

Imaginative Ecologies

Inspiring Change through the Humanities

Edited by

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Humanities in Transition in the European Context

Interview with Christof Mauch

Diana Villanueva-Romero

Abstract

This chapter is based on an interview conducted with Dr. Christof Mauch, Director of the Rachel Carson Center for Environment and Society in Munich, Germany during the summer of 2017. Its goal is to explore with him the contribution of this centre to the environmental humanities since its foundation in 2009 as well as his perspective on the development of the field from the privileged vantage point of managing one of the most prestigious institutions in the field worldwide and a pioneer in Europe. This piece intends to offer an overview on the origins and growth of the environmental humanities in the European context aided by my personal academic experience as a Spanish ecocritic as well as readings of state-of-the-art bibliography in the environmental humanities. With this, without forgetting to mention its many challenges, I eventually aim at giving the reader a sense of the diverse nature of the environmental humanities as well as its potential in a time when an urgent need to transitioning to new ways of living and doing academic work are needed.

Keywords

Environmental history, environmental humanities, environmental studies, interdisciplinarity, Rachel Carson Center (RCC).

The Rachel Carson Center (RCC) is currently the world's largest Centre for Advanced Study in the Environmental Humanities. It is part of Ludwig-Maximilians-Universität Munich, Germany's highest rated university. The Deutsches Museum in Munich is the RCC's local partner. The centre was established in 2009 with project funding from the Federal Government of Germany. The initiative to build this centre goes back to environmental historian

Christof Mauch. Diana Villanueva-Romero spent three months at the RCC in 2017. Towards the end of her tenure she interviewed Christof Mauch (CM) in Munich.¹

The interview was conducted at the Rachel Carson Center, Munich, August 7th, 2017.

I: *Can you tell me about the origins of the Centre? How was it possible to create something like this? After two months here, I'm really impressed by what you have achieved; I see it as a model to follow, an example, so I'm curious to know how the centre started in 2009 and where the funding came from.*

CM: We were really lucky. There was a competition going on for about five years. The competition started in 2007 and during those five years 10 projects were selected, projects that would be supported, actually paid for, by the Federal Ministry for Research and Education. These 10 international centres were created to internationalize the humanities in Germany. The ministry felt that the humanities, more than the sciences, were too national in their focus. Moreover, representatives of small disciplines were encouraged to apply. I decided to apply with a proposal in the field of environmental history—a very small subject in Germany; even today there is no Chair in Environmental History anywhere in Germany. At the time I might as well have applied for a different topic, for example in the field of German-American relations, because my background was in transatlantic history. I had been running the German Historical Institute in Washington D.C. and I had lived in the U.S. for 14 years before coming to Munich. During my time at the German Historical Institute, environmental history became my hobby. I had organised about a dozen international conferences in the field of environmental history because I felt that this was really a fascinating topic. When I returned to Germany a couple of people approached me and asked whether I would start an institute or a project in the field of environmental history, and they pointed me to the ministry's competition. So I decided to apply under this call.

¹ This interview was possible thanks to a Mobility grant by the Junta de Extremadura which allowed me to be a visiting scholar at the Rachel Carson Center for Environment and Society from June to August of 2017. I am also deeply grateful to Prof. Mauch for his generosity in sharing with me his time and ideas.

Fortunately, at a reception, I met the research director of the Deutsches Museum in Munich, Helmuth Trischler. I asked him whether he would want to be part of the proposal. Helmuth was excited. The combination of a university and a museum made our application unique and strong. In the end we were lucky. We applied and we got funding for six years and later on for an additional six, altogether 12 years.²

I: *Why the name Rachel Carson?*

CM: My hope was that we could give the centre a non-German name, and the name of a woman rather than a man. So many German foundations and institutes carried the name of a German male scholar: Leibniz Gemeinschaft, Humboldt Foundation, Goethe Institute, Böll Foundation, Adenauer Foundation, etc. Our goal was to think of somebody who would be known outside of Germany, an academic who had gone beyond the ivory tower. The name should signal that our centre was a research centre but also a centre with a political mission. In fact, at the Carson Center we are trying to reach out to the public through public symposia and lectures, through occasional exhibitions, and through our digital portal which today reaches hundreds of thousands of people around the globe.³ The funding that we received from the ministry was meant for fellowships. But at the German Historical Institute in Washington, I had learned that outreach was an important complement to research. So, from the beginning the idea behind the Carson Center, in contrast to other projects that received funding from the ministry, was to strengthen the outreach component and also to play some role in current political debates.

2 For an adapted version of the proposal that led to the establishment of the RCC see Mauch, Christof, and Helmuth Trischler. "International Environmental History: Nature as a Cultural Challenge." *RCC Perspectives* 2010, no 1. doi.org/10.5282/rcc/5581. In a public talk at the opening of the Rachel Carson Center Christof Mauch explained what the RCC was all about: Mauch, Christof. "Notes from the Greenhouse: Making the Case for Environmental History." *RCC Perspectives* 2013, no. 6. doi.org/10.5282/rcc/5661.

3 An international essay competition that would demonstrate the topicality of Rachel Carson's legacy led to hundreds of responses from all over the world. The two winning essays were published in Culver, Lawrence, Christof Mauch, and Katie Ritson, editors. "Rachel Carson's *Silent Spring*: Encounters and Legacies." *RCC Perspectives* 2012, no 7. doi.org/10.5282/rcc/5597.

Moreover, we hoped to transcend borders. From the beginning we were interested in flows and transfers of people, of materials, of resources, of flora and fauna. After all, natural environments ignore national borders. In fact, our goal was to study and compare human-environment relations across space and through time. We felt it would be interesting to study how societies, cultures, experts in different parts of the world and in different periods in history had dealt with similar challenges. History tends to be very descriptive, but if you start to compare across time and space then you go almost automatically beyond description. Comparisons provide you with an opportunity for unique analysis and this provides you with the potential for lessons.

I: *What about other disciplines besides history?*

CM: Initially our institute had a focus on international environmental history. However, from the beginning we felt that it did not make sense to focus on history alone. In fact, some of the most boring conferences were the ones that brought together historians only. (Even worse were those that brought together German-speaking historians only). During phase I, from 2007–2013, we hosted about 50% historians and 50% non-historians. We found that the best way to come up with new and exciting research questions was by bringing people from different disciplines together: Scholars who have something in common—in our case an interest in the environment—but who also differed in their methodological approach. I remember, for instance, an informal discussion when one of our fellows, an ethnobotanist who happened to be the President of the Global Diversity Foundation, was challenged by an ecocritic from Canada who asked him about the value of the concept of diversity. This led to a heated debate among fellows from different disciplines. In the end we decided to organize a multidisciplinary workshop on the topic “Why we value diversity” which was published in our *Perspectives* series. We realized that multidisciplinary settings make us come up with fundamental questions that we would never ask in a single-discipline setting. Many of our workshops were both multidisciplinary and cutting-edge. We were, I think, the first who did a workshop on neurohistory. The workshop started in a hospital with students under a scanner. They were presented with different images of urban and rural landscapes, land and sea, etc. We asked scientists to help us explain what happened on a neurological level. As humanities scholars we normally study texts and artifacts, but we ignore what

happens in our brain as a result of environmental stimulation. In our workshop and the resulting *Perspectives* publication, edited by Edmund Russell, we tried to understand how we can integrate neurological understandings into our humanities research. Last year, to give another example, we discussed the concept of human niche construction in a workshop with philosophers, architects, social scientists and others. Niche construction is a well-known concept in biology. The standard example are beavers who create dams and reconstruct and reshape their environment—often dramatically—according to their needs. Humans are doing something similar, on many levels, including for instance the air-conditioning of our living spaces.⁴ Our workshops have had an enormous potential in bringing people together from different disciplines and from different countries.

I: *How did the Centre evolve over time?*

CM: In the beginning we received our funding mainly for what the ministry called “free space.” Scholars were given a stipend so that they could sit at the desk and write books. That was the basic idea. We introduced weekly lectures, our lunchtime lecture series in which our fellows introduced their work to their peers and to the interested public. After some time we established the format of works-in-progress, weekly meetings that gave the fellows an opportunity to discuss their work in written form through pre-circulated papers. In order to reach a broader public, we worked on our social media, on digital exhibitions, and finally also on non-virtual exhibitions in cooperation with the Deutsches Museum. We began to publish our own journal, *Perspectives*, and an English and a German language academic book series.⁵ We also launched “Green visions” which featured monthly viewings followed by discussions with experts. In the meantime, fellows and staff had

4 For more information on the concept of human niche see Ertsen, Maurits W., Christof Mauch, and Edmund Russell, editors. “Molding the Planet: Human Niche Construction at Work.” *RCC Perspectives: Transformations in Environment and Society* 2016, no. 5. doi.org/10.5282/rcc/7723.

5 *Perspectives: Transformations in Environment and Society* (online journal), <http://www.environmentandsociety.org/perspectives> (Series editors Christof Mauch, Katie Ritson, and Helmuth Trischler), since 2019 *Environment in History - International Perspectives*, Berghahn Books, New York/Oxford (Series editors, Christof Mauch, Dolly Jørgensen, David Moon, and Helmuth Trischler), since 2009; *Umwelt und Gesellschaft*, Vandenhoeck und Ruprecht, Göttingen (Series editors Christof Mauch and Helmuth Trischler), since 2009.

developed their own formats, in particular discussions on such topics as gender and the environment, on risk society, on water issues etc. So, within three or four years we had totally expanded and reconstructed the original focus on “free space.”

I: *Did the organizational and the thematic focus change over time?*

CM: During phase I of our project we offered six research foci. They included transformation of landscapes, ecological imperialism, environmental knowledge, resource exploitation, cultures of catastrophe and risk, and environmental ethics and politics.

Setting this up at LMU was anything but easy. Our university had no programme in environmental studies. The Carson Center was something like a *creatio ex nihilo*. If you had come to Munich, let's say ten years ago, and you had told anybody that Munich would set up an environmental centre, it would have sounded like science fiction. I'm a professor of American cultural history, I had organised conferences in history when the RCC started. I had published a few articles and edited a few books in this field, but nobody would have thought of me or my co-director (Helmuth Trischler is a historian of technology) as leading figures in environmental history. We started from next to nothing. But there was a belief that questions that are related to the environment are of real importance for the future of humankind, questions like: How are we using our resources? How will we feed an ever-growing population? Etc. For questions such as these, history can serve as a great compass.

Now, in order to make our project sustainable beyond the six plus six-year funding phase from the Federal Ministry, we proposed a doctoral programme and a master's programme. We ended up creating a truly international doctoral programme with students from every continent, but we could not establish a master's programme in environmental studies.⁶ This proved to be too difficult within a university with a very weak central structure and about 50,000 students. Instead we created a certificate programme that gives master students from currently more than 40 disciplines a second “degree,” a certificate in environmental studies.

In order to get funding for a second phase we had to come up with new ideas and programmes. Among other things we added new types of fellowships—Outreach Fellowships (for filmmakers and writers for instance); as well as interdisciplinary fellowships for scholars who come from different disciplines but work together on a common project. We encouraged the creation of an

⁶ In 2019 the RCC received funding from the Volkswagen Foundation to create a master programme, MOOCs, workshops, visiting professorships and exhibitions through the Volkswagen Foundations funding line “University of the Future.”

alumni organization, the Society of Fellows, and we now have fellowships that are jointly sponsored by the alumni and by the RCC. The idea of the alumni fellowships is that former fellows come back and “give back”—for instance by organizing workshops, teaching a class or doing a virtual exhibition in their field of expertise.

Another *novum* were the regular discussions with environmental experts—policy makers, members of NGOs, environmental publishers, the heads of natural history museums and zoos and national parks, the City Planning Office etc. We also decided to include the students in outreach projects. One project was Ecopolis—a big student exhibition about the environmental history of Munich to which citizens and city planners contributed. This exhibition (part of it is available online) explains, for instance, why beer gardens have chestnut trees.⁷ It reveals that Munich’s Olympic Park sits on a mountain of World War II rubble, and it explains that the City of Munich buried a whole village under a mountain of garbage. The exhibition also elucidates how the rise of the Alps has shaped the terrain of the city of Munich, and what it took to re-naturalize the Isar river.

Also, in order to be sustainable beyond the ministry funding phase, we recently established a foundation for which we hope to gather tax-deductible donations for some of our projects. And we focus more and more on local research projects, including one that will start in 2018 about the National Bavarian Forest, Germany’s first National Park.⁸

Other regional activities include place-based workshops that bring students and fellows from different disciplines together: cultural historians, hydrologists, ecologists and geologists have camped out in places south of Munich and explored human-nature relations as part of a multi-day seminar with our certificate and doctoral students. This year we also did a place-based workshop along the Danube, in collaboration with our partners from the University of Wisconsin in Madison. We invited 18 experts from many different

7 <http://www.environmentandsociety.org/exhibitions/ecopolis-muenchen2017>. In 2019 the Ecopolis project was continued, with a second exhibition titled: Ecopolis München 2019: Environmental Stories of Discovery. The project received LMU’s Teaching Award. Parts of the exhibition are available online and so is the catalogue Laura Kuen Gesa Lüdecke, and Christof Mauch, eds. *Ecopolis München: Umwelt- und Entdeckungsgeschichten. Eine Ausstellung des Rachel Carson Centers for Environment and Society*. Munich: Rachel Carson Center for Environment and Society, 2019. <http://www.environmentandsociety.org/exhibitions/ecopolis-muenchen-2019>.

8 The project resulted in seminars, field trips and a multidisciplinary publication on the 50th anniversary of Germany’s first national park. Marco Heurich and Christof Mauch, *Urwald der Bayern: Natur, Geschichte und Politik im Nationalpark Bayerischer Wald*, Göttingen: Vandenhoeck und Ruprecht, 2020.

disciplines—engineers and architects as well as foresters and archaeologists—who helped us to explain the relations between the Danube River and its people in the past and into the future. Because our environmental study programmes bring students from very different disciplines together—humanities as well as social and natural sciences—students learn to speak about their own discipline in a way that is accessible. They are not only talking to their own in-group but learn to find a way to communicate so that people with a very different background can understand them as well. Our 130 certificate students and 30 doctoral students are a small group but what they are doing is unique. Their community is truly international and interdisciplinary. No comparable programme exists anywhere in Europe today.

I: *Do you have partners outside of Munich?*

CM: It is important for us to have partners in other places. We work together with the Centre for Ecological History at Renmin University in China, for instance. We organize annual workshops there. We have a partnership with KAJAK, an environmental centre in Tallinn, Estonia. We organize mini-workshops with the University of Vienna. The University of Zürich and the RCC have a joint fellowship programme. We established a doctoral exchange with Kansas, we are about to set up a partnership with New York University in Abu Dhabi where one of our alumni is teaching. Currently, we are getting proposals almost on a weekly basis from scholars in different parts of the world who are hoping to collaborate with us or apply for grants together.

I: *So far, throughout this conversation, you have often used the expression environmental history, not environmental humanities, and I would like to know the reason for that choice. What is your perception of the way in which environmental humanities, as a field, is growing and also do you think European institutions can play a role in its development?*

CM: These are at least three questions and I think they are really important ones. First, you have addressed the point of nomenclature. When we started the Carson Center, it was officially called “Internationales Kolleg, Internationale Umweltgeschichte: Natur als Kulturelle Herausforderung.” That seemed a bit long. Now “Rachel Carson Center” was potentially misleading, because, without a subtitle, it could have referred to a centre that deals with the work of Rachel Carson. There is already a Rachel Carson Institute

in the U.S., so we needed a clarification. Also, Rachel Carson was a biologist, and we were doing environmental history and related disciplines. So, for a short time we called our centre the “Rachel Carson Center for Environmental Studies.” Nobody knows that, but we actually had letterhead that read: “Rachel Carson Center for Environmental Studies.” At the very time, when we were about to print the letterhead, there were two fellows at the centre who discussed the term “environmental studies.” One of them was from Britain and the other one from Canada. One of them said, “Environmental studies means, for me, something scientific,” and the other one said, “Environmental studies means, for me, something literary.” Because of these potentially confusing connotations, we got rid of our brandnew letterhead design.⁹ We decided to call the RCC “Center for Environment and Society.” I have to say I liked the broadness of the term and the suggestion that our work was not merely scholarly but potentially political as well. In contrast, I never quite liked the term “environmental humanities.” The reason why I don’t like it—but I may very well change my mind—is because until recently almost everybody who calls themselves an environmental humanities scholar is a literary scholar. The Carson Center started out as a centre for environmental history. This is what our grant was for. And the term “environmental humanities” de-centres history. I realize that so many people now call their centres Environmental Humanities centres. Currently I still think we should keep the “Environment and Society” label, but it is also important to be pragmatic. Recently, we established a doctoral degree in “environmental humanities.” As the Carson Center is part of LMU’s literature and language faculty, I could not suggest a degree titled “environmental history” or “environment and society.” Instead, I asked for permission to establish an environmental humanities PhD, and it was granted. Students who will receive such a degree can have a background in many different disciplines—anthropology, geography, literature, history. If you want to work outside of academia, in the environmental “field,” it

9 Since 2017 the RCC has increasingly used the term “environmental humanities” for its projects and events. In July 2018 Christof Mauch convened the first ever International Summit in Environmental Humanities in Schloss Hohenkammer/Munich. The event brought together scholars from every continent, including a number of doctoral students and 26 directors of Environmental Humanities centers.

may be an advantage to be an environmental humanities scholar rather than, for instance, a scholar of modern history or theology. Depending on the future of the term “environmental humanities,” we might decide that we change the name of the Carson Center and call it an Environmental Humanities Centre. Currently, however, I am afraid that the term does not do what we want it to do. The term is not inclusive enough. Many geographers who see themselves as scientists would not easily identify with “environmental humanities.”

I: *And the question about Europe and its role?*

CM: Europe is special. I realised this when I was president of the European Society for Environmental History (ESEH). Members of our society at the time were publishing in twenty-four languages. I am always amazed how an organization like the EU can survive. It holds so many different countries together under one umbrella. Interestingly, in Europe, in contrast to many other continents, the natural sciences feature more prominently in environmental history conferences than elsewhere. Historical climatologists attend the European Environmental History Conferences and give papers. In America, many people work on cultural aspects and they discuss issues of national identity. In Europe in contrast there is no common cultural history. If you look at the programme of the most recent ESEH conference there are many different disciplines represented: geographers, anthropologists, political scientists, and also literary scholars. EASLCE, the European Association for the Study of Literature, Culture, and the Environment identifies itself much more with the environmental humanities than ESEH. But this may well change. I will admit that the term “environmental humanities” is not without some charm. There are aspects that I like about it. I like the fact that it brings together the physical world: the “environment” out there, alongside “humanity” and the “human world.” When geologists or biologists talk about nature, they usually don’t think of humans. So, the reference to the humanities is attractive because it includes both impact on humans and human perception. But the term “Environment and Society” suggests relevance beyond academia—perhaps more so than “Environmental Humanities.” Environment and Society suggests outreach and policy orientation, and my hope is that our research will be relevant beyond the ivory tower.

I like the little essay that Frank Zelko wrote for a conference that we organised on “The Future of Environmental History” several years ago in Washington D.C.. Zelko says something like: Next time after you are done with your book, ask yourself whether there is anything that the non-specialist can draw from. Does history provide solutions that can be used in today’s world? Can we write a relevant policy statement based on our study of the past? Zelko is a co-editor of a journal called *Solutions* and he urges us to think whether we might have solutions for current-day challenges. Humanities scholars, in general, and history scholars, in particular, are very good at identifying problems, but once we have identified a problem we tend to leave it at that. Likewise, if somebody comes up with a solution, we are very good at critiquing the solution. We are really good at explaining that there are no easy solutions. We are good at demonstrating how complex our world is. But I agree with Frank Zelko who would claim that we become more relevant as environmental historians or environmental humanities scholars if we realise we can also help to provide solutions to contemporary challenges. We may be criticised for it, but our work is concerned with human-nature relations and indeed with the future of the planet. It would be good if our research could give direction and orientation for political decision makers. I think as environmental scholars, we have an obligation to identify ways for moving forward in a manner that is less destructive to our environment. As environmental historians we have learned that humans in different times and in different parts of the world have found ways out of alarming situations. We know about cultural responses that can provide us with hope. If we learn about these ways through our research, I think we have an ethical obligation in our world to intervene. Now I am using a military term “intervene,” “intervention,” and I realise that this is a problematic term. But what I mean is that we should intervene in the sense of taking part in political debates if we have relevant knowledge. Sometimes we see a lot of alarmism about developments that humans have handled fairly well in history. In such a situation, we should raise our hands and say, “look we’ve handled such situations before.” What looks like an aporia, is not quite as gloomy as one might think. So, I really like this idea of Frank Zelko that, at the end of writing a book, we should write a memo or an opinion piece for a newspaper and discuss how we can make our world a better world. A better world can mean a more hopeful world but, in some cases, it can also mean a more concerned, a more alert world.

- I: *From what you say, I see that a focus on the environment can bring hope to the humanities. In Spain, we have the sense that the humanities are in a time of crisis. It is difficult to get funding for projects*

in the humanities, so perhaps by incorporating the environment in what we do, we have a possibility of telling society how meaningful the humanities can be. So, what do you envision as the future of environmental humanities in Europe?

CM: The short answer is I agree with you 100 percent. We have seen a recent concern for the environment and a surge in the environmental humanities programmes. This in itself is a cause for hope. We have come a long way within half a century. The first time that anybody could get a university degree in environmental studies was in the 1950s in the U.S. It was a natural science degree. Today, people—far beyond the circle of specialists—realise that our environments are fragile and vulnerable. We are today in a better situation as environmental humanities scholars than we have ever been: we have a community of potential listeners. People who look for orientation. I see the environmental humanities as orientation sciences. They help us orient ourselves because we narrate stories in which humans, minds, intentions etc. have a place. In some of the stories, we are victims of environmental change, in others we are drivers of positive change. We live in a time in which people are eager to listen to environmental humanities researchers, in part because we talk precisely about the role of humans in the environment. However, I am also worried. I do not see that our funding agencies—and particularly the EU—realise the value of the humanities. Unless EU officials change their advertisements for academic projects dramatically, there is a danger that we will become ornamental and indeed irrelevant. On the one hand, the EU is paying lip service to the integration of the humanities in their calls for research projects. Some natural scientists and engineers integrate philosophers, historians, lawyers or some other humanities scholars in their projects. However, typically humanities scholars play a peripheral role in almost every large EU project. Including a humanities scholar is like ticking a box: putting a humanities scholar on the roster gives the project a better chance of winning. The Carson Center often receives inquiries from natural scientists or engineers who want to include us in their proposals, but most of the time they have no idea about what the Carson Center is doing. All they want is the formal involvement of a humanities institute. If one wants to get funding from the EU in today's world, one better be a scientist or engineer, not a humanities scholar.

Funding goes to those who collect data and evaluate data and to those who do applied research. Environmental historians have, of course, also collected historical data. If a city is flooded, we, as historians, can provide data. We have records that show, for instance that the water level of the Danube in 2013 was higher than at any other point since the Middle Ages, with the exception of 1501. This information—and the 1501 data—may be useful for engineers. But if we reduce ourselves to the collection of data, we lose what makes us who we are: critical humanities scholars.

What we need on the EU-level is nothing short of a revolution. Currently, the proposals and calls are written in a science and engineering language. We need calls that speak to the strengths of humanities scholars. There should be calls for research projects that come out of an understanding of what humanities scholars can provide. We are good, for example, at explaining complex transformations over time. We are good at answering questions about what happens to people, to livelihoods, to flora and fauna when humans intervene, for example through deforestation, the planting of soy, monocultures, etc. We are good at answering questions about cultural, social and political responses to catastrophes—in different parts of the globe and at different times. We are good at identifying unintended consequences. We are good at imagining better worlds and good at analysing past utopias and dystopias. For some of our projects we would seek scientific knowledge and support. Remote sensing, for instance, could be helpful when it comes to an analysis of landscape transformation, but our skills and the value of our work is not in doing applied research. The questions we are asking are “why” and “how” questions, and our answers can rarely be reduced to simple data. We would not simply provide numbers and correlate them. Recently some scientists reported: “Look, in certain areas of the globe where a lot of water is used, income is low in agriculture.” This may well be true, and it makes for good headlines. As humanities scholars and as environmental historians in particular, we would be critical of such a statement. We would ask who uses the water, how the water is being used, why this specific correlation was investigated. We would also think of alternative questions that one might ask, and we would always include what one could call “context”: cultural context, social context, political context, legal context. Not just data. Politicians want data and executive summaries, short abstracts, and oftentimes a legitimization for their agenda. Under the current call for EU proposals no large-scale project will ever be led by an environmental humanities scholar. And there are reasons for it.

We are an academic community without a strong lobby. And we are small in numbers. Most politicians do not know that the environmental humanities exist. So perhaps we should indeed work towards a revolution. I think that

our world would be a much better place if every university had at least two or three environmental humanities scholars or environmental historians. Our world would be a different world; universities would look different. A stronger presence of our field would create a new culture of understanding that would also be visible to people who are decision-makers. We have a long way to go, but we should not give up. I truly believe that the contextual critical thinking that the humanities can provide is needed today more than ever before, particularly when it comes to human-nature relations. Humanities scholars are good at providing a deep understanding of what scientific data might mean. For example, what impact does the use of pesticides or a transformation to monoculture have? What is the impact not just in terms of productivity, but also regarding the minds and outlook of people, social realities, environmental justice, visions, etc. The humanities are better than the natural sciences at providing a comprehensive picture of our world.

- I:** *What should the humanities relationship with the natural sciences look like? And how does the Rachel Carson Center handle this relationship?*
- CM:** What scientists are doing is extremely important and it will be important that environmental humanities scholars work together with natural scientists. But I contend that it is easy to mock the natural sciences when medical advice about how much coffee and how much wine we should drink, and whether it is healthy or not to drink a certain amount per day has changed dozens of times during my lifetime alone. Scientific results have a very short lifespan. The stories that humanities scholars write typically have a much longer lifespan. After all we write against forgetting: we give voice to humans and to human-environment relationships that would not be remembered without our narratives.

What I feel we need is an academic culture in which students and scholars don't think in dichotomies and hierarchies between natural sciences and social sciences and humanities. We need people who can understand the importance of coming together and contributing to a larger project that reaches beyond disciplinary boundaries. We should try and come together first and foremost in order to contribute to a better, a just, a diverse, a sustainable future. These broad goals are often forgotten in our research agendas. The environmental studies programme of the Rachel Carson Center may be a small step in this direction. Our students have to attend courses in natural sciences, humanities and social sciences. They come from many different disciplines. The

environmental studies programme forces our students to communicate across disciplinary boundaries. They are all enrolled in a regular master's programme, but they attend environmental classes as well. They get a second degree, a certificate. Because of their different backgrounds, they learn how to communicate with peers who come from very different disciplinary cultures. Our Certificate Programme in Environmental Studies will not save the planet, but if people would think in the way our environmental students think, then our world would likely become a better place. Altogether, I am optimistic. We are currently a small group, but we are a growing minority and we have never been in a better position to grow than today.

I: *I recently had an interesting experience applying for a Project Life, a European type of funding that was established to give funding to projects having to do with environmental issues. I was discouraged by scholars and by the Spanish authorities because my project was educational, so I can fully relate to what you are saying. We need a revolution. What do you think about this type of situation where a humanities scholar finds herself blocked by a long-established system of doing and understanding things?*

CM: I think we are victims of a neoliberal culture and a type of thinking in the European Union that gives priority to economic development. There are, of course, reasons for this. The last line of EU research calls came at a time of economic crisis. In order to legitimize research funding, it was necessary to come up with an economic reasoning. In the rationale of the EU, research needs to contribute to development and it needs to create profit. This type of thinking leaves little or no room for what you described as your own educational project. There is no direct monetary profit in educational research projects. If we criticize the EU, we should not forget, however, that the situation is not much better elsewhere. U.S. education is all about money. Universities are notoriously run like businesses. Students have to pay, alumni have to pay, and governments end up paying less and less. In a way it is understandable why the EU prioritizes applied research. The phenomenon is not EU specific. It is an expression of capitalist ideology and utilitarianism.

I: *Do you see a way out of the current situation?*

CM: I can see two ways out of the dilemma. First: a slow "march through the institutions." I think that there is a chance that over time EU

bureaucrats will change their calls. I also believe—and I have seen this—that natural scientists, some of them at least, are fascinated by what the environmental humanities are doing. As humanities scholars we should get heavily involved, directly or indirectly in all the meetings that prepare future EU research calls.

The other option is to apply to non-EU funding agencies that are more open-minded. That way we might be able to, subtly and subversively, create awareness of the role of the environmental humanities and strengthen our role in public discussion. I would not underestimate the fact that our strength is in communicating science. In recent years environmental humanities scholars have very effectively gathered around the term Anthropocene. The momentum the term Anthropocene gained is fascinating. A group of geologists created the Anthropocene Working Group with the goal to formally establish a new geological epoch. That epoch is supposed to be located on the same hierarchical level as the Pleistocene and Holocene epochs, with the understanding that the Anthropocene terminates the Holocene. These geologists did not get any big grant for their project. They did not need it. They got free publicity for their project—way beyond anything that anybody could have ever imagined. The publicity came from hundreds of environmental humanities scholars around the globe, but also from artists, musicians, painters, sculptors, philosophers, historians, literary scholars, museums. The geologists got free advertisement for their concept from cities, from landscape projects, from people who work in conservation, because this term, a scientific term, grasped the imagination. It helped the Anthropocene Working Group to have humanities scholars and artists as their mouthpiece. Humanities scholars and artists have shown themselves to be the best analysts and interpreters of what the Anthropocene might be, and what human presence means for the future of the planet. One could go further and say that explaining the Anthropocene needs the humanities. This is a reason for optimism, and perhaps one day the EU will propose a call about the Anthropocene or similar concepts. That would give humanities scholars an opportunity to become project leaders.

- I:** *You have done some work on the Anthropocene at the Carson Center, haven't you?*
- CM:** Yes, the Carson Center developed and curated a Deutsches Museum exhibition titled “Welcome to the Anthropocene” that was visited by close to 300.000 people. The term Anthropocene is

a broad term. It has topicality and it is future-oriented. We called our exhibition “Welcome to the Anthropocene.” The title suggested that we are just now walking through the gateway of a new geological era. The future of the planet will be determined by what we as humans have done and will be doing in the future. The currency of the term Anthropocene has helped environmental humanities scholars get visibility. It has helped geologists as well. In recent years, geologists have often been criticized because of their inability to predict big disasters, such as tsunamis or earthquakes, and because of their involvement in environmentally destructive mining projects. The Anthropocene has given geology an altogether new identity, and some geologists have adopted and embraced that. I am claiming that we can learn from this phenomenon. It shows us that interdisciplinary and transdisciplinary projects can be attractive. It shows us that we have potential allies in politicians and decision makers and artists, and in natural scientists, in this case geologists, as well. We do not need armies of natural scientists as partners. But natural scientists who are open-minded are extremely valuable partners. The secret behind the success of the Swiss Network in Environmental Humanities which was established just a few years ago is that it includes a small number of highly motivated natural scientists. A few natural scientists is all it needs.

Currently, it looks like the environmental humanities have no ally on the EU level. But we are slowly gaining traction, in particular through university programmes. We are gaining traction through the ideas and activities of students who begin to think differently. New policies will certainly not come out of diplomacy alone. The Paris Climate Summit was important not because of its direct policy implications but because of its symbolism. Environmental humanities scholars are playing a major role in translating the goals of the summit into action. Perhaps some time in the future Brussels will understand that an EU project is not only valuable if it brings in money or leads to new patents, but also because it creates awareness and concern. When I say we need a revolution; I think it is basically going to be a grass roots revolution, but this revolution has already started—in all the environmental humanities centres that have sprung up like mushrooms over the last few years. Many of them are working on a shoe-string, but they have gained a lot of visibility, especially if they work with local and regional communities.

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