## Sebastian Rahtz (1955–2016): A brief memoir

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I wish I could discuss this with Sebastian. I know that if I could, it would be a better piece, because everything I have worked on with Sebastian has always been better as a result. He had that rare ability to understand what you were trying to achieve, perhaps better than you did and to push you in the right direction, if you were pointed that way, or gently dissuade you if you were not. He saw things clearly, and he had opinions about the right and the wrong way of going about a thing, which in some people might have been insufferable, but in him was not. Far from it. No-one who enthused about Dr Who and about dark Scandinavian thrillers on the telly, about Bach and about Wagner, about the Moomins, and Arthur Ransome, and Rudyard Kipling could be considered insufferable.

I think I must have first met Sebastian at the start of the 1980s, when he was working in the Oxfordshire Archaeological Unit. He was one of the small number of proto-geeks frequenting Oxford University Computing Services who managed to make its pioneering Lasercomp Typesetting System sit up and say Uncle (or in his case the equivalent in Greek). I got to know him better when he left Oxford and became a lecturer in something called Humanities Computing at Southampton University in 1985 or thereabouts. We had a cheerfully irreverent email correspondence making fun of our elders and betters and bickering about what he called 'Sludgemull', the ancestor of XML. We also engaged in data-trafficking of dubious legality. His students extended my transcriptions of the complete works of Bob Dylan, and I provided him typesetting tapes of English dictionaries to reformat. (Yes, dear reader, this was back in the day when the most reliable way of transferring more than a megabyte or so of data between different computer systems involved huge reels of magnetic tape in different proprietary formats.)

In 1985, he organised one of the first UK conferences about how to teach IT skills to humanities students. This was remarkable at the time because delegates were provided on arrival with a copy of the proceedings in the form of a decently typeset book. The subjects covered seem extraordinarily technical for a humanities focussed conference: embracing database technology, information modelling, and even logic programming, then much in vogue. He was however skeptical about whether 'humanities computing' actually meant anything much and

remained a fearless critic of some of its more pretentious advocates on the email discussion lists and bulletin boards which were the only kind of social media we had in those distant days.

But the first big thing in Sebastian's professional life was not 'Humanities Computing' as such; it was T<sub>E</sub>X and the T<sub>E</sub>X community. For about fifteen years his professional energies were devoted to developing and promoting that celebrated open source typesetting system. He became a world-recognized mover and shaker within its community, setting up its first online archive, producing numerous distribution packages, and writing two or three best-selling textbooks. Others know much more than I do about this period of his life; I note simply in passing what an excellent preparation it provided for his work with the Text Encoding Initiative. Because TeX is not only a typesetting system, but also a community of enthusiasts, empowered by the system's openness to tweak and modify it into a state of perfection. Or confusion.

In the 1990s, Sebastian had a short spell working outside academia, first as a consultant at CERN, where he witnessed first hand the arrival of the World Wide Web, and then at Elsevier, where he was actually paid to work on TeX. But at the start of the present century, Oxford University Computing Services (as it then was) recruited him, initially with the brief of reorganising its chaotic documentation systems. The right answer, Sebastian decided, with only a little prompting from me, was to convert everything to XML, more specifically TEI. And so began his second major international collaboration, in which I am very proud to have been involved.

The Text Encoding Initiative had been in use amongst a small and rather various band of cognoscenti for more than a decade; its declared goal was to define a common format for the representation of written texts of every kind, in all languages, from all periods of time, for every kind of scientific application. Naturally, this was expressed as a very complicated modular SGML schema, the full ramifications and internal workings of which possibly a handful of people in the world understood, on a good day with a following wind. By the end of the nineties, and with the arrival of XML, to say nothing of Unicode or the web, the TEI was starting to look decidedly antiquated: an elegant piece of research perhaps but hardly a practical technology.

Sebastian paid the TEI the compliment of taking it seriously, and worked hard at making it realise its full potential. He asked awkward questions about how all that elegant text encoding was actually supposed to be processed, and (when I waved my

hands about by way of response) both proposed and implemented solutions, real solutions, using actual software. He led the development of a new technical framework within which the TEI re-expressed itself as a modular and customisable XML schema, and he wrote the library of XSLT stylesheets which enabled both publication and maintenance of succeeding versions of the system, from 2005 onwards.

Remarkably, he did this in a way that was entirely faithful to the TEI's original design goals of accessibility and uniformity of documentation, but taking advantage of the vastly improved range of infrastructural tools and methods which had become available since that initial design. We should not forget that although designed before the existence of the World Wide Web, the TEI anticipates, even takes for granted, the wide availability of web technologies which only came into being many years later; it anticipates, for example, the kind of intimate linking between documents and data we now recognize as linked open data. Michael Sperberg-McQueen, the original principal editor of the TEI Guidelines, liked to say that when confronted by a choice between expressing in one's encoding what is true of a document and what is expedient for processing, truth should always take precedence. Sebastian's work reminded us that the claims of expedience should not be entirely neglected.

His contribution was not only technical however. During the long drawn out process by which the TEI transformed itself from short-term well-funded research project into long-term self-sustaining research infrastructure, he played a major role, working closely with both Technical Council and Board of Directors of the new TEI Consortium. Of course he was not alone in orchestrating this transformation, but his voice was the one consistently nudging the TEI to adopt both open licencing policies and open working practices, thus doing all that could reasonably be done to ensure its longevity. I remember his being quietly jubilant, as we stood on a railway platform waiting for the train back to the Gare du Nord after a session at the French national standards body AFNOR where the fledgeling TEI Council had agreed once for all to licence all its products under the GPL.

I am lucky to have shared many such moments with him. I remember a long bus journey in Norway during which we reviewed and fixed all the outstanding problem areas in an ancient TEI working paper concerning the move from SGML to XML. I remember thrashing out details of what became the ODD specification language with him, in countless email messages, several airport lounges, and at least three different Eurostar terminals. And I remember the

evening following an exhaustive TEI training workshop in Alicante during which (after rather a lot of rioja) we planned out the structure and content of the definitive TEI training manual.

His technical contributions were prodigious: it became a standing joke in the Technical Council whenever a particularly thorny issue was being discussed that by the time the Council—not the least argumentative bunch of people—had formed a consensus as to how it should be resolved, Sebastian would have already implemented and tested an XSLT stylesheet to do the job. But he was also and always a collaborative animal: he hated what he called 'magic' in software systems—secret by-ways in the code depending on undocumented or special cased data or situations. He wanted there to be a reasonable possibility that a reasonably intelligent person should be able to take over and run with everything he had developed. Sadly, this goal is now something the TEI Technical Council has to put to the test.

I think his later career at Oxford was marked by the same insights. He obtained national funding for a project called OSS Watch, which investigated the role of Open Source software in academia, and developed over the years into a consultative service, providing reliable and objective data about the role of open software provision in the academic context. He became a well-liked and respected member of the senior management team at OUCS in 2012, surviving the department's many vicissitudes and reorganisations to become the University's Chief Data Architect, with strategic responsibility for many aspects of policy and practice across the University. I won't try to list all the different projects and services that benefited from his expertise. I will however say that he took each one seriously, so long as it was going somewhere, but was ready to move on as soon as it reached fruition. That seriousness, that commitment, was surely a major cause for the real affection and respect which his colleagues felt for him, not only in the University, but in each of the many scientific communities in which he participated, all of which I think felt equally bereft when he was taken from us earlier this year.

Sebastian's personal life was full of happiness and incident and variety, and he was blessed with a wonderful loving family. There are many who count themselves fortunate to have shared some small part of his domestic life, whether IRL or elsewhere (for he was a great Facebooker), to have eaten his excellent bread, to have enjoyed his unstinting hospitality, to have witnessed his joy and pride in his children, his love of life, of running, of great art, and of all that makes up our shared culture.

And perhaps the most important lesson he taught us was the need to engage with our fellows, no matter how contrary they may seem. We are all dead in the long run. Only by engaging the support of our fellows can we hope to make possible any kind of continuity for all those things that (like him) we care so much about.











