

guest comment

Advice to ex-physicists on entering the real world

David H. Weinflash

"Absent thee from felicity awhile and in this harsh world draw thy breath in pain to tell my story"

This sermon is addressed to physicists who have been rudely turned out from their chosen profession or who are realistic enough to recognize that, sooner or later, they will be looking for a real job. You have read uplifting articles expounding the doctrine of the "fortunate fall" and exhorting you to share your talents with a world eager for the unique intellectual capabilities that characterize the least of those who have mastered the mysteries of the paragon of the sciences. Yet the most casual empirical investigation reveals that, by and large, the defrocked physicist occupies a humble position that engages but the smallest part of his native abilities and hard-won skills. The aim of this essay is to explain why and to suggest remedy.

First some personal details. I got a PhD in 1971 from Columbia University where I was an adequate student and less than adequate physicist. I briefly served as associate editor of this journal and then, by a certain declension of circumstance, returned to Columbia for an MBA degree and thence to Wall Street. Presently, I am employed at L.F. Rothschild, Unterberg, Towbin in the Public Finance Department, where I work to effect negotiated underwritings of tax-exempt bonds. I believe that this concatenation of events qualifies me to speak on the subject I have chosen.

The reasons that physicists employed outside of physics fail to realize their potential are threefold: psychological, sociological and methodological.

Psychological. Few physicists leave the profession voluntarily; most leave only when there is no other choice. Hence, the newly expelled physicist is generally suffering from shell-shock, from which he often descends into a post-partum depression from which he may never recover. Many ex-physicists never give up the hope that someday they will find a per-



manent job in physics. Your first step toward rehabilitation as an ex-physicist is your unreserved acceptance that you will never return to your beloved science as a full-time profession. You must resolutely turn your back on the past and say to your new employer "Whither thou goest, I will go; and where thou lodgest, I will lodge; thy people shall be my people and thy God my God."

Sociological. If your new employer is in business, the God he worships will be Mammon. In his world, a person is taken seriously in proportion to the interest he demonstrates in money. Unless you have concealed your past, your employer will have prejudged you according to his image of the typical physicist: wonderful mind, but always in the clouds; wildly impractical and indifferent to money. The quickest (and some cases, only) way for you to convince him that you are a serious person is to show him that you care very much about money. If money offends you, there is no need to keep it; you can give it away as fast as you make it, if you can make it. However, I assure my readers that money, like oysters, is an acquired taste. If at first, greed comes hard to you, I suggest reciting every morning as you brush your teeth, "I'm in it for the money, I'm in it for the money." Don't let them put you off by telling you that you're a genius; tell them you'd rather be dumb and rich.

I hope that you realize that you can *not* prove your interest in money simply by

asking for a 25% raise after three months on the job. You will prove it by demonstrating a lively interest in your firm's bottom line, by making it clear that you are aware of your contribution to that bottom line, and maintaining an accurate appraisal of your fair-market value as your career with the firm develops.

Remember that in attempting to alter the world's perception of the physicist as something not quite human, something to be unplugged and put back in its box when not in use, you will be embarking on a revolutionary task in which you will need the revolutionary virtues of patience and irony.

Methodological. The last obstacle to your success as an ex-physicist in the real world lies in an intrinsic aspect of physics training. In physics, there is an ultimate authority: nature itself. In the real world, there is none. Science may be defined as putting questions to nature. But only the most talented scientists actually formulate questions; the majority spend their working lives routinely answering the questions posed by others. Everyone has at one time seen an intelligent dog drop a ball at his master's feet and with imploring eyes beg, "Throw the ball, and I'll chase it." Similarly, the ex-physicist begs of his new employer, "Ask a question, and I'll answer it." Unless you learn to both ask and answer questions, to ask "what" and "why" instead of merely answering "how", you will forever remain a precocious child among adults. □

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