Trip report E.W.Dijkstra, Australia, 19 Jan.1983 - 12 Feb.1983

The reason for this trip was "The First Wollongong Summer School on The Science of Programming", held from January 31 to February 9, 1983, at Perisher Valley, Australia. It had been organized by Juris Reinfelds of the University of Wollongong, who had invited David Gries (Cornell University), Tony Hoare (Oxford University) and me as its lecturers. He had invited our wives as well, an invitation my Ria and Tony's Jill had accepted; David was there all by himself. I was furthermore joined by Netty van Gasteren in her capacity of Teaching Assistant.

On Wednesday afternoon Netty's husband drove us to Schiphol, where in spite of the fact that we were early we had some difficulty in obtaining the kind of seats we preferred. The B747 of flight KL843 was fully booked, and we did not look forward to the flight, which was going to take more than 24 hours. The crew was refreshed twice --once in Dubay and once in Colombo-- ; on the whole the flight, though much too long to be comfortable, was not half as bad as we had feared. The B747 is really an excellent plane and KLM made the flight as comfortable as the circumstances permitted. (Eventually we left the plane with the feeling that KLM could not help it that the world is so big.) I wrote, however, much less than I had hoped and expected to do: with its alternation of deserts, mountains and seas the route via the Far East is much bumpier than, say, crossing the Atlantic Ocean or the Polar Route to Anchorage. I thought I could not sleep while sitting, but eventually I could not keep my eyes open, so that problem solved itself. Due to strong tail wind we arrived half an hour early in Sydney; due to heavy car traffic --caused by a railway strike-- Juris Reinfelds, who had promised to collect us, arrived half an hour late. Just when Netty had decided to cash a traveller's cheque, Juris arrived; he drove us to Wollongong in his car, whose air conditioning we learned to appreciate. Around noon we were in the Boat Harbour Motel, where we slept most of the afternoon; Juris and his wife Lauma joined us for dinner. (The Boat Harbour Motel boasted a 4-star restaurant, but we have not been able to discover where those stars came from.) For the Australian traveller, life is complicated by the fact that during the weekend everything closes; Lauma had solved these problems for us, firstly by having shopped for us, so that we could prepare our own breakfasts etc., and secondly by inviting us for a Sunday brunch.

Saturday morning at 3:00 I was awake beyond redemption; so I continued
the letter I had started on the plane. I wrote that day ten pages; we explored
that day the town and the beach and we slept some hours. Tony and Jill Hoare
arrived on Sunday morning early; David's plane, which had been due to arrive
within 20 minutes from theirs, had been diverted to Brisbane with engine trouble
and David arrived as a result a couple of hours later. (Consequently, poor
Juris had to make the trip Wollongong - Sydney and vice versa twice that day!)
The newly arrived courageously stayed awake.

The rest of the week was devoted to adjustment to time shift and climate
and to preparation of our Summer School. We met the other tutors --Geoffrey
Dromey (Wollongong), Jeffrey Sanders (NSW Institute of Technology) and Rodney
Topor (Melbourne). Monday and Tuesday were devoted to preparation, i.e. on
the second day we organized an extraordinary session of the Tuesday Afternoon
Club in order to show the Australian tutors what was expected from them. (We
went through the first five pages of a long manuscript by Dromey, who did not
know the word "pleonasm"; David was a great help.) Wednesday was largely de-
voted to interviews, first by the local television, then by the national radio,
and finally by Computerworld. That evening, Juris took Netty, Ria and me to
Cosi Fan Tutte in the Sydney Opera House. (The organizers of the 6th Australian
Computer Science Conference would take David, Tony, and Jill on the day we three
flew back.) The dinner before the opera was good and the building is curious;
the seats were covered with plastic and duly uncomfortable. The performance
was better looked at than listened to; at 24:30 we were back in our motel.
Thursday was a day of rest; we did some shopping and wrote letters and postcards.

On Friday morning 7:10 we left in a minibus for Canberra, where Tony was
to give a lecture at the Australian National University, either at the end of
the morning or at the beginning of the afternoon, no one was quite sure. (It
turned out to be at 14:00.) The journey to Canberra was not a pleasant one:
it became very, very hot in the minibus and its driver --Dromey-- absent-mindedly
indulged in a technical discussion for which he would have preferred to use
both hands. After a depressing exposure to the results of the Australian drought
we arrived in Canberra, well in time had Tony had to perform in the morning.
After lunch, Tony gave his talk, but he was clearly not in the mood. In the
evening the Department of Computer Science took us out for dinner; I enjoyed

both the food and the company.

Then our ways separated for almost three days. The others continued the next day their journey to Perisher Valley, while Ria and I stayed for a long weekend with Robin and Kate Stanton. (Robin had been my host in 1977, when I stayed for a month at ANU.) On Saturday we went to the Botanic Garden (whose trees give surprisingly little shade), to the High Court and the (new) National Galery, on Sunday to Tidbinbilla Nature Reserve, where we saw many emus, kangaroos (both from quite close) and --we were very fortunate!-- one koala: a really charming animal! Both evenings Kate had guests for dinner. It was a pleasant weekend, but very hot: 34 degrees C. in the living room seemed standard. I wrote some, but not much. On Monday afternoon Robin drove with Brian Molinari and us in Kate's car to Perisher Valley, where, in Sponar's Chalet, the Summer School would start the next morning. Upon arrival we were well-done and greatly releaved to find the shower in working condition. (With the nearest plumber at, say, 70 km distance, I had voiced my misgivings about the sanitary conditions at Sponar's Chalet; David had spent part of the weekend trying to find me a room that would justify my fears, but had not succeeded. Sponar's Chalet had no laundry facilities, but that was intentional: lying in the middle of a national parc it was not allowed to upset the ecology by detergents.)

The facilities at Sponar's Chalet were somewhat primitive but otherwise excellent, with the exception of the shape and the temperature of the large room where we had to give our lectures: it had clearly not been designed for lecturing to an audience of 100 people. But Tony had his overhead projector, and David and I had our blackboards (please note the plural). We lectured from 8:30 to 12:30 with a 30-minute coffee break and from 14:00 to 17:30 with a similar break for tea. I admired the sense of duty of the audience that was almost always complete (with the noteworthy exception of Stefan Postma from Pretoria, who hardly attended any lectures). It was hard work for all concerned; we lectured from Tuesday to Saturday, and the first two days of the next week; Wednesday morning was devoted to a discussion session, and at noon the Summer School was closed. Tony had his own topic: programs and predicates, specifications and the axiomatic theory for CSP; David and I shared at the beginning the topic of scientific program development, half-way I broadened the scope by some capita selecta.

3

Our original plan had been that we should lecture 10 days instead of 7, and that would indeed have been better, for a number of topics (such as the presentation of larger programs) had to be dropped. But the summer school had to be squeezed in between an Australian national holiday on Monday 31 January and ACSC 6, which started on Thursday 10 February in Sydney. This was a pity. It was, however, partly compensated by the active cooperation of the audience which was encouraged by the perfect isolation of Sponar's Chalet: all evenings one saw participants reading in the library, working, discussing the homework, etc. The tutors made long evenings.

On the whole I think the summer school went down very well. With an audience as mixed as we had one cannot expect to please all, and a few were discontent because we did not touch on what they perceived as the problems of "the real world" --such as how to make the best of a COBOL shop-- . For the vast majority the rather formal approach was a refreshing novelty, which they liked very much. "Novelty" does not seem an exaggeration: my impression was that up till now most of the Australian discussion about programming methodo- logy so far has been carried out in terms of the not very helpful imponderabilia as "ease", "understandability", "naturalness" etc.; the sharp distinction between convenient and conventional had not been made.

As any summer school we had our social activities. On Sunday we had excursions. I went to Thredbo to climb the Kosciusko, which was precisely the sad mistake I knew it would be: even the first 600 m in the chair lift I dis- liked. At the end of that day I was so tired that next morning I slept soundly through most of Tony's lecture (but every time I woke up, it sounded so nice that afterwards I felt I could compliment him). On Sunday evening we had a recital for cello and piano (Mendelssohn, Franck and R.Strauss), at which the piano --carried all from Wollongong-- was the weakest link. On Tuesday evening we had a very nice string quartet (Mozart, Shostakovich, and Mendelssohn again; I liked Mozart most): Richard Tognetti (17) and Karen Segal (18), violins, Debbie Lander (17), viola, and Rita Woolhouse (21), 'cello. They played very well and had not the handicap of an unwilling keyboard instrument.

Around noon, on Wednesday 9 February, we left in a big coach for Sydney,

where we arrived around 19:00. By the time we arrived in Sydney, the driver,
who had come that morning with the coach from Wollongong, had made something
like 1200 km. When he switched on the radio to listen to the cricket match,
I did not protest at first, considering that it might help him to stay awake,
but after half an hour it was really more than we could stand and I had to ask
him to switch it off.

In Sydney we --i.e. the six of us-- were collected by Les Goldschlager,
who drove us to our motel and then took us out for dinner in a Chinese restaurant.
Some of us were primarily hungry, I was dried out, so much so that besides the
beer I had noodle soup as main dish. Dinner conversation was this time impos-
sible: it was a restaurant with three guys making the most terrible music
(electronic organ, drums, guitar, and male voices, all amplified).

The next morning, after the official opening of ACSC 6, I gave a keynote
address from 9:10 to 10:00, which seemed to delight my audience. I presented
the development of the new algorithm for the detection of termination of a
distributed computation, which I had also shown at Sponar's Chalet; this time
it was primarily an exercise in timing. After the coffee break, the six of
us played truant and went to the Sydney Zoo, that is: tried to go: the per-
sonnel of the ferry that should take us there had just gone on strike. We
took two taxis. We missed the platypus --it refused to show its face in the
breeding season-- but were fully compensated by the wombat and the koalas.
Tired but satisfied we came back in the University Inn Motel at 17:00, glad
to be able to have a short rest before we had to attend the Conference Dinner
(which was called a banquet). Three Australian professors spoke at the dinner;
brevity was the main virtue of their speeches, which were perhaps an explanation
why, at Sponar's Chalet, we had got so many compliments for our lecturing styles.

Friday morning, from 9:00 till 10:10 --he did not know how to stop and
the chairman did not assist him-- Tony gave his keynote address in a for him
very unusual fashion: he had decided not to show visuals and to use the black-
board instead. The "coins" had been abbreviated by "c", the "chocolates" had
been replaced by "toffees" so that he could abbreviate them by "t"; knowing
the difficulty of a last-minute change of identifiers I admired his courage.
After the coffee break we took leave from David, Tony, Jill, and Juris and were
taken to the airport.

On our outward journey, Netty, who had had two bad nights, had slept most of us; on the way back Ria, who had been terribly sick after the Conference Dinner --was it the Seafood Cocktail that I had skipped?-- won the prize. Half an hour after take-off my pen was empty; I filled it during the stop at Melbourne. With the same stops, the return flight took 2 hours more: the difference between tail wind and head wind is evidently nonnegligible. Again we arrived half an hour ahead of schedule. Upon arrival, Netty's husband and our daughter were waiting for us with two cars. After a shamefully long delay before our luggage showed up --usually Schiphol Airport is much better-- we were reunited and drove South. Near 's-Hertogenbosch the five of us had a cup of coffee, and then our ways parted; at 9:00 we were back in Nuenen. While Ria informed her mother and other relatives that we had safely returned, I made coffee and started to deal with the accumulated mail, which had been admirably sorted during our absence. After Femke had done the shopping for the weekend, Ria and I went to collect Bamse and Duke (our two Samoyeds, who had stayed with our maid); they were in excellent condition and glad to see us back. They wanted immediately to be walked with: it was barely below zero, but I at least found it very cold.   We slept from 12:00 to 15:00, whereafter we were almost back to normal. Later that afternoon, the florist delivered a congratulation from the Department of Mathematics and Informatics with my "Computer Pioneer Award" from the Computer Society of the IEEE, which I had received the day before I left.

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At the ACSC 6 Conference Dinner the empty chair between Ken Iverson and me became occupied by a charming lady, who was just a little late. Since my "A Discipline of Programming" had been her introduction to computing science she was very excited to sit next to me, and so she told me. After some conversation she realized that her other neighbour was somewhat lonely, turned to him with social grace and asked him "And, Dr.Iverson, what is your field of interest?".   Iverson answered "APL.".

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I collected another piece of Ada gossip. When Ada was still the Green Language, Jean Ichbiah asked Mike Woodger to rewrite the manual, not trusting his own English. Mike found many obscurities and unclarities which he cleared up after having checked his understanding with the author. His version of the report then revealed the complexity of the design so ruthlessly that Ichbiah

submitted his original text to the DoD.

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From "Proposal for an Australian Computer Science Network" by Robert J. Kummerfeld (Australian Computer Science Communications, Vol.5, Nr.1, p.196):

"Unfortunately, letters are not a very convenient means of passing messages since it is such an effort to write them.".

I was reminded of Samuel Johnson's "What is written without effort is in general read without pleasure.".

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After a trip like this one always asks oneself "Was it worth it?". Knowing the other speakers so well I got little out of it and we have been too busy preparing our performances to have much time for serious conversations among ourselves. Hence the fruit has to lie in Australia. I think the fruit was worth the effort. The Australians have an isolation complex with all sorts of consequences, and a pleasant one is that they are very receptive. (Up to this very day "A Discipline of Programming" sells very well in Australia, a fact I have always interpreted as a consequence of my 1977 visit and a symptom of their receptiveness.) This time almost half of our audience consisted of academic staff and my impression is that all Australian universities were represented. So it is not unrealistic to expect a noticeable effect from our visit, at least when the Departments of Computing Science will be given the opportunity. Particularly in Sydney it surfaced quite clearly that the Departments of Computing Science have to do their work under the hearty obstruction of the more established departments, which do their utmost best to keep computing a null-science; it all sounded very familiar.

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