The Dismal Science

By Theodore Dalrymple

There's no art to find the mind's construction in the face, says Shakespeare—or rather, says Duncan in Macbeth, since of no author is it more difficult than Shakespeare to know what his own opinion of any question was, so capable was he of entering every type of person's mind as if it were his own. I think you can deduce a certain amount about his own views from what he wrote—for example, that he was not fond of mobs and that he was no puritan—but not that he was a nihilist himself simply because Macbeth's great speech about life being full of sound and fury signifying nothing so exactly expresses the despair of a nihilist in extremis.



What Duncan meant was that, to quote Hamlet, a man may smile, and smile, and be a villain. There is an asymmetry here, it seems to me: While a man may look good and be bad, it is much less common for a man

to look bad and be good. A vicious expression rarely disguises a good heart; sweetness of expression is much more likely to disguise a wicked intention, though it may be only in a minority of cases that it does so. We should always remember Doctor Johnson's dictum, that it is better sometimes to be deceived than never to trust.

Such, at any rate, were my thoughts when I saw recently an entry on that excellent website Retraction Watch, a public

guardian against misconduct, including but not limited to fraudulence, in scientific research. The entry had a picture of a man caught cheating in research not once but at least thirteen times, a man of such pleasant and open countenance that I would immediately have trusted completely in his honesty. Perhaps I am not a good judge of countenances, because I would have entrusted my life savings to the late Mr. Madoff, so honest, solidly dependable, and frank did I think his face. Though fortunately I had insufficient funds, and was insufficiently prominent, to make it worth his while for him to trap me in his elaborate web of deceit.

The scientist with the honest face and a tendency to forge evidence was called Richard L. Eckert, of the University of Maryland. The Office of Research Integrity (ORI) found that he had made up evidence in his research papers on work funded by a variety of public bodies such as the National Institutes of Health. It found that, over a period of seven years, he:

intentionally, knowingly, or recklessly falsified and/or fabricated Western blot image data and microscopy image data by: using images representing unrelated experiments, with or without manipulating them, and falsely relabeling them as data representing different proteins and/or experimental results....

Furthermore, he applied for grants on the basis of his frauds. The amount in total was not small: \$19 million.

As a result of the investigation into his work, Professor Eckert was enjoined not to contract or subcontract with any U.S. government agency, not to apply or allow his name to be used to apply for such a contract or subcontract, and not to serve in any advisory or consultancy capacity for the Public Health Service, all for a period of eight years. To these conditions was appended the word "voluntarily": He would "voluntarily" agree to these conditions, said the ORI's

announcement.

I found the use of the word "voluntarily" here rather curious. He would choose to obey these conditions in the sense that a man with a gun held to his head chooses to do what the man holding it says he should do rather than be shot in the head. Of course, he could always choose to be shot in the head, but we would not normally describe his choice as "voluntary."

In the circumstances, the announcement by the University of Maryland, from 2018, reads somewhat ironically:

Dr. Eckert, a preeminent scientist and investigator with continuous funding from the National Institutes of Health (NIH), has served as the UMGCCC Associate Director for Basic Sciences, since 2013. In his new role as Deputy Director, Dr. Eckert has principal responsibility for scientific and research leadership, as well as recruitment and strategic planning, working with the leaders of the UMGCCC [the Marlene & Stewart Greenebaum Comprehensive Cancer Center] to set priorities and future direction.

I am completely unqualified to assess the seriousness or effect of Dr. Eckert's misdeeds: whether they represent a minor detail in otherwise excellent work, or whether they totally invalidate the conclusions of his papers. He is the author of 200 published papers: Are we to assess them in the light of the now mainly superseded legal principle falsus in uno, falsus in omnibus, according to which the whole of a witness' testimony is to be rejected if any part of it is to be found to be false or dishonest? After all, a seven-year record of falsification does not suggest a rush of blood to the head or the succumbing to sudden temptation: It suggests something more like a policy.

Scientists falsify their data for more than one reason, perhaps. They may be so convinced of the correctness of their initial theory that they regard a small deviation from the

results they hoped for or expected as nothing more than a slightly irritating temporary obstacle to the acceptance of their theory, in the expectation that the small deviation will before long come out in the wash of future work, and therefore decide to "correct" their results. They may be driven by the lust for fame or advancement, or even, I suppose, by the desire to make fools of their colleagues who have failed to treat them as they deserve. One of the pleasures of art forgers, after all, is the demonstration of the inexpertise of art experts.

I am slightly surprised by the mildness of the punishments inflicted on scientific forgers. For example, Dr. Shin-Hee Kim, a veterinary scientist of the University of Maryland, was found guilty by the ORI in 2020 of:

Intentionally, knowingly and/or recklessly falsifying and/or fabricating data by altering, reusing, and relabeling same source Western blot images, microscopy fields and data of viral titers....

Kim, it is said, "agreed to three years' supervision on any federally-funded research."

In the same year, Dr. Anil Jaiswal, also then of the University of Maryland School of Medicine, was found by ORI to have:

Intentionally, knowingly or recklessly...used manipulated images to generate and report falsified data in figures; and...used mislabeled images to falsely report data in figures.

There seems to be a lot of this about, but presumably it is only a tiny proportion of all scientific activity. Or is it because, if punishment of scientific fraud were more severe, scientific activity itself would grind to a halt?

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