



A SEMESTER IN BERLIN
SCOTT BARRETT

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I am sorry to say that I hadn't heard of the Wissenschaftskolleg until late 2014, when I was invited to attend a workshop at the Kolleg. Looking back, I can now see that this meeting had all the hallmarks of a classic Wiko event. It was about a fascinating topic (why societies ignore looming disasters). It involved people from a variety of disciplines (including evolutionary biology, law, and the humanities). It was lively and enjoyable and taught me new things. During my short visit, it was suggested to me that I might want to consider being a Fellow at some future date. As I am of the view that other people often have a better idea of what I should be doing with my life than I do, I took the suggestion

seriously. When I heard that people with my kind of training didn't often come to Wiko, I became even more interested.

I had hoped to raise enough funds to spend the year at Wiko, but this proved impossible, and in the end, I was only able to spend the autumn semester in Berlin. I'm very sure it would have been better to stay the whole year. It takes time to get to know the members of your group. It takes time to let go of your old ideas and to absorb new ones. Although Wiko asks applicants to say what they intend to do when they come, in a way Wiko succeeds most when applicants end up doing something different than they had planned. This is very hard if not impossible to do in the space of just a few months.

I had intended to spend my time at Wiko writing the first chapters of a new book on climate change. I was able to make a start on this project, but my main accomplishment was to do some of the background research needed to underpin the book.

My first achievement was to finish a paper I had started before arriving in Berlin. The topic of my research is international cooperation, particularly on issues relating to the environment. I've written a lot on this subject, but it wasn't until shortly before I arrived in Berlin that I understood that a Big Idea lay behind all of my work: countries are very bad at cooperating voluntarily to supply a global public good, but extremely good at coordinating voluntarily to achieve the same aim.

In some cases, the need to coordinate is obvious. One of the greatest achievements of international cooperation was the eradication of smallpox. Why did this succeed? The main reason is that, once each country came to believe that all other countries would eliminate the disease, each had a strong incentive to eliminate it, since each country would then determine whether the disease would be eradicated. This is a classic coordination situation.

To climate change negotiators it has seemed obvious that every country has to reduce its emissions. But some countries are only willing to act if others act, and the assurance that others will act on climate change is very weak. This is not a coordination situation.

I think this explains why the climate negotiations have been so frustrating. My research suggests that negotiators would do better to search for ways in which countries can coordinate the adoption of actions that would cause emissions to fall.

One way to do this would be to make cooperation on trade conditional on cooperation on climate change. Linking trade to climate change would create a coordination situation provided countries had a strong incentive to join the free trade group (in particular, the gains to having free trade relations with the other members would have to exceed the price of admission, namely a reduction in the new member's greenhouse emissions). If a

critical mass of countries were to join such a group, the incentive for the remaining outsiders to join it would become irresistible.

My main accomplishment during my stay at Wiko was to construct a model that would explain whether and under what conditions a climate change treaty could be enforced by the threat to impose tariffs on free riders. This was important to my book project because the main reason all previous climate agreements have failed, my research suggests, is that they were unenforceable (this is also true of the new Paris Agreement).

The challenge I faced was to construct a model that was very, very simple, and yet also yielded new insights. It's easy to construct a complicated model, but complicated models are difficult to understand and for that reason the results that spring from them are difficult to interpret. These models aren't of much help. The best models are both understandable and yield results that are surprising – meaning, surprising even to the researcher who constructed the model. When you look at these models, you can't anticipate what the results will be; and yet, once you've seen the results, you can understand, going back to the model, what gave rise to them. These models yield insight.

The model I developed in my room at Wiko shows that, because non-members of a climate coalition have an incentive to retaliate should tariffs be targeted against them, the circumstances in which tariffs can be used to support a climate agreement are limited. Punitive tariffs would only sustain cooperation on climate change if they transformed the game into one of coordination.

A theoretical model can't tell us whether real people would choose to impose tariffs when tariffs support a coordination situation and whether, in these cases, coordination will succeed. To answer these questions, you have to play the game “for real” (meaning, for money) with real people.

To do this, I teamed up with Astrid Dannenberg of the University of Kassel. Astrid is an experimental economist, and she and I designed an experiment in which we asked groups of undergraduate students in Germany to play the game I constructed at Wiko. Our results are not yet complete (Astrid has played the game with 600 people so far!), but they suggest that groups won't always try the coordination option. Moreover, some of the groups that try it fail to coordinate (meaning that they fail to address the climate problem and, in the bargain, engage in a trade war). This suggests that the idea of making trade cooperation conditional on climate cooperation holds some promise but is also risky.

Of course, I did more at Wiko than work. I chatted with the other Fellows. I went on runs in the Grunewald Forest. I explored Berlin.

I have some warm memories of my stay at Wiko: Joining Michael Jennions for a traditional German meal in town. Playing ping-pong with Andrea Bergmann. Drinking beer at a German pub with Steve Beissinger. Drinking a smoked cocktail at a bar with Andrea Bohlman, Menaka Guruswamy, and Barbara Kowalzig. Gossiping with Helena Jambor and Emily Sena in Helena's room after Helena's lovely daughter, Elli, had gone to bed. Watching Shaheen Dill-Riaz's film, *Ironeaters*. Watching the film, *Mädchen in Uniform*, starring Carey Harrison's mother, Lilli Palmer, and being spellbound by Carey's remembrances of his mother. Being treated to a meal by Frédéric Brenner at Dunia Najjar's restaurant. Discussing consciousness with Jihwan Myung. Discussing everything and anything with Carey.

I also have disturbing memories. One was joining other Fellows very early one morning to watch the election results in the United States. Sometimes you read history and wonder, how could that have happened? On the morning of November 9th, I learned how history happens.

One of Berlin's charms is the way it displays its history. The Kaiser Wilhelm Memorial Church was badly damaged in a bombing raid in 1943, and rather than repair it or raze it, Berliners chose to preserve it: a remembrance and a warning to future generations of the horrors of war. The Church is known as the "heart of Berlin", and Berlin is proud to let it be known that there is a hole in its heart.

In early December I walked through the Christmas market surrounding this church, and later that month, on the 19th, I was shocked to learn that a terrorist had driven a truck through the market, killing a dozen people and injuring more than fifty others. When something like that happens you wonder, how will people respond? I was moved when a crowd of people – Muslims, tourists, Berliners, a very mixed group – appeared at the Kaiser Wilhelm Memorial Church holding flowers and candles, a display by ordinary people of their humanity.