

Eric Warrant

Vision, Lifestyle and Habitat



Eric Warrant was born near Sydney, Australia, in 1962. He received an honours degree in Physics from the University of New South Wales in 1985, and a Ph.D. in Visual Science from the Australian National University in 1990. Since that time, he has been at the Department of Zoology at the University of Lund in Sweden, where he is currently a Associate Professor. His research centres on visual processing in lower animals – particularly insects – which he believes are ideal for studying the principles of vision common to all animals. He is particularly interested in vision at night, something which many insects have mastered. During his tenure at the Wissenschaftskolleg he held the Schering Fellowship. Together with Dan-Eric Nilsson, he is currently writing a book titled *Visual Ecology*, a project begun in Berlin. – Address: Department of Zoology, University of Lund, Helgonavägen 3, S-22362 Lund, Sweden.

The first morning I sat at my new desk in the Wissenschaftskolleg, I was suddenly confronted with a working environment which I scarcely believed could exist. The phone didn't ring, nobody knocked at my door, my computer was not full of "urgent" e-mails. At first the sheer peace was almost frightening, but when the realisation dawned on me that this was reality – albeit only for 10 months – my affair with the Wissenschaftskolleg began. Now, on the eve of departure, I look back on my tenure with the mixed feelings typical of such an intense and marvellous time.

When Professor Rüdiger Wehner first suggested to Dan-Eric Nilsson and myself that we should consider the possibility of a year at the Wissenschaftskolleg, we were both very enthusiastic. We had discussed the possibility of writing books together on several occasions, and this seemed to be the ideal opportunity. Such peace would be unthinkable in Lund. In the meantime however, Dan-Eric obtained the Chair of Zoology in Lund, and his new duties eventually placed severe restrictions on his visits to Berlin.

For a long time we had both felt a real need for a new book on the topic of visual ecology – how visual systems are adapted to different lifestyles and habitats – and this naturally became the theme of our project. The only book existing on the topic of visual ecology was written 20

years ago, and since that time great leaps have been made in our knowledge, especially concerning the physical structure of the natural world, something which has profoundly influenced the evolution of animal visual systems. I first set myself the task of compiling a list of chapters, each with a brief outline, to get a feeling for the magnitude of the task. It rapidly became rather mammoth, with 19 chapters requiring a good grasp of an enormous variety of topics, from the statistics of natural scenes, to the lifestyles of marine worms, to the meaning of colour for birds, and just about everything else in between. Dan-Eric and I had a reasonable grasp of only about 50% of the material, and it became rather obvious that we needed help from experts in those areas we were not so confident in. Again the Wissenschaftskolleg came to the rescue. It, together with the Otto & Martha Fischbeck-Stiftung, generously allowed us to organise a symposium – *Advances in Visual Ecology* – where we brought together the world's leading authorities in those areas of visual ecology that we were least familiar with. This symposium was an outstanding success (reported in detail later in the *Jahrbuch*), and helped us immensely with the format of the book.

Now of course I must assess how far we came in our quest. Like most Fellows, I arrived with grandiose expectations of how much I could achieve in 10 months of peace and quiet. Again like most Fellows, my actual achievements fell short. Instead of planning, researching and writing an entire book, I managed only the planning and the research. This resulted in a very detailed outline of the entire book, which includes the literature to be covered and detailed passages of text. This huge document is more than just a skeleton: it already has the internal organs in place. The finishing text will have to be reserved for Lund. At this point it is very fitting for me to express my deep gratitude and admiration for Gesine Bottomley and the other staff of the library, whose untiring and ever-smiling ability to cope with my skyscrapers of request cards still amazes me. The huge task of obtaining all the relevant literature for this book – literally thousands of papers, many in obscure and very old journals – would have been totally impossible without them. Of course reading them all has been quite another labour, but without the library (whose services I am sure I was close to abusing), the whole exercise of writing this book would have been futile. Apart from this, I also managed to write two papers and also gave a number of lectures both in Germany (Berlin, Bielefeld & Frankfurt) and Sweden (Lund & Göteborg).

Of course, a year at the Wissenschaftskolleg is more than just work. It is also an incredibly rich experience. When 40 academics from all possible disciplines are thrown together for almost a year, it is impossible not to be affected by them, intellectually as well as emotionally. From a very

early stage, we biologists (Eva Jablonka, Raphael Ritz, Rainer and Claudia Goebel, Andreas Engel and myself) became good friends, and this led rather quickly to the initiation of regular Thursday lunch-time meetings, where we cooked lunch together and then discussed matters of common interest. We were soon joined by Ekkehart Schlicht, an economist with a flair for evolution. These meetings were a real highlight of the year, and resulted not only in stimulating exchange, but also in a rollicking good party for the entire Kolleg and its staff to coincide with the Swedish festival of light – *Lucia* – which occurred at the beginning of December. I had the dubious fortune to be cast as Lucia herself, an innocent blonde maiden in a flowing white gown carrying a crown of candles in her hair. Dressing up in drag with my hair on fire was not exactly something I imagined I would do at the Kolleg!

One of the most rewarding experiences was interacting with the *Geisteswissenschaftler*, those who we *Naturwissenschaftler* almost never have the opportunity to meet in daily life. Admittedly, it took a while to understand how they think, with the earlier Tuesday colloquia depressing me terribly due to how little I managed to understand. But slowly the wonderful world of the humanities opened up to me, and gave me great pleasure. This interaction didn't stop within the walls of the Kolleg. Quite by chance, I also met a few well-known Berlin artists with whom I have now collaborated for several months. Following long discussions about visual ecology over several glasses of wine, one of them – Alke Brinkmann – began a marvellous series of paintings on animals and their eyes, some of which have found their way into galleries. Another artist – Franz John, famous for his use of modern technology in art – was deeply inspired by the visual system of spiders and is using this in his current work. For me, with a modest painting hobby of my own, this became a very exciting aspect of life in Berlin.

Beyond the peace of the Kolleg, it was the musical Berlin that had the biggest impact on me. To hear the Berlin Philharmonic under Claudio Abbado was a breathtaking experience. It is hard to describe the goose bumps one feels upon hearing more than 100 musicians playing so softly that you can hear your neighbour breathing, and then within seconds explode in an ear-splitting crescendo. Such dynamism must surely be a mark of a truly great orchestra. To hear them play the music of our own Composer in Residence, Wolfgang Rihm, was a very special event. I must admit I lost track of the number of outstanding operas I saw, most in the good company of other Fellows. The unforgettable *Ring* cycle at the Deutsche Oper was a particular highlight.

But when all is said and done, I think that the things which will linger longest in my memory are the human sides of the Kolleg. My little family

at the Villa Jaffé – Eva Jablonka, Aziz Al-Azmeh and Ekkehart Schlicht – gave me endless evenings of excellent candle-lit dining, wonderful (and often colourful) discussions and long-lasting friendships. How will I live without you? Beyond the Villa Jaffé my life was enriched by so many of the Fellows and their families, and several in particular gave me much joy, inspiration and friendship: Weyma Lübbe, the Maars, the Raychaudhuri, the Corinos, Stephan Leibfried, the Joneses, the Behrenses, the Hölschers, the Biermanns and of course all the biologists. Finally, the year would not have been the same without the friendliness and long-suffering of the academic and administrative staff of the Kolleg whose ability to solve all problems – from fixing a broken-down car (Gerhard Riedel), to fixing a symposium (Joachim Nettelbeck), to fixing just about anything (Barbara Sanders) – made life so easy. My deepest gratitude to all of you.

It is not an exaggeration to say that this has been the most remarkable year of my life, a year that will live long in my memory. It was a year that gave me the necessary peace to discover in my work what Hugh Cott so splendidly expressed in the preface of his 1940 classic *Adaptive Colouration in Animals*: “All men, provided they are not too ignorant, too proud, or too sophisticated, are bound to take a delight in animal life; and fortunate are those who have learned to see, in the wild things of nature, something to be loved, something to be wondered at, something to be revered, for they will have found the key to a never-failing source of recreation and refreshment”. How true.