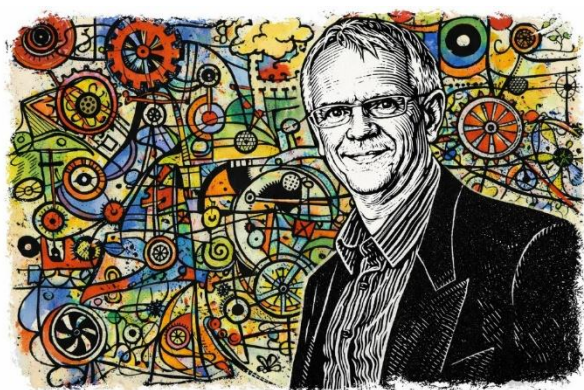


## a tribute

Vivienne Baillie Gerritsen

As I crossed Geneva this morning and approached the office, I felt a growing sadness. I realised that, if I was walking in this direction in the first place, it was thanks to Amos Bairoch. Flashback to 1993: I have just emerged from a long and bumpy journey across the realm of academia, with a degree in biology and in dire need of a job. Over a glass of wine, my mother mentions my case to a distant aunt who gives it a thought as she serves herself to an olive. A nephew of hers might be able to help, she answers. Indeed, the nephew did. Nicolas Mermod, now a respected biologist himself, got in touch with me and said that he knew a friend who was looking for people to assist him with a database. In those days, for me at least, the word ‘database’ was still a hazy concept, and I wasn’t sure it was my cup of tea. I was in no position to be picky, however, so I thanked my distant cousin and gave Amos a call. The following day, I found myself walking up a narrow path leading to a small house in Nyon, a town on the edge of the Lac Léman. I rang the doorbell. Though I was unaware of it at the time, it turned out to be one of these encounters that sets you on a track you least expect but, with hindsight, marks a milestone in your life.



Amos Bairoch

by Vivienne Baillie Gerritsen and AI

*(linocut portrait with a suggestion of Swiss artist Jean Tinguely's drawings as a background)*

Amos opened the door wearing a mixture of surprise, perplexity and amusement on his face that, over the years I came to realise, was so characteristic of him. He ushered me in warmly. While crossing the dining-room, he introduced me lovingly to his latest newborn who had been parked in a baby carrier on the table, as we made our way up to the attic where he worked. I soon understood that this would be no classical job interview. Amos didn’t ask me what knowledge I had in computers nor in molecular biology for that matter. In retrospect,

he must have imagined that if I had approached him in the first place, these were two things I must have been acquainted with – which was true. Though I was to return to the attic frequently after that, all I remember is that the interior decoration remained rather stark apart from piles of journals, a dull cream-white monitor or two, and the just as dull cream-white keyboards and system units the 1990s tended to produce.

Amos sat down in front of a monitor and invited me to sit on a chair beside him. For a biologist whose introduction to the world of computers and programs had been more theoretical than practical, I tried to keep up with things whizzing past on a small screen at a bewildering pace. There were protein sequences. There was talk of domains, talk of function, talk of mutations and disease. There were accession numbers, journal citations and a set of simple tools I could use to insert information I had found in journals into the entries of the database. Which database? Swiss-Prot. A database Amos had initiated and been developing himself since 1986. Things were moving fast now, however. Information was beginning to pour in, and he needed help. He turned to me and said: “Are you interested?” Despite feeling numbed by the pace at which Amos had introduced things to me and admittedly puzzled by what it all really meant, I said “yes” in the hope I wouldn’t disappoint him.

That settled, Amos began to talk to me excitedly about the internet and the world wide web – two notions that

didn't mean the same things in those days. "Ask me to look something up for you," he said. "Anything." I wasn't sure what he meant. At the time, I don't think I was even accustomed to the words 'internet' and 'WWW' – let alone what these two developments could be used for. Seeing my bafflement, he chose something himself. If I remember well, it was a book in a certain American library. I do not recall if we found the book, but we did find the library – which seemed like magic at the time. This kind of free-flying eagerness was so typical of Amos. Whenever I knocked on his door at his office in Geneva, unless busy, he would always tell me to come in. We'd exchange a few words on some issue that had to do with work and then, invariably, chat about everything under the sun as his fingers tapped away on his keyboard looking for images, articles, websites, maps, biographies, definitions, you name it. Whatever he did he would do with great enthusiasm too – and speed.

By the end of the 1990s, the Swiss-Prot database and projects that had developed in its wake had become important – not to mention essential – on a global scale. This significance (to cut a long story short) led to the creation of the Swiss Institute of Bioinformatics (SIB) where Swiss-Prot (UniProt since 2003) formed the core database. Knowing my keen interest in popular science and my love for words, in 2000, Amos asked if I would be interested in writing up articles on proteins. "Yes!" was my immediate answer. Neither of us knew exactly how these articles would turn out but I remember discussing it over lunch. Although perhaps it would be more exact to say that we talked about everything but the articles over lunch and it was between the canteen and his office that he told me what he was thinking of. He wanted me to write up something in an informal tone for the scientific community. Something which would inform them on proteins and what they do. What he imagined was one article a month, which describes one protein – or family of proteins. I could do it the way I wanted to, but what he insisted upon was for me to write about the protein, about its structure, about its function, about any peculiarities it had, how it worked, what happened if it went wrong – and why not mention potential therapies too. There was one requirement: the protein must be updated in the database.

As was frequently the case with Amos, he left me stranded in an artistic blur with guidelines I could sort of just make out. It was like driving in thick fog with the roadside barely visible. I began by reading dozens of learned articles on a given protein and extracting the essence of what had been written. It was a painstaking

process. Then I searched for something less academic by delving into the history of science – or anything that would take me off the beaten track of laboratory research. From all that information, I squeezed out an article which took me – and still takes me – hours to write. Over the years, the process hasn't really changed – I just know now what to look for, where to look for it, and how to read what is necessary. Naturally, today I do everything much faster. Once the article had been written, I would present it to Amos who always read it at record speed, literally. It was maddening, sometimes vexing, almost comical. Within seconds he could point out what was incorrect or what he preferred to avoid. And he was always right.

Though, almost 300 articles later, I may have had to change a paragraph or two, Amos didn't once refuse an article. And he was always game for mischief. On April 1<sup>st</sup> 2003, we thought it would be fun to invent a protein\*. I forget how we came up with *chameleonine* but the idea certainly sparked off imagination and offered wonderful scope. Amos set to the task the way a child attacks a ball of chocolate ice-cream. We based the information on a few real facts while inventing others. It took a little resourcefulness to make the whole lot seem plausible – we needed journals, names of scientists and a dummy Swiss-Prot accession number and entry (which no longer exists). We did the job so well that, for several years, I had infrequent requests from researchers who wanted to know more about *chameleonine* – only to receive exasperated messages when they discovered that it was all a joke. Someone even wrote to say that it was a lack of respect and scientific rigour for such an acclaimed database. Amos just shrugged his shoulders. Seriousness never excluded fun for him. On the contrary.

Amos knew how to give people opportunities on the sole basis of instinct. I suppose it comes down to an innate, perhaps innocent, belief that there is nothing you cannot do. Perhaps it is a relic of the DIY ethos of the 1980s where so many things seemed to be in their infancy that you just buckled down and did things yourself – music, fashion and, why not, databases. Certainly, I owe Amos his faith in my capacity to play with words in a way that would appeal to many. The first article appeared in September 2000 – exactly a quarter of a century ago. I won't be writing them for another 25 years. Not even for another 5. It would have been nice to have Amos around a little longer. I know he would have loved it too. He died suddenly on November 29<sup>th</sup> and like all sudden partings, it is so difficult to grasp how such curiosity and enthusiasm for life can be so abruptly suspended.

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\*Moody Wallpaper ([https://www.proteinspotlight.org/back\\_issues/033/](https://www.proteinspotlight.org/back_issues/033/))