

We, the undersigned scientists and researchers, stand with young people who call for a real social and ecological change, and encourage our research communities to own up to this change within a reassessed link between research and society.

As part of the larger movement of on-going and expanding school strikes for climate, known as “Fridays for Future”, students and schoolchildren plan to walk out of school on March 15, 2019. We, the undersigned, represent members of French public research and higher education institutes who will be by their side, along with teachers who have chosen to participate in the climate movement. We celebrate the demand of young people to engage in acts of resistance, as they protest against the political inaction, denial, as well as passive consent that afflict our global society.

Thanks to academic research, we have privileged access to the very alarming analysis of the current ecological crisis and its unprecedented global disruptions. The fact is that this ecological crisis results from human activity supported by socioeconomic systems that have proven their structural incapacity to take into account long-term effects as well as environmental limits. In a globalized world, this general framework is generating a headlong rush toward destruction. Present trends will promote critical conditions such that, within a mere few decades, the planet could become uninhabitable.

We are the sadly privileged witnesses of the ever-growing gulf between the deadly path that our societies are actually following, and the path our societies need to follow in order to limit the effects of this catastrophic event. This alternate path requires a complete transformation of our way of life that notably centers on justice, solidarity, relocalization and resilience.

At the heart of our academic institutions, we can only see that the transition – in its even simplest dimensions – is far from being part of our objectives and practices. How many research institutions have actually committed to reducing their environmental footprint? How many of us have actually modified our habits (by limiting airplane travel for example)? Most of our research bodies are unable to assess their own environmental impact, just by doing a full carbon assessment, which is a legal obligation in France. Across the variety of our academic disciplines, we work to advance knowledge. This confers upon us a particular responsibility to take practical remedial action.

The modalities for project and career evaluation structurally encourage world-wide, limitless mobility, for example to major conferences and international symposia. The fact that academic institutions - which have accrued alarming results on the state of the Earth system - and that researchers - those who regularly sound the alarm - are both unable to implement policies to limit their own footprint, is reflective of the general denial defining our societies.

The inaction of the world of academic research and of its institutions is indicative of the challenge that we are facing. Technoscience constitutes a fundamental tenet of our civilization. In it, research is central to a social contract constantly driven by the notion of inevitable progress. While the notion of progress encompasses beneficial, concrete realities – despite a strongly unequal distribution – it also justifies a permanent headlong rush, a modernization process that feeds upon itself and, as it accelerates, creates regressions, dead ends and false hopes that blind us. When applied using the dominant economic logic of capitalism, the very idea of progress becomes misguided when it is reduced to a growth

“index” regardless of its negative consequences, especially in the long term. Scientific research is ideally considered as a positive innovation booster, a source of inspiration and of culture for our society. Too often nowadays, scientific research also sustains a delusional and dangerous idea of infinite growth in the name of modernity. This only contributes, without reflexivity, to a frantic quest for novelty and big announcements that is disconnected from our society’s real challenges.

To question the way we do research today is also to question our relationship, as scientists, with knowledge and the world. To do so undermines the very foundations of our civilization. This frightens us and paralyzes us to the point that the subject becomes taboo. In the collective imagination, thirst for knowledge is a direct heritage of the Enlightenment thinkers. To question the motivations, priorities and implementation of this principle can be construed as deliberately ignoring knowledge, thereby labelling any debate a return to the dark ages or, even more, to the Inquisition. Likewise, questioning the relationship between research and the economy would amount to condoning recessions, unemployment, shortages or even refusing to “feed the planet”. This ‘denial machine’ also integrates the well-known effects of misinformation campaigns by powerful lobbies (industrial or other) when they defend their own interests at the expense of an enlightened view of the common good.

Despite it all, at a time when we are on the brink of global environmental disruption, isn’t it urgent to overcome obstacles and to reexamine the issue? Why, for whom, and at what price do we want to know? Which inspiration, and which culture, do we want to transmit to future generations to allow them to live a dignified life on our planet? Which innovations will contribute to this and which innovations will not? Isn’t it contradictory, even absurd, to keep on accumulating data without taking into account the impending collapse? And without prioritizing research to order to mitigate it? What value will our academic knowledge have if, tomorrow, it becomes lost, or useless? This could occur due to technological regression, and/or the loss of support systems, available resources and disposable energies, or simply due to chaos in a regressive civilization. What if, in the extreme, there is no one left to take an interest in knowledge? In the end, would research that does not enforce its own rules to preserve the living and the habitability of the planet first and foremost still have any meaning?

Part of the population, including a good deal of scientists, will answer that it is precisely research progress that will save the world, that salvation will be technological (green growth, AI, transhumanism, geo-engineering, the conquest of space, etc.). Who can seriously believe in these affirmations, given the present tendencies and the urgency of the situation? By thinking this way, aren’t we deluding ourselves into avoiding the transformation of our organizational frameworks and our socioeconomic system? A lesson of modernity is that Promethean promises often generate new issues, some of which are more severe than the problem they were meant to remedy. New risks (climate disruptions, global chemical contamination, insect extinction, upsurge of chronic diseases, antibiotic resistance, radioactive waste, etc.) become more and more difficult – if not impossible – to contain and some could have catastrophic consequences. These risks are, however, inherent to current research and advances in applied science. They contribute to the technological and energetic headlong rush, which generates an “energy-complexity” spiral as described by Joseph Tainter. Scientists are thus too among the agents of transformation who contribute to the dynamic of planetary destruction.

It is then clear that successfully implementing the challenging social and ecological transition needed for our techno-industrial civilization to survive requires questioning some of its established tenets. To allow not only future generations but also *this* generation, to live a dignified life on our planet, we cannot merely establish new rules or regulatory norms, reorient policies, investment or taxation, or even transform our institutions and our daily actions. We also need to change our relationship to the world.

This youth call for a global mobilization against climate inaction on March 15 demands our attention and must force us to act. We invite our colleagues in the field of research all around the world to contribute to the debate and to unite through collective efforts. We, the undersigned, are committed to working together toward this end, particularly through concrete proposals. Young people are about to launch a call for all human beings to enter into civil resistance to truly transform our societies so as to stop destroying the future of both new and existing generations. The challenge is immense but the stakes are even greater. As scientists and researchers, we have the responsibility to embrace it as clearly and resolutely as is necessary.

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