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Creating an Environment That Promotes Responsible Research Conduct

By Dr. Caroline A. Whitbeck



Dr. Caroline Whitbeck, the Elmer G. Beamer-Hubert H. Schneider Professor in Ethics at CWRU, graciously agreed to write this article for the summer issue of our newsletter. Professor Whitbeck has been one of the modern leaders in thinking about research misconduct.

Recognition of the need for attention to standards for responsible research conduct has increased markedly over the last two decades. Only recently has the larger research community begun to settle on a basic vocabulary with which to discuss the ethical aspects of research conduct. Near silence about both standards and the means for controlling conduct (other than the treatment of human subjects) prevailed before the 1980s.¹ We now see a general recognition of the need for education in the responsible conduct of research ("rcr") at the Town Meeting on Institute of Medicine (IOM) report, *Integrity in Scientific Research, Creating an Environment That Promotes Responsible Conduct* in October 2002.

The legacy of silence is still apparent to those of us who have been attempting to develop the conversation on research integrity. In discussions at a variety of universities and institutions, I have often found that many investigators are surprised to learn, apparently for the first time, just what their colleagues think and do. Nonetheless, the awareness of the issues of responsible research practice has developed through three discernable stages. For several decades, ending in the early 1980s, the research community gave very little sustained attention to the subject of research integrity. That a researcher would commit a major breach of trust seemed almost unthinkable. The view of research misconduct within the research community in the late 1970s was comparable to the public's view of the sexual molestation of children at that time. Most believed that such atrocious acts were extremely rare and those who commit them must be evidently deranged so that none of one's acquaintances could possibly

be perpetrators. Both assessments have proved wrong. Most investigators would not commit research misconduct any more than most adults would molest children, yet the perpetrators of both sorts cannot be easily picked out and misconduct happens frequently enough to require better measures of control.

In this first period, the literature on research integrity, or compromises of it, was tiny. Although the American Association for the Advancement of Science did form its Committee on Scientific Freedom and Responsibility, the report that John Edsall wrote for this committee in 1975 stood virtually alone as a statement on responsible research conduct.² Rosemary Chalk's excellent collection, *Science, Technology and Society: Papers from SCIENCE, 1949-1988*,³ shows the neglect of the topic in those forty years, especially prior to 1980. Research conduct is barely mentioned except in the section on research misconduct, and that section is a mere six pages long and contains nothing written before 1981.

Many researchers, of course, maintained high ethical standards for themselves and took great care to pass these ideals on to their students.⁴ Nonetheless, the larger community of research scientists formulated few statements of ethical norms for their work. Despite two articles in *Science* that argued the need for an ethical code for scientists,⁵ professional societies did little to address the need for guidelines for research conduct until the mid-1980s or later. For example, it was not until 1991 that the American Physical Society issued their first statement of ethical guidelines.⁶

In contrast, most engineering societies and at least one scientific society, the American Chemical Society (ACS), had established codes and guidelines for professional responsibility for a

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half-century and more. Those statements had set forth norms of professional responsibility for public health and safety. Nurses, physicians, and physical therapists had all established ethical norms for practice and, to varying degrees, educated new practitioners about their responsibilities.

In the decades leading to the 1980s, hardly any universities or other research institutions established policies for investigating wrongdoing. Flagrant or repeated instances of plagiarism, fabrication, falsification of data, or experiments were either ignored or mishandled.⁷

Recognition of the gross mishandling of cases came in the 1980s, when the government began mandating procedures for handling charges of serious wrongdoing. The attention to serious wrongdoing, commonly called “research misconduct,” was much needed, but unfortunately, the discussion quickly became polarized. Some said that research was riddled with “fraud.” Others countered that the charges of fraud in science were exaggerated, and that the attention to research misconduct was part of a campaign to discredit science and drastically reduce public support for it. About all that could be generally agreed upon was that institutions needed better ways to handle charges of wrongdoing.

Although a few institutions did establish guidelines for the conduct of research in this period, which extended into the early 1990s, legalism so dominated the discussion of research conduct that ethical concerns were often distorted. Emphasis fell on legal and quasi-legal procedures for handling allegations of fabrication, falsification, and plagiarism. Subtler issues of trust and trustworthiness were largely ignored, and many otherwise sensible people forgot what they knew about ethics. For example, some people with a generally good command of English claimed that we do not have a definition of “plagiarism.” Plagiarism has a clear definition, of course; it is the representation of another’s work or ideas as one’s own. All that is wanting is a specification of the evidentiary standards to be used in legal or quasi-legal proceedings.

Some immediately equated any questions concerning research conduct with questions of “fraud.” The assumption that the only ethical issue worth discussing were matters of fraud persisted until the mid-1990s. Because legalism so dominated the discussion in this second period, even observations about the relationship of instances of outright misconduct to other ethical aspects of a situation received little attention. Foremost among these

was that falsification, fabrication and plagiarism tend to occur in research environments where a host of other offenses, disputes and dereliction of duties—poor mentoring, harassment, disagreements about authorship, and ownership of data or failure to share data—have gone unresolved.⁸ “Fabrication, falsification and plagiarism” occupied the center stage—alone. (Struggles over whether research misconduct was in fact to be defined as “fabrication, falsification and plagiarism” actually ran throughout the 1990s and was finally resolved only with adoption of the new Federal Policy on Research Misconduct, available at <http://onlineethics.org/fedresmis.html> in December 2000.)

We are now in the third period in which subtler issues of trustworthiness in research conduct (including their connection to gross research misconduct) have come to the fore. The complexity of today’s research enterprise has created such a vast network of cooperative endeavors that trust relationships have a new importance. Although the question of ethical behavior in research arose in the last century as well,⁹ in those days, research was often a solitary endeavor and so many current issues of trust did not arise. The best ways of handling subtler issues of responsibility and trustworthiness vary considerably with the discipline, however, because of differences in the nature of the research, variations in journal practices and the like. For that reason, the establishment of standards for responsible practice cannot come in the form of rules for investigators in all disciplines. Furthermore, the need for practical education to foster research integrity is now recognized as a national problem—notably in the aforementioned IOM report, *Integrity in Scientific Research, Creating an Environment That Promotes Responsible Conduct*, and educational initiatives by research institutions are now agreed to be preferable to government mandates. Since such education is best done in the department or laboratory in which students gain their research experience, this poses an important challenge to major research universities, such as CWRU, to develop a plan to strengthen the support for, and understanding of, responsible research conduct in the particular disciplines and to transmit this understanding to their students.

¹ Caroline Whitbeck. 1995. “Trustworthy Research, an Editorial Introduction.” *Science and Engineering Ethics*, 1:4 (October 1995) 322-328.

² Edsall, John T. (1975) *Scientific Freedom and Responsibility*. Washington D.C.: American Association for the Advancement of Science. It is notable that Edsall joined the committee only after he had written the report.

Lying and Justification

For reasons unknown, I have been besieged lately by journalists, asking me a variety of questions about “lying.” Usually, these patterns of media queries emerge because of some hot story or other in the news. The latest flurry began with the Martha Stewart scandal, when it was announced she would not be prosecuted for insider trading, but for lying about insider trading. Nevertheless, it has persisted far beyond that specific cause. Many journalists have called, who are working on longer articles, some who want an historical, philosophical or sociological perspective on the subject. Again, I don’t know all the causes for this rash of inquiries. Perhaps it’s something in the gin that journalists drink. (At least that’s what they drink in seedy movies.) But what prompted me to say a word or two on the subject in this Director’s Corner was an article sent to me by a friend. It was entitled, “Lies, Damned Lies, and Duplicity.”

The writer is a theologian, Dennis Doyle, who teaches at the University of Dayton. I won’t critique the article as such, but I want to examine some of the distinctions Doyle made in discussing the question. First of all, he distinguished between a “bald-faced lie” and “the process of holding back information and putting a spin on things.” He calls the later, “duplicity.” He seemed to be absolutely against lying, but somewhat sympathetic to duplicity. Regarding lying, Doyle was trying to uphold the long-standing moral tradition (at least since Augustine, but most notably in the work of Kant) that it is never “permissible to tell a material lie.” Although Doyle did not define lying, his use of the word indicated to me that he adopted a definition like this one, found in my handy Webster’s dictionary: to lie is “to make an untrue statement with intent to deceive.” Kant seemed to think that lying could never be condoned, even to save an innocent life from an unjustified attack. Some thinkers wanted to keep the principle, but believed Kant’s practical application was wrong-headed. They devised subtle stratagems. One of the most ingenious was the theory of “mental reservation.” This allowed the person desiring to hide the truth to say, “I don’t know,” to the inquiry of the attacker as to the whereabouts of the innocent person; however, under his or her breath he or she added the words, “whether or not I should tell you where the innocent person is hiding.” This was also good for telling children “never to lie,” but if a salesman at the door asked whether a parent was home, the child could say, “No,” but as a mental reservation, add the words, “not to you.” You can imagine the

fun and games such a substitute for thinking was for mentally active children.

The issue here is whether we want to define lying in such a way that it maintains its status as an absolute moral value, or whether we want to adopt what I judge to be a more candid approach: simply by saying the principle, good in most cases, has justified exceptions. We do not say “killing another human being is never permissible,” but rather, it is sometimes justified, as in legitimate self-defense. Whether we want to go the route of definition or of exception/justification, we surely have to offer arguments that do, in fact, satisfy some moral criteria, in order to absolve a person of moral wrong-doing in situations where the intention is to deceive. Clearly, “mental reservation” cannot be used in every case where you would like to deceive someone. The admonition against lying would dissolve for anyone with the least amount of cleverness. I hold that the attacker chasing the innocent can very well be told the speaker has no idea where the person is, or even that he saw the person jump into a cab and speed away. Why? Because the principle that an innocent life could be saved from an unjust attack clearly trumps the principle against lying.

Contrast lying now, with “duplicity.” Sissela Bok, in her well-known, and justly-praised book, *Lying*, does not identify “duplicity” as a separate category, but absorbs it in her definition of “deception.” For Bok, the problem is untruthful communications, so the broad principle is the general wrongfulness of any “intentionally deceptive message.” Thus, we can deceive through gestures, disguises, action, inaction, “even through silence,” she says. Lying is a subcategory of deception. It is “any intentionally deceptive message which is stated.” Deception is generally wrong, and must be justified, just as lying, a subcategory, must be justified. Notice a crucial difference between Bok’s understanding of the moral issue and Doyle’s. Doyle would argue that “duplicity” is a lesser problem, because it does not involve a false material statement. Thus, it is somehow less wrong if you can manage to say something that is literally true, but your intention is to deceive someone else, *i.e.* make them believe something that you know is not true. I think Bok is right and Doyle is wrong about this. It is a common way in the world to salve a guilty conscience when you wish to deceive someone, by telling them the literal truth, even as you expect—and deeply desire—that they

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Leadership in the Global Perspective

Dr. Kazuo Inamori Speaks

When a business magnate speaks about his philosophy of business, you'd probably be a little surprised to hear him actually discuss philosophy. But, Dr. Kazuo Inamori is not your average businessman. With his head in the business world and his heart in the spiritual world (he entered the Buddhist priesthood in 1997), Dr. Inamori is a rare find in today's society, let alone today's tumultuous business world. Last October, many gathered at the Weatherhead School of Management at Case Western Reserve University to hear what the innovative Japanese thinker had to say about the current state of business, ethics and how spirituality can keep ethics and business intertwined. Dr. Inamori spoke on "Leadership in the Global Perspective" as a featured speaker in the Presidential Visiting Scholar Lecture series.

After four decades of corporate management, Dr. Inamori is rightfully considered an irrefutable expert in the inner-workings of the business world. "If you look back into history, you can clearly see that the experience of any nation or any group where it has prospered or perished has been determined by its leaders," said Dr. Inamori. "A Chinese proverb says, 'A nation rises through an individual and is ruined by an individual.' Therefore, we can say that the history of mankind is a history of leaders, and we can say the same for a corporation: the prosperity of enterprise, and the fate of its employees, depend on the behavior of management."

Dr. Inamori invoked the names of the Big Three (Enron, Arthur Andersen and WorldCom) as examples of bad behavior in management, but he was quick to point out that the United States isn't the only country reeling from these problems. "In recent years, many of Japan's corporations have been under scrutiny because of misconduct by top executives; this has prolonged our economy's stagnation. The fact that corporate improprieties can undermine public confidence in the economic system is a very serious situation," he explained.

Part of the problem, according to Dr. Inamori, is the way the current management system works. "I have misgivings about the recent phenomena in U.S. corporations of giving extremely high salaries and huge stock options to corporate managers," he said. While Dr. Inamori believes this phenom-

ena "could serve to motivate managers for making great contributions," he contends that there are many problems inherent in giving such enormous rewards. "The recent tendency of awarding extremely high compensation to corporate management acts as a narcotic drug, killing the spirit and jeopardizing ethical standards," he noted.

Dr. Inamori believes the salaries and combined stock options for corporate higher-ups far exceed socially acceptable amounts. He added, "Reports say, in the past twenty years, C.E.O. compensation has grown by a factor of forty in the United States, while general employee compensation has only doubled. Such a huge disparity in salary could become a big obstacle to maintaining morale in a corporation." With stock options, Dr. Inamori believes that a manager with even the most impeccable record could be led astray, "racking his/her brain, seeking a way to make as high a stock price as possible in order to personally profit from it." The cost of all of this greed and unethical behavior, as we have seen from Enron's experience, is usually at the public's expense. To avoid and prevent "greater crisis in corporate governance in economically advanced societies," Dr. Inamori believes we need to review the way we choose to compensate leaders as well as investigate "the fundamental aspects of all the leaders' characters."

According to Dr. Inamori, the wisdom of the Japanese hero, Takamori Saigo, should be taken to heart by those who choose corporate leaders. "As one of the leaders of the successful Meiji Restoration in the 19th century, Saigo opened the door to Japan's modern era," he explained. "As a leader without selfish motives, Saigo received the love and respect of many Japanese. Saigo said the most important point when selecting leaders is the following: to be promoted to a high position, a person must possess character. As we know, in industry today, the major factor in selecting leaders is not character, but rather ability and achievement. This tells the rest of the company, and the world, that a person who can directly contribute to a company performance is a more suitable leader than a person of character."

This idea of "character" is an important component of Dr. Inamori's ideal of leadership. "A famous Chinese philosopher of the Ming Dynasty wrote

that 'a leader should be a person of character who can always think about matters deeply, and while intelligence and eloquence are important qualities, they are secondary. Character above all else is the significant leadership quality,' explained Dr. Inamori. "I have become convinced that people have abandoned the lessons of Saigo and other philosophers. Corporate leaders are selected, not for their character, but strictly on the basis of talent."

Dr. Inamori observed that talent alone is a dangerous thing. "The more gifted an individual, the more help they need controlling their ability," said Dr. Inamori. "I believe this 'control' is what we call 'character.' To elevate one's character, we must repeatedly learn from philosophy and religion how we should behave as human beings. Quality of character is the product of a God-given nature each one of us is born with combined with a personality we develop afterward through our life's journey." After witnessing so many "front running business and enterprises appear like comets, only to disappear just as quickly," Dr. Inamori is sure "people who are blessed with exceptional ability may accomplish much success, but if they place too much confidence in their talent, they may err or use their gifts improperly; eventually, they will invite their own downfall."

As anyone who has worked in the business world knows, the best leaders are usually the one's who have a facet of selflessness to their personality. "A leader must be a person of wonderful character with an ability to separate personal desires when it is necessary to do so for the good of the group. A leader who leads many people must work not for personal gain and must be willing to sacrifice for the good of the group with a firm sense of mission," he said. "In other words, a leader must be a person of noble character. Even when a business succeeds and fame and fortune are gained; a leader is someone who possesses a spirit which finds joy in returning the fruits of success back to society."

While the world is well aware of "endless corporate leaders who are full of self-interest and greed," Dr. Inamori does point out something that most critics of today's business dealings do not. "There is no shortage of genius in today's managers," he said. "From fledging entrepreneurs to CEOs—all display the quality of intelligence. These people are not only well versed in interlocking new technology and marketing, and

implementing management strategies—generally speaking, they burn with passion and dedication to promote growth and expand their business." This could strike fear in the heart of cynics who perhaps fear the rise of more "evil geniuses," but it is also an idea which requires faith. There is faith and hope that, in their intelligence and drive, these leaders will see their way to "righteous behavior as human beings," according to Dr. Inamori.

"Nobody is born with a perfect nature," he explained. "No matter what imperfect nature or character you were born with, I believe that one can acquire a wonderful character later in life through teachings on how one should righteously behave as a human being."

Dr. Inamori's cure for corporate ills is unique, and at its core, simple and rather beautiful. "As children, our parents and teachers taught us not to be greedy, deceitful or lie, but to be honest. Leaders should reflect on simple things like this," he said. "You can elevate your character by making an effort to learn from philosophy and religion." Repeated self-reflection is also very important. "We must examine and reflect on our behavior daily in order to see if we need to raise our character," he added. "Many managers believe that once we have learned how to righteously behave as human beings it is no longer necessary to study religion and philosophy. This is false. Like an athlete who must maintain his/her condition by training every day, we must realize that we will rapidly lose all we have gained if we do not train our minds. While all involved with business should take these pieces of wisdom to heart, it is especially important advice for leaders. "When a leader is entrusted with a large number of employees, and charged with a major social responsibility, it becomes an imperative to improve his/her character in order to provide an example to his/her subordinates," said Dr. Inamori. "Managers know that good character is important, but knowing and being able to practice these qualities are two different things."

Currently, much of society is under the impression that "highly sophisticated management control systems are now being structured to safeguard corporate governance"—various groups of watchdogs set in place to catch corporate criminals after bad behavior has transpired. Dr. Inamori believes that "it would be far more effective if leaders of industry simply made a practice of

Ethnopsychiatry & American Immigration

Dr. Atwood Gaines Explores and Explains

On April 18, 2003, the Public Affairs Discussion Group sponsored "Madness, Immigration and the Law," a presentation by 1997 Ethics Fellow, Dr. Atwood Gaines, CWRU Professor of Bioethics, Anthropology, Psychiatry, and Nursing.

Dr. Gaines began his talk by debunking the myth that there is a singular immigrant experience. "So much depends on where a group is from and where they are going," he explained. "In the United States, we tend to have the notion that people leave one country for another, forever. That is not usually the way people do it. In Latin America, for example, people come and go, and come back, and then send their kids—it's not as permanent as the way we normally think of the immigrant experience." When immigrant groups come to the United States, there is an attempt by our country to categorize them. At times this categorization is to help the immigrants, but sometimes this is done to make it easier for the rest of society. "Many times, these categories are unhelpful and, at times, even damaging," explained Dr. Gaines. "For example, there is the mistake of assuming that all Asians are the same—Japanese, Koreans, Chinese. They are all placed in the 'Asian' category even though the cultures are very different." Another bug in the United States' system is that we label someone African American if they have African ancestry. Many Latin American immigrants have both Native American ancestry and African ancestry, but we do not call them African American. Obviously, trying to wedge people into a category, even for a constructive reason, proves to have major flaws.

So, if the immigrant experience can be a difficult one even in the simplest form of "what do I call you?" what happens when a new immigrant needs help for a mental disorder? Most immigrants hit a stumbling block almost immediately. "Psychiatry differs across cultures in terms of experience and diagnosis of mental disorders," explained Dr. Gaines. "People who come to the United States come with their own psychiatric (professional or popular) rules about how disorders should be treated and classified." While some U.S. psychiatrists understand this, many believe that U.S. psychiatry should be the universal. "Some doctors believe that to dispute this calls into question the very concept of specific mental disorders," said Dr. Gaines. "But why should the disorders found in the United States be universal? Why not the ones in Cambodia or Japan? In terms of seeking help, people who have particular disorders—ones that are special to their culture or region—are not likely to seek treatment because U.S. professionals are not likely to know about these disorders or treatment." Here, Dr. Gaines gave the example of "spirit loss," a

disorder which occurs across several cultures. "It will look like depression to a U.S. psychiatrist, but it isn't. It is what these cultures call 'unevenness between a self and the soul,'" he said. "These patients are given pills, but the pills do not help them."

Not only do cultures diagnose and treat similar-looking or acting disorders differently, but cultures vary on what is most valued in the realm of mental health. According to Dr. Gaines, the United States places a lot of value on high cognitive function whereas in other cultures, it just isn't as important. "In areas of Vietnam, fulfilling a social role is more important than high cognitive functioning," he said. "As long as one can farm or do his/her part, the culture doesn't exclude the person and will not perceive the person as any less of a person." In the United States, we do tend to view people with diminished cognitive capacity as less than. "Dangerous and pernicious labeling goes on in the United States because we tell people suffering from mental disorders that they are genetically or biologically different," he explained. "Other cultures do not do that. When you say 'these kinds of people' to describe someone, you are slicing them off from the bottom and making them separate from the rest of society."

What of depression, the pervasive disorder that Dr. Gaines described as "one of the most expensive in our country?" Is depression culturally bound? "In the Mediterranean cultures, there is a culture pattern of dysphoria (opposite of euphoria); where people actually emphasize and cultivate an idea of unhappiness. Throughout their culture, they are taught to experience dysphoria and that it is good and positive because people mature by experiencing sadness," he said. "Muslims have all sorts of traditions and rituals to teach children how to grieve and feel sad." Dr. Gaines mentioned that he saw a speaker at a conference addressing what was laid out in the psychiatric treatises about depression: that life is meaningless, life is worthless, there is no purpose in life, and the list went on. "The speaker, a Buddhist, explained, 'To a Buddhist, these are good things because they represent enlightenment!'" he said. Dr. Gaines believes that the American culture tells us that we must be happy all of the time; what is seen as depression in Americans is just a regular part of life in other cultures. "Most Americans are seen as shallow by other cultures," said Dr. Gaines. "They think that because we are supposed to be happy all of the time, we don't experience anything deeply." In France, there is a disorder that roughly translates into chronic sadness or tiredness. "In France, it is considered a normal and valid response to a painful event," he said. "In the U.S., you'd be called a damaged personality or

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Gaines

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an emotional cripple. In France, these people are valued."

Lastly, Americans should remember that some immigrants come to the United States to escape awful situations. "Many immigrants have witnessed violence and danger; they arrive vulnerable to mental disorders," he said. Dr. Gaines believes offering culturally relevant health service to immigrants will make an enormous difference in how immigrants take to their new homes in the United States. He reiterated a need for doctors to learn about other cultures and traditions, and he urged them to find creative ways to lend a hand to America's newest arrivals.

Inamori

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following the basic precepts mentioned above."

"It can only be achieved through constant effort by leaders to improve their personal character at every opportunity. For once a leader of a questionable character seizes and abuses power, no sophisticated system can possibly safeguard the enterprise," Dr. Inamori warned. "Some would question such a tedious process. But I believe there is no shortcut to proper corporate governance. It is a long journey, but I believe this is the best way," he said.

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understand the literal truth otherwise. Politicians are particularly apt at this kind of deception. Since we do not have access to their true intentions, it gives them "plausible denial," and the opportunity to back-track later. Don't just beware of those who make false statements, but of their crafty allies, the deceivers. Generally, deception needs a moral justification just as much as a "bald-faced" lie does.

Whitbeck

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³ Rosemary Chalk, (1988) *Science, Technology and Society: Papers from SCIENCE, 1949 - 1988*, Washington D.C.: American Association for the Advancement of Science.

⁴ See for example the account of a mentor—Thomas E. Duffy—that Susan M. Fitzpatrick gave in the *Chronicle of Higher Education* (April 6,1994). B3. That this mentoring warranted a letter to the editor bespeaks the author's concern that it is endangered, an impression that I confirmed in private communication, October, 1994.

⁵Ward Pigman and Emmett B. Carmichael 1950 "An Ethical Code for Scientists," and Lawrence Cranberg (1963) "Ethical Code for Scientists?," reprinted in Rosemary Chalk, (1988) *Science, Technology and Society: Papers from SCIENCE, 1949 - 1988*, Washington D.C.: American Association for the Advancement of Science.

⁶ The American Physical Society Guidelines for Professional Conduct adopted by Council, November 1991 available from the American Physical Society, College Park, Maryland.

⁷ Mazur, Allan. (1989) "The Experience of Universities in Handling Allegations of Fraud or Misconduct in Research." Project on Scientific Fraud and Misconduct: Report on Workshop Number Two. edited by Rosemary Chalk. Washington D.C. AAAS, pp. 67-94.

⁸ See for example, "Progress Report of the Committee on Academic Responsibility," August 12, 1991 published as a supplement to MIT Tech Talk and Fostering Academic Integrity, Report of the Committee on Academic Responsibility, MIT April 15,1992, p. 14.

⁹ Charles Babbage, *Reflections on the Decline of Science in England and on Some of Its Causes*, first published in 1830, republished in 1969 in London.

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