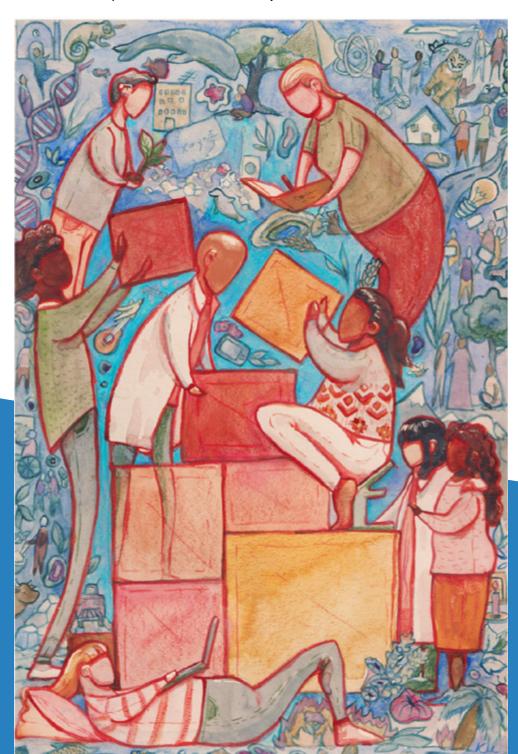




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How activist should scientists be?

Participants of the IRI THESys Summer School 2019



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On a Friday evening in late September 2019, 21 PhD students from every continent but Antarctica gathered in a dimly lit room on the second floor of Sophienstraße 22a in Berlin. This was the climax of a week-long summer school on 'Transformative Human-Environment Research & Participatory Methods' organised by the IRI THESys at Humboldt University. The preceding week's lectures, discussions, and practicums on the democratization of knowledge production were fresh in everyone's minds. Should scientists strive to be objective? Is it possible (not) to align our values with our scientific practice? What counts as 'science'? The summer school students and faculty, as well as a handful of members of the public, took their seats among a few rows of chairs. At the front of the room were five chairs arranged in a semicircle facing the audience. The moderator, Krystin Unverzagt, welcomed the audience and explained how the event would proceed. Unlike a typical panel, this would be a 'fishbowl' discussion; the moderator would take the central chair, and each time an audience member wanted to add to the discussion, they would walk to the front, take a seat, and make their point. They were then free to stay for a few responses or return to the audience. Regardless of the direction of the conversation, one seat in the front would remain open, so there was always the opportunity for someone new to join. The following is a reconstruction of the ensuing conversation, collaboratively assembled by the participants the following day. The editors—themselves participants of the event—have added headings and made slight changes to wording for stylistic consistency.

1. Opening Question: When researching transformations of human-environment systems, how activist should scientists be?

Bettina König: Research questions in sustainability may already be perceived as 'activist' statements because they often question the status quo. This activist position may or may not be meant as politically activist by the researcher themselves. But within the value-laden discourses about sustainability, activist role(s) may be ascribed to a researcher by others. So, being perceived as activist without intending to be so in all its potential meanings, is also a perspective from which to explore our discussion question.

Because of the different interests, values, and power issues involved in the arenas we study, it is important to consider the value of scientists not being involved directly in these conflicting discourses. Rather, a 'non-activist' role that captures different perspectives and meanings with scientific methods is of great support for stakeholders to see the whole picture through the lens of the sciences. Also, to present and discuss the whole picture is of value in such a situation. This, however, requires scientists to take a 'non-activist' role, that allows them to serve as facilitators in participatory processes. Only then can we take a position that allows us to generate knowledge that is not biased towards a specific stakeholder group. And only then can we meet scientific standards. It also means that we need to make potential users of our knowledge aware of its limitations.

Tobias Krueger: I think we need to understand that science is embedded in politics anyway. The questions we ask, the methods we use, the funding we receive, and indeed our identity as scientists, are all part of a particular history and contingent on cultural, political, and economic factors. And our research has political consequences. This may be seen most clearly when we do research in particular places, where our presence as researcher is an intervention in the situation. But it can also be seen when we add to a body of literature that is used in political controversies—whether we like it or not, how and for what ends that research is being used. In general, our research will reproduce a particular social order¹—which often remains invisible. Hence there is no neutral position. When we realise this, then it is just a small step to intervene more actively in politics. For me, this is as much about being transparent and opening up my research process to greater scrutiny by those potentially affected, as it is about defending my research where I consider it being misused.

Alicea Garcia: For those of us who analyse intersections of social inequality, power, and agency, our research may be inherently 'activist'. An explicit aspect of my research, for example, is advocating for the subversion of entrenched global inequalities and inequitable power dynamics for moving toward more transformative and just climate change adaptation outcomes.² I choose not to shy away from that narrative or agenda. One consequence is that I am sometimes invited to contribute to academic forums and debates as a sort of 'token activist' researcher. Yet in more 'hard scientific' forums I may not be respected as a true scientist. As early-career researchers, and especially as women and other groups underrepresented in science, it can be challenging to bridge that gap.

2. A matter of positionality...

Erwan Sachet: Researchers don't position or situate themselves as (non-)activist solely through their research question(s). As a situated person, the researcher or scientist performs research through the social history of the institution of science (as underlined previously by Tobias) and through their own personal

socio-history.³ Consequently, these situations and positions are intertwined. You do not become a queer public sociologist,⁴ for example, without having been in contact within queer institutions, readings, conferences, assembly, debates, friends, family, art, and so on.

So, to me, it's not as much about the research question, as it is about the methodology; the way that you ought to look at and use knowledge construction. The manner in which you would construct this knowledge tells what act you perform. Being a scholar-activist already implies what methods you are thinking about. Using extractive econometric data will not result in the same act in society as the use of participatory observation and action research.⁵ Positioning oneself as scholar-activist requires a sound reflection on methods, on the way towards constructing legitimate or illegitimate knowledge.

Nusrat Molla: I think that the ability to actively engage in activism is sometimes a privilege; if you're a woman or a person of colour or another marginalised identity then your credibility is already questioned constantly. Consciously engaging in activism will often invite more scrutiny for those of marginalised identities than for their more privileged colleagues.

3. 'Sound' science vs partiality

Bettina König: Science can only be called science if you apply methods to generate knowledge—if you are transparent and reflexive about the limitations of one's approach and methods. Even if a scientist decides to take an overtly activist role, they need to make sure the scientific methods are appropriate. Moreover, there is a clear need for, ideally, even more reflexivity about the influence of the activist position on the knowledge that is generated. The activist intention should not impede or hinder the researcher's openness for unexpected findings.

Nusrat Molla: The problem is that even if you're doing sound science, your work will face more scrutiny when you engage in activism as a scientist. What I struggle with, then, is how do those of us early in our career make change? Should we conform to the culture and institutions we are in and try to be subtle with our activism with the aim of maximizing our likelihood of 'making it', and then make changes once we are in a position of power? Or should we be more vocally activist, with the hope that we can change the culture from the bottom up?

Stephen Chignell: I definitely resonate with the questions Nusrat is bringing up, and I've noticed that activism tends to look different in natural sciences and the social sciences. In the environmental social sciences—especially those in the 'critical' tradition—it seems that being an activist not only can but *should* play a central role in one's personal and professional identities. For example, I have a human geographer friend who believes she doesn't have enough activist credentials to get an academic job in her field. I was struck when she told me this, since I didn't understand why a personal decision like engaging in activism would have a bearing on her professional qualifications. I now realise that my reaction was largely the result of my own training in a more natural science context, where the personal-professional/scholar-activist divides are stronger (although I think this is starting to change). We're all working with different epistemological backgrounds and educational socializations. Assuming an overtly polemical or activist tone in the way I write would feel awkward and unnatural for me, as I tend to be more reserved in my personality. Still, I have strong

political positions and want my work to make positive changes in the world. Maybe there's value in trying to 'trojan horse' our activism into our research?

Lukas Tank: There may be an activist argument against overtly activist writing: you are at your most persuasive to sceptical readers when you write in the least overtly activist way. You will only convince those who are already on your side when you write in an overtly activist way. This argument admittedly only applies to 'overt activism', such as using an overtly activist tone in your work. Choosing your topic according to your activist interests is not targeted by the argument. The argument builds on the assumption that all research, especially if it concerns real world problems, tries not only to communicate the author's point of view, but aims to convince those who are 'mildly sceptical' towards the findings presented. If that is indeed true, overtly activist writing misses the point of scientific enquiry and possibly does more harm than good to the cause it aims to serve.

Anushka Rege: For me, a scientist is simply someone who collects, generates and/or interprets data and publishes results in a scientific journal. The results may or may not be used for on-the-ground, policy changes—that is irrelevant to the scientist. What counts as activism to me is when the scientist makes an active effort to translate the results obtained into policy for societal change.

In a sense, any scientist who is disseminating their results to a wider non-academic audience is already doing activism. Activism could be aggressive and give fast results, but one has to consider the repercussions of such bold, 'in-your-face' activism. For example, an ecologist could simply help the police arrest illegal hunters in their study site by using camera trapping data that shows the hunters in the act. However, I stand for what I call 'slow activism', a form of activism that is informed by science, but is accepting of the fact that even science has varying narratives and perspectives. 'Slow activism' would mean integrating the perspectives of as many stakeholders as possible and working with them. Often slow activism may take time and go against your values, causing internal struggle. For example, instead of simply reporting hunters to police, I can engage with the hunters, since I understand that hunting is a deeply ingrained cultural practice and convince them of the value of live animals for eco-tourism livelihoods, as opposed to dead hunted ones.

As a human doing research, I am witness to many societal norms and beliefs. They may not be directly related to my field of research—but due to my proximity to the landscape and its people I may still want to engage in activism regarding the societal norms. Sometimes, one must step back a little and ask: where should I be drawing the line for activism? Do I run the risk of imposing my values as an activist on the local community? Is this ethical? Can I push the line of permissible activism as I spend more time with the local community, or are some boundaries not meant to be crossed?

Juan Carlo Intriago Zambrano: I would rather avoid the scientist-activist dichotomy; they must not be domains belonging to two different kinds of people. It is completely fine that a scientist can and sometimes must be an activist, and the other way around as well. Actually, I think it should be a task of scientists—with exception to fundamental research, for instance—to advocate for that in which you are becoming vastly informed and expert in. If, as a scientist, you are in permanent pursuit of the 'truth', whatever it may be, why not state your position for it? Moreover, during our production of scientific knowledge, we continuously expose our theses to our peers, so in a way we already advocate for that type of engagement.

It is also true that, while being an 'active' activist, you might incur potential inconveniences with your research group, university, research institute, or even with your research discipline itself. From this point, it turns into a personal affair. As far as I am concerned, I value more being honest with myself and my values and principles, so I would not avoid advocating for the things I believe in just for the sake of avoiding further 'disagreements'.

Glory Edwards: By our choice of career, we already show what our values are. We don't need to separate ourselves from our values, rather we should maximise and embrace our values to stimulate change in society. Being a scientist comes with responsibilities and these are even more pertinent in some settings than others. The concern that our values may mask our science should be shelved, our values can act as a guide to improve our science; therefore, we should make the best use of the opportunity science gives us to enhance our values rather than shy away.

4. Interlude on intersectionality

Juan Carlo Intriago Zambrano: Sometimes, even within the academic/scientific domain, political decisions are and must be made in advocacy of certain principles. An example is that of gender balance in academia, which resulted in the so-called 'positive discrimination', in favour of female researchers. It might not necessarily respond to a scientific fact or output; however, it must be made in favour of an issue that cannot be simply addressed through the scientific method. This is how a scientist must be involved, at a point, in a certain kind of activism as well. Nevertheless, those political decisions and activism within academia research domains, as well as in any other, must be taken with care. Otherwise, it might lead to undesired side-effects.

Alicea Garcia: I think it's important to note at this point that when debating issues of gender and equity, we are not only talking about inequalities and differences between men and women, but among various and intersecting demographics and points of possible marginalisation and privilege.⁶

In response to Lukas' comment earlier on targeting the audience we would like to persuade, and diluting our activism in academic outputs, I think there are times when this is counterproductive. For example, if the very purpose of research or a specific output is to include the voices of, and advocate for those underrepresented in global knowledge systems, then the research or output is an undertaking of activism in its own right in that it challenges the status quo of knowledge production. In such cases, I don't see the sense in limiting or diluting strong statements of advocacy or activism.

Anushka Rege: In the case of gender-based equality at workplaces, there is a need to distinguish clearly between 'favouritism' as opposed to 'inclusivity'. For instance, EU funded PhD advertisements clearly state: "Female candidates are encouraged to apply", but nowhere do they mention that the females have a gender quota. This sentence ensures that females applying from less-privileged backgrounds will know that they stand as equal a chance as their male counterparts; an assurance that is necessary in the lights of hundreds of years of political power imbalance.

There are quotas in important educational institutions in India for the so-called 'backward classes', and their purpose is not to give the 'backward' community any advantage over the others; the quota simply seeks to redress historical power imbalance and injustice that was meted out.

Nusrat Molla: I'd like to address Juan's point about the role of scientists in advocating for or against 'positive discrimination', or gender quotas, if those even exist. As he notes, this is not a scientific question; it is a political one. And it is part of our obligation as members of these institutions to think carefully about the best way to increase diversity and inclusivity in the institutions that produce knowledge. But I think this is a case in which using our role *as scientists* in particular to further our activism would be detrimental because it suggests that this is a scientific issue, which depoliticizes it and quite frankly, relies on some unscientific and problematic views (which has historically been an issue in the biological sciences). Finally, let us be clear—there's no such thing as positive discrimination; it's a matter of taking scales that have been historically tipped towards certain privileged groups and making them balanced.

Glory Edwards: I think there is such a thing as positive discrimination. If favouring marginalised individuals will increase their participation and representation, and ensure the well-being of generations to follow, then why not? In many societies where women are still side-lined, if giving one woman biased advantage will make room for more women, then I say yes to positive discrimination.

Krystin Unverzagt: Though the topic of gender differences in science and personal accounts of how women struggle to establish themselves as researchers may seem to suggest that we have deviated from the topic, I would like to argue that indeed we haven't. Instead, this exchange opens up what is to my understanding yet another dimension of activism, and another conceptualisation of what activism can mean and how it can operate in research. It shows how our bodily presence within a setting itself can be an act of political relevance. Besides science-society 'interfaces', activism can also relate to the institutional makeup of science itself, where those boundaries become messy. As historically marginalised groups of people enter institutionalised knowledge production, ways of producing knowledge arguably shift towards more inclusivity of perspectives. This, according to a co-productionist rationale, contributes to a more democratic way of simultaneously producing knowledges and social orders. Hence the political relevance of increased female representation within institutions. The persistence of individual women researchers within conditions that they experience as challenging thereby acquires an activist quality – they express discontentment with conventional imbalances by not only demanding but quite literally physically changing the institutional landscape.

5. On what it's like to be a scientist

Burag Gürdan: I would like to flip the original question on its head to ask: How 'scientist' should activists be? There are two dimensions to this. First, any activist, meaning an individual who is vocal in the politics of societal change, is a knowledge-keeper and represents a particular knowledge system. What makes one a scientist is equally valid for any individual with regard to keeping and demonstrating a form of knowledge. Second, activists are relying more and more on institutionalised science, as opposed to science-deniers, where activists start to call themselves 'factivists' to bolster the credibility of their position and claims. This naturally demarks an area of convergence between activism and science.

Erwan Sachet: Through this discussion thread, a simple question occurred to me: Why and what is so difficult about losing the status of 'scientist'? This is something we should reflect on. The fear of being seen as more of an activist than a scientist signifies the importance of this status, and the power that this status provides.

Why should we be scared of losing this status by endorsing another one? What privileges are we defending there?

Stephen Chignell: I think this relates to the nature of the science 'hat'. This is a hat that comes with a lot of privilege in our respective societies. I recently met a friend of a friend, and they asked what I did. I told them I was a scientist, and they immediately said: "Wow, what's it like being a scientist". They went on to say how they were going to tell their friends and family about how they now know a scientist, and so on. This made me feel very awkward, partly because it created a strange separation and power dynamic in the conversation, where all of a sudden, I was seen as having some special knowledge or expertise, but also because it sort of folded the different parts of my personality into a single identity. Can I just be a person that does science, just like I also do music, or anything else? Maybe we can get rid of the 'hat' altogether and think about ourselves in a more intersectional way. This relates to why I'm somewhat hesitant about things like the recent March for Science in the United States. Science's historic privilege and authority is being challenged, but doubling down by saying: "We're scientists, we produce facts, you should listen to us" doesn't seem like the most persuasive strategy—especially given what the field of Science and Technology Studies has taught us. Rather, I think we should be saying: "We're people engaging in a social endeavour, and it's not perfect, but it can tell us some important things about the world, and we're working really hard at it". We should be opening up the black box of science rather than standing on the box and yelling into the crowd.

Erwan Sachet: What Stephen just described is relevant. The power position of the institution of science is tremendous in our current society. I have experienced the same awkward feeling that Stephen just described. We are often seen as gods, or as keepers of knowledge that we may or may not share by what we would call 'lay' persons. This power must be questioned. To this end, we, as scientists, ought to understand how the institution of science has been institutionalised and, consequently how this specific social history has legitimated a specific knowledge production system and put aside other knowledge production systems.

Several examples provide food for thought.⁷ But I am thinking of one in particular right now. For centuries, in the Amazonian regions, several knowledge systems, or epistemologies, have been taking care of the forests. Some studies have proved that the pre-Conquista Amazon forest has not been as pristine as has been thought in Western collective imaginary, but rather cultivated.⁸ An Amazonia modified by human activities, but not exterminated or deforested. Thus, pre-Conquista knowledge systems have been efficient in terms of preserving the natural ecosystem as a habitat for the living being, while the post-Conquista knowledge system has not. I mean the Western epistemology, which is the legitimate one nowadays, has not been able to deal with ecological disaster. Accordingly, my point is that as scientists and researchers living in a current phase of science institutionalization, we need to reflect and rethink the production of knowledge for allowing other knowledge systems to be considered as legitimate for a societal problem. That is to say, a scholar-activist needs to provide reflections and acts for the self-determination of knowledge systems in autonomous society.

6. Do our positions as scientists obligate us to be activists?

Hela Gasmi: Sometimes we don't choose to be activists, but rather we are obliged to be activists, for example in development projects.

Emma Awuku-Sowah: I agree. I also think that sometimes knowing what you know as a scientist behoves you to take an activist position on matters of profound consequence, like climate change. This, for me, is especially true in situations where urgency is paramount, and there is inertia among actors in the political space. A scientist in such cases is sometimes a more credible activist than others. On the contrary, however, an activist loses some 'trustworthiness' when operating within academic circles, because of a perception of a set agenda or the suspicion of potential bias. The problem for me is how to effectively employ 'nuanced thinking' in approaching both roles.

Lara Aysal: It is very exciting to hear all these thoughts. I am against lines that create borders between our thoughts, feelings and actions. We tend to be more complex than staying in between lines. Trying to define the relation between science and activism is itself problematic due to this perspective. Engaging with the world is a political action and it is triggered through curiosity that stems from various forms of creativity that lead to taking action. To some degree, engaging with the world is the process of asking questions, searching for methodologies, and trying to see through and beyond theories. Hence, engaging with the world is systematic thinking that requires care and is quite radically utopian by its discourse.

I must confess that I am not a scientist. I am trying to understand what it is, just like I am trying to understand art. However, I refuse to see clear lines between activism, science, and art; they are tools. Curiosity and fluidity are the main source of my excitement in engaging with the world. I sometimes engage with people through theatre. This happens in a dialogical process: sometimes we speak and sometimes we listen; what sparks communication is curiosity, and that is the drive that forces me to utilise other tools.

One last point: when we talk about science, are we talking about Western science? How can we think about activism if we only talk about a Western knowledge system? And why should we? If we are only looking through the Western lens, then perhaps we should be aware of this problem when we mention participatory inquiries and co-producing knowledge.

Glory Edwards: I want to give an example of a project⁹ we did on seasonal forecasts, testing the use of seasonal forecasts by farmers for their decision-making, decisions such as what to plant, when to plant, and so on. Despite the improvement in scientific seasonal forecasting, there is still a persistent gap between climate information production and its uptake among farmers. Many farmers rely on the traditional ways and their personal experience. With climate change and increased variability, scientific climate information is needed. Yet the science sits on the shelf and gathers dust. If science is produced and not taken up by end users, then has science served its purpose? Science becomes 'useless' if it is not useful and usable for those who need the science.

7. Keep the tension!

Sangay Tamang: Activism and research, even though they are an inseparable phenomenon, need to be understood within their own epistemological and methodological mooring. Hence, the first step towards such effort would be to define the meaning and degree of activism and its relevance in academic (or scientific) research. For me, activism has a deep-rooted political meaning and is mostly associated with the idea of resistance and power located within a certain historical and political context. Hence, the question about how activist research should be depends on the context within which one's research questions, objectives and

problems are based on. Having said this, I would rather prefer to see activism as an organised way of asserting resistance through political meaning that perhaps has very little scope in the scientific domain. To be activist is to challenge the existing power relationship in any society and hence for the researcher there is a very little scope outside academic boundaries to engage with such form of activism.¹⁰

Hence, I would prefer to locate activism and research as 'two—modes of expression' that cannot be separated from each other in order to bring changes in society. They are closely intertwined with each other and together constitute an important mechanism in law and governance. Thus, one cannot separate one from the other and there is a need for active collaboration in order to bring in the voices from the margin. When we choose to work with people and try to understand their problems, listen to their grievances, and understand their way of living, we are often encountered by our research interests, institutional protocols and academic pressures. Hence, we are bound to be a scientist with certain theories and methods in our background and this differentiates us from an activist who chooses to be with the people and for the people—though they have their own narrow political interest. I would like to clarify this further with my own experiences below.

As I said in our previous classroom conversation, those of us from marginal societies are often obliged to study our own community, and this defines our research agenda, field, and in some cases, ideology. However, to mitigate bias in the research, we need to distance ourselves from the standpoint of a hardcore activist. So, for me, an activist is someone who mobilises people, organises them, and even provokes them to fight against the power, such as the state. In contrast, a researcher is someone who observes the situation—even through participant observation—understands the discourse and tries to represent them through their writing.

When I was in the field, the movement for separate statehood of 'Gorkhaland' for the Nepali speaking population in India was very active, and the whole region was politically volatile and economically blockaded for 105 days. I was connected to the movement in two ways: first, emotionally, as this is a movement for identity that has historically been distorted and unrecognised. Second, intellectually, as this movement has been the main driver in my research. In such circumstances, my existence in the field complicates my participation in the movement. Should I participate as a researcher or as an angry protester? Hence, it is in this context that I distinguished myself as being a researcher from hardcore activists who often provoke the situation.

8. Epilogue (written as a letter)

Dear friends,

I was just re-reading our conversation and that strange mixture of being confused but also delighted with the confusion came to me, as it did in those days. And it is fascinating—I don't know what you think—to hear so many people so vast, so deep and generous in so many ways, speaking freely and with real concern about a subject that seems to have no single conclusion. Well, I get emotional reading our conversation. Perhaps it is the affections and the talks, the new friends, or the memory of the Spree on the blue afternoon, or that of an era that disappeared so suddenly with the virus. Perhaps it is all the memories that are tied to our conversation that also allow me to return to it with emotion. I don't know if this conversation can be closed in a strict sense. I mean, I'm not sure that the last word can be said on these subjects, although,

paradoxically, we scientists are always sort of pulling the cart in the direction of trying to say what things are. I rather have questions. So, I'd like to join my question wagon on this train, in case anyone takes a ride over here and wants to follow along.

I think, as Tobias says, that it is irrelevant to discuss whether or not the scientist should seek to embody certain values or have a political position. This is already done by the fact of being human. For me, the essential question is: what values should the scientist embody? Science is, in principle, an intentional practice. And as such, it has ends. It is not born out of nothing directed at nothing. Historically, science has always been science "for something". And its initial end, the most immediate of them, is to create knowledge. An intention that, in fact, it shares with other practices. How this knowledge is achieved, how it is distinguished from other thoughts, is defined by its own community and within its cycles of rises and paradigm crises. But the intention that addresses knowledge as a product remains. If we judge science in general, or scientific practices in particular, on the basis of how they achieve this end or how they are faithful to it as a horizon, according to the parameters validated within each of their branches and set by their own community, we can distinguish between scientifically adequate and inadequate practices. In this way, through a merely functional judgment, we can judge how adequate a scientific practice is for the intrinsic purposes of that same science and which postulates formulated by them deserve the classification of scientific knowledge. The community of science then decides what science is, in each branch and in each case. But science, like all practice, does not occur in a vacuum, nor in an abstract time. It does not float suspended in the ether. Rather, it occurs in this world, where others exist. And insofar as it affects others, it is susceptible of being judged by its effects on them. That is to say, it can be judged not only in relation to itself but in relation to others. In other words, it is susceptible to ethical and political judgment. Science and its practices can be judged not only insofar as they are adequate for the purposes of science itself, but also insofar as they are adequate for the rest of the human world. And since the human is an integral part of a larger whole—which is the world of the totality of life—science and its practices can also be judged ethically according to how they act vis-à-vis the world of life.

And this is where, I believe, the critical role, the central role of science begins. Science is always in a world. And this world, ours, is a world in crisis. Don't we all agree that our house is on fire? For me, the question "how activist should scientists be?" has a relatively simple answer: as much as their community needs them to be. The ethical relevance of an action is judged according to the circumstance and against the good of others, including the act of knowing. Knowing for the sake of knowing is not enough. Our community, which is, to a large extent and because of the scale of the problems we face, a planetary community, needs at this moment all the efforts that can be given to it. The house is on fire! And are we still going to ask ourselves if it is pertinent to do something?

We at least, I believe, have a consensus on the need to act. What is extremely complicated, in my opinion, is not to continue doing good science, but to do good science that responds to the ethical and political imperative of our time, which is to save life. And this is where the situation seems to leave us in a kind of immobility because science, like all other forms of knowledge—in this fascinating ecology of knowledge that is the experience of human knowledge—has been, historically, not only knowledge for something but for someone. What we know generically as science, which is nothing but modern Eurocentric epistemology, based on the formal mathematical analysis of facts, as Husserl said, or the delirious Cartesian project, as Clastres called it, has been from its genesis associated with the development of capitalist

colonialism and constitutes its Intelligentsia. That is to say, not without contradictions, not without resistance and differences within, it formed and forms an organic part of a civilizing project (or that in the past was civilizing) aka industrial capitalism, whose current systemic effect is the possibility of the end of the material conditions of reproduction of human life. So, the question for us, for our time and our circumstance, it seems to me, is no longer whether good science can be done, but whether an ethical science can be done within the institutions that form an organic framework with this life-denying project. How have we reached this point where the possibility of the end of life becomes real? Who has brought us to the edge of this cliff? Governments and corporations, coordinated for the purpose of accumulating power and capital. Of course, the analysis of this can be much finer, more in-depth, but I don't think that a historical detailing overrides the general premise: the Anthropocene is a Capitalocene. 11 A Capitalocene whose power is not simply diffuse, but has concrete beneficiaries, an aristocracy, etc. In the technical operativity of this Capitalocene, positive science has played and continues to play a central role. Fortunately, not all science is captive to the interests of corporations or governments. But the capacity that these actors have to influence its agendas or viability, or the practical appropriation of their knowledge is overwhelming. Do not our very universities, the temples of intelligence, as Unamuno called them, those great training centers, send most of the new bearers of knowledge to be absorbed by the needs of the market? The practical freedom of intelligence, in the real world, is limited by power. Can one, then, stop the pollution of the seas, the resource wars anchored in extractivism, the massive deforestation, the large-scale burning of fuels for expanded commodity production, the legal and power asymmetries between rich and poor nations that allow corporate environmental abuse and massive human rights violations, by putting more and more knowledge at the service of the same actors that cause precisely these problems? Can the harmful effects of this systemic web of complicities be overcome by putting intelligence at their service? It is as if the temple of intelligence, as an institution, were tragically directed, as a whole, to produce the intellectual reserve army of capital.

Knowledge is not ethical by the mere fact of having been produced. Its ethical character is conferred by the social ends it serves. To produce and transmit knowledge as if they were ends in themselves, without worrying about where they are going or what ends they will serve, is an act of ethical irresponsibility and political blindness. At a time like this, producing knowledge blindly is an irrational, or even potentially catastrophic, gamble.

While the academy is under attack, as Geertz said in the 1970s, we keep asking people to trust science, but what kind of commitment are we offering in return? What ethical, and thus political, position will prevail in us when we make decisions, when we decide to cooperate or not? How committed can we be to greater ends, beyond the internal needs of our own practices? Would it not be better, like Bartleby, to start answering: "I would prefer not to"? Even the minority and privileged realm of research is captured by productivism. Or what else are the essentially quantitative evaluations of departments and institutes? Ethically and politically committed science, when it dialogues with the sphere of the institutional and of power, seems to enter a kind of dead end.

Perhaps the problems of our time do not even require accelerating the pace of production of new science, properly speaking. We have naturalized this productivist imprint. The current accumulation of knowledge is in fact abysmal. In a sense, we are drowning in knowledge. But much of it is functional to the great devastation. I remember that in a conference on interdisciplinarity by the Volkswagen Foundation someone insisted on the need to generate more and better trained scientists. Until an elderly professor got

up, took the floor and reminded us all kindly: "I know a company that hired large research groups, with the best scientists, and used them to generate a device that would deceive everyone about the amount of pollutants emitted by their vehicles." So, it's no longer just about generating more and more knowledge. Or is it? Aren't we trying to respond to new problems with old formulas, or with a mistaken spirit? Don't we need to concentrate more on the ends, and on actions that guarantee a certain autonomy and use knowledge to resist, survive, and transform? Someone might object: "Well, that's also knowledge production, isn't it?" Well, yeah, but of a different sort, isn't it?

In case we were missing something within the spectrum of our ethical hazards, we are also in the midst of an epistemic revolt, as Quijano called it, which questions the legitimacy of science, but which is not resolved only as a vindication of other non-Western knowledges—that is to say, as cracks in its claim to universality—but also as a second crisis of reason, which appears in the strengthening of climate denialism, of the anti-scientific discourse on the management of pandemics, or in the rebirth of extreme political positions based on narratives such as that of race. Isn't it the responsibility of science, as the bastion of rationality and logical consistency, to also respond to these discourses? It is necessary to clean the house, yes, but also to go to the public square, when necessary. The responsibility for the problems we naturally face does not fall solely on science. But this does not mean that scientists have no responsibility. Science cannot claim to validate itself ethically only in relation to itself, but is obliged to validate itself in relation to the rest of the world of humanity and life, of which it is a part. In the midst of crises, the legitimacy of the whole castle of knowledge is called into question. How should we respond? Science for what? Science is a practice to obtain knowledge. For whom, then? I believe that, due to the circumstances in which chance has placed us, the ethically and politically sensible knowledge, at this moment—not only that of science—is that knowledge placed at the service of life and humanity as a whole, without anyone being left out. Or perhaps this is an extreme—or even dangerous—instrumentalization, though it pretends to be justified by desirable ends? What do you think? You know what could be nice? To be able to meet again, after the cyclone of the virus passes, don't you think? Maybe we could jump back into the fishbowl and share that gentle joy of thinking through the problems together once again. Would you like to? For the moment I embrace you all with much affection, hoping you are all healthy and full of joy, each one from their own trench.

> Jorge Vega Berlin, 08.03.2021

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10. Endnotes and References

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- 2. Building on critical work in (feminist) political ecology, for instance,

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- 3. 'Personal' is to be understood not solely through a psychoanalytic lens or through the individuality mindset. Here, "personal socio-history" also means the socio-historical context out of the science institution: political socio-history, education socio-history, class/identity/strata socio-history, and so on.
- 4. As coined by Ana Cristina Santos,

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- 10. This is not to deny the fact that one might have to encounter various forms of resistance and power in the course of his/her research work but however I would prefer to consider as something that James Scott called "everyday forms of resistance".
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