Trip Report E.W.Dijkstra, Stanford/Palo Alto, 26-29 March 1987

        I had been invited as the keynote speaker at a symposium on "The First
Ten Year of Computer Science at Stanford.", in my capacity of "well-qualified
observer who was not directly involved in the Stanford program". After I had
accepted this invitation, Computer Literacy Book Shop in Sunnyvale asked me whether
I would be willing to give as well a talk under their auspices.

        Originally I had booked tickets for Ria and me to San Jose with UT's travel
agent, Sanborn's; for a round trip (with American Airlines and Continental)
they charged $ 430.-- . When Jayadev Misra heard this, he picked up the telephone
and booked us to San Francisco with Southwest Airlines for $ 198.-- per person.
That was a difference of $ 464.-- and we decided not to complain, not even if
Southwest would fly us via Hawaii. (It turned out that this was a good decision
as Southwest no longer believes in feeding its passengers: after out first flight
to Phoenix, Southwest had even run out of peanuts.)

        The Stanford symposium started with a reception on Thursday evening, but
we missed that because I had to lecture in Austin on Thursday morning. In the
course of the afternoon we left on a flight to Phoenix, where we changed planes.
With an intermediate stop in San Diego they flew us to San Francisco, where we
were collected by Jim Horning, who took us to Stanford's Faculty Club. There
we arrived at 21:45. We had been assured that the Student Union nextdoor was
open 24 hours a day, so there we went to eat something. It was spring break,
however, and the Union was closed. A little hollow we went to sleep. By way
of welcome, the Symposium Committee had adorned our room with a beautyful flower
arrangement (which we admired) and a bottle of cooled white wine (which we did
not open in view of our more than empty stomachs). We also admired the apartment
in the Faculty Club, for it had been very nicely designed.

        The next morning at 7:30 we were at the Terman Engineering Building for
Registration & Continental Breakfast. The latter gave the usual wrong impression
of breakfasts as served on the Continent, but was welcome anyhow. At 8:30, the
speeches started. The morning was taken up by
Welcome to the University (James Gibbons, Dean)
Symposium Introduction (John V.Levy, Chairman Symposium)
The Visiting Committee for Computer Science (Cuthbert Hurd)
Origins of Computer Science at Stanford (William F.Miller)
Impact of Stanford CS on Academia and Industry (Thomas H.Bredt)
        Coffee Break
The Early History of the Stanford Computation Center: A Personal Collection (Edward
A.Feigenbaum)
Computer Science Today at Stanford (Nils J.Nilsson, Chairman of the Department)

        Fortunately, the CS Department at UT had celebrated its 20th Anniversary
last fall, and so I knew more or less what to expect. This time, the proceedings
did not shock me anymore. It was mostly on money, power, and housing, a little
bit on computers and hardly on science. An exception was Thomas H.Bredt, who
gave some surprising statistics, e.g. that the overwhelming majority of the Stan-
ford graduates of those first ten years were still with their first or second
employer. The overwhelming majority also still lived in California; the latter
strengthened my overall impression , viz. that we were witnessing a local event.

        In the afternoon we had

Theoretical Foundations: Then and Now (Donald E.Knuth)
Numerical Analysis: Then and Now (Gene E.Golub)
Systems and Languages: Then and Now (Forest Baskett)
        Coffee Break
Artificial Intelligence: Then and Now (John McCarthy)
Student Perspectives: Then and Now (Panel of current and former students)
Closing Presentations (which may have been skipped, for I don't remember them)

        Knuth and Golub, both very much in their own way, were highly informative.
Knuth showed early correspondence concerning his appointment (and that of Robert
W.Floyd) and a classification according to subject of the Ph.D. Theses and Techni-
cal Reports in his field as they appeared over the years, while Golub had the
courage to be technical. Baskett (currently with Silicon Graphics, Inc.) talked
about businesses and McCarthy gave a slide show of pictures (the construction
and the demolishing of one of their buildings) he did not recognize himself.

        The overall impression created by the picture of the past was a systematic
neglect of computing science's core. The "theorists" regard machines primarily
as tools or as a source of their mathematical problems or as an application area
for their mathematical theories; for the others they were only tools. Computing
Science as a discipline in its own right hardly emerged. Nilsson gave his vision
of the future of the department; I can describe it only as "more of the same".
I saw no effort to remedy the situation and that was a bit saddening. I talked
about this with a number of people. The general feeling was that the department
was saved by the very high quality of its students, 50 % of them being able to
find their own way. I found myself dreaming about what the alumni would have
been able to achieve, had they been properly educated by the department....

Afterthought   In view of the quality of their students --only a minute fraction
of the applicants is admitted-- the fact that the output of the graduate program
is only 50 % of its intake is a very sobering thought indeed. (End of Afterthought.)

        After cocktail party and banquet I addressed an audience of about 180 for
about an hour; I did so under the title "How well did we do?". Instead of pro-
nouncing a verdict, I gave them a number of yardsticks. The talk was followed
by a lively question-and-answer period and my whole performance was well-received.
During the day I had already realized that quite a few of my yardsticks would
not show the Stanford Department in a very favourable light; I noticed that none
of the faculty members present entered the discussion.

        The next morning Dan Doernberg, the founder of the book shop, would collect
us at 8:15. We were packed and he arrived at 8:35, having lost his way on campus.
(He hardly apologized; is punctuality no longer a Californian virtue?) He took
us to The Blue Sky Cafe, where we had a nice, though extremely healthy, breakfast.
I had to perform at 10:00, and we arrived at the place at 9:58.

        The duty to address an audience of 350 with a flip chart as only way of
showing something severely constrained me in the choice of examples; fortunately
this situation did not catch me totally unprepared and my talk went very well,
my only purpose being to give the audience some feeling for the nature of the
mathematical arguments used in program development. I spoke for about an hour
and then we had a very successful discussion session: the audience, which was
a pleasure to work with, distinguished itself by departing from my examples no
later than at the third question. After more than another hour, while I was
answering to questions and signing books, Doernberg took the two of us to Hotel

Horning, where we stayed for another 24 hours.

It was a pleasure to see Jim and Jane again. They were perfect hosts: they showed us some of the surroundings, but not too much, they offered us lunch and brunch in pleasant restaurants, and had invited some nice company for Saturday evening dinner. That evening I would have liked to conduct some technical talk with Greg Nelson, but by the time the opportunity was there I was too tired: I had worked with sizeable audiences, and that showed. The night we spent in Hotel Horning is memorable for the fact that I don't remember a single second of it.

Saturday afternoon we paid a short visit to the DEC System Research Center, the interior decoration and the furniture of which we immediately felt at ease with. It was perhaps even nicer than the Faculty Club. The general taste displayed was markedly more "modern", more "cosmopolitan" than we have adapted ourselves to in the mean time. This was confirmed the next day when Jim and Jane took us to one of the Palo Alto book shops: at the entrance, they had about two dozen foreign newspapers. Jim told me some about the work he was doing, and I was, besides instructed, very pleased with what I heard.

We were due to take off at 15:45 from San Francisco, but it was 16:45. Three intermediate stops --San Diego, Phoenix, and El Paso-- enables Southwest to catch up with most of the delay, and after a flight of five hours, we arrived at 23:25 in Austin. It was cold, and the next day we heard that we had missed a weekend of foul weather. The next day I had appointments at 9, 11, 12, 13, and 14:00. It was one of those days (which, fortunately, are relatively rare).

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