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Environmental Humanists Respond to the World Scientists' Warning to Humanity

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## Beyond Nonpartisan Discourses: Radical Knowledge for Extreme Times

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by Marco Armiero

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#### Abstract

The majority of scientists agree on climate change and on the most daunting environmental problems humans are facing today. Moved by a commendable desire to contribute to the solution of these problems, several scientists have decided to speak up, telling the scientific truth about climate change to decision-makers and the public. Although appreciating the commitment to intervene in the public arena, I discuss some limits of these interventions. I argue that stating the reality of climate change does not prescribe any specific solution and sometimes it seems faint in distributing responsibilities. I ask whether unveiling/knowing the truth can be enough to foster radical transformations. Can knowledge move people towards transformative actions if power relationships do not change? Various environmental justice controversies prove that even when science is certain—and this is rarely the case in that kind of controversies—knowing might be not enough in the face of power structures preventing free choices and radical changes. In the end of my article, I state that it is fair to recognize that scientists have done their parts, and it is now up to social movements to foster the radical changes in power relationships that are needed for transforming societies.

Keywords: Politicization, scientific consensus, radical transformations, truth, environmental justice

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#### About the Author

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# Beyond Nonpartisan Discourses: Radical Knowledge for Extreme Times

#### Marco Armiero

I am writing these few pages in my home in the suburb of Stockholm, Sweden, struggling with the aftermath of an extremely aggressive form of COVID-19 which brought me to the verge of death. The reader might question—perhaps rightly so—the choice to start an academic article with such a personal experience. As students in chemical laboratories are taught to carefully manage different substances, students in humanities and social-science laboratories are taught not to mix the personal and the scientific. In fact, a cornerstone of my Ph.D. education was to avoid the "I" pronoun in my writing, a golden rule associated with the categorical prohibition to express—or perhaps to have—any political opinion. Science must be impersonal and free of bias.

I must confess that I have always been quite an undisciplined student, always reluctant to follow the rules. Furthermore, I became the scholar I am today precisely because of my political opinions and personal experiences. The personal is political, as feminists have taught us; and I would add that even science blends these ingredients, often without acknowledging it.<sup>1</sup>

The politicization of science, the merging of personal commitments and scientific work, and the agency of omens—or warnings—in society seem to be central themes both in my personal experience and in the articles we have been asked to comment upon. After all, is the current pandemic not the most telling omen of the ecological crisis? Sometimes omens are written in the stars, sometimes in words, other times in flesh and bones, as I, along many others around the world, have experienced in our own bodies. Facing the impending catastrophe of climate change, hundreds of scientists have decided to leave their comfort zones and engage with the challenges of policymaking and public opinion. However, this is not new for scientists. In both articles, the authors refer to historical cases where scientists raised their voices to ask for radical changes in order to protect the basic means of human survival on Earth. They

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mentioned the 1992 "World Scientists' Warning to Humanity," signed by more than 1700 scientists and the 1979 First World Climate Conference in Geneva, where scientists from 50 nations all urged governments to act to ensure a safe environment for humans to thrive. They could have also mentioned scientists' mobilization against the employment of the highly toxic defoliant—so-called Agent Orange—by the American Army in Vietnam (Martini 2013; McElwee 2020) or the work done by individual and organized scientists against nuclear weapons (Rubinson 2016). Immediately, my mind goes to people like Rachel Carson, the maritime biologist who turned into one of the most influential environmentalists of our times;<sup>2</sup> Barry Commoner and his work on nuclear weapons and contamination (Egan 2007); or Alice Hamilton, less well known among environmentalists, nonetheless a crucial figure for the development of industrial hygiene.<sup>3</sup> In my research on environmental justice I have encountered several scientists who have chosen to use their knowledge and authority to support the struggles of grassroots organizations and affected communities. I am thinking of the medical doctors who have tried to prove the link between toxic contamination and health problems in Italy (Armiero 2017), the geologists and engineers who have supported the struggles for justice of the survivors of the Vajont disaster,<sup>4</sup> or the legal scholars and practitioners who have shared their expertise in the thousands of controversies generated by the unjust distribution of environmental harms. These scientists did not hold their political opinions or stake out their positions to be obstacles to the production of "good science," but rather to break paths towards what Sandra Harding (1993) once called "strong objectivity." But my research on environmental justice—and more broadly most of the scholarship produced in this field—also proves that science is not a conflict-free zone; rather, every environmental controversy is also a scientific controversy. Everyone who has tried to prove a direct causal connection between some kind of contamination and a specific, individual disease, knows well the difficult and tortuous path of scientific proof. Often it is just a matter of power, when rich corporations or governmental agencies are able to mobilize resources and influences that are unthinkable for affected communities and grassroots activists. Nonetheless, many issues are extremely complex, and they leave room for uncertainty and divergent explanations beyond what can be called mercenary science.

While in environmental justice controversies scientists and various kinds of experts often find themselves supporting divergent views, on climate change and global ecological threats (sixth extinction, loss of biodiversity, etc.), the scientific consensus is almost unanimous. Several studies have concluded that the scientific community largely agrees that climate change is real, it is caused by human activities, and is threatening the survival of life on Earth (Bray 2010; Oreskes 2004). I am not saying that

there are no climate change denialists, but they are clearly a minority and not a very authoritative one. Such a large consensus is a crucial aspect of the two articles we are analyzing: one is supported by more than 11,000 scientists and the other by more than 15,000. The message is also in the power of those numbers: the scientific community appears to be compact in exposing the gravity of the ecological crisis and asking for action. This is a clear difference from what I have encountered studying environmental justice conflicts, where scientific truth is much more controversial. During my fieldwork in Naples, Italy, several environmental justice activists, who have also become climate activists, have remarked how difficult it is to mobilize scientists on health and toxicity vs. climate change. As Raniero (April 12, 2019), one of the leaders of the StopBiocidio coalition,<sup>5</sup> states: "While we struggle to prove that toxic contamination is affecting our communities, there is no need to prove that climate change is real. All scientists are with us on this matter." Nothing wrong with this, of course. Indeed, it is good news that the scientific community shares a large consensus on climate change and other global ecological threats.

I would argue that it is precisely this consensus that helps scientists to leave their comfort zone. In the 2020 Warning article, the authors speak of scientists' "moral obligation to clearly warn humanity of any catastrophic threat and to 'tell it like it is" (Ripple et al., 8). This statement reminds me of the famous quote by Al Gore, who in the documentary An Inconvenient Truth (2006) declared that "[The climate crisis] is not a political issue, it is a moral issue." The shift from the political to the moral field is key to ensure the non-partisan nature of the mobilization over climate change. We are told that science can be ethically committed but not politically engaged, or even less, militant. As the reader might have already grasped, I am among those who would instead welcome a politically engaged science. My argument is that scientists might agree that climate change is real and is caused by humans (although we might question the choice to blame the crisis on a universal human species), but this leaves radically divergent solutions still on the table. Is geo-engineering a feasible and desirable solution? Could atomic energy be the path towards a reduction of CO<sub>2</sub> emissions without reducing the level of consumption of the wealthiest? Can a functional carbon market mechanism save the world from collapse? Why is it easier to speak of overpopulation as a key issue in the contemporary ecological crisis and not of redistribution of wealth or of compensation of the colonial debt? The attempt to build a nonpartisan narrative necessarily forces out of the discourse anything which might sound controversial, divisive, or too political. Capitalism cannot be anything other than the elephant in the room. There is no mention of the most effective and successful maker of the ecological crisis in those passionate appeals to action. I do acknowledge

that both articles mention social justice and I realize that this is already a remarkable step towards what might seem a political agenda for an engaged scientific knowledge. Invoking social justice implies—though in an implicit way—that the present state of affairs is not only ecologically unsustainable but also socially unjust. The 2017 article, for instance, asks for a revision of our economy aiming "to reduce wealth inequality" (Ripple et al., 1028), while the 2020 article acknowledges the huge differences between rich and poor countries, demanding international solidarity, though basically limiting it "to support poorer nations in transitioning away from fossil fuels" (Ripple et al., 11). Aiming to produce a nonpartisan text, both articles mention neither colonialism and its legacy nor racism and its entrenchment in the socio-ecological crisis. To have a sense of a militant approach to scientific knowledge, we can refer to the Zapatista experience of Las ConCiencias por la Humanidad, that is, the meetings of scientists and Zapatistas held every year in Chiapas, Mexico.<sup>6</sup> On the first day of the 2017 meeting, the participants drafted what can be considered a manifesto for a militant science in four points: (1) unveil the false neutrality of science, which, in fact, can be employed to dominate and exploit (the capitalist science) or to contribute to the struggles for emancipation (the "other science"); (2) promote a science for the wellbeing of humans and the planet; (3) oppose all pseudosciences and antisciences; (4) produce scientific knowledge with the people for the people (SubVersiones, n.d.). There is no way that a manifesto like this one could gather thousands of signatures from fellow scholars.

Besides their careful nonpartisan approach and a deliberate avoidance of politically charged controversial themes (but not of all controversial themes, since overpopulation is mentioned), there is an optimistic and almost Enlightening-like faith that knowing something will automatically lead to action for the common good. I acknowledge that the principle of "speaking truth to power" is an integral part of the struggles for emancipation, defining a constitutive element of what means to be a politically engaged public intellectual. In this sense, those scientists are performing a fundamental service as scholars and citizens. Nonetheless, I wonder whether this "telling the (scientific) truth" about climate change and the global ecological crisis is really enough to lead people to action. On the one hand, as I have argued above, this approach leaves the nature of the actions which should spur from knowing the truth completely unsolved, or it assumes that any action would be positive as long as it addresses the problems (i.e. geoengineering and reducing consumption in the rich countries are equally good). On the other hand, this approach seems to underplay the power relationships and the economic interests which move collective actions. In her research on what she has called "working class ecologies," Stefania Barca and Emanuele Leonardi (2018) have clearly demonstrated that knowing that some kind of industrial jobs are harmful for workers and communities does not automatically change things; knowing will not be enough to liberate subaltern people from job blackmail and other forms of oppression. In order to act in a radically different way from what has been done before, we need to challenge the structures of power and oppression which have made business-as-usual the only possible reality. Knowing the truth might set you free, but only if you do not have to choose between starving or getting sick in a toxic factory.

In the end, I hope I did not give the impression that I am overly critical of the courageous step taken by these scientists. Although I have enlightened some limitations to their approach, I am extremely grateful for what they have done. I could try to summarize my thinking about this matter by rephrasing a famous quote by the US radical historian Howard Zinn (quoted in Maass 2010, 103). He once said that what is relevant is not who sits in the White House, but rather who is rallying outside it. Similarly, I believe that what is relevant is not who sits in the laboratories or university offices, but rather who mobilizes outside of these buildings to ask for radical changes. Of course, if inside these labs and universities there are sympathetic scientists—as those who signed these articles—instead of climate denialists, this will definitely make a huge difference.

#### Notes

- <sup>1</sup> On being undisciplined as scholars, see "Undisciplining Political Ecology: A Minifesto" (Armiero, Barca, and Velicu 2019).
- <sup>2</sup> The bibliography on Rachel Carson is extremely rich. I would suggest starting with Mark Lytle's (2007) *The Gentle Subversive: Rachel Carson, Silent Spring, and the Rise of the Environmental Movement* and exploring more resources in the online exhibition by Stoll (2012), "Rachel Carson's *Silent Spring*, a Book that Changed the World."
- <sup>3</sup> On the connections between her work and environmentalism see Sellers (1997), Hazards of the Job: From Industrial Disease to Environmental Health Science.
- <sup>4</sup> On October 9, 1963 a gigantic landslide into the Vajont reservoir (in the Italian North-East) caused an immense dam disaster which killed almost 2000 people. I have written extensively on this case in my book *A Rugged Nation. Mountains and the Making of Modern Italy* (2011).
- <sup>5</sup> StopBiocidio (Stop Biocide) is a coalition of grassroots organizations based in the Campania region (around Naples), fighting against toxic contamination. Since 2019 the coalition has become a crucial player in the Fridays for Future movement.
- <sup>6</sup> In Spanish the compound word *ConCiencia* means both "science with"—what we might call in English co-production of science—and "conscience," referring to the need to produce knowledge based on moral principles.

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