

Trip report E.W. Dijkstra, Newcastle, 19-25 July 1981.

Having been invited as "guest speaker" at the "Advanced Course on Functional Programming and its Applications" (University of Newcastle upon Tyne, 20-31 July, 1981), I had the opportunity to attend its first half. (People actually seemed quite pleased that I had shown up in person: F.L. Bauer had sent M. Broy instead and D. Scott, who just decommitted himself, was replaced at the last minute by D. Park from Warwick.) I was glad to be able to attend at least the first half, which in a way was quite instructive and illuminating (though on the whole not very "advanced").

My trip to Newcastle was the first occasion at which the KLM coach service from Amsterdam Central Station to Schiphol Airport let me down. The coaches had been given a second stop at the South side of the station, but not all the drivers had been told this and the coach I had intended to take failed to pick me up. As I had planned my trip with my usual pessimism I arrived at the airport just in time; and there I heard that the flight of British Caledonian to Newcastle was 35 minutes late..... Their plane back on Saturday morning was delayed by 10 minutes.

There were about 65 participants. We slept at Hender-

sun Hall, where breakfast was served at 8:00; at 8:30 the coaches left for the Computing Laboratory, where the lectures started at 9:00. The general pattern was three one-hour lectures in the morning and three one-hour lectures in the afternoon. Around 18:00 we would be back at Henderson Hall. Before and after dinner its common room was at our disposal; the bar was open until 10:30.

Four slots were filled by G.J. Sussman (Artificial Intelligence Laboratory, MIT) and a similar number by D.S. Wise (Department of Computer Science, Indiana University). Both belonged very much to the LISP subculture, neither of the two proved a single theorem, both showed too much and made such heavy use of anthropomorphic terminology that they were painful to listen to. Sussman's transparencies were printed, but overloaded; Wise's transparencies were handwritten, but very messy. Not used to Sussman's lecturing style - is it called "teaching by example"? - I found him very tiring to listen to; he spoke very fast but told very little, since he used most of his words to go in detail through a number of almost identical examples. Wise struck me as rather old-fashioned: he seemed to talk about the implementation of LISP in very much the same way as people did in the early sixties. LISP's syntax is so atrocious that I never understood its popularity. LISP's possibility to introduce higher-order functions was mentioned several times in its defence, but now I come

to think of it, that could be done in ALGOL 60 as well. My current guess is that LISP's popularity in the USA is related to FORTRAN's shortcomings.

J. Darlington (Department of Computing & Control, Imperial College) devoted three hours to program transformation as a program development methodology. His examples were well-chosen and carefully presented, but I am afraid he oversold his topic. At the end he talked about a grandiose transformation system yet to be built.

D.A. Turner (Department of Computer Science, University of Kent at Canterbury) devoted four hours on recursion equations and how to use them as a programming language. He had more new things to tell than all the preceding speakers; regrettably, he also oversold his topic more than them.

J.E. Stoy (University of Oxford) spoke for four hours on denotational semantics. His lectures were very well prepared, and the material was coherent. He was by far the best speaker. It was only a pity that, in his first lecture, he overestimated the speed with which his audience could absorb what he said. He doesn't only speak well, he also speaks fast. And he did not sell his topic.

G. Lindstrom (University of Utah) spoke for one hour as a guest speaker on "A Programmer's View

of the Applicative Multi-Processor System AMPS." He did so with great enthusiasm. His visuals were very elaborate and I got the strong impression that he had given this "presentation" quite a few times. He was obviously an advocate of "graphical" presentation of how AMPS was supposed to work. His major example, however, was invalid in more than one respect - apparently no one had ever pointed this out to him before! - and this confirmed all my prejudices against pictures.

David Park (Warwick University) spoke as a last minute replacement for Dana Scott on "Fairness". The talk was well-prepared and carefully delivered, but I don't care very much for the topic.

As arranged with Brian Randell - last January in Ham-sur-Lesse - I spoke about correctness proofs and showed an example that challenges the often repeated slogan that applicative programs are easier to prove to be correct than imperative ones. I felt at ease and gave my talk with pleasure.

Manfred Broy (Technical University, Munich) replaced F.L. Bauer; he presented a joined paper on different forms of nondeterminism and presented it well. Earlier in the week he had caught me when my foot slipped from the stairs and I fell.

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Harry Whitfield and his wife had invited me for dinner on Friday. When I returned at Henderson Hall shortly after midnight, I saw no one at the porter's lodge. Around one o'clock, when I was about to fall asleep, panic suddenly seized me when I realized that the next morning at 6:40 I would have to call a cab for the airport and that I had no coins to operate the telephone. I jumped out of bed and started wandering through Henderson Hall until I found someone still awake. He and his neighbour - Brooy again - saved me. On the plane British Caledonian served a "continental breakfast" which was an offence of the Continent.

On the whole I could not avoid some feelings of deep disappointment. I still believe that the topic deserves a much more adequate treatment; quite a lot we were exposed to was definitely not up to par.

Marktobendorf,
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