Models.Behaving.Badly- Why Confusing Illusion with Reality Can Lead to Disaster, on Wall Street and in Life

Emanuel Derman

Catchy title: wish that it fit the book

This book is a potpourri of a very intelligent man's favorite themes. An author should have an idea of his intended readership when he writes the book. He must've had himself in mind; I cannot imagine much of anybody with interests as eclectic as Emanuel Derman.

Having chosen his title, he has an obligation to explain what a model is. He begins by saying what it is not. It is not a theory, and it is not fact. A model is a metaphor, a simplified representation of reality, necessary when reality itself is too multifaceted to easily grasp. The value of the model depends on how well it represents those aspects of reality in which the user is interested. A model airplane, his example, is useful because it looks like a real airplane and has similar aerodynamics. The kid who makes a model airplane knows full well that it is much smaller and the internal structure and is nothing like a real airplane. For the kids purpose, that doesn't matter.

A theory represents reality. A theory that has been proven is the fact. The Pythagorean theorem is a fact, as our Newton's laws of gravity, Maxwell's laws of electricity and magnetism, and so on. One of the valuable parts of the book is a short history of science in the realm of electricity and magnetism. Derman, whose professional training was in physics and spent half of his career doing it, elegantly and succinctly takes the reader through the groundbreaking theorems describing these phenomena, electricity and magnetism, which can only be examined indirectly – through their effects rather than the thing in itself.

Derman was raised in Jewish neighborhoods of South Africa. His account of his childhood is fascinating, evoking in this reader a nostalgia for the kind of community that every kid should be lucky enough to have. It was a community of caring people, intellectual challenge, social involvement, and a vast amount of adventure. His description of his own involvement with apartheid seemed a little bit formulaic; what can you say? For a far better treatment of South Africa of that era, by a woman whose father led the Jewish opposition to apartheid, read "Into the Cannibals Pot" by Ilana Mercer.

There is a pretty good exegesis on the various names for God in the Hebrew language, and the two, three, and four levels of circumlocution used by the most devout to avoid saying the name of God. He somehow equates God with a theory rather than a model. To that I would not say yes or no, simply "Huh?" He then goes into philosophy with Baruch Spinoza. What he finds to be incredibly deep looks to me like navel gazing.

And at last we get into the world of finance and find not very much, at least not compared to so many other recent books such as the Black Swan, How Markets Fail, Money and Power, Boomerang and many, many others. He talks at extremes. He gives very simple, high school level descriptions of securities such

as stocks and bonds, then maybe a collegiate description of derivatives, and then jumps into Black Scholes models. Is unbalanced, and fundamentally not very useful. The take-home messages are quite simple. Your hedge fund manager is not earning his 20 percent if he is making money in a rising market. No model works all the time; you should not give up your intuition and trust totally in models. Making money in the stock market is hard work. And other platitudes.

Lastly, Derman is not very sanguine about the current course of events. He considers the bailout of Wall Street an outrage, and does not sound very bullish on the future of the long-standing alliance between capitalism and democracy.