an individual freedom, the question of the institutional framework in which it takes place is crucial. In addition to the primary responsibility incumbent on organisations to provide research staff with a guide to public relations, institutions need to think about how they position themselves with regard to their staff who publicly commit to causes, on the one hand, and their own engagement on the other.

1. A guide to public engagement

It is the responsibility of research organisations to work with research staff to draw up a guide establishing the stakes of public advocacy and providing clear ethical and practical guidelines. Existing charters (the Code of Ethics for Research Professionals; the Deontology, Ethics and Scientific Integrity Charter) already set out the main framework that should guide researchers' public advocacy. But the rules are scattered, poorly known, incomplete, and difficult to interpret in some cases. This is the case, for example, with the neutrality requirement listed in the 'communication' section of the French

[49] See Avis 2021-42 du COMETS on crisis communication.

[50] This is particularly true of Radio France - hearing of Vincent Giret.

[51] The aim is to control as much as possible 'contextual elements' that can distort the researcher's original intention. See Lydia Messling, *op. cit.*

Code of Ethics for Research Professionals, which is ambiguous regarding the rights and responsibilities of researchers in terms of public advocacy. The guide should assume that there is no reason in principle to prevent researchers from becoming engaged; clarify certain abstruse or misinterpreted concepts; spell out the rights and duties of researchers; and provide them with tools so that they can, if they so wish, become engaged in a fully responsible manner.

Drawn up in close collaboration with research staff at the CNRS, this guide could also involve the collaboration of other research bodies currently considering the subject. It should also be accompanied by collective discussions in the context of research foresights, as part of the science-society work at national levels, as well as with wider communities, in particular the research communities that structure certain disciplines at international level.

The guide should be accompanied by staff training programmes set up by research institutions and organisations.

2. The position of institutions with regard to the researcher's public advocacy

Should research institutions go further in encouraging researchers to engage publicly or, on the contrary, in framing and limiting advocacy that they deem inappropriate? In response to this question, COMETS believes that the CNRS should focus its efforts on protecting and promoting the freedom of expression of its research staff.

Neither encouraging nor condemning

To date, while the standards in place in many research institutions give researchers a certain amount of latitude when they decide to get involved in advocacy work, they do not encourage them to do so, except for forms of engagement that do not fall within the scope of this Opinion (transferring scientific knowledge, informing citizens, disseminating scientific culture, or collaboratively developing research with 'civil society' players). This is the case at the CNRS.

COMETS does not consider that it is the responsibility of the institution to encourage or promote a culture of engagement as defined in this Opinion. Once again, public advocacy must remain a personal choice.
Conversely, in general, it is not the role of the institution to condemn or police public advocacy. Its 'default reaction should be to defend the academic freedom and freedom of expression of researchers'.[52]

In particular, when their research work is evaluated, researchers should not suffer from the fact that they take a given normative stance in public. The evaluation of research activity should focus solely on the research work itself. Similarly, when a researcher's public advocacy causes debate in the research world (for example, when a researcher intervenes in a social debate on the basis of weak or even false scientific results), the main institutional principle should be not to take sides for or against the researcher concerned, but to allow the scientific debate to take place between peers. It is not the role of the institution's management to attempt to regulate the public advocacy of researchers, rather it is the role of the peer review bodies and, in the case of the CNRS, the *Comité national de la recherche scientifique*. Generally speaking, the most appropriate sanction for advocacy that does not comply with the rules set

[52] UNIL Report, *op. cit.*

out above is the collective reaction of the scientific community, which can be very harsh in the face of inappropriate speech or behaviour: researchers risk exclusion from the scientific community, loss of reputation, lack of career advancement, public condemnation, and so on.
There are, however, special cases where there is proven misconduct, a breach of scientific integrity or ethics (e.g. fraudulent manipulation of knowledge[53]), or a breach of certain laws (e.g. Holocaust denial). Depending on the case, the institution should then refer the matter to the officer(s) in charge of scientific integrity or ethics, issue a report, or even ultimately take disciplinary action.

Finally, with regard to civil disobedience, COMETS considers that the CNRS should not assume the role of police and judicial institutions. As stated in the UNIL report, when faced with cases of civil disobedience, caution must be exercised in order to avoid unjustified interference in the basic rights of members of the community.[54] *A posteriori*, in the event of a criminal ruling against a researcher, the CNRS may consider that its intervention is required, and only if the integrity of the field of science is seriously compromised.

Protecting researcher's freedom of expression

It is the responsibility of the CNRS to protect the freedom of expression of its employees, for example in certain cases of staff being defamed, personally attacked, or subjected to 'gag lawsuits'. The organisation should then consider granting them worker protection in one form or another.[55]

More generally, COMETS encourages scientific institutions to act as guarantors of a genuine scientific debate based on freedom of expression, respectful exchange, and listening to each other.

3. A committed institution?

Should the CNRS present itself as a committed institution, in the sense that it explicitly takes sides on social issues and thus displays values or even normative positions (beyond 'classic' shared values, such as transparent science, and beyond the positions that result from the organisation's research priorities)?

A number of French research institutes claim to have a 'culture of engagement', which is all the more pronounced when they carry out targeted research. Examples include the French National Research Institute for Sustainable Development (IRD) and its commitment to the 'sciences of sustainability'; CIRAD, which has set itself the mission of 'inventing resilient agriculture for a sustainable world based on solidarity' and is fully committed to tackling societal challenges (particularly environmental); and INRAE, which, as noted by some observers, chose to take a stance 'in favour of GMOs' in the 1990s.

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[53] See the CNRS press release dated August 2021: 'Le CNRS exige le respect des règles de déontologie des métiers de la recherche' (August 2021).
[54] UNIL Report, *op. cit.*
[55] 'Worker protection' refers to the public service's obligation to protect its employees when they are subjected to violence, insults or threats in the course of their duties. It is governed by article L 134-5 of the *Code général de la fonction publique* (General Civil Service Code): 'The public authorities are obliged to protect civil servants against deliberate attacks on their person, violence, harassment, threats, insults, defamation or insults of which they may be the victim without any personal fault being attributable to them. It is obliged to compensate, where appropriate, the resulting damage'. This protection depends on the circumstances and can range from a statement of support to the payment of legal fees, or even a request for police protection.

It is not for COMETS to say whether the CNRS should become an issue advocate. But if such an approach were to be adopted, it would have to satisfy two conditions. On the one hand, it would have to comply with the rules that apply to researchers themselves, in particular by clearly stating its position and the values that underpin it. This also applies to the choice of research priorities. On the other hand, since researchers may take issue with any position taken by the institution, the organisation should ensure that the conditions for healthy debate are maintained within the institution, so that it remains 'a forum for the constructive confrontation of ideas'[56]. Failing this, institutional engagement could give rise to more aggressive engagement by individual researchers in response[57]. By creating the conditions for such confrontation of ideas, it is possible to avoid pitting researchers against each other on the basis of their positions, which runs the risk of radicalising them. With this in mind, COMETS encourages the CNRS management to establish relations with engaged researcher collectives provided the latter respect the requirements of responsible advocacy as outlined in this Opinion.

III. RECOMMENDATIONS

To researchers:

1. COMETS considers that engaging in **public advocacy is a matter of personal freedom** and that **there is no incompatibility in principle with the standards applicable to research activity**.

2. COMETS wishes to emphasise that researchers are free to decide whether or not to become publicly engaged. It considers that it is always preferable to seek a collective basis for engaged action. However, this is not a necessary condition.

3. COMETS stresses that **any decision to become publicly engaged must be taken with the full awareness that the researcher has not only a legal but also a moral responsibility**, which stems from the authority conferred upon them as a result of their possession of specialist knowledge. Public advocacy potentially affects not only the academic reputation and career of the researcher, but also the image of their institution, that of research itself and, more generally, the quality of the public debate in which they intend to participate or which they intend to encourage. Researchers enjoy a privileged position that gives their words particular weight. They must put this authority to the service of the community and not abuse it.

4. COMETS stresses that **the responsibility of the engaged researcher involves certain duties.** In this case, it is incumbent upon them to:
- **'situate' their advocacy in context**, i.e. specify on whose behalf and in what capacity they are speaking or acting, declare any conflict of interest, and explain as clearly as possible the values underlying their position;
- **respect the standards of scientific integrity and the rigorous requirements of the scientific method.** These duties are the natural corollary of the freedom of research, which is a professional freedom. They are also the best guarantee against being accused of activism or militancy.

[56] UNIL Report, *op. cit.*

[57] See C. Bonneuil, *Cultures épistémiques et engagement public des chercheurs dans la controverse OGM*, *op. cit.*; C. Bonneuil et F. Thomas, *Gènes, pouvoirs et profits : Recherche publique et régimes de production des savoirs de Mendel aux OGM*, éd. QUAE, 2009.

While aware of the difficulties that may arise in complying with these duties (particularly with regard to the workings of the media), COMETS nonetheless recommends that systematic efforts be made to implement them.

To the CNRS:

5. COMETS believes that **a guide to public advocacy should be developed jointly with researchers.** This guide should: (1) clearly state that there is no incompatibility in principle between the work of a researcher and public advocacy; (2) point out that advocacy represents a freedom but also a responsibility which involves the respect of the researcher's duties; (3) provide solid guidelines (for example by clarifying the meaning of the duty of neutrality) and concrete tools for responsible advocacy. **COMETS encourages the CNRS to discuss the subject of public advocacy with other research institutions**, both nationally and internationally, so that research communities can take a comprehensive and coherent approach to these issues.

6. **COMETS recommends that researchers be offered awareness-raising and other trainings in the** challenges **and methods of public advocacy,** in particular as regards speaking out in the media.

7. **The COMETS considers that the CNRS should intervene, if necessary calling upon the relevant ethics officer(s), in the event of a clear breach of scientific integrity or ethics by a researcher whether engaged with a cause or not, or in the event of a violation of their freedom of expression**.

8. **Beyond these cases, COMETS believes that the CNRS should neither condemn nor sanction researchers' commitment a priori**.
- In the evaluation of their research, researchers should not suffer as a result of their public advocacy. The evaluation of research activity should focus solely on the research work;
- If public advocacy leads to controversy, the institution should avoid getting involved and leave the matter to scientific debate among peers, its role being to create the conditions for this to take place. It is the responsibility of institutions and research communities to foster a constructive exchange of knowledge and ideas based on freedom of expression.
- When a researcher commits an act of civil disobedience, CNRS should not assume the role of police and judicial institutions. It should not condemn this form of engagement *ex ante*, nor sanction it in place of the judicial institution. *A posteriori*, in the event of a criminal ruling against the researcher, the CNRS may consider that its intervention is required, and only if the integrity of the field of science is seriously compromised.

9. **COMETS encourages the CNRS to protect the freedom of speech of its staff.** If a researcher is defamed, attacked or harassed because of his or her commitment, for example in the case of a gag order, the CNRS should support the researcher by considering providing them with worker protection.

10. **If the CNRS decides to take a stand on an issue as an institution**, i.e. to adopt public and normative positions on social issues, **COMETS believes that it should respect the rules applicable to researchers**—making its position clear and explaining the relevant underlying objectives and values—and facilitating a debate of opposing ideas within the institution.

IV. QUALIFIED PERSONS CONSULTED

- Michel Badré, Chair of the Consultative Ethics Committee of the INRA
- Françoise Benhamou, Professor at the Sorbonne Paris Nord University, Chair of the Committee for Honesty, Independence and Pluralism of News and Programs at Radio France
- Bernadette Bensaude-Vincent, Member of the Académie des Technologies and of the INRAE-CIRAD-Ifremer-IRD Joint Consultative Ethics Committee
- Pierre Cornu, Professor of Contemporary History and the History of the Sciences at Lumière Lyon II University
- Léo Coutellec, Associate Professor of Epistemology and the Ethics of Contemporary Sciences at Paris-Sud University
- Marion Desquilbet, Research Fellow in Economics, Toulouse School of Economics
- Michel Dubois, Sociologist, Director of Research at the Groupe d'Étude des Méthodes de l'Analyse Sociologique of the Sorbonne
- Doris Farguet, Professor in the Department of Judicial Sciences at the University of Québec, Montreal (UQAM)
- Augustin Fragnière, Professor of Geography, Lausanne University
- Marie Gaille, Director of the Institute of Human and Social Sciences of the CNRS
- Karine Gentelet, Professor in the Department of Social Sciences of the University of Québec at Outaouais, Associate Researcher at the Center for Law, Technology and Society
- Yves Gingras, Professor of History and Sociology at the University of Québec at Montreal (UQAM)
- Vincent Giret, Director of News and Sports at Radio France
- Pascale Goetschel, Deputy Scientific Director at the INSHS
- Pierre-Henri Gouyon, Biologist at the National Museum of Natural History
- Catherine Guaspare-Cartron, Project Engineer at the Study Group for Methods in Sociological Analysis of the Sorbonne
- José Halloy, Professor of Physics at Paris Cité University
- Etienne Klein, Physicist, Director of Research at CEA
- Sylvain Laurens, Sociologist, Director of Studies at the EHESS and Researcher at the Maurice Halbwachs Center
- Pierre Léna, Member of the French Science Academy, Honorary Chairman of the Office for Climate Education (OCE)
- Valérie Masson-Delmotte, Co-Chair of the WG1 of the GIEC, Director of Research at CEA
- Stéphanie Ruphy, Professor of Philosophy of Sciences at the Ecole Normale Supérieure, Chairwoman of the French Office for Scientific Integrity (OFIS)
- Stéphane van Damme, Professor of Modern European Transnational History in the History Department of the Ecole Normale Supérieure

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V. LIST OF ACRONYMS

ANR : Agence Nationale de la Recherche
APC : Article Processing Charges
CC : Creative Commons
CC-BY : Creative Commons attribution
CIRAD : Centre de coopération Internationale en Recherche Agronomique pour le Développement
cOAlition S : initiative des organismes de recherche ayant proposé le Plan S
DIST : Direction de l'Information Scientifique et Technique du CNRS
DADVSI (loi): Droit d'auteur et droits voisins dans la société de l'information
DEAL : DEutsch Alliance Lizenzen
DOAB : Directory of Open Access Books
DOAJ : Directory of Open Access Journals
DOI : Digital Object Identifier
DORA : Declaration on Research Assessment
EPRIST : Association des responsables IST des organismes de recherche
ESR : Enseignement Supérieur et Recherche
IFRS : International Financial Reporting Standard
IST : Information scientifique et technique
ESAC : Efficiency and standards for articles charges
HAL : Hyper Articles en Ligne
INRA : Institut national de la Recherche Agronomique
LERU : League of European Research Universities
MAA : Manuscrit Auteur Accepté
MESRI : Ministère de l'Enseignement Supérieur de la Recherche et de l'Innovation
OFIS : Office Français pour l'Intégrité en Science
OMPI : Organisation Mondiale de la Propriété Intellectuelle
PCI : Peer Community in
SCOAP3 : Sponsoring Consortium for Open Access Publications in Particle Physics.
SHS : Sciences Humaines et Sociales
WCRI : World Conference on Research Integrity