Useful Mistakes

Mistakes often lead to useful learning opportunities. After all, we often mistakenly look upon our successes as if they are the result of some intrinsic property of ourselves, as if we are both special and right, rather than consider that at least some of them have come about due to luck. A failure or an error, on the other hand, will often receive more attention. Could it be that we have run out of luck, or is it that the failure has exposed some important shortcoming in our process?

I am humbled and grateful to have been chosen as the Honoree at this year’s CSEG Symposium. Going by past Symposia, it seems probable that a group of very intelligent people are going to make an effort to say some nice things about me. But what are we going to learn from that? How much of that, really, can an educated audience withstand? Looking back on my own career, I do see some things that I am proud of. I see a great many people who I am proud to have worked with. I see a few problems (sort of) solved and situations improved. All that is wonderful, but my career trajectory looks the way it does because I had a great many things to learn. I made errors. I was part of some mistakes. I was the ringleader of a few of them. My work suffered from a variety of cognitive biases, and many of the very intelligent people around me did as well. In the second half of my time as a geophysicist, I became more aware of some of my faults, errors, and shortcomings. I attempted to become a better scientist and make less cognitive errors. It turns out that both tasks are difficult.

Let us consider some of these mistakes—especially the ones of a type most common to everyone—and see if we can understand them. Let us see if we can do better.

Let us see if we can learn from my mistakes.