

Tripreport E.W.Dijkstra, 29 July - 21 August 1977.

Twenty-four hours ago I came home; since then we have had a thunderstorm and so much rain that the town of Eindhoven has been flooded; my daughter could not reach her school (a fact she did not seem to regret). The storm is over now, but it is still raining.

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Upon my return I asked myself whether or not I regretted having made this trip; after some consideration I concluded that after all I did not regret it. The reason that I had not posed myself that question any earlier was simply that I had not had the feeling of having had much choice. IFIP65 in New York had been the last IFIP Congress that I had attended, having skipped IFIP68, IFIP71, and IFIP74. From various sides I had heard that my absence from IFIP74 had been a disappointment for many, and so I felt more or less obliged to attend IFIP77 in Toronto. A working conference on Formal Description of Programming Concepts held at Saint Andrews, New Brunswick, during the preceding week, and a meeting of W.G.2.3 on "Programming Methodology", held at Niagara-on-the-lake during the following week completed a three-week program.

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Flying across the Atlantic Ocean was the usually misery. It is a golden rule that families the parents of which cannot control their children should not make use of public transport. The trouble is that that rule, although golden, is not too widely known. The next time an airline gives me a questionnaire in which I am asked about the service and "whether I have any suggestions that could improve the service" I shall suggest special flights on which children are allowed. (Tip: ask for a seat in the section from which the movie cannot be seen!) Yesterday morning I was very grateful to my wife for being with the car at Schiphol Airport when I arrived.

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I had first two nights in Toronto to get adjusted to the six-hour time shift. I arrived in Toronto in my hotel late Friday evening, Saturday I walked through the town until it became too warm, returned to my hotel where the humidity made writing difficult --although possible with a Kleenex under my hand-- , late in the afternoon I had a little nap, and in the evening I had dinner with Ric Holt and his wife. On Sunday I was "adjusted"; I got a telephone call from Jim Horning, and had my Sunday morning cup of coffee --that is: its Canadian approximation!-- with him and his Jane. Shortly after lunch we went to the Airport from where we flew to Saint John. A special coach took us to the Algonquin Hotel in Saint Andrews, where we arrived a little late for dinner and the service was as slow as the elevator. That first evening dinner was ruined by the fact that the filot of sole was misspelled on the printed menu, had been frozen, probably wasn't sole at all, and was served with Muzak. The next morning I had 65 people signing a petition to the management to have our meals without that audible form of air pollution. (I had four refusals, J.W.de Bakker and two Americans who did not mind, and David Harel who, although full of sympathy, felt that it would be incorrect for him to sign the petition as he had his kosher food elsewhere.)

The two talks I enjoyed most --they were very different from each other-- were the ones given by J.W.de Bakker (Amsterdam) and A.Blikle (Warsaw) respectively, I thought "On the Power of Applicative Languages" by R.Lipton and L. Snyder one of the worst: its actual topic, believe me or not, was a study of the space/time complexity of ... APL-one-liners! It told me at least what Alan Perlis was doing to Yale University; I thought it an extreme example of bad taste

and was reminded of Lin Yutang's "The cultured man or the ideal educated man is not necessarily one who is well-read or learned, but one who likes and dislikes the right things. To know what to love and what to hate is to have taste in knowledge."

My feelings were very much the same as those at the Gdansk Conference last September --it was very much the same crowd that was present-- and were very well expressed by John Backus who opened one of his contributions to the discussion with "I have the feeling of witnessing the rituals of a foreign tribe...". In spite of Rod Burstall's efforts at the previous meeting of W.G.2.3, the ones grown up in category theory were to me the most foreign of all. The people in my immediate surroundings don't take too kindly to category theory --the subject, if mentioned at all, is usually referred to as "general abstract nonsense"-- ; not being familiar with the subject I have tried to keep an open mind and listened patiently --to topics such as "Abstract Errors for Abstract Data Types"-- but gently, ever so gently, my mind now closes itself for their verbiage. To justify that latter act and to satisfy my curiosity I probed into the backgrounds of its advocates: from one --I asked among other things what his thesis topic had been-- I got distinctly the impression that it so had happened that category theory was his major and perhaps only field of competence, two others have confessed that they had now invested so much time and energy in category theory that it seemed too great a waste to leave the subject! Very revealing. Background tainted by streaks of Buddhism (a view of mankind not included in his book by the aforementioned Lin Yutang "because it is too sad"); I think I shall leave the phenomenon to those interested in the sociology of science.

Robert Milne's paper --presented by E.Blum in the author's absence-- was memorable for its sickness. His goal in mathematics seems to be to dance his ballet of symbols with a very special set of steps, no matter how inadequate, and seems to try to debunk the elegance of other treatments by showing how, translated back into his holy formalism, everything becomes clumsy again. Careful reading reveals what seems a profound frustration, and I am afraid that the late Christopher Strachey has something to answer for.

On short notice I was asked to chair the Thursday evening discussion on something like "Are applicative languages programmable?". Despite the fact that various talks had had "applicative languages" in their title, I was fairly sure that no one would come up with a meaningful definition of the term that would hold water. Nearly half a dozen proposed definitions were dissected that evening; after that illuminating demonstration of confusion and profound immaturity of our profession --by now it was past ten o'clock-- I called it a day and closed the session. I did so to the satisfaction of the majority of the people present, who had enjoyed the evening; a small minority around the original organizers of the panel discussion was visibly annoyed, felt that I had not been "constructive", and continued on their own to form "the conclusion that I had disallowed to emerge". Three quarters of an hour later one of them came to me telling me that I had been right: even without my disturbing influence they had not been able to give the supposed topic sense.

After a (scheduled!) three-hour wait at Saint John's Airport on Friday afternoon, our plane landed a few minutes before the fog rolled in. With a visibility close to nil we took off and at 20.05 we were back at Toronto Airport. There Tom E.Hull (former Chairman of the Department of Computer Science, Univ. of Toronto) collected Andrei Ershov (Novosibirsk) and me, and took us to his cottage up north in the woods, where we stayed for the weekend. On Saturday we canoed on

the lake --i.e. Tom and Andrei as paddlers and I as passenger in the middle-- and had a swim before dinner. Andrei prepared his IFIP performances for next week, while I wrote letters. It was a most pleasant weekend; it was with great regret that we parted from Tom Hull and his wife.

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Late Sunday afternoon we registered for IFIP77 and I went to Massey College, where a room had been reserved for me. I stayed there a week: it was not expensive, it was not comfortable either (the kitchen was closed, the hot-water system broke down, there was no telephone, etc.).

IFIP77 was divided over the Royal York Hotel (old and posh) and the Sheraton Centre (new and posh; next year I think that I too shall have Muzak in our toilets). They were quite a distance apart; it was suggested that IFIP77 was a pilot model for IFIP80 which will be shared between Tokyo and Melbourne. The exhibition, which showed a bewildering variety of terminals, I did in half an hour. In the booth of Prentice-Hall I saw many books displayed, but not mine; later I learned that it had been stolen within the first few hours, and suddenly I remembered that someone had asked me earlier that week to sign his copy of my book....

I had a reasonable schedule: on Monday afternoon I was on a panel on micro-processors --my position paper I had written the evening before in Massey College--, I had a panel discussion on software reliability on Wednesday afternoon, the position paper for which I had written before my departure, and had to chair one of the last sessions on Friday afternoon. I have attended a great variety of sessions, with topics ranging from data base management to communication protocols. These exposures did not make me regret my absence at the preceding three IFIP Congresses, nor did they change my decision not to attend the next one; at the session that I had to chair a paper was presented that, as a referee, I had rejected last year! It was really bad. Including MEDINFO there were 3500 participants, but in view of the poor quality of the papers that seemed 3500 participants too many, and of no one shows up at IFIP80 --what I expect-- IFIP just gets what it deserves. (Has the author's nationality been a factor in the selection process of the papers to be accepted? That would explain a lot.) Those were my feelings as evoked by the papers. Listening carefully to the questions and remarks from the floor, however, one got the sad impression that the majority of the participants had not even an inkling of the first principles and after all I concluded that David L.Parnas has probably done a good job. His talk contained nothing new and was repetitive and shallow; but for how large a fraction of the audience was this the very first exposure to the idea that programming might be more than just the production of code? The fraction was presumably large; but the cynical definition of "adult education" as the recycling of intellectual trash remained lingering in my mind.

I spoke to many people, known and unknown, gained more insight in the way in which some large groups or organizations work, got better acquainted with a few people I only knew superficially and collected vast amounts of gossip (not to be reproduced here, but some of it very valuable in view of some of my secondary capacities). I gained that week's only new technical insight on Friday evening while I had dinner with Jan Poiters and Martin Rem: during that dinner we discovered why the naive program transformation systems that are currently proposed and/or developed will fail to fulfil the expectations of their designers. That very evening I was so overwhelmed by the convincing power of the argument just discovered that at four o'clock in the morning I was still wide awake. The next morning I woke up at 9.30 instead of 9.00; David Oakes and family had been waiting for half an hour at the closed gate of Massey College without any means of making their presence known. Then we all went to the Toronto Zoo.

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Sunday noon I carried my luggage from Massey College to the Hyatt Regency Hotel. It had been loaded by the proceedings of two conferences and I could just make it, although the muscles of my arms ached for a major part of that afternoon. At the Hyatt Regency we were picked up by a coach that via the Airport took us to Niagara-on-the-Lake where W.G.2.3 started with a meeting of the members. Technically it was the most rewarding week of the three; as a W.G.2.3 meeting it was much better than the previous one --this was the second meeting under the chairmanship of Jim Horning-- but not yet good enough. We missed Tony Hoare who had just moved from Belfast to Oxford and John Reynolds who (for fiscal reasons!) had not returned yet from his sabbatical year in Europe.

I went to the W.G.2.3 meeting full of misgivings, remembering the fiasco of St.Pierre-de-Chartreuse last December only too well and, in view of Dave Parnas's letters concerning the future of W.G.2.3 fearing that the soft sciences might take over. He tried hard enough to make us share his views, but as far as I could see the members, I am happy to say, did not move an inch.

On the last day of IFIP77 I had walked with Bob Balzer from the one hotel to the other. Balzer announced to me that the coming meeting of W.G.2.3 would certainly be very successful because (sic!), as he had heard, many people would attend! His assurance (plus the implied message that he himself would be present too) had lowered my expectations still further. He spoke, as was only to be expected, again about the same project he speaks about as long as I know him and that still seems to me as silly as when I first heard about it. Having expressed and explained my doubts that very first time in Boldern, I hardly entered the discussion this time and mainly listened. The discussion was, however, absolutely fruitless: only the devil knows how many thousands of dollars have already gone into that project, clearly enough to make it impossible for Balzer even to consider its potential nonsensicalness. When asked how many bucks of the American taxpayer's money had gone into it, the coward refused to give a clear answer. I was fairly disgusted and concluded that when prior investments make a project's technical soundness, merit, or significance indiscussible, W.G.2.3 should not try to discuss it. (The same ban should in the meantime perhaps be extended to Brian Randell's recovery project.) Several members showed new results and ideas, successfully solicited the members' opinion and used the exposure to or the vicinity of others to come to grips with their own problems. On Wednesday afternoon I did not join the excursion, but listened to an informal lecture by John Guttag instead, which I found very illuminating. He gave a very clear example illustrating that the logician's concerns are so drastically different from ours that we should think twice before adopting them; I would not be amazed at all if most of the logician's concerns upon closer scrutiny turned out to be irrelevant to our purposes. (His example was very nice, so simple that even I could understand it perfectly.)

The meeting was attended by Manfred Paul (Munich) in his capacity of Chairman of IFIP's T.C.2, our "parent" Technical Committee. When discussing "business matters" he had the thankless task of explaining to us why the IFIP General Assembly was so dissatisfied with us. He did a serious and honest effort, but the task proved to be impossible. I think that one must have been immersed in IFIP politics for at least five years to make sense of the reproaches made. The accusation that we kept our goodies for ourselves and that the world at large could not profit from our work was easily pointed out to be so ridiculous a charge that for a moment I feared that even Manfred himself would lose faith in his mission: he became even more apologetic than usual.

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