

What I missed in Batcher's Baffler (EWD935a-0)

The remark on p. EWD935a-3 "I did not fully check it, but ...." is stupid because the check is trivial. It is amazing that I missed that because, one page earlier, I had made the relevant remark, viz. that the OK-relations in  $P_2$  - and also those in  $P_3$  - are disjoint provided  $e.i \equiv \neg e.(it)$ . [The remark was too weak to my taste: disjointness of the relations in  $P_2$  - and also of those in  $P_3$  - is equivalent to  $(\forall i :: e.i \equiv \neg e.(it))$ .] And I also remarked that any such predicate would do. If  $e$  is such a predicate, so is  $\neg e$ . Replacing  $e.i$  by  $\neg e.i$  would interchange  $P_2$  and  $P_3$ , so "the choice just made is irrelevant". So that is that.

That was stupid, wasn't it? I know what happened. In EWD935a I tried to present a derivation of Batcher's Baffler, but I did not actually derive it, for I had seen it before, and in that presentation  $P_2$  and  $P_3$  were not given in terms of  $e.i$  but in terms of the very specific choice  $(i \bmod 2.t) < t$ . I introduced  $e.i$  more as a short-hand, I am afraid, than as an abstraction.

I discovered my stupidity while lecturing. It was also, while lecturing, that I discovered that I could have presented a nondeterministic program in which at each iteration of the outer repetition - i.e. for each value of  $t$  - a fresh predicate  $e$  would be chosen.

My mistake is a nice example of the harm done by being overspecific. That Netty van Gasteren has

eloquently warned me against being overspecific makes my mistake only worse.

Another moral of the experience is: postpone the reproduction and distribution of EWD's I am going to lecture about until I have actually done so. (I am now going to write EWD941; it is for my course and I shall postpone reproduction until I have given the lecture.)

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