



A YEAR LIKE NO OTHER

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My stay at Wiko was very wonderful and very successful. I had the time to explore new areas intellectually, finish manuscripts, meet new friends, and establish an academic family. It was quite unlike anything I had known in over forty years in academia; in many ways I felt I had finally arrived at a university where faculty were important and where there were real interactions across disciplines. There was the added bonus of coming to really like and enjoy the variety and vigor of Berlin, both in its people and as a city.

The main tangible professional success, for which I have to thank Wiko, was to have a major grant proposal funded, and this will now support my research for the next five years. My previous attempts on this topic, carried out in the rush of various semesters, had failed. The research will investigate the question of how and under what circumstances parasites and pathogens affect population distributions – if indeed they do. The question

is simple and obvious but, as in most areas of scholarship, it is the simple questions that often still hang in the air, waiting to be plucked (and hopefully answered). Being a blend of ecology and evolutionary biology, it is an issue that has fascinated me intellectually for several years. A bonus is that our study system is in the Italian Alps ... but as I write, I'd much rather be in Berlin. A year ago I would never have imagined that I would come to prefer Berlin to Italy!

Our focus group on “Limits to Disease Control – Failures in Disease” made progress, but less than I had hoped. Two manuscripts stemming from our discussions await editing, further plumping up, and of course the tedious task of doing the references. One manuscript deals with the issue of why most hosts are seemingly resistant to most pathogens. Much of the reason, we concluded, is that the pathogen lifestyle of necessity entails a high degree of specialization, and so evolution on one host “withdraws” the ability to infect other hosts. The resistance of most hosts to these many pathogens appears to be “non-evolved” and incidental. We gathered evidence for this from the literature, outlined how these ideas could be tested, and explored the implications for the study of infectious disease in humans using animal models.

The other manuscript acquired the interim, if somewhat tongue-in-cheek title of “Elephant in the Cupboard”; and it is still somewhat touch and go whether the paper itself will ever “leave the cupboard”. The elephant is evolution. If there were no evolution we would already have controlled most of the world’s main infectious diseases. We have had the drugs and vaccines to eliminate most pathogens (or their vectors), but they have been repeatedly made ineffective by the evolutionary responses of the pathogens. Yet there has not been serious acceptance and investigation of evolutionary processes in the field of biomedical research. The issue is how to achieve a commitment to this issue and to bring evolution out of the cupboard. Our discussions raised both biological and policy issues, and our focus group benefited greatly from the participation of other people at Wiko, especially Andrew Farlow, Britt Koskella, Irufka Okeke, and Ben Sadd. I also got a lot of help in unexpected ways, especially on how to approach a subject that was “too big to handle”. Robert Boyer, an economist, responded to my frustration by suggesting I do something crazy; so I drew cartoons, drawing inspiration from his seminar. Anne van Aaken, a scholar of international law, introduced me to the “Precautionary Principle”, and this stimulated me to indeed wonder if it might not be feasible to apply this principle to the loss of antibiotic usefulness due to the irreversibility of evolution. Most policy and

regulatory activities do not take evolution into consideration, and I ended up thinking that they very much should.

My own, largely unrelated readings on the germ theory in the 19th century also resonated with these issues of evolution; our own wishy-washy statements about “overuse” or “misuse” of antibiotics as the cause of antibiotic resistance had great similarities with Victorian ideas about “bad hygiene” causing disease. In both cases the words that are used create an aura of authority and generality, when what is needed is commitment to a serious research program. Also, having time to reflect on the history of evolutionary biology made me realize that the “fault” for a failure to accept the importance of evolution (if blame could be assigned) also lay with the lack of institutional formalization of evolutionary biology. Our field has no certificate of professional competency, so it is no wonder that at the fringes there is much incompetency, casual speculation, and general helplessness.

My book project made stuttering progress. The title changed regularly (“Darwin, Linnaeus, and the Germ Theory of Disease” or “Smut and the Scientists” or “A Mere Cryptogamic Powder”) and will no doubt continue to do so. But the chapters, scope, and overall messages crystallized into something that I am very happy with and hope will be entertaining, interesting, and coherent for the reader. I gained confidence in how to approach writing through both trial and error, as well as through conversations with my colleagues at Wiko. The phrase “rhetorical strategy” took on new meaning, and I realized there was more to writing than the reasoned, narrow approach of a science paper; and that writing may indeed sometimes turn out better if done in coffee shops and away from the office context.

Inevitably perhaps, I still had to deal with the scientific papers that were in the pipeline. However, because all I wanted to do was “Wiko work”, I found it thoroughly frustrating and distracting. But perhaps I should not complain. I had three manuscripts accepted for publication and submitted two more. In the process of working on one of them, I had enough time to do some programming, beyond just “providing words” for the manuscript, and this stimulated me into new ideas and directions in understanding how the genetics of host-pathogen genetic interactions are molded by evolution and how to attack the subject theoretically. Discussions with others in our focus group and with Laura Rose, a visiting scientist, gave me many new ideas, and I am keen to pursue these new directions over the coming months.

There were other benefits of Wiko. I felt I cemented my interest in the visual arts. Our images group, an informal unplanned gathering, was one of the highlights of my stay

in Wiko. Not only did I make very good friends through this group, but also thoroughly enjoyed co-editing the Photobook at the end of the year with two of them, François Lissarrague and Christiane Kruse. As Christiane pointed out, at least we finished one book this year.

Historians taught me how to cite sources and to feel more relaxed with “ibids”. Bahru Zewde, on discovering that there were still more biologists but fewer historians among next year’s Fellows, was dismayed: “Without us historians you biologists will become insects. You need historians to give you your humanity.” At which point my other Villa Jaffé neighbor Behrooz Ghamari-Tabrizi interceded: “But history proves that we are all still animals.” I thoroughly enjoyed correcting the Arabian poetry for my other neighbor, Beatrice Gruendler, and she reciprocated when I had some German translations. We even translated an older German poem together, but disappointingly it was rejected by the *New Yorker*. But we hope to publish it in a journal with a lower impact factor.

With a visitor, Klaus Reinhardt, I started a project on infectious diseases and their impact on sperm longevity. Klaus also guided me skillfully and patiently through the depressing Berlin Document Center and the university archives in Halle and Heidelberg. These visits helped me cement some aspects of the life of Wilhelm Ludwig, a German evolutionary biologist whose work has been neglected. I found out that my initial publication on him in the early 1990s is the only paper of mine that has never been cited in the scientific literature, which makes me more determined than ever to keep going! I also translated one of Ludwig’s seminal papers and hope that at least this may be cited at some time in the future. We also found Ludwig’s house in Heidelberg, but alas after a lot of searching failed to find his grave in the nearby cemetery!! Next time, maybe.

Emotionally, it was a strange year, quite unlike any of my previous sabbaticals.

Now while still in my “dorm room” (albeit a very luxurious one) in Villa Jaffé, I feel I have just been through my first year at college, am just learning how everything works, and of course looking forward to having a greater chance of losing my virginity now that I am a more confident student. Alas, “next year” in this all too ephemeral college won’t happen (even though perhaps other things aren’t precluded!).

For me there were three very full semesters, separated by the Christmas and Easter “holidays” when I went back to the USA, where I normally live.

The first semester was difficult and complicated. This was largely for personal reasons. I was born in Riga, Latvia, and as a child had been in a refugee camp north of Germany. Eventually we settled in England, but my summers as a teenager were spent in

Austria, where my godmother and her family had ended up after the Second World War. After university, I had turned down a fellowship to study in Germany because I got my first choice for graduate work. So I had always wanted to come back to a German-speaking country. Alas in Berlin, the German past came to life for me more vividly than I had wanted it to, and it was difficult to reconcile my own enthusiasms for being here with some of the realities of the past. For example, Platform 17, which I was shown only a few months after passing it many times at Grunewald, was a shock, made worse by the snow on the platform memorials; one of them documented that 963 Jews were deported to Riga, a day after my birth there. The Stasi museum was modest, but the sheer size of the office complex that had orchestrated the repression was staggering, and seemed to condemn more than just a few individuals. I was very upset by discovering (through readings in our German class) that on reunification of East and West Germany, there was a wholesale take-over of university positions in the East by professors in the West with almost no respect for academic freedom (a process euphemistically labeled the *Abwicklung*). It was a case of McCarthyism mixed not with populism, but with elitism; and it maintained the oppressive and hierarchical academic system of West German universities. Were the people who did this now my colleagues here? To then discover that over 300 hours of language classes, a rigorous test, and at least 8 years of residency were required for German citizenship seemed to confirm the “same-old” attitudes. So it was a complex and somewhat difficult time for me.

My second semester, after Christmas, was less intense emotionally, but wasteful and therefore a bit exhausting. I read a tremendous amount, but did not take enough notes. I chased sources, but took too many false turns. I tried to get objective facts and didn't appreciate enough that at times there was no point. I looked for rational continuity of Chapters, but was palpably failing to entertain the reader. However, it was a joy to get support from my colleagues who emphasized how they too get stuck on writing, how they too have good periods and bleak periods, and that books take years not months. I did eventually make considerable headway on my proposed book, but never got into a good balance and rhythm in terms of reading, note taking, and writing. I still am not sure I am capable.

The opportunity to read widely and to think about many disciplines, from sociology to history to art, was wonderful. For a period of several months, I went through a very strong sense that I wanted to leave the sciences and join the humanities. It seemed that how things were said, how they were culturally presented, and what resonated with poli-

ticians and other power brokers was much more affected by the humanities than the sciences; the humanities were surprisingly useful! Barring advances in medical science and the realization that we may be destroying the planet, science seems to have provided us with little beyond conveniences and gadgets. But over the course of this “winter semester” this feeling was replaced by realism. I just do not have the competency or background scholarship to enter a humanities field productively; seeing the knowledge, commitment, and depth of my colleagues here was really humbling. I also felt there were too many intangible tempting tentacles in which to become entrapped. Eventually, even quite self-consciously, I found myself needing something solid and tangible. For one afternoon a week, I started going over to the Botanical Museum, recording disease on the herbarium specimens there, and though it was a small, even trivial task, it was something very concrete and reassuring.

The third “summer” semester was busy, exciting, and chaotic. I had committed to a number of seminars around Germany, and all my visitors seemed to descend on Berlin as spring and summer approached. But all the residual stuff had been taken care of, and I felt I was finally settling into some form of creative work. I made progress on the group project, new ideas came to the fore, and the summer evenings were surrounded by the lakes, by biking, and by discovering the infinite variations of Berlin lifestyles … and then it was all over.

For a few weeks before the end of the year I felt incredibly frustrated. Obviously, I had come here to try to do too many things, with too optimistic a frame of mind. In all of the projects progress was made, but I ended up very discouraged that I finished very little of what I came here to do. So the last few weeks I was a bit overwhelmed by the sense of incompleteness. I was told this was normal, but this didn’t help much.

But on a rational level, I am anything but discouraged. The optimist in me knows that many of the things I started here will be finished and will continue. I am already looking into options for returning to Berlin … there is a possibility of a flat for next year, and through contacts at the Freie Universität, I have been encouraged to apply for a Humboldt Fellowship. I am also looking forward to continuing many of the rich friendships I formed.

So I hope my “year like no other” will continue, somehow, somewhere.