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Trip report E.W.Dijkstra Summer School Munich, July 25 to August 4, 1973.

Well, actually it was not Munich, but the little town of Marktoberdorf, which meant that upon arrival in Munich we had another two hours of travel to survive and that upon departure we had to leave so early, that I bought a travel alarm clock, just to be on the safe (i.e. "early") side, as I had found the waking service of Hotel Sepp on previous tests unreliable! At both occasions, the international trains were perfect and dead on time, it is for distances of thatorder of magnitude the most civilized way of travelling through Europe.

This NATO-sponsored Summer School is establishing quite a position in the field. Last time there were about 80 participants, this year they could accomodate 105, but the number of applications had been three times as much! It was a difficult audience: it was large and highly inhomogeneous. I always try to adapt as far as possible my presentations to my audience and for such a mixed audience this is always difficult, but during the first three days I could not even try it, because they were very passive and did not give any feed back. Part of that can be explained by the language barrier -there were participants from 22 different countries, including France- but not all of it. I had to give ten lectures (of 45 minutes each), the last six --i.e. after the weekend-- were less of a monologue. I got the impression that eventually I reached pratically all of the participants. Wladislav Turski and Alan Perlis had an equal share of the burden.

Turski (Warszawa, Poland) lectured under the title "Morphology of Data." What he tried to do, seemed quite reasonable: he tried to separate "naming conventions" on the one hand from storing on a (addressable) medium on the other hand. But he suffered quite clearly from the pressure of his Polish environment, where pure mathematicians are very much in power and enforce their notational prejudices (probably justified for their own requirements) ruthlessly upon everyone else; I know that Turski has suffered from this pressure and that he has made a conscious effort to undo its harmful effects as much as possible. Having heard his presentation I must come to the conclusion that he has not fully escaped (yet).

Perlis (Yale University, USA) is quite a different person! He is fun to listen to as long as you do not listen too carefully, for as soon as you start doing that, his words dissolve into loose talk, so superficial that after a while it becomes most annoying, his jokes excepted. His presence was valuable in sofar he provided the contrast, trying to make his case for "unstructured programming" and his presence has been responsible for a number of discussions and even arguments; but I have the feeling that the level of these discussions could have been higher if someone else had provided that contrast. Brian Randell (who is very good at such things) saved a few discussions.

Niklaus Wirth --who spoke also a little bit on behalf of Tony Hoare-- spoke on "An Axiomatic Definition of the Programming Language PASCAL". His presentations were very well prepared and end it was a pleasure to listen to him. He gave a striking demonstration of our increased powers of annotating and explaining non-trivial programs! It was really impressive. (The demonstration slightly suffered from the fact that the program he showed was not very nice and some in the audience found there thoughts drifting away in the mood of "How should I solve that problem by means of a program?") In other respects he was not convincing: in the design of PASCAL the axiomatic definition has not played a significant role, to give an axiomatic definition was an afterthought. The result shows that and you cannot conceal that.

Personal reasons prevented M.Griffiths from Grenoble to speak as scheduled, but we were lucky in having Per Brinch Hansen (California Institute of Technology) as a substitute. He went through the highlights of his recently published book "Operating System Principles" and he did that much, much better than two years ago, when he covered the same material, but then he was very biased and even aggressive. Now he gave a neat, balanced survey. It is a pity that he has a very monotonous voice; it is really soporific and now I cannot even read one of his publications without hearing it!

Brian Randell gave a two-lecture talk on the PEARL system, and did so very nicely. (He had better, for its author, Bob Snowdon, was sitting in the audience!). The remaining three speakers, I am afraid, failed to get their message across the limelight; in one or two cases there was some doubt whether there was a message...

Having talked about factorization of a solution and having illustrated this by comparing with each other two different types of circuits as you find in clocked machines, I wanted to expose the audience to the design of the mouse that follows a contour, because you can then in a completely different environment meet that same factoring principle (in its full glory, even!). I did not quite know how to stage it: the whole crowd of 105 people seemed to large for active participation. I have announced "an interactive programming session", announced that I had found two "intelligent terminals" -in the form of David Redell and Paul McJones, both from Berkeley- and predicted a successfull session because our communication language (viz. English) was"an interpretive language". (I was so cross with Al for all his platitudes; I think that this ridicule was the only time that I showed a temper in public!) It was a very nice session, I had been very lucky in the choice of my "intelligent terminals"!

Compared with earlier Summer Schools there was a change. A greater percentage of the participants seemed to have come with the rather stupid hope, essentially, for a recipe for thinking, or came under the false assumption that "the good programming language" is the end to all your problems! Who has taught them that nonsense? I observed this attitude most markedly among the American and the Israeli participants (but as the French have kept their mouth hermetically sealed .... who knows?). This false and primitive idea surfaced over and over again; in utter exasperation I have recommended at the beginning of my last lecture "A Guide to Positive Programming" by Norman Vincent Peale.....

Another difference was caused by a drastic change (or shift) on the German Academic scene. After neglecting computing science for years, finally, now they have invented the term "Informatik" the German governement is backing the subject with all its force and marks: departments of "Informatik" are mushrooming all over the country. And how did they staff them: with what they had, pure mathematicians and automata theorists in particular. I am afraid that the result is a disaster, at least for German Computing Science. German Computing Science is in danger of being taken over either by the mathematicians or by APL; in both cases the result will be very much the same, viz. the end of German Computing Science!

I solved the convergence properties of a tricky cyclic relaxation problem while the others visited mad Ludwig's castle Neuschwanstein. It came out of my search for self-stabilizing systems.

NUENEN, 7th August 1973 dr.Edsger W.Dijkstra