

Vivian Weil's Commentary on "A Single Author Paper"

Commentary On
A Single Author Paper

The account in this case is the more telling for revealing the adviser's remoteness without making a point of it. Mike, a post-doc, and Lisa, an advanced graduate student, share the spotlight, but their adviser, an important figure in the situation, remains unnamed and in the background. Whether wittingly or not, the adviser contributes to unfairly denying the graduate student credit for her work or an acknowledgment of her contribution. And he falls short in his training of both the post-doc and the graduate student by intervening clumsily in a potentially fruitful collaboration.

Set in a large lab, the situation in this case is remarkably isolated. There are no glimpses of the surroundings or hints of policies, procedures, or structures in the lab that might have prevented this problematic situation. Left to themselves, the two friends, a post-doc who is theoretically oriented and a graduate student who is a talented experimentalist, cooperate to complete the solution to the post-doc's problem. As an outcome of this success, they undertake a more extensive collaboration, in which the graduate student designs and builds the experiment to support the post-doc's new theoretical idea.

It is striking that no discussion between the friends about allocation of credit is recorded. Apparently they proceed with Lisa silently trusting Mike, believing that she will get due credit, and Mike focusing on successfully confirming his ideas. If the adviser is genuinely ignorant of Lisa's role as the experimentalist, he is negligent. Advisers should be in close touch with the work in their labs and the activities of their advisees. They should not be clueless in such a situation, and they should know the capacities, strengths, and weaknesses of their advisees.

However, the advisees are not blameless. It is natural for post-docs and graduate students to be inclined to report when they are excited about findings. They must learn the importance of keeping advisers abreast of their research activities,

including collaborations. Lisa apparently does not even inform her adviser of her experimental success in completing the earlier problem, let alone her work on the new problem. The adviser seems to be unaware of her contribution when he suggests a single author paper. However, he should know that Mike lacks experimental adeptness. When advising Mike about publication, he has an opportunity to inquire about efforts to obtain experimental support. The advisees' reticence does not excuse the adviser's ignorance.

If the adviser has been informed about Lisa's contribution and overlooks it, he is even more at fault. He has a duty as an adviser to keep track of such matters. We can only speculate about whether he has a bias toward theoretical work or male students. But the adviser should be aware of the dangers of such destructive bias. Mike takes advantage of the adviser's failure of attention. He is guilty of deceiving or misleading the adviser in not informing or reminding him of Lisa's involvement in his project. In representing to Lisa that he is inclined to aim for a single author paper because that is what his adviser wants, he is disingenuous. He misleads her to her detriment without uttering an actual falsehood. Admitting by implication that Lisa might have reason to feel cheated if he uses her data without acknowledgment, he tries to get her to agree to go along by putting the burden on her. How cheated will she feel?

Lisa is disappointed and unwilling to go along, and she throws the choice back to Mike and his sense of what is right. Naively and timidly trusting Mike and her adviser, Lisa is at fault for failing to protect her own interests. She should have made it more difficult for their adviser to overlook her contribution. And she should have summoned the courage to point out to Mike that he so much as admitted that by publishing the paper as a single author, he would cheat her. While the standards for authorship in this situation are not clear, some acknowledgment of her work is clearly called for.[\(1\)](#) In disappointment, and probably anger as well, Lisa withdraws from the collaboration with Mike. He will no longer take advantage of her, but both will be denied the benefits of a continuing collaboration. Lisa's timidity is unfortunate for her career as a scientist. A more responsible adviser would have noticed this weakness in a talented student and tried to encourage more forthrightness. That is a good quality in a person and a necessary quality for a competitive career in science.

This case is useful for bringing out the loss to science and to promising scientists that can result when advisers fail in their obligations to stay in close touch with

advisees, to establish an atmosphere of openness in the lab, and to provide a framework of expectations and procedures.[\(2\)](#) When the post-doc takes advantage of the adviser's negligence or bias, and the graduate student proves too timid to defend her interests, a promising collaboration ends, without realizing its potential.

- [\(1\)](#)Eugen Tarnow, "Scientific Authorship: What's in a Name?" *Physics Today* 44 (1991): 13.
- [\(2\)](#)Vivian Weil and Robert Arzbaecher, "Ethics and Relationships in Laboratories and Research Communities," *Professional Ethics* 4 (1996): 3 and 4.