

A trip to the U.S.A., 5th - 25th January 1974.

The journey to Albuquerque was an ordeal, as usual. I knew no better than that my plane left Schiphol at 11.35 in the morning. My usual pessimism had seen to it that I had left home so early --catering for punctured tyres, train delays etc., and disasters that did not occur-- that I arrived at Schiphol at 9.45 just in time to catch my plane that took off at 10.15! I crossed the North Sea hoping that my luggage was with me.

I was at a PANAM flight which after a long stop and a change of planes in London continued to Boston, that is: so I thought. When I studied my ticket I saw that for London-Boston they had booked me on a TWA flight, that left London much earlier. I was somewhat annoyed because I hate missing connections and now I had in London only one hour and 20 minutes, but I was greatly relieved to see that the PANAM plane left Schiphol dead on time. Over London, however, instead of landing, it started to circle, and circle and circle... At last it came to the ground: it took a long time before the passengers could leave the aircraft; in the mean time I had a view on the conveyor belt unloading the suitcases and --needless to say-- I failed to see mine.

I caught the TWA flight to Boston. Although I had three seats to myself I did not sleep: the cushions were so bad that lying was too painful. Still reasonably fresh I arrived in Boston where, as I expected, my luggage failed to turn up. Thanks to the changed schedule I had plenty of time in Boston and I started waiting for the PANAM flight to arrive in Boston. And there one of the last suitcases was mine! I shall never know in which plane it crossed the North Sea!

At five O'clock local time I left for Dallas where I had more than an hour to kill before the fourth plane would take me --with one intermediate stop-- to Albuquerque. The hour in Dallas I have walked up and down in front of the gate: I was afraid that I would fall asleep if I set down. At 23.15 local time --an eighth hour to the time shift being added-- I arrived at Albuquerque, more dead than alive. My hosts, Bell and Morrison, were there to pick me up; before I went to bed they revived me with a few whiskeys that were gratefully accepted.

The next day, Sunday, I had the shock of my life. I knew already that the number of participants of the Regional Conference would be unusually large, not the usual 60 but about 175. When I saw the list of participants, I saw that they came from all over the USA --even one from London-- and, worse, that quite a few were quite well known. A rather terrifying audience. Secondly I heard that no other speakers had been arranged. As Stoughton Bell put it nicely "Well, I felt that the majority decided to come in order to hear you!" I quickly figured out that the scheduled two hours a day would be insufficient and that the double would be closer to the truth. And so it turned out to be.

I was very afraid, not in the last place because last December in Alpe d'Huez I had been warned that the perfection of some of my programs --and, of course, I have polished them over and over again-- is beginning to irritate some of my audience. Add to this the possibility of a cultural shock. Secondly I knew --particularly from Marktoberdorf-- that in the USA I am so famous that people come with such utterly unrealistic expectations that one is bound to disappoint them. People tend to take your word as the gospel, simple souls think that one has a retail shop in Philosopher's Stones that, by magic, will cure all diseases. (And when over a few years even these simple souls will have discovered that there remain a few diseases uncured, they will denounce me as a quack!)

In order to save the situation I used the first half of the morning to display all my misgivings, all my feelings of uncertainty and I warned them for all possible forms of disappointment. And I did no attempt to disguise my vulnerability; as I felt that honesty alone could save me. (Two days later aone of the participants told me "On Monday morning I did not understand why you were so apologetic, but now I do.") It worked.

I had decided to start also here each lecture with a quotation, but on Monday afternoon I made an exception and wrote down one of my own puns. After the morning session, which for me ended at about 11.15, I went to Stoughton Bell's office where I could rest for a few hours on a couch. Returning to the theater at two o'clock I could not resist telling them that the graffiti in the men's toilet at the Computation Center Had taught me that not all computing scientists overhere were proud of their president but that, being a foreigner, I was not quite sure whether I was allowed to write at that sacred spot and that, therefore, I would give my modest contribution on the blackboard, in particular because I felt that U.S. Computing Scientists could help him: "What Nixon needs is a debugging aide." I intentionally hesitated slightly before writing down the last "e" and I had the theatre roaring with laughter. (I had already verified that even in front of the most mixed audience, a cynical joke about Nixon is one of the safest one can make.) The next day I could inform my audience that the graffiti in the gentlemen's toilet mentioned had been removed (all eighteen-and-a-half of them!).

What happened during that one-man show of five days is unbelievable and excede my wildest hopes. It turned out to be a very inspiring audience, once they had picked up the rules of the game they inspired me to an extent that I have not experienced since a long time and I am perfectly willing to believe the many participants that told me on the last day that this week had been a unique experience. It certainly was for me! The most compact way to indicate it is perhaps to tell what happened on a Thursday. One of the older participants shyly handed me a piece of paper with a quotation from "Sand and Foam" by Kahlil Gibran

"The obvious is that which is never seen until someone expresses it clearly."

I thanked him very much, not only because it is a nice quotation, but also because it was clearly meant as a compliment. In the afternoon I found a sheet of paper on the speaker's desk with two others from the same source

"It takes two of us to discover truth: one to utter it and one to understand it."

"There lies a green field between the scholar and the poet; should the scholar cross it, he becomes a wise man; should the poet cross is, he becomes a prophet."

As about half the audience had to catch planes we ended the official proceedings at Friday morning. (That morning's quotation had been Lord Peter Wimsey's "A quotation saves original thinking.") As those who stayed quite clearly wanted to go on, we also arranged a Friday afternoon session which should be wholly conducted around requests from the floor. A group of conspirators centered around Ralph London wanted to see me solve a problem I had never seen before, so by mouth of a charming lady conspirator --should I say: "conspiratrix"?-- the problem and what was expected from me was explained to me in such a way that I could not escape. I managed, but not before displaying the detours and dead alleays they had been looking for. (Taking into account how dead-tired I was, I think that I even did not do too badly.) Afterwards they apologized for "undressing me", Unnecessary, for their desire was fully in order. I had vaguely expected something of that sort and took it as a welcome symptom that it actually happened.

And after havong been carried for a week on 350 hands, I had to see to it that I should land safely with both feet on the ground again!

Saturday Stoughton Bell drove me via two Pueblos --muddy Indian villages, highly interesting, somehow beautyful and immensely refeshing because I saw children and dogs-- and Santa Fe to Los Alamos. On Sunday James Morris showed me the Bandelier National Monument: I found the climb to the caves tiring, but probably I was already aloder that its early, original inhabitants ever managed to become.

On Monday I was picked up by Mark-B.Wells and introduced to his group. It was then that I collected my main impressions about Los Alamos Scientific Laboratory. Some of the impression found their explanation during the evening when I read "Los Alamos, 1943 - 1945, The Beginning of a New Era....", a brochure full of nostalgia for the good old daysm when they could make an atom bomb, but knew at least what to do and why! Next day I lectured --under the title "The formal derivation of a few simple programs" at the general colloquoum at LASL.

I have a general impression about the place, and a more specific one about the computing activity. The place has gone sour, that is the only way in which I can describe it. The exodus of brilliancy in 1945, the general unceratinty whether that place would continue to exist now World War II was over, is described quite vividly in the aforementioned brochure: apparently the place nearly died and it is to the credit side of J.Robert Oppenheimer's successor that it stayed alive, at least after a fashion. I do not know whether it is the general unhappiness about all the implications of the existence of atom bombs or the general sickness of high energy physics --there must be a bug in that theory!-- which made the place one of the least exciting scientific institutes that I have visited in the last years. It was quite typical that most of the people seemed to welcome the energy crisis and its recognition: this might channel more funds into LASL, for the benefit of the whole (rather fragile) New Mexico economy.

Another example of malaise was that I have met no one who spoke with respect about his superiors. That is truly a bad sign. I tested it during my lecture. After having explained that, as every research director would agree with me, the truly scarce resources are not computing time or budget --"Bit-fiddling is the pass-time for the uneducated."-- but worthwhile research projects and good brains, I tentatively added "and another very scarce resource, of course, is, as all their subordinates will agree, good directors of research!" The audience thought this insolent remark funnier than I thought funny: I had verified my impression of sickness on a large sample! The impression of hardly disguised death was moreover confirmed by the insipidness of the lunch conversation --since long a sensitive point with me!-- and the often repeated assertion that Los Alamos was the ideal place to work and live ... on account of the scenery and the skiing opportunities!

The computing group seemed in exceptionally bad shape, as if they had forgotten what intellectual excitement really is. They spoke, full of misery that I can so well understand and also --and that is worse!-- full of contempt (no matter how justified) about their customers who clung to FORTRAN for dear life. They tried to design a new programming language around the CDC-Star Comput but before telling me what nice things they had thought of, they told how they felt constrained by their customers insisting on obsolete features. I know that in particular high energy physicists are fairly education-resistant as far as computing and programming is concerned, but have they preached their gospel? I know that one has to do it ad nauseam and with great patience -- decades, as a matter of fact--; but if one has not done so, can one complain

about the lack of education of one's customers? About CDC --apparently the machine had been forced upon them-- they spoke with bitterness and in this respect they met some sympathy from my side, for I remember the CDC salesman visiting the THE and recommending the Starx Computer as a unique and fascinating challenge for the programming community, as if that was what we had been waiting for! This was some years ago and apparently CDC's software department up till now has failed to pick that gauntlet itself! Morris showed me some of his efforts to design a higher programming language that would control that machine: it was a valiant effort, but too much APL'ish to inspire me. The Star seems a sad mistake. My initial quotation next day was from the aforementioned brochure "The error probably will stick," but no one asked during the discussion to what error I had been referring.

Shortly after my talk --which started at 8.15 in the morning-- I was taken by car back to Albuquerque and from there via Los Angeles to San Diego, where I was joined by Wim Feijen: together we should address from Wednesday through the next Wednesday about 18 people from Burroughs. As soon as Wim was with me I felt much better: now I could catch a cold, collapse etc., I had now a spare speaker. On Friday evening Tony Hoare would join us and he would address the audience during the weekend.

Tony's arrival was not without problems: he was due to arrive at 20.40 and we had made the arrangement that he would arrive with an empty stomach and that we should have our evening meal together. Due to fog, San Diego airport was closed and his flight was diverted to somewhere. We had gone to the airport to pick him up but returned without him at 23.15: the hotel did not serve anything anymore. I went to bed, preparing my Saturday morning talk as I felt asleep. Next morning at the breakfast table I encountered Tony, with a beard and a healthy appetite: he had eventually arrived by coach at a quarter past one in the morning! He spoke that morning and that afternoon and did an excellent job. He spoke on Sunday morning as well, but then he appeared tired and in the afternoon I took over again.

My feelings with respect to this group were as mixed as the group itself was mixed. There were a number of very sharp and capable ones, there was even one who had kept his sanity and soundness of judgement while having made a (very succesful) PL/I compiler. On the other hand there was a man who still "lived" in machine code and --so it transpired on the very last day-- did not really know what "a variable" was. OK, to Perlis we owe the remark that having understood what a variable is means that you have understood what programming is about. But yet. We had participants from all over the USA, from different plants; the obvious conclusion is that Burroughs is large enough to show a considerable amount of non-homogeneity.

At first sight our efforts have been very succesful. That is, some two or three in the audience must have felt absolutely out of place and (I presume) utterly miserable. But these poor guys were rather silent. A next group enjoyed it, a minority was absolutely delighted and thrilled. Well, if I can give a number of people a fresh appreciation of our wonderful craft --and this for the benefit of all of us!--, if I can show them the way towards unexpected intellectual satisfaction and excitement, I am content: this is a worthy job. (This is what I have been trying to do in Albuquerque as well, and also there I think I was succesful with about a quarter of my audience.) But it will take time, before these ideas spread; I have used the analogy, that you cannot show someone three times how to swim and throw him in deep water! You can do it, but the victim will drown and the act is like willful murder. And --not that I had expected otherwise-- everybody was very pleased with the way Wim played his part.

Shortly after the weekend it was decided that the seminar would only take seven days instead of the original eight: people were getting tired. As a result we left San Diego early Wednesday morning by car for Los Angeles, where we went to the Proctor plant. In the afternoon I had a private discussion about technical matters while Wim "addressed the troops". He had been warned that he should not expect an audience of the San Diego calibre, and my impression from him was that the warning was fully justified. (In both places, Albuquerque and San Diego, I have given exercises, "homework": in both places I found that accuracy and a good handwriting is perhaps even rarer than a sharp wit. This to my amazement, I just cannot imagine how you can combine sloppiness with programming. Perhaps they cannot either!)

Wim's last night in San Diego was not a very good one. He had a room on the 15th floor with a beautiful view for which he was envied. During his last night, however, Bob Hope had hired an apartment just above him and B.H. proved to be a noisy guest. This was a great pity for Wim, for the next two nights we should pass in planes.

After a pleasant meal at Don Lyle's home we flew during the night to Boston. (We would announce that flight as a flight to Boston with an intermediate stop in Cleveland, America Airways called it "A non-stop flight to Cleveland with continuing service to Boston.") To our misery we found ourselves close to three noisy couples (Puerto Rican? Mexican?) and since then I know the difference between Man and Beast: speech, non-stop speech....

In Boston we were picked up by professor Joseph Stoy from Oxford and his wife; they took us home with loving care and supplied us with eggs, coffee, milk and two showers. Jack Dennis came for lunch, then we went to MIT, Project MAC, where I gave a talk. It had only been announced a few hours before and it was really out of term time, but even that could not prevent an overflow problem. I had fun and Wim in the mean time collapsed. His eyes were still open but I don't think that he still heard or saw very much. After a cocktail party given by Stoy in our honour --Douglas Ross was there to my pleasant surprise!-- we were taken to the airport and shipped home. Our flight back was successful in the sense that both of us have slept about four hours, but we had a stop in London of more than three hours and that was hard: Heathrow Airport is of course a quite interesting and fascinating place, but I don't think that we were still in the mood for it.

Our train brought us in Eindhoven at 15.54 and both our wives were at the railway station to collect us. On the whole of the trip I lost four pounds.....

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