The Dark Landscape of a World with Ten Ounces to the Pound

LEON G. HIGLEY AND DAVID W. STANLEY

W

hen we began writing about ethics, we were interested in understanding how we might help ourselves and others achieve greater satisfaction in our scientific careers. We thought finding a better ethical foundation in our work would be an important component of the help. It hasn’t made us experts on ethics nor has it made us ethical paragons. It has improved our views of careers in science. Writing seems the best way to explore many ethical questions, and the pleasure of writing these essays is a bonus. But explorations can take you to places where you don’t expect to go, maybe to places where you don’t want to go. This essay is one of those trips.

Let’s start with money.

In the British navy famous to fans (like us) of C. S. Forester and Patrick O’Brien novels, naval stores aboard ship were the province of the purser. The purser was a (poorly) paid member of the ship’s company, but a careful purser could retire to a comfortable old age. How? By receiving a commission of one-eighth the value of everything he issued. Every “pound” of biscuit, cheese, pease, butter, salt pork, and salt beef weighed fourteen ounces. The same principle of seven-eighths held for issues of beer and rum. The practice was completely illegal but universally condoned, both to allow for wastage and to avoid increasing the purser’s pay. But what the Admiralty and the Navy Board turned a blind eye to was far from acceptable to common seamen. In 1797, the British fleet mutinied at Spithead, and the first of the mutineers’ demands was that provisions be issued at sixteen ounces to the pound.

The academic parallel to this story relates to indirect costs. The notion that some portion of a grant should address fixed costs (like utilities) is reasonable—that these indirect costs should represent more than 40% of the total (a typical indirect cost rate) is not. Just as the pursers retained an eighth of all provisions to sell and profit from, so do universities retain a portion of grant monies to use towards their own ends. But unlike the practices of Nelson’s pursers, universities offer only ten ounces to the pound and the practice is not merely condoned, it’s legal and required. Probably, some portion of this indirect cost money goes to actually paying for university costs related to research; more often, it is used to drive the agendas of senior university administrators. When challenged, administrators will argue that the research infrastructure of universities would collapse without indirect costs, but we’re skeptical. We think it would be instructive to learn the fate of indirect cost money.

The importance most universities ascribe to external funds can be illustrated by another parallel to Nelson’s Navy: prize money. When a British warship captured an enemy vessel, the officers and crew shared in value of the prize when it was sold. This was, of course, a strong motivation beyond the call to King and Country. At some universities, prize money exists as a portion of the indirect cost money returned to the principal investigator of the grant. When summer salaries are written into a grant, it even may be possible to profit personally from a successful proposal. More commonly, professional survival is the motivation for grant writing rather than direct financial rewards. To obtain job offers, tenure, and promotion, you must publish, and to publish you must have money for research. Often, obtaining grant support itself is a professional requirement, with tenure and promotion based in part on grantsmanship. (One of our deans argues that grants are input and that faculty should be evaluated on output, but this reasonable notion seems at odds with how most faculty are judged.) Indirect costs are important to universities and to achieving the research objectives of funding agencies. However, when faculty members are used as sources of “flexibility,” university faculties are transmogrified into means to other people’s ends.

Like all organizations, universities depend on money to fuel their programs. With limited or decreasing public support, seeking alternative funding sources is a necessary activity. What seems less necessary is the lengths to which universities will go to find that money. The practice of naming buildings, classrooms, and laboratories for well-heeled alumni donors, for instance, is not new. What is new is allowing individuals or companies with little or no association with the university to buy their names onto university structures. We know the university gets the money; what does the purchaser get? It reminds us of the library in The Great Gatsby, a room full of beautifully bound books, all of them with pages uncut and unread. Gatsby tried to buy legitimacy through a façade of respectability. It seems to us that universities increasingly are involved in selling such façades. We don’t know if this is good or bad, but we’re not sure the implications have been considered thoroughly.

We could go on at length regarding money and universities, but the point is that as getting money becomes an organizational goal, other goals and principles suffer. Even in business, focusing exclusively on profit is unwise. Sacrificing principles for dollars undermines the purpose of a university. And the influence of money on individuals is no less than that on organizations.

It is no great insight to recognize that all freedom, even political freedom, depends on money. And those with more money are freer than those without, because money releases you from many sorts of toil. One of the most obvious myths of academic freedom is that you are free to do whatever research you desire. The reality is that you are free to research whatever you can find money to support. This is not a modern development, but academic freedom has become more constrained as the cost of research has increased. However, the more sobering recognition regarding money and academic research is not that researchers are limited in their choice of research directions. It is recognizing that other people, those with money, can choose what we do.

To emphasize this point, consider just a couple of examples. And let’s not look at purely basic research but at work with a strong practical benefit. Like many insect-borne diseases, malaria is at record levels (we’ve seen estimates of 300–500 million cases annually, with 1–2 million deaths per
Can you get grant support to work on malaria or mosquito biology? Probably not. Funding for research on the malarial parasites and their vectors is at an all-time low. Well, so it goes. Perhaps research with agricultural implications is supported better. Most writers on pest management identify sampling and evaluation as key components of IPM programs. Can you get grant support for work on insect sampling or developing economic injury levels or life tables? Probably not.

Can the pursuit of funding involve more than failing to address what we regard as the most important research questions? Consider a case study. Imagine an organization proposes a new insect management plan for an agricultural pest. Let’s suppose the plan calls for large scale insecticide use over a wide area, irrespective of insect population levels. Let’s further suppose that the program will be conducted against a native insect in areas where insecticide resistance has occurred previously and that resistance is known for the insecticide class proposed for use. Let’s also suppose that various alternatives to this program exist and that these adequately manage the pest. We might add another layer, too, about the environment in which the insecticide program is proposed. Finally, let’s suppose the organization holds out a few hundred thousand dollars to fund its collaborators. Do universities, entomology departments, and researchers sign on? Absolutely.

Too often, money is the great explainer, the great excuse. A research area is unfundable, so it isn’t really important; and, conversely, where there’s money, there’s work worth doing (irrespective of what scientific contribution it represents). University administrators are happy to use money to explain why our facilities or equipment are inadequate or why our salaries can’t keep pace with inflation. Contrarily, there seems to be money for development officers, bonuses for football and basketball coaches, and other priorities; but, often, universities don’t have the resources to correct longstanding gender inequities in the faculty. And so on.

To us, it is not that money is used as an excuse that is most objectionable. Raymond Chandler, in a letter about his fictional detective, wrote that “Phillip Marlowe and I do not despise the upper classes because they take baths and have money; we despise them because they are phony.” This is our attitude towards many university administrators. Despite the notion that universities are solely dedicated to education and the pursuit of truth, it is hardly surprising that universities are run with baser objectives. What we find most objectionable is the hypocrisy.

We dream of a world where research is supported at sixteen ounces to the pound, but it is not our world. Ours is a world that destroys marriages and families in the quest for tenure and professional success. A world that too often uses graduate students and post-docs and faculty as means to unagreed upon ends. A world of egoism, jealousy, rivalry, and pettiness. A world that is ostensibly about the search for truth but is routinely about hypocrisy and falsehood. A world of light and idealism, but a noir world.

In our search for meaning in careers, we realize much of our dissatisfaction stems from the vast chasm between the reasons we got into science and the realities of what we must do to stay in science. How do we achieve satisfying careers in science when reality is so far from our ideal? Perhaps, we must become, like the protagonists of a noir novel, cynical idealists: recognizing how the world really works but not sacrificing our ideals in an effort to survive.

We find ourselves in this harsh world, where survival is not certain, but survivorship alone does not evoke our sense of meaningful careers in science. We want to see people thrive. We want to pursue visions of things not directly before us, to take risks in environments where risks are rewarded. We want to be able to produce a legacy of scientific contributions, of books, papers, and, most especially, students. We want to look critically at our own imperfect thoughts and behaviors and at the ethics imbedded in our institutions and not despair.

If we are to achieve satisfaction in scientific careers, we must recognize the realities of the world in which we work. But we do not have to accept that this is the only possible world. We might begin by hearing the faint echoes of mutinous seamen.

David W. Stanley is professor of entomology at the University of Nebraska, where he also has an appointment in the Center for Biological Chemistry. He works on the biochemistry and physiology of eicosanoids in insect immunology and studies comparative eicosanoid physiology in invertebrates. Leon G. Higley is professor of entomology at the University of Nebraska. His central research interests are pest management theory and physiological responses of plants to arthropod injury.