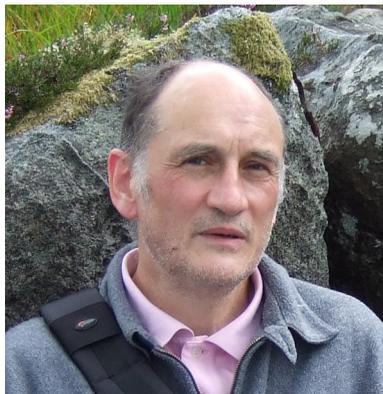# Sebastian Rahtz

For 15 years, Sebastian Rahtz was involved in an amazing variety of TeX and TUG activities.
[Interview completed 12 March 2009.]

Dave Walden, interviewer: Please tell me a bit about yourself.

Sebastian Rahtz, interviewee: I suppose the main emphasis in my life has been on the past. My father is an archaeologist, I studied Classics and Modern Greek at Oxford in the 1970s, I did an MA in archaeology, and I worked for some time as an archaeologist. Even when I drifted into computing (because it was easier to get a job), I specialized in the humanities and archaeology. It's hard to escape. Even now, my favourite place in the world is the Protestant Cemetery in Rome.

I live in Oxford now, with my partner and two teenage girls, who are even more beautiful and intelligent than those from Lake Wobegon. I make my living as Information Manager at the university Computing Services.

DW: When and how did you first get involved with TeX?

SR: I was a lecturer in humanities computing at the University of Southampton in the early 80s. I had become quite involved in typesetting working at Oxford, using a Monotype Lasercomp, for example for *The Lexicon of Greek Personal Names* (typesetting Greek nicely). So I was ripe for conversion when Professor David Barron showed me the first TeX for PCs (on 5 1/4 inch floppies). I was completely gobsmacked; then we got our first Unix TeX on tape from Pierre MacKay, and I did not recover from the spell for the next 15 years or so (I still haven't recovered from the Unix spell). Almost all the work I did from 1985 or so onwards until 2000 revolved around TeX.

DW: Please tell me about those "TeX years" — the deeper involvement with TeX and the series of projects and activities you got into and how.

SR: Really quite a lot of what I did in the "TeX years" was about the community. So I started by copying Sun TeX tapes for people, then I joined in the work around the UK TeX archive, from there I went on to work on CTAN in its early days (I believe I created the first instantiation late one night at Aston University), and from there it was an obvious step to the TeX Live CD, which I edited for the first 7 or 8 versions. I also worked for the user groups (TUG and UK-TUG) a lot in conference organisation, newsletter editing and so on (my highest post was as Secretary of TUG). Coupled with teaching TeX, supporting it (Michel Goossens employed me for some fruitful years at CERN), and publishing articles and books, it all comes back to helping the community rather than doing anything very deep. My efforts on the side as macro writer are relatively small, although my hyperref package lives to this day (now in the safe hands of Heiko Oberdiek).

How did I fit all this into real life? Some of it I did when I was at Southampton, then I had a few years as self-employed consultant (which was when I worked with Michel at CERN), before spending five years in production at Elsevier Science where I was paid to work on TEX-related things full-time.

I am quite proud of writing two of the LATEX Companion volumes with Michel and Frank, assisting Hàn Thế Thành promote pdfTEX, helping launch TUGIndia, starting CTAN with Rainer and George Greenwade, and starting TEX Live. At the TEX meeting in Oxford in 2000, I was presented with a specially-drawn Bibby cartoon showing some of these things. That was about the culmination of my TEX career . . . .

There were low points, usually around personality conflicts in the user groups which used to cause me immense grief. I am amazed that Karl and others have been able to carry on for so long — they have more equable tempers than me.

Like almost all TEX people, I would cite Don Knuth as the great unifying force, inspiration, and reason for using TEX. I don't understand almost anything he does, of course, but I was gratified to find we have a shared interest in road signs.

DW: I think I first saw your name in connection with NFSS. Where does that fit into your sketch of the TEX years?

SR: Ah, that is because of PostScript. I loved PS as soon as I saw it, and I still think it is a really great bit of design. We had a first model Apple LaserWriter, and of course we wanted to use its fonts, not the mangy Computer Modern (sorry, but I never did like that font). So I got stuck into AFM to TFM font metric conversion and tinkering with DVI . . .PS software early on. When Mittelbach and Schöpf released NFSS, I was an early and very happy adopter. My setup for a lot of common typefaces got canonicalized as PSNFSS which I worked hard on for years; Walter Schmidt took it over, luckily. There was also the weird and wonderful fontinst package from Alan Jeffrey (Ulrik Vieth took that over, and now it lives with Lars Hellström) which underlies the LATEX packages. Good stuff there, most of what I knew about it went into the *LATEX Graphics Companion*.

DW: Also please tell me a bit more about TEX Live, particularly the teTEX/TEX Live relationship — and more generally about how you founded TEX Live and when you left it. I ask partly because this was so important to the viability of TUG during the late 1900s and early 2000s.

SR: It's hard to remember now that distribution of TEX was a big deal in the days before universal broadband, and that 650 megabytes was really an awful lot. It was obvious that a CD with all the TEX goodies on would make people happy. The Dutch 4AllTEX folks did it first, but their CD was pure Windows, and I wanted a Linux equivalent. Using Esser's teTEX was really a simple choice — it was all working, well-engineered, and Thomas was nice and helpful. All I did was expand on it, adding hundreds more packages and lots of Unix binaries. It was always a collaborative effort, getting friends to compile binaries for obscure systems — a lot we did at CERN and at Florida (thanks to Mimi Burbank). Getting a single source tree and one giant compilation script was a challenge!

The first CD was ready for TUG in Russia in 1996(?), I think. It even had the first version of pdfTEX on. Burning the first master took practically all one long night in the empty Elsevier offices. Then it turned into a regular production, Michel and I wrote a better manual, and a lot of the work became monitoring CTAN and keeping the source texmf tree up to date. That occupied my time for years — it became an instinct to grab an update from CTAN and bang it through the sausage machine every day. Many people helped out, of course, especially during the yearly compilathons. I remember especially

Fabrice Popineau and his sufferings with Windows. Some people tried to "help" by releasing updates of their packages an hour or two before the deadline . . . .

A lot came out of TeX Live, I believe. It focussed people's minds into packaging properly, automated procedures, common documentation, etc. It was symbiotic with CTAN, of course, and both of them stimulated the massive job of overhauling all packages to make sure they had proper open source licences — some people (not me especially!) have done great work there. Making TeX interoperate properly with the open source world was an important achievement.

I had to stop 100 percent daily work on TeX Live when I started my present job, it was too too time-consuming. I stopped reading the mail list properly in about 2006, and don't look much now at all. A pity, but it is not a job for someone on the sidelines. I pride myself on having passed on most of my TeX projects and *not* hung on to them in a dog-in-a-manger way.

DW: From your earlier answer, it sounds like you began to lose some of your interest in TeX about 2000 and an interest in XML (is this right?) began to build. I presume this change was driven at least partially by other things you saw happening in the world. Please tell me about this change and your subsequent activities.

SR: I was employed by Elsevier to work on conversions between TeX and SGML, so I started to hang out at SGML conferences. I also, like everyone else, was bowled over by the web. When the great Jon Bosak revealed the first draft of XML at one of the SGML meetings, it just seemed so *right* that I knew this was the future. It was not that TeX-the-engine was wrong, just TeX-as-input-language.

DW: TeX-as-input-language . . . . ?

SR: I mean that writing documents using backslashes and braces is just not on any more. I don't mind writing style files like that, but for an input document I want a syntax I can validate . . .

DW: Now I understand. Please go on.

SR: When I had a chance to leave Elsevier in 1999 and join computing support at Oxford, I was specifically asked to work on bringing documentation into a common format using XML, and I threw myself into it with a will. At the same time, I suddenly appreciated how brilliant the fledgling XSL was, and Lou Burnard reintroduced me to the Text Encoding Initiative (of which I had been vaguely aware during the 1990s). Those two new toys excited me so much that I had no energy left for TeX; sadly, but there are only so many hours in a day. I did put a lot of effort into automated typesetting of XML using TeX; my weird PassiveTeX package, named as a dig at Jonathan Fine, had some traction as an XSL-FO engine, but I could not ever make it 100 percent reliable.

It's all about the web, really. The web is so omnipresent, so omnipotent, so exciting. I just don't care enough about fine typesetting any more, because I don't produce printed matter much. Remember I am not a mathematician, so I don't share the obsession with beautiful formulae. I do use TeX a lot in the background, converting XML to LaTeX using XSL, and processing it using pdfLaTeX or XꟾLaTeX, but I don't tweak the result much. Philip Taylor would spit on my work these days! (but then he always did).

In many ways my life these days in the world of the TEI is like my old days in the TeX world — lots of community work. I teach, write guide material, do distributions, develop infrastructure, work for the user group, etc. No change there.

DW: Please tell me a little more about the Text Encoding Initiative and the OSS Watch and what you do with those. In particular, Karl Berry tells me you have a job as "open

source software watcher" for Oxford; watching rather than doing doesn't exactly fit with my impression of your activity over the years.

SR: OSS Watch is a national advisory service on Open Source in higher education, based here at OUCS where I work. I led the bid which secured funding, was its director for 4 years, but I stood down in 2007 due to work pressure. Yes, I was and am an open source bigot! It was good to evangelize and explain for a few years. Last year I started a new project from the same funding to look at geolocation services and information delivery on mobile phones, called Erewhon — now *that* occupies my every waking moment!

The Text Encoding Initiative produces guidelines for people encoding digital texts. It's a hugely well-documented XML schema, in a way. I use it to write our web pages, but most people want it for encoding Hamlet, medieval manuscripts, dictionaries, stuff like that. My speciality is the metalanguage we use to define XML schemas . . . . But I also spend a lot of time on the politics and business of the Consortium which runs the TEI, just like I used to for TEX.

DW: I see lots of travel photos at `http://www.flickr.com/photos/srahtz/` (there's even a link at the end of `http://tug.org/interest.html` where it notes that you originally created that web page), and you said we have to get this interview done before you go to Taiwan. Is travel a sort of hobby for you, or are you still looking at archeology sites (or road signs), or . . . . ?

SR: I do travel a lot, mostly for work. Taiwan is to teach a TEI course, no road signs or archaeology I am afraid! We do travel a fair bit as family — a few years ago we spent two months in East Timor where my partner was teaching. That was really a big adventure :-). I am afraid my carbon footprint is a bit unhealthy.

Yes, I like taking photographs, though I am not very good. I love my camera. though I love my DAB radio even more.

DW: Thank you, Sebastian, for taking the time to participate in this interview. As a late arrival at TUG, it is gratifying for me to communicate with you, someone whose fingerprints are all over the TUG and TEX world.

SR: Thanks, I like the idea of those fingerprints. Good for future archaeologists.