

The ATAC (= Austin Tuesday Afternoon Club).

The Tuesday Afternoon Club in Eindhoven (now to be referred to as ETAC?) was founded in 1973, when I became Burroughs Research Fellow. Being suddenly only one day per week at the THE, I felt obliged to reserve one afternoon for scientific contact. Its original purpose was twofold: to prevent our -and, in particular, my - intellectual horizon from shrinking - for the first time in my life I would work in complete isolation for most of the time - and to help my younger colleagues in finding out how to conduct their own research.

In name of the first goal, we sometimes spent an afternoon scanning the literature and studying what, at first sight, seemed interesting. But on the average this turned out too often to be too disappointing, and we stopped doing that. Sometimes we still studied work by others, but only on recommendation.

Tuesday Afternoons have never been prepared: the standard opening was "What shall we do?", and from the different suggestions we would choose. This format makes the happenings very unpredictable; some afternoons are exciting, some are just illuminating or useful, and some are a failure. I think this is a very good thing and I would like to keep it that way.

In my memory, we have had mainly three types of Tuesday Afternoons.

One type might perhaps be captured by "sensing directions", either of things taking place or of things to do. It could occur on a very specific challenge such as "Can we think of a dozen worthy Ph.D. topics?"; it could also occur after, say, a Markt-oberdorf Summer School, when we would try to get a motivated feeling for significance/promise/wisdom of Category Theory, Temporal Logic, Event Theory or what have you. Such afternoons, as you might guess, are relatively rare and pretty exhausting. They are almost always successful.

Less rare (and also less predictable) is the afternoon that starts with tackling an unsolved problem. We never take one of the standard ones - the equivalent of Goldbach's conjecture, say, preferring problems of our own design. A typical example is the on-the-fly garbage collection. Our reconstruction of the snapshot algorithm falls in the same category. On an afternoon like that, two rules are most important: at any moment at most one person should be speaking - long periods of silence are, however, permitted - and everyone who has made a remark should be prepared to answer the question "Why did you say so?". It is the most effective way I know of making problem solving techniques explicit. One rule is essential: only accept problems because one has reason to hope

that the effort of solving it will be instructive. (One of our foreign guests, from a more pragmatic culture, had grave, almost emotional problems. For three months he would ask in desperation "But why do you spend a whole afternoon on such a silly problem?" and for three months we would answer "Because we don't know how to solve it nicely." After those three months, he caught the spirit.) Such afternoons are invariably exhausting, and failures are not uncommon (in the sense that the only thing we learned was that we still could not solve the problem.)

By now the most common afternoon is the one at which one member submits something he has written to the scrutiny of the others. The rule is that the author has no feelings to be spared and that the others try to improve his text as much as possible. Authors trained to that scrutiny are very attentive and will say "I noticed that we had to read that sentence twice. Can anybody explain to me his problems with it?" before anyone has actually complained. The fascinating observation is that, in such a situation, the author always gets a convincing explanation: a jump in the argument, a missing reference, a linguistic ambiguity, an unfortunate punctuation, or what have you. It quickly emerges how to mend the text.

I rarely saw a first version of a text pass such scrutiny unscathed, and this observation

proves for me that Tuesday Afternoon Clubs are indispensable.

It has been during such sessions that a tradition has evolved as we arrived at a consensus which modifications were improvements. I realize that in Austin we have to go through that process afresh. It is partly purely technical, such as "avoid the superfluous", be it case analyses, nomenclature, or subscripts, and "avoid the misleading", such as anthropomorphisms, operational arguments, or causal considerations (possibly in connection with the implication). It may be "political", and then consensus may be harder to reach. While there are technical reasons for avoiding most diagrams and for never using an example for clarification or disambiguation, people may feel tempted to sin in such respects in the belief that thus they serve their readership better. This is what I meant by "political". The Eindhoven Tuesday Afternoon Club accepted the political decision never to write down to its readers; respect and consideration for the reader was the cultural glue that kept the ETAC together. It is a very good glue; I think it is essential.

Austin, 29 August 1985

prof. dr. Edsger W. Dijkstra
Department of Computer Sciences
The University of Texas at Austin
Austin, TX 78712-1188
United States of America