

Re: What annoys you in mathematical text?

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Toni Lassila wrote:

I was thinking of ways to improve one's mathematical writing and went through some essays on what certain authors preferred with regards to style (rather than grammar). Many of the suggestions are of course contradictory, so I think that rather than trying to be clever and please everybody, it would just be better to avoid the common annoyances that people run into in mathematical texts. The risk is to become bland, but at least you'll be bland and inoffensive.

So what particular things annoy you when reading a mathematical paper or a book? I would also appreciate hearing about people's annoyances that are somewhat non-standard. I mean, everybody hates things like the overuse of "it's easy to see" and "clearly". What is your pet peeve of which you'd like to see authors rid themselves?

I don't mind "clearly" and "it is easy to see" as long as it is not a lie. If too many details are put into the proofs, then the reader can lose a sense of the woods and see only the trees.

What I really like in a book is a kind of road map that tells the reader where we are going, and/or why we are doing it. What I often dislike is where the writer gives a rambling set of arguments, and then says "and so we have proved ... THEOREM: ...", that is, I like for the theorems to be stated first, and then for the proofs to follow, preferably in a systematic "Proof...QED" format.

I dislike the use of Gothic letters, or any other kind of letters which are hard to distinguish from each other.

Style for style's sake (like grammar or spelling) are not things I worry about (well you can see that fairly quickly from my posts), so if you put a math symbol at the beginning of a sentence I am not going to get bent out of shape. But I really do appreciate it when the author makes a very genuine effort to make his or her arguments easy to follow, and also makes the effort to make the whole argument flow nicely. If it is a choice between clarity and good style, go for clarity.

In books, I prefer it when the author tries to use somewhat standard terminology or notation. I particularly like it when I can start reading page 150 without reading the previous 149 pages. If you do insist on non-standard terminology or notation, at least make sure that you have a very good index. If its a choice between using the standard but perhaps imperfect notation, or reinventing a much more consistent new notation, generally you should stick to the old.

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Also, if you use some notation on page 50 which you introduced on page 10, it is not shameful if you remind the reader what the notation means.

The main thing is – make the effort to communicate what you are really doing. It will really show, and people will really appreciate it.

Regarding humor, you don't really need to put it into your papers. People who speak a different language will probably appreciate it if you leave it out, because more than likely it will confuse them.

Also, if I might brag a little, on MathSciNet, two of my more recent papers got a nice comment on how well they were written.

Stephen

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