



A beginner's guide to criticism

Edzard Ernst

A brief taxonomy of reviewers, and how to deal with them

Progress, we are told, can be helped by differences in opinion. If we always agreed on every issue, advance would be slower or perhaps even non-existent. This applies to all walks of life, and medical publishing is no exception. But differences in opinion can involve criticism, and criticism can be difficult to take. Today most journals rightly insist on peer review, which essentially means you receive written criticism on your submission. Having had my fair share of it, I would like to assist the novice by describing the archetypical critics and by suggesting strategies for dealing with them.

The nitpicker

The nitpicker is obsessed with detail. Acting as peer reviewers is where nitpickers have their heyday! They might dislike anything — from your approach to statistics to the way you use semicolons.

The best way of dealing with nitpickers is, I am ashamed to admit, to give in. It is, of course, tempting to justify this or that semicolon, but my advice is, don't. Life is too short! Unless you are a nitpicker yourself, try to rise above nitpicking criticism.

The aggressor

For those of us who are not born masochists, criticism is rarely an enjoyable experience. The aggressor makes sure it is thoroughly unpleasant. Whatever the arguments, they articulate them so forcefully that the opponent is likely to get hurt — regardless of the validity of the argument itself. I once received a review of a paper I had submitted for publication which started with the statement "This article is staggering in its incompetence". What followed was hardly a qualification of this opinion, more a mindless enforcement of it. Aggressors do not normally assist you in your efforts to enhance anything; constructive criticism is not their cup of tea — they only aggress.

There are several ways of dealing with the aggressor. Avoid an escalation of aggression, but insist on discussing the real issues openly. You might just win the day because the quality of the aggressor's arguments is often inversely correlated to the force with which they are produced.

The evangelist

Evangelists are so utterly convinced of being correct that they view any deviation from their truth as heresy. If your data fail to support their beliefs, your data must be wrong. Evangelists read medical publications upside down — they first study the conclusions. If these are in accordance with the evangelists' convictions, you have little to worry about. Even if your method is fatally flawed, they will praise you and your work. But if your conclusions contradict their beliefs, they will find plenty of fatal flaws in your work and condemn you forever — even if the research is flawless.

After having been confronted by evangelists all too often, my advice is to ignore them. There's no other choice. Only another evangelist can change an evangelist.

The wind-bag

If a written criticism extends to more than five pages, or if a verbal comment goes on until you feel hypoglycaemic, it is, in my experience, likely to be worthless. Wind-bags love to hide the presumptuousness of their arguments behind large quantities of pseudoscientific waffle. They use tedious pseudoscientific jargon to indulge in apparently complex thoughts or theories. Unfortunately, this tends to impress a surprising number of people. But, once one manages to look behind the smokescreen, one is usually struck by the hollowness of the arguments.

Subsequently, it is easy to deal with wind-bags; simply expose their elaborations for what they are: hot air.

The inventor

If your opponent cannot find anything wrong with your work or arguments (or cannot even be bothered to study them), he or she may decide to become inventive. This strategy works best in published debates. Once the invention is out there in black and white, it is difficult, perhaps even impossible, to re-establish the truth. Whenever I publish research suggesting that a given "alternative" therapy does not work, you can be sure that someone counters by claiming I was bribed by "big pharma" to do so. There is nothing more efficient for tarnishing somebody's work than a good old-fashioned lie. If the lie is important enough, you obviously have to deal with it. You then need to expose it and clarify who is inventing things and why. This process can be nerve-racking. Therefore, it might be wise to just ignore inventors, particularly if their lies are inconsequential.

Criticism is meant to be helpful. It can and should be a good and constructive contribution to progress. Every now and then we do receive thoughtful criticism that is highly profitable. It enables us to reconsider certain issues and perhaps correct or prevent mistakes. This is the sort of criticism that does indeed further progress. I only wish we had more of it!

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