

From: Maggie McLoughlin <mam@CS.Stanford.EDU>
To: noam.zeilberger@polytechnique.edu
Subject: from Prof Knuth re your letter of 11 Feb 20256
Reply-to: knuth-bug@cs.stanford.edu
Date: Fri, 27 Feb 2026 13:10:27 -0800

Hi Noam. [Are you any relation to my friend Doron?]

Many thanks for your flattering letter. I fear that you have an exaggerated view of my competence; yet of course I'm delighted to know that somebody understands what I was trying to say.

I'd forgotten about deleting those paragraphs from the original preface to Volume 1. In the desk copy of the 33rd printing of the second edition, I'd marked only one change (besides additions to the list of abbreviations for commonly cited journals):
pure mathematical problems historically have always developed from
-> pure mathematical problems almost always owe their origins to
[Probably that change went into one of the published errata.]

Evidently in 1997, after Silvio Levy had presented me with TeX versions of the various parts of Volume 1 so that I could finally make a third edition, I edited the preface by first adding a paragraph (apologizing for being forced to leave things out because CS had been growing so rapidly). Naturally I also then looked for parts of the preface that no longer needed to be said. And I guess I'd come to the conclusion that mathematicians had by then come to understand the material that you've quoted from the earlier prefaces.

About Ulam's article: I don't actually recall reading any articles in the September 1964 Scientific American except Martin Gardner's column [which Martin intentionally made "as unmathematical as possible" that month ... it's about puns and palindromes]. No doubt if I had time today, I'd find the articles by Courant, Davis, Kline, Sawyer, Kac, Quine, Dyson, Bellman, and Ulam quite inspiring. [wow, what a collection of great expositors and thinkers!]

I wouldn't have written many of the sentences of Ulam that you quoted. ("It is preferable to regard the computer as a handy device for manipulating and displaying symbols.") An interesting thought, but it's never entered my head.

I met Stan (and visited his Sante De home) in 1976, and we got along great. He's wonderfully creative, and by now I've read many of his books and papers.

I think the main other person who influenced my original preface, besides my mentor de Bruijn (a frequent visitor to Caltech), was George Forsythe. You can get an idea of the ideas that I thank him for the most by looking at the bio that I wrote in CACM when he died suddenly in 1972.

Cordially, Don Knuth

PS You say you're "eagerly looking forward to reading Volumes 5 and 6". But I'm currently in the midst of 4C, and that will by no means be the end of Volume 4...