## **David Walden interview** *A conversation about writing and learning and some books to read*

## Introduction

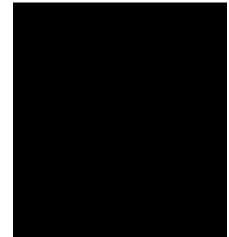
There's a treasure URL (http://www.tug.org/interviews/) on the TUG site, where Dave Walden has collected a number of excellent interviews with key people of the  $T_{\ensuremath{E}} X$  community – a lively "Who's Who" for anyone who has met some TEX luminaries or seen them in action during conferences. The interviews go way beyond the obvious as Dave invites his guests to respond to his lucid questions. The result is a growing collection of significantly detailed portraits of the people who have made the TFX landscape the way it is today. Even if you've known one of the featured people for years, you're certain to discover something interesting about this person that you've never been aware of. Although there is an excellent interview with Dave himself (http://www.tug.org /interviews/interview-files/dave-walden.html) on the site, conducted by Karl Berry, we decided to interview Dave for MAPS, exploring some subjects that were mentioned in his online conversation with Berry. You might want to read that interview first to have context for some of the questions and answers in this interview.

**FG:** In your career, you've been a dedicated writer of documents, like manuals. As a highly significant witness to great inventions, you've described what was created so well that some people remember you as the inventor, for instance of telnet. And you were nearby when the first computer adventure game Adventure was developed. Are you an inventor, a writer or both?

**DW:** My primary tasks in my business career were as an actual inventor, as a manager of inventors, and as a manager of businesses involving innovation. I wrote a lot for four reasons: (1) it helped me think things through; (2) I was quick at it and it made sense for me to do it rather than trying to force someone to do it for whom it was a struggle, (3) I wanted to be sure to get my name on the eventual published document, and (4) (as Will Crowther told me when I was in my first job about one month out of college) the person with the pen has disproportionate influence on the outcome of the discussion. This list is not in priority order – I will certainly claim that point 3 was my least concern.

The first point is really about learning, whether I am trying to understand what someone else said or what I myself am thinking. I have always written down my own thoughts when they begin to get complicated

(e.g., during a technical design session) because it helps me see flaws or gaps in my reasoning - sort of the same reason one has a written contract about a business deal rather than just a verbal understanding. Also (since college where I barely studied at all) I have taken detailed notes when hearing a presentation or lecture, and I often write-up these notes into nearly a verbatim transcript afterwards to help me sort out what I thought had been said. This is the way I came to be co-author of my first book, (A New American TQM). I listened to six full days of lectures by Shoji Shiba and took detailed notes. Then I wrote these up so I could pass the information on to the other people in my company (I was chief quality officer of my company at the time). In the end, I had something that was close to what became the published book. This use of writing is in keeping with a model of skill development that Shoji Shiba promotes: first you are taught something (hear the lecture); then you say it back in your own words (write it down, try to repeat it to other people) with feedback from an expert; then you practice it yourself, repeatedly. At each stage you get greater insight into and proficiency with the skill you are trying to learn. Another reason my "Travel's in T<sub>F</sub>X Land" column tells about my own experiences is



Frans Goddijn

that by writing them down I understand better what I have done. In fact, I kill several birds with one stone: I understand better myself, I perhaps help someone else understand something, and I fulfill my commitment to provide a regular column to *The PracTeX Journal* without having to learn more than what I actually did.

**FG:** What are your thoughts about the power of words written by an expert observer?

**DW:** I don't have much thought on this as my experience was as a participant, not an observer. However, how history is remembered in the long term is how it is written down, whether the writing is accurate or not. [I just read Stephen King's book *On Writing* and in something related to this book his wife (also a writer) is quoted as saying something like "I prefer fiction to non-fiction and I think the latter term is highly inaccurate."]

FG: Which writers / novelists / poets do you read and admire?

DW: I read widely, both fiction and non-fiction, but just what happens to strike my interest, not because of the quality of the writing. I get most of my reading material by looking at what is on the "new book shelf" at my town library, picking out a bunch of books, reading one or two that engage me and returning the rest unread; I make several trips a week to the town library. I don't read poetry, but of course some writers have poetic skill with words. I tend to look for more books by the same writer when I find one book I like by the writer. Of some books that seem particularly well written, I often ask myself "how does he/she do that", but I don't have much insight into how it is done. I can of course list some novels or writers I have enjoyed (and will be happy to do so) but I'm not sure that any list I give would be representative of anything.

What I can say about books and writers is that they can provoke lots of useful thought for me even if the book is not meant explicitly to be "educational" or a "how-to" book. For instance, *Moneyball* by Michael Lewis (a book about the US sport of baseball and the best non-fiction book I think I have read in the last decade) makes one think about the importance of evidence versus "gut feel" and wishful thinking.

Similarly, John Irving's fictional book *The Cider House Rules* gives pause to one's knee-jerk reactions about the controversial issue of abortion. I also think plays and movies can be equally thought provoking and that the writing is key for plays and movies (at least for the movies and plays I enjoy most) just as it

is for books despite what set designers, actors, and directors can bring to these efforts. (I try to see

a few plays and 100 movies (http://www.walden-family.com/public/movie-index.htm) each year.)

Of course, some books do explicitly try to teach something and some of these can be quite wonderful, or at least quite educational. One of the most valuable books I ever read (studied, actually) was Robert Anthony's *Essentials of Accounting*. Anyone who dismisses double-entry bookkeeping as boring or too complicated has thrown away the possibility of making use of an tremendously powerful organizational tool – that the Medicis created a tool that is practically a miracle of elegance and usefulness is clear from the fact that the method has been in wide use since the 15th century.

**FG:** Many organizations depending on volunteer work, like TUG and NTG, find that these are harder times than a decade ago. Today it seems more difficult to get work done and conferences get fewer members to attend. You take a different view though. Your thoughts struck me as quite original in the way one can compare the challenge of today's volunteer organizations with for-profit organizations that also have resource conflicts.

**DW:** My view is that all organizations have many of the same kinds of issues: maintaining a set of "customers" for whatever they do, finding/selecting people who can succeed in getting key work done (just because businesses can pay people doesn't mean they automatically have access to the appropriate people), organizing and engaging people to do multi-person tasks, adapting to changes in the world, remaining financially solvent, etc. Of course, some of the differences are real. By the way, I think "for-profit" is not part of the distinction we are talking about - many non-profit organizations (e.g., Red Cross, Catholic Church, Army) have just as many organizational issues as for-profit businesses do; we are talking about organizations which depend primarily on volunteers versus those which depend primarily on paid employees. It is not even necessarily a matter of priorities: I know of plenty of people who care more about the activities of their volunteer organization (their real life) than they do about the activities of the company they are forced to work for to earn a living. [By the way, the great management thinker Peter Drucker made the point about for-profit businesses that profit is a cost of doing business, not the goal – the goal is creating and keeping customers. He discusses this in his monumental book, Management: Tasks, Responsibilities, Practices. Drucker also wrote a book on Managing the Non-profit Organization.]

Notice that one of the activities volunteer-based organizations have in common with regular businesses is that they must adapt to changes in the world. The TFX world has significantly changed since TUG was founded. In the early days TFX was part of, or perhaps the instigator of, a state-of-the-art research area, T<sub>F</sub>X was uniquely capable of doing computeraided typesetting, and TUG was a key to communication among developers and diffusers of T<sub>F</sub>X. Today computer typesetting is not the wide-open research area it once was, many alternatives to TEX exist for computer-aided typesetting (some of which, e.g., InDesign, have massive marketing behind them), very mature T<sub>F</sub>X distributions abound in the world, and the web (e.g., comp.text.tex) has replaced the user groups as the primary way of communicating about T<sub>F</sub>X. It's no wonder that involvement with the user groups has diminished. I think the user groups still need to do some work to figure out how they can best serve this changed world. Complicating things is the fact that the TEX culture is substantially a "free" or "open-source" culture; this means that the user groups tend to give away publicly the good things they develop which additionally decreases the incentives to participate explicitly in the user groups. Personally, I suspect future vitality for TEX depends on a few people with great capability putting in massive amounts of effort to develop production versions of follow-on systems to T<sub>F</sub>X, just like Knuth did originally. In other words, T<sub>F</sub>X or its follow-on needs to be widely perceived as being state-of-the-art again. We may be seeing some of that with the efforts of highly capable and motivated people like Hans Hagen, Taco Hoekwater, Hàn Thế Thành, and Jonathan Kew, to name just a few of the potential heavy hitters that come to mind. Personally I don't think not having funding like private industry does for major projects is the key issue - "enough" funding will be found as the right people make themselves available.

**FG:** Another subject that intrigues me, and I'd like to explore this subject with you, pops up in several spots in Karl Berry's interview with you: your awareness of non-altruism in volunteer work, and your way of preventing stress in your work in order to make your time all the more productive. You said "I like projects where I also can benefit from what I am doing. I also prefer projects that can be done incrementally so I am not under too much pressure to finish too much too soon; one of my rules of thumb is to avoid trying things that are so hard or have such a near term deadlines that it becomes stressful or an unpleasant burden to work on them."

**DW:** Regarding altruism, I believe people mostly do what they do because it does something for them, whether they are working for businesses or volunteer

organizations. Consciously or unconsciously some people work for money, some people work for glory, some people work because they like to learn, some people like to be a part of a team, some people like to feel they are helping others, some people want to be appreciated, some people like to be martyrs, some people are working toward some sort of immortality, some people do what they do because they are good at it and it feels good to be able to keep doing it, some people want to have impact on the world, some people like a feeling of accomplishment, some people like to feel altruistic, etc. In either type of organization, a key organizational task is finding people who are motivated (for whatever reason) and capable to do what needs to be done. [You might look at the parts of the following paper, http://cqmextra.cqm.org /cqmjournal.nsf/reprints/rp11300, by Steve Kelner that talks about the three motives people typically have (accomplishment, affiliation, and power); Steve has also written a book applying this theory to writing: http://www.upne.com/1-58465-442-2.html]

Personally, I enjoy learning more about something I am interested in, and I also enjoy being able to accomplish something tangible - these are two of my motivations from the list of example motivations I just gave you. Thus, I try to organize my volunteer activities in ways that are compatible with these motivations. I also tried to organize my activities when I was working for pay so I was doing stuff I wanted to do more often than not and had a good chance of succeeding at what I was doing. There are always plenty of things that need to be done in any organization and different people are skilled at different things, so it just makes sense for the workers and the managers to work together to try to match people to what they are good at. [As I remember, Peter Drucker also has something to say about this, e.g., in his brilliant memoir, Adventures of a Bystander.]

Of course, one always has to do some work one doesn't like, and it also makes good sense to just try to make short work of that part rather than fighting it so one can get back to what one is good at and enjoys. Doing this matching doesn't require a super high level of awareness about what oneself or others are good at and enjoy, but it does require an honest view of such strengths and weaknesses. Whether as a worker or as a manager, I always want to succeed (no one ever cares about a person's success more than the person himself or herself). As a worker, I know I will ultimately go farther by focusing on what I am good at and want to do than by trying to be someone I am not. As a manager, I know that my success depends on the people working for me succeeding (I still care about

my success more than anyone else), and so I must try to match them to what they are good at. There

is a lot of talk about "empowerment" these days: to me empowerment means that someone (1) has the capability to do something, (2) has the authority and responsibility to do that thing, and (3) is engaged by the desire to do that thing. Two of the three are not enough. If we can get everyone empowered, we can get a lot done.

The point about avoiding stress is that when something becomes too much of a burden for someone (i.e., they are failing rather than succeeding at a task), then the person tends to wander away (mentally or physically) to do something that is more fun. This happens for paid employees as well as for volunteers. This is something one has to constantly guard against, as a worker or as a manager, and to take steps to make the job accomplishable or to quickly move the struggling person (before too much time has been wasted) to a more suitable assignment. Complicating such considerations is the fact that some people -afew - are able to reorganize themselves and work their way out of situations in which they are in over their heads, and they need to be allowed to continue, but perhaps with a little guidance so their journey is not too inefficient.

The point about doing what you are good at – for greater success and for greater enjoyment – bears repeating and reminds me of something Edward O. Wilson (the renowned biologist *and* Pulitzer-Prize winning author) suggested in his wonderful autobiography, *Naturalist*. If my memory serves me correctly, he expounded the joys of taxonomy – describing and organizing things – in contrast to making fundamental discoveries. Some people are better at one of these and some people are better at the other, both can make a major contribution to the world, and it pays to figure out which type you are. Wilson talks about skirting your weaknesses and pushing your strengths. Read this book if you haven't already.

**FG:** In addition to the TUG interviewing work and your PracTeX Journal column, what writing and publishing are you doing now?

**DW:** A few months ago I finished writing a new book called *Breakthrough Management* (http: //www.walden-family.com/breakthrough/) with my co-author Shoji Shiba. This is fundamentally his work, but he doesn't write for publication in English and he and I have worked together teaching and writing about management for long enough now that I was also able to contribute something to the content of

the book. Our previous books, A New American TQM and Four Practical Revolutions in Management, were published by a traditional publisher; with this latest book, however, we decided to experiment with modern printing and distribution technologies that allow authors to control their own publishing and hopefully get a little more profit than is possible with traditional books (at least with traditional books that may only sell a few thousand to 10,000 or 20,000 copies). Thus, in recent months I have spent much time (1) using LaT<sub>F</sub>X for the first time to actually do the finished typesetting of a whole book, (2) learning about printing options including print-ondemand, and (3) learning about sales and distributions options, e.g., sales via my own website, sales via Amazon, payment via PayPal or credit cards, and so forth. This has been very interesting, although the range of printing and sales/distributions options can be pretty confusing. What seems most clear to me at this point is that national, particular continental, boundaries still very much get in the way of global sales and distribution. For instance, I do not have a fully satisfactory way to distribute books within Europe; at present I plan to sell them via my website and PayPal (in US dollars) and ship each book to Europe from the United States. I wish I knew about some on-line discussion group in Europe that serves the same mutual-education function that the Yahoobased Self-Publishing discussion group does for small US publishers.

**FG:** I'm sure you have plenty of new ideas for future publications?

**DW:** I believe my publishing experimentation will become more valuable as I publish a *few* more books: I plan to reissue an oral history of my mother, who is of Germans-from-Russia heritage and grew up in North Dakota speaking an obscure German dialect on a farm originally without running water or electricity; and I plan to finish compiling and probably publish myself a technology history of the company known as Bolt Beranek and Newman (BBN) where many innovations in computer technology and applications were accomplished. Who knows what will happen after that – perhaps some compendium of T<sub>E</sub>X-related writings.

Frans Goddijn frans (at) goddijn (dot) com