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Acceptance speech

19 June 2025

## **Camille Parmesan**, awardee in the Climate Change and Environmental Sciences category (17th edition)

I'm delighted and honored to receive this award in Climate Change and Environmental Sciences. I want to thank the BBVA Foundation for their recognition of the importance of climate change, and through their awards, for helping to enlighten the public on the importance of the sciences to their own lives, and to society as a whole. I also want to thank my family, especially those who flew all the way from Texas to be here with me, and to express my deep gratitude to my husband and colleague of 40 years for his bedrock of support and endless encouragement. Finally, I want to thank President Macron for inviting me to France through his Make our Planet Great Again program where I have been warmly welcomed by the scientific community, as well as by the local community in my village in the foothills of the Pyrenees.

I grew up in Texas in the Star Trek generation. This was a time of the first landings on the moon, with scientific discoveries regularly making headline news. For young people, the world seemed on a positive trajectory of better lives for everyone, and a future full of hope and peace and discovery. Just as I was finishing my first university degree, in the 1980s, this started to shift. Universities have increasingly been labeled as elitist, scientists have been attacked as out of touch with the common person, and I've witnessed a gradual erosion of respect for science. This award is especially relevant now in light of increasing disinformation about not only climate change, but science in general.

The work for which I'm being awarded was spearheaded by a grant from NASA, but really bloomed when I joined the Intergovernmental Panel on Climate Change (IPCC) in 1997. It was clear that global leaders needed to know the extent to which climate change was already impacting the natural world. This was a difficult task, because there are so many activities of humans that are affecting wildlife, how do you tease them apart? I took advice from the great detective, Sherlock Holmes, who said "When you have eliminated the impossible, whatever remains, however improbable, must be the truth." Using a systematic approach of elimination, we were able to conclude that climate change is indeed affecting a majority of species, changing when, where and how they live.

Of immediate relevance to conservation are the massive movements of species' ranges that are occurring as the climate space to which wild species are adapted shifts around the globe. This discovery created much angst in the conservation community. The global network of protected areas so painstakingly created were clearly not going to be able to protect all the species for which they were designed. Conservation in a time of rapid climate change requires a new way of thinking that allows for dynamic changes in local communities; that aids rather than hinders these changes; that embraces new waves of hybrids being formed as species that were historically separated come together. This process is most advanced in the Arctic, where the shrinking of the polar ice cap has opened new oceanic passageways, and Atlantic whales and seals are breeding with their distant relatives from the Pacific.

Wild species pay no attention to political boundaries. Effective conservation more than ever needs to coordinate across countries. Tackling the problems that have arisen because of human-driven climate change requires transboundary research, planning and action. Attacks on science, not only in the USA but around the world, are coming at a time of climate emergency when international cooperation is most needed. Climate science should not be politicized.

I'm an American, which renders me optimistic. I've spent much of my career fighting the anxiety and pessimism that the reality of climate change imposes. I've been trying to get the message across to the public of how climate change is altering the natural world, and how those changes are already causing suffering for humans, especially for the most vulnerable peoples, and in the most vulnerable nations.

In doing that, I have learned that I am a "right-brain" person. I know how to use scientific facts and graphics of scientific data to support the conclusions I've helped develop in my own research and in working with others in my 27 years in the IPCC. But this approach doesn't reach everyone. I've learned that many people favor the left-side of their brain, respond more intuitively to the world around them, and are more moved by feelings than by facts. To this end, I've been increasingly working with artists – filmmakers and photographers – and I intend to devote a portion of my prize to further engagement in the artscience interface. Filmmakers like Heidi Morstang and Gaby Bastyra have come with an "outsiders" view of the world of science and breathtakingly beautiful cinematography, to help me tell the tale of climate change, and how it is altering the natural world. I can reach people's minds, but I need artists to help me reach people's hearts.

In summary, I thank the BBVA Foundation for their practical and moral encouragement to continue with this work in these difficult times for science.