



THE STEPPING STONE JOACHIM KURTZ

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Conservation biologists are fond of “stepping stones”. These are small habitats helping endangered species to survive in an increasingly damaged and polluted environment that is over-used by human economic activity. Like protected islands in an otherwise rough and inhospitable milieu, stepping stones provide these frightened creatures with a retreat area to recover and refuel energy for their next big step.

The Wissenschaftskolleg zu Berlin also protects an endangered species: The scientist – as a thinker! Nowadays a scientist’s life seems to be increasingly indistinguishable from the life of a businessman. The modern scientist appears to be constantly hunting for research money, trying to sell scientific results in high-impact journals and juggling with terms that become more and more indistinguishable from the stock market report. Time to think is becoming rare ... What a pleasant difference at the Wissenschaftskolleg!

For me personally, the Wissenschaftskolleg was a stepping stone in an even more concrete way: I was migrating from the ETH Zürich, Switzerland, to a new professorship at

the University of Münster, Germany. On the way I refuelled my creative reserves at the Wissenschaftskolleg from October 2006 to March 2007. On the one hand, and for sure, these months in Berlin were extremely helpful for me to survive the following stressful phase of starting a new research group, setting up new laboratories, preparing teaching, etc. On the other hand, my situation “on the move” also prevented me from fully benefiting from what the Wissenschaftskolleg had on offer, intellectually. It was, so to speak, a good thing – but at the wrong time. With the new position and all the workload on the horizon, I did not experience my time at the Wissenschaftskolleg as calm and graceful, as it is found in so many of the Fellow reports. I wish I could come back when times are more adequate!

My time in Berlin was also a stepping stone (or should I here rather say a springboard?) in yet another direction, namely into family life. Our little son was born just 3 months before we arrived in Berlin and I will never forget all the fantastic experiences of him entertaining the staff and Fellows, who were all so extremely nice and helpful, making the Wissenschaftskolleg also a fantastic place for children.

But let’s start at the beginning. In the fall of 2003, Rüdiger Wehner invited me for a talk to the University of Zurich. He was interested in my finding that copepods, which are tiny crustaceans, appear to be capable of reacting with specific immune memory against parasites. This finding was absolutely contrary to prediction, since it was known that invertebrates (such as copepods) do not possess any of the mechanisms that are responsible for immune memory in vertebrates (such as humans), and alternative mechanisms were unknown by that time. Interestingly, a workshop we had at the Wissenschaftskolleg in February 2007 neatly showed how wrong the initial scepticism against specific immune memory in invertebrates was, since almost all the participants worked on amazing examples of alternative mechanisms for immunological specificity that were now being elucidated (no more than 5 years later!). Rüdiger Wehner, Permanent Fellow of the Wissenschaftskolleg, seemed to be open-minded for such results that break the rules. Since I experienced him as a very enthusiastic and inspirable scientist with an amazingly broad range of knowledge, he had no difficulty enthusing me for the idea of assembling a group of open-minded scientists to address questions of evolutionary immunology at the Wissenschaftskolleg. I became even more enthusiastic when it became clear that I would have the chance to co-convene this Focus Group *Evolutionary Immunology* with Paul Schmid-Hempel, one of the founders of this expanding field of research. What we might have underestimated was the hard work to follow. Everybody whom we approached as potential Fellows was truly enthusiastic about coming to the Wissenschaftskolleg, but it appeared to be especially difficult

for experimental scientists running large labs to leave for a whole year. Finally, we successfully brought together a group of fantastic younger and more advanced experts working experimentally and theoretically on diverse complementing fields of ecological and evolutionary immunology. Some of them would stay for the whole year, while others could not afford more than a month or so away from their labs, which somehow runs counter to the idea of the Wissenschaftskolleg as an intellectual retreat from day-to-day stress.

Starting with big plans – that our group would redefine the field of evolutionary immunology and would write at least one book about that – I was soon persuaded that this was probably not the right direction to go. We decided instead to freely drift into the discussions at the Wissenschaftskolleg and then see what happened. In general, this turned out to be a good decision, since what makes the Wissenschaftskolleg special is its openness for the unexpected, rather than a predefinition of something carefully planned beforehand. For example, the ample opportunities for discussion with theologians, social scientists and philosophers on topics we as biologists would never have thought about, or at least not the same way. Or the many fantastic Tuesday colloquia that were such a different experience from what biologists encounter in their normal seminars and conferences.

In the end, most members of our group were very productive – but I am not sure about me. Even my main project, an introductory textbook for the field, to be written together with Paul Schmid-Hempel, was barely begun when I left Berlin in March. After all, the many positive feelings resulting from my time on this stepping stone were thus mixed with a persisting, unpleasant feeling of not having achieved my goals there. Somebody (who was it?) said, the correct measure for productivity resulting from the Wissenschaftskolleg should be taken not immediately after, but ten years later. So, let's reconsider this question in ten years ... At least there is one thing I am sure about: scientists need stepping stones!