



A SECOND HELPING OF WIKO ALEX KACELNIK

Alex Kacelnik investigates decision-making by “human and non-human animals” in Oxford, where he chairs the Behavioural Ecology Research Group. His approach combines evolutionary biology, experimental psychology and economics. Alex was born in Buenos Aires in 1946 and studied biological sciences at Buenos Aires University before moving to Oxford in 1974. He obtained his Ph.D. at Oxford in 1979. In addition to Oxford, he spent time at Groningen, Cambridge and Leiden. His recent publications address risk attitude, tool use, smiling and trust, the relation between evolutionary biology and psychoanalysis, the sense of time and several other areas of behavioural research. In addition to his research, Alex is also a member of the Academia Europaea and co-founder of Oxford Risk Research and Analysis, Ltd., a company dedicated to investigating decision-making in industrial contexts. His web page is <http://users.ox.ac.uk/~kgroup/>. – Address: Department of Zoology, Oxford OX1 3PS, United Kingdom.

And so my second round at Wiko has ended. I explained in last year’s report that I faced an unusual circumstance: rather than spending a single full year, I was here for two part-time years, as the organiser of a focus group on “The Sciences of Risk”. This arrangement was an experiment on the part of Wiko and one that I hope will be offered to others. There were two reasons for this arrangement, the first having to do with the planning of the work at Wiko and the second related to my personal circumstances.

First, the reasons for the long haul. My target was to work with a set of colleagues coming from a diverse set of disciplines (biology, psychology, economics, mathematics, anthropology) and I envisaged that we would form more efficient sub-groups if temporal overlap

was staggered and carefully orchestrated. Some participants came as full Fellows for the whole year, but others as guests of the Rector and spent only a few months in Berlin, so that several overlapped only partly in their stints. It was important that some came at the same time, if they shared interests and their simultaneous presence would be productive, but on the other hand the interests of some of the others were at the extreme end of the continuum and I felt that the discussions would suffer. The two-year program allowed for a degree of flexibility in planning that would not have been possible on a normal cycle.

The second reason for my part-time arrangement is perhaps the most interesting one from the point of view of repeating the experience in the future: my experimental laboratory in Oxford cannot be closed nor the graduate students abandoned for a full year. If I could not have spent 20% of my time in Oxford, I would have found it impossible to embark in this project. I arranged the time-sharing in a very flexible way: The first year, I spent most of Fridays and part of Saturdays in the Oxford lab and Mondays to Thursdays in Berlin, while the second year I switched to longer trips at greater intervals. I know that many experimental scientists face similar constraints and that because they cannot afford to leave their experimental bases they don't take full sabbaticals away. That's one reason why they are scarce among Wiko Fellows. The part-time arrangement worked. In fact, as my Oxford collaborators would say with glee, the lab had never been as productive as during the time I was mostly away... It was during this period that our beloved Betty achieved worldwide notoriety by an astonishing display of creativity. Betty is a crow whose most dramatic feat was to make a tool by bending a wire to obtain an otherwise unreachable morsel. This ability had previously been reserved to *Homo sapiens* and when a bird did it, the media went wild. While Betty carried out even more tricks in Oxford, I handled the press from my retreat in Wiko. It was also during this period that the lab produced the first experimental examples of Prospect Theory as applied to non-humans (this theory's core is the observation that people switch from aversion to appetite for risk if the same problem is framed in terms of expected gains rather than expected losses). Starlings, it turns out, do the same, and this observation demands a re-analysis of the explanations normally given for human behaviour. In summary, I can say with a degree of satisfaction and relief that yes, it is possible for an experimentalist to remove himself from the action arena and take time to think with the freedom and breadth that Wiko offers, without compromising the continuity of empirical work back at home. I do hope others consider and perhaps emulate this experience. But now I should return to Berlin.

The starting point for this multidisciplinary project was the realisation that, while uncertainty permeates all decision-making and has received a huge amount of attention from scholars from different angles, theoretical constructs of risk remain isolated from each other. Economists examine utilities and compute efficiency boundaries, biologists examine the shape of fitness functions, and psychologists dwell on distortions of perception, but few (until recently) saw the uniformity that lay behind the different findings and the benefit of cross-fertilisation. To help in bridging these gaps, we convened at Wiko for these two years, and, I hope, much was gained. All of the project's participants have become intellectually richer and broader, even if it would be exaggerated to say that we have found a common view. Differences in perspective persist, but we have learned a great deal, and I am grateful to my colleagues for all they taught me and to Wiko for the opportunity to bring them together.

I organised two workshops during my time at Wiko, the first with a highly interdisciplinary composition and the same title as the focus group (see last year's report) and the second, reflecting the intervening developments, on the broader topic of "The Limits of Rationality" (see report in *Wissenschaftskolleg Nachrichten* 13, 2003). While the first year's workshop gathered mostly fully established figures, the second year focused on the research coalface, so that mostly young and innovative experimental researchers exchanged their latest findings on when and how (and, if known: why) decision-makers do not behave the way they are expected to. Preference inconsistencies, context effects, the importance of simple rules, and bounded rationality were discussed and examined with obsessive enthusiasm and lively discussions, around examples including bees, birds, humans and even plants. While the 2002 workshop on "The Sciences of Risk" had allowed scholars from different fields to inform and educate each other, the 2003 workshop on "Limits of Rationality" allowed those who knew only too well the strengths and pitfalls of each other's work to explain, question or re-interpret each other's findings as they were presented hot from the experimental laboratory. We were all invigorated by this exercise and I am very grateful indeed to Wiko and to the Otto and Martha Fischbeck Foundation for the finances that made this possible. Workshop organisation was deceptively easy: back in the Wiko offices, Britta Cusak corresponded with the participants, made complex travel arrangements, compiled timetables, and, when the day came, received the visitors with hospitality and good humour. I am very grateful to her for her support. And life at Wiko was, as ever, made wonderfully pleasant by all the staff, from the kitchen to the library.

My final comments are an attempt to round up a question I raised in my previous report: would this year's assemblage of Fellows resemble the previous one? Would some people take recognisably similar roles as the humourist, the social facilitator, the prima donna, the colloquium inquisitor, and so on? Would the clash among natural scientists, social scientists and humanists take similar forms? Would the vagaries of postmodernists clash with the appetite for mathematical certainties of the more classically minded empirical scholars? Well, to some extent yes, we did have individuals taking some of these roles, but my full answer, I am afraid, is perhaps not surprising coming from the lips of a scientist: I think that more research is needed. I need a further two years to know. May be I'll come back.