

Ethical Issues in Physics:  
Ethical Harassment

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### Abstract

The concept of ethical harassment is identified and discussed. It is proposed that we search for societal mechanisms that may lead to some progress in the curtailment of ethical harassment. It is proposed that the right to act ethically should be regarded as a fundamental human and professional right.

### I. Introduction

Ethics in science has been receiving noticeably increasing attention in recent years. The increase in interest in scientific ethics appears to have been correlated in time with decreasing funding for science. Whether there is a causal relationship between these two phenomena is unclear. However, it may be that at some level we as scientists are perceiving the decreased availability of funding for science as something that we have somehow brought on ourselves by "bad" behavior, and the increased attention to scientific ethics may be at some level an effort to root out the supposed evil and bring the good days back again. Our increased interest in scientific ethics may thus perhaps be regarded as in part a self-directed "blame the victim" response to hard times. Whatever the motivations may be, however, this raised attention to ethics is a commendable enterprise on the part of scientists. It provides an opportunity to develop further an aspect of our professional lives that deserves further attention.

While discussions of ethical issues in science have been fairly wide-ranging, in much of the discussion of ethical issues in science, we seem to be blaming ourselves for departures from ethical behavior. While this is certainly accurate in some instances, I take exception to the "mea culpa" emphasis in much of the discussion. Most physicists and other scientists whom I have known are on the whole very ethical people. In almost all cases, they have not been trying to make a fast buck by sleazy, unscrupulous, unprincipled, corrupt, or illegal activities (Mergens, p. 2). Generally, they seem to have been trying to follow ethical principles, modulated by some selfishness, and with considerable acquiescence to external constraints. It is the external constraints that play

such a large role in preventing us from observing ethical codes, that most interest me in this paper.

And it is in these external constraints that many current problems in science ethics lie. Apparently, there exist two major ethical problem classes: one dealing with personal ethical behavior as a professional scientist, and the other dealing with ethical harassment of scientists by their employers (Schwab, p. 15). This latter major ethical problem class is the one of present interest.

Ethical harassment is a term that has been introduced to identify a type of harassment that can happen to an individual when that individual attempts to act in accordance with ethical principles (Elden, 1996). Ethical harassment is what happens when another person (the harasser) attempts to coerce someone (the harassee) into perpetrating what the harassee regards as an ethical impropriety. Ethical harassment is an analog of sexual harassment for a somewhat more general case. In this paper, I will concentrate on ethical harassment occurring in research and teaching of physics and other areas of employment of physicists.

## II. Professional Ethics in Science

All of us, as human beings, have internalized informal conscious and unconscious ethical criteria. In addition, there are more formal and explicit religious and secular ethical standards. Furthermore, most professional organizations have codes of ethics which are intended to guide individual decision-making.

In particular, these include codes of ethics for scientists. Some organizations have codes of ethics also. All of these sources lay ethical obligations upon us. Of course, they are not all compatible, so that every one of us is faced with a unique problem of how best to adhere to mutually incompatible standards. This can be problematic, of course. We can minimize the impact of differing ethical standards by focusing on those standards that different codes of ethics agree on. Even then we are not out of the woods, because these ethical standards need to be applied. We can talk a good game, but can we walk a good game too?

Let us suppose that we can resolve this incompatibility of different ethical codes in some manner, and come up with an operative code of ethics that we individually choose to observe.

## III. The Right of a Scientist to Act Ethically

Once we have developed an ethical code for a profession, it would seem that individual members of the profession should have the privilege or prerogative of working in compliance with that ethical code. It would seem that an individual should, as a fundamental human right, have the right to act ethically. However, all too often it seems that adhering to or conforming with a professional code of ethics requires at the very least

heroism, and in some cases martyrdom (Wujek, p. 3). Must physicists be heroic and put their jobs on the line just in order to act ethically, within professional guidelines, just so as to follow and comply with our ethical codes? It is my belief that the answer to that question should be "no"; that heroism beyond the call of duty should not normally be required of us for simply complying with a professional code of ethics. Professionals should have a right to act ethically, and this right should also be formally codified in our professional guidelines and ethical codes.

When professionals are in independent practice working for many individual clients, as has been for example the case for many lawyers and physicians in the past, although less so today, the ethics problem is mainly to formulate codes that help define ethical practices and to develop procedures for educating and inducing practitioners to adhere to such principles (Ungar, p. 2). Such professionals, because their incomes are derived from a multiplicity of independent sources, are seldom subject to major economic penalties for ethical behavior (Ungar, p. 2). But for those professionals who normally work as employees, or who have a relatively small clientele, such as engineers and physicists, there is the added problem of devising means to secure their rights to behave ethically in cases in which this entails behavior in specific instances that their employers or important clients object to (Ungar, p. 2).

There are potentially several sources of support for the ethical physicist. One is our legal system: Various proposals have been made, and some implemented, that directly or indirectly would use the law to shield individuals for responsible behavior in the public interest (Ungar, p. 2). Another is through mechanisms within the organization for giving a meaningful hearing to individuals with concerns about the organization's decisions or policies; however, organizations differ greatly in the extent to which satisfactory resolution can be obtained internally (Ungar, p. 2). Other potential sources of support might be interested and sympathetic individuals and groups, and professional societies or activist groups within professional societies.

#### IV. Implementation of an Ethical Code: Application of Ethical Principles in Science

The ethical criteria in the principles and codes of scientific ethics generally lay most stated obligations on the individual scientist. Thus, five of the six fundamental principles of scientific research enunciated in an earlier workshop (those which deal with scientific honesty, carefulness, openness, credit, and public responsibility) are obligations laid primarily on the individual scientist; while only a single one of the principles (intellectual freedom) primarily addresses a responsibility of scientists' employers (Resnik, p. 9).

However, the individual scientist is not alone and independent of the environment in which he or she works, and the extent to which an ethical code can be implemented also depends upon the environment of the individual scientist. Decisions may also be affected by rules set by organizations of which we are members or employees. Institutions may have policies that limit the options available to us. Some employers also have prepared codes of ethics for their staff, but these codes commonly lay further restrictions primarily on the individual, rather than seeking to provide actual assistance and support in the

observation of professional codes of ethics. We need to examine how to promote the individual's ability to observe a code of ethics in an at best neutral environment, and sometimes in a hostile environment.

The extent to which a scientist is capable of exercising a code of ethics is dependent not only upon the ethical intentions of the individual, but also upon other factors. These include limitations and ambiguities in interpretation, external constraints and pressures. These pressures and constraints come from external sources such as other individuals, employers, and sources of funding. The application of these pressures to act contrary to ethical precepts is what I am referring to as "ethical harassment".

The application of some of these principles of ethics could lead to conflict with your employer. To look at a specific example, suppose that you are a member of the IEEE as well as the APS. The IEEE Code of Ethics requires those observant "... to accept responsibility in making engineering decisions consistent with the safety, health, and welfare of the public, and to disclose promptly factors that might endanger the public or the environment" (IEEE; Wujek). If you simply take the IEEE code of ethics seriously and attempt to act in accordance with it, you may be in conflict with your employer. The application of some principles of ethics could, for example, cause a physicist to refuse to work on a project. To do so may cause prejudicial retaliation by the individual's manager and organization (Wujek, p. 3). The individual could be cited for insubordination and be dismissed, or relegated to a job having no particular significance or potential, or be transferred to another location, which would be disruptive of the individual's life (Wujek, p. 3). Thus, to invoke some ethical principles involves an element of risk to the individual's job, and as a consequence, to the individual's career (Wujek, p. 3).

In a physicist's or engineer's employment situation, when she or he finds it necessary to dissent on either technical or ethical grounds (or both!), an employee-employer conflict can usually be anticipated. When this conflict does not become resolved in a professional and fair manner, the physicist may feel compelled to go outside and "blow the whistle" (Elden, 1996, p. 1). The situation can escalate into a worsening conflict situation, perhaps with harassment, discharge of the employee, or sometimes legal action.

## V. The Issue: Harassment

Harassment in the workplace takes many forms. Harassment is a kind of localized form of persecution of an individual. Harassment is the deliberate creation of an oppressive work environment, often on the basis of personal characteristics unrelated to job performance. We are most familiar with sexual harassment as it has achieved the greatest media attention, but there are other forms of harassment that are also serious. Harassment can occur on the basis of gender (sexual harassment), race, religion, sexual orientation, weight, height, physical handicaps, mental handicaps, political beliefs, and as retaliation for legitimate job decisions (Schlossberger, p. 207).

Like many other forms of misconduct, harassment is first about power and only secondarily about sex, race, or other factors (Jones, p. 2). It is, at its core, a coercive, exploitative, and improper use of power.

Harassment is unethical and in some cases illegal. (For example, sexual harassment is illegal if retaining your job depends upon going along with sexual advances; or if the conditions of your employment (such as pay, promotion, or vacation) depend on your going along with this behavior; or if the harassment creates a hostile or offensive work environment which interferes with your ability to do your job (9to5.html).)

We are concerned here with harassment that takes place in the context of an ethical decision on the part of an individual, where the harassment is an effort either to prevent or to punish action based on an ethical decision. Thus, coercion, influence, or pressure that may cause the individual unwillingly to act contrary to a code of ethics to which she or he subscribes, constitutes ethical harassment. If you are made to feel that your job is jeopardized because you attempt to practice your profession ethically, then you are being subjected to ethical harassment. The context of ethical harassment is differential power, dominance, intimidation, and silencing.

I have adopted the term "ethical harassment" for this type of harassment because this term has already been introduced, and because this name is somewhat catchy by association with sexual harassment, and accordingly may be effective in bringing more attention to this issue. It is important to name phenomena. This phenomenon has gone without a generally recognized name. Unnamed, it goes undiscussed and undebated - its underlying assumptions unexamined. This insidious practice of "ethical harassment" has existed unnamed for a long time, for too long. We need to examine it and curtail it.

How can ethical harassment be operationally identified in a perpetrator? Here are two criteria, based on analogous considerations for sexual harassment, which may assist in identifying a harasser (Jones, p. 5):

- The perpetrator would not say or do these things (that are identified as conduct of harassment) in the presence of an ethical authority or mentor, such as for example his minister or rabbi.
- The perpetrator would not feel comfortable having these acts reported in the local newspaper or news broadcast, and would object to publicity.

It should be noted that these criteria are not without exception, as in some instances, ethical harassment is occasioned by clashes of codes of ethics rather than being the result of unethical behavior on the part of the harasser, which is the usual case.

## VI. Ethical Harassment and its Deleterious Consequences

Harassment can interfere with work and create serious personal hardship for those who are harassed, for those who witness the harassment, and under some circumstances for the harassers. In the long run, employers may benefit by examining and addressing

ethical harassment, since it can lead not only to employee dissatisfaction, but in some cases also the circumstances of ethical harassment can lead to whistleblowing and/or to legal action.

## VII. Examples of Ethical Harassment

Organizations differ in the extent that they allow or sanction harassing behavior. Also, the type of harassing behavior can depend upon context. Some brief particular examples of cases of ethical harassment of physicists are included to clarify by particularization and provide a further basis for discussion (see Appendix I).

## VIII. Types of Ethical Harassment

We need further analysis of the concept of ethical harassment. It may be helpful to distinguish different forms of ethical harassment.

We can distinguish two forms of ethical harassment: quid pro quo harassment and hostile work environment harassment (a categorization that we can make in analogy to the corresponding categories delineated in sexual harassment and recognized by the EEOC and the courts) (Rifkind and Harper, p. 33). Quid pro quo harassment would involve a tangible job benefit that is offered in exchange for unethical behavior. An example of quid-pro-quo harassment would be an employee threatened with a demotion for not complying, or promised a promotion for complying, with unethical behavior. Hostile work environment harassment takes place when conduct at the workplace has the purpose or effect of unreasonably interfering with an individual's work performance, or creating an intimidating, hostile, abusive or offensive working environment.

Other types of categorization might include institutionally tolerated or encouraged ethical harassment, and casual individual ethical harassment. We need to address the former, the structural ethical harassment, which is built into an organization, as well as the latter, informal ethical harassment, which occurs at the instigation or pleasure of particular managers.

As another example of categorization, some ethical harassment is explicit and up-front and unequivocal. Some ethical harassment is subtle and devious and may be regarded as defined by information equivocality in communication. In the latter case, the individual may be reluctant to claim harassment because of fear that she/he may have misunderstood the harasser's intent.

## IX. Why is Ethical Harassment Effective?

Ethical harassment works because of threats explicit and implicit, and penalties imposed upon the individual. External pressures are exerted to cause individuals to act unethically, in the service of the organization or in support of another interest.

Ethical harassment is effective for much the same reasons that other types of harassment, such as sexual harassment are effective, and harassees are reluctant to contend the harassment (Rifkind and Harper, p. 156). Fear of possible job loss or other retaliation (such as slowed promotion, elimination of salary increases or salary reduction, or loss of security clearance) can be a concern of the harassee. (Retaliation can take many other forms, including verbal abuse, non-cooperation from coworkers, poor personal recommendations/ references, poor job evaluations/bonus ratings, impossible performance standards, excessive demands for unpaid overtime, demotion or downgrading, transfer to less satisfactory work, worsening of work schedule, and termination of employment (Hadjifotiou, p. 22).) In some cases, there is fear of embarrassment or humiliation, ranging from embarrassment at being perceived as stupid in not understanding the unwritten rules of the game, to fear of not being taken seriously, to fear of loss of professional standing. Also, as noted above, there can be fear of having misunderstood the harasser's intent.

#### X. Comparison with Sexual Harassment

We need to seek and put in place mechanisms to provide deterrence against ethical harassment. It is possible that we may be able to learn to deal more effectively with ethical harassment by examining other forms of harassment and how they have been dealt with in successful cases.

Some progress has been made against sexual harassment since it has had its name spoken in public, and been extensively discussed, and a general consensus reached that sexual harassment is not societally desirable. A similar approach might be taken to curtail ethical harassment.

Because of our experience with sexual harassment, it seems likely that women physicists may have an informed background for contributing to analyzing and developing positions and inventing mechanisms against ethical harassment, but all physicists can be affected by this type of harassment, and the help of all physicists should be sought in addressing this problem.

#### XI. Taking Action - Contesting Ethical Harassment - Mitigative Approaches and Preventive Measures

In view of the fact that facing up to sexual harassment has led to what appears to be a nation-wide decrease in this virulent activity, there is hope that addressing ethical harassment in a similar manner might have positive results.

In order to curtail ethical harassment, similar approaches might be taken to those already taken with some success against sexual harassment. We need to name it, we need to discuss ethical harassment widely, we need to publicly deny the acceptability in any form of ethical harassment. If we can achieve having it widely acknowledged that ethical harassment is not acceptable in the professional community, this may come to pass. We

might even hope eventually to get legislation against ethical harassment introduced and passed.

In the meantime, it is time that we name ethical harassment for what it is, arrange to get it identified and forbidden in ethical codes and personnel handbooks, and otherwise do what we can to deter ethical harassment. We should take action to make "ethical harassment" become regarded as an unwelcome and formally undesirable feature of the employment scene, and begin to take whatever further action is necessary to make ethical harassment become only an unpleasant memory, to make it disappear.

One mechanism for deterrence against ethical harassment might be the inclusion of statements against ethical harassment in both professional codes of ethics and the codes of ethics of employers. Let us make an effort to have this occur, as a step in this direction.

Here are some suggested mechanisms for curtailing ethical harassment:

- Naming it.
- Identifying ethical harassment when it occurs.
- Talking about ethical harassment and condemning it.
- Researching ethical harassment.
- Taking individual action when you yourself are victimized.
- Helping individuals victimized by harassment.
- Discussing it formally as well as informally in professional meetings, so as to increase professional awareness of it.
- Requesting the APS to set up a Forum on Ethics to address ethics issues in physics, including ethical harassment.
- Engaging in other activities to raise consciousness about it (meetings, publicity, workplace campaigns).
- Encouraging professional journals and newsletters to publish articles on ethics and ethical harassment.
- Working with professional organizations for help or to develop methodologies (for example, IEEE will be providing an ethics hotline and a support fund for harassed).
- Working with unions on the issue, for any physicists who may belong to unions.
- Working to include statements addressing ethical harassment in professional codes of ethics.



- Working and negotiating to get agreements to include statements forbidding ethical harassment into codes of ethics or management policies and procedures of employers and government agencies.
- Once an agreement is reached, working to ensure that a training program is implemented for management.
- Encouraging organizational efforts to eliminate ethical harassment.
- Working to change the law to address ethical harassment.
- Insisting on the right to act ethically as a fundamental professional and human right.

The reader is invited to suggest other possible mechanisms for curtailing ethical harassment.

The goal of these mechanisms is to affect the corporate and university and governmental environments in which we work to make it less likely that scientists and other professionals will be punished for conscientious behavior. The hope is that the various institutional environments or milieu in which physicists work will become more hospitable to ethical practitioners.

## XII. Concluding Remarks

The issue of ethical harassment is one of real importance, and further research focusing on obtaining an understanding of its causes and developing strategies for reducing its occurrence in the workplace is needed. Action is needed by physicists to curtail ethical harassment against members of our profession. We can take a step in that direction by asserting and maintaining our right to act ethically as a fundamental professional and human right.

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## Appendix I: Examples of Ethical Harassment of Physicists

## EXAMPLES OF ETHICAL HARASSMENT OF PHYSICISTS

Here are some diverse examples of ethical harassment for cases of potential interest to physicists:

- You are a physicist with a regulatory agency, and you identify some improprieties on the part of one of the corporations subject to regulation by your agency. Your management tells you to tone down your report, then eliminates your findings and recommendations from the final report. (This would appear to be an example of "forced changes in recommendations"; see e.g. Alger et al., p. 140; or Schollossberger, "going easy on safety assessments", case 26, p. 159).
- You are working on a contract for a client; you are required by your management and the contractor to omit relevant data and associated conclusions from a report so as not to embarrass the client; you are told that your organization will lose the contract unless that is done (and, implicitly, you may possibly lose your job). (This would appear to be an example of "forced changes in recommendations," see e.g. Alger et al., p. 140).
- The corporation that employs you is about to market an environmentally harmful product. You voice objections, and your management threatens you with loss of your job.
- The corporation that employs you has had an environmentally harmful accident, and tries to hush it up. You think that the accident should be brought to the attention of regulatory authorities and become public knowledge, but your supervisor uses abusive language in referring to you and your attitude to the situation, and suggests that promotion may occur slowly if you should mention the occurrence publicly.
- You have published a paper in a field unrelated to your present employment which has irritated a government agency that potentially could provide contracts to other parts of your organization. Your management informs you that all of

your future publications, related to your employment or not, must be subject to management review prior to release for publication.

- You have supported a female colleague in her complaints about sexual harassment. This year in question, you receive no salary increase as a consequence of being categorized in the lowest 10% of employees in the annual personnel evaluation, although there is substantial evidence that you have outperformed most other employees in many important respects.
- You are an upper-level manager as well as a physicist; many of your employees are physicists. You have been told that your own salary will depend on how successfully you control the total salary costs for your employees; thus, if you keep down their salaries, your own salary will increase. (This would appear to be an example of quid pro quo harassment, an example of ethical harassment to put the individual in an ethical quandary.)
- A scientific colleague has discovered a major flaw in the siting of a planned new accelerator facility at the institution where you work. Should this problem come to light, the accelerator will in all likelihood be built elsewhere. Your colleague's promotion is deferred indefinitely.
- An accident occurs at a foreign nuclear reactor. You and other technical staff are told that no comments are to be made in public by any employees, with an implicit threat of retaliation against those who may respond to media inquiries.
- In a new report which has been cleared for distribution, you quote your own earlier unclassified publications. One of your earlier publications is then retroactively classified, and you are required by security personnel to recover all copies of the new report that have already been distributed.
- In presenting a seminar, you make a statement interpreted as critical of a major figure in the technical establishment. Your management then insists that you are to accept no further invitations to speak at seminars, colloquia, or technical meetings without the express written approval of several levels of management.

- You have attempted to support other employees in an ethical harassment issue, and subsequently you receive a low employee performance rating. When you inquire why, you are told that you exhibit inadequate evidence of leadership ability, even though you are at the time serving as president of a national organization of scientists.
- Working in an industrial setting, you are required to fill out and approve time sheets. Adjusting the records so that they no longer truthfully reflect actual time spent is insisted on by your management, and representation from a higher level of management is brought in to assure that you comply. (Compare Schlossberger, case 23 p. 145.)
- You are lead author of a report prepared under contract which has been delayed in publication due to repeated sponsor reviews, which seem to be directed toward modifying some conclusions in the report. You then receive a low personnel performance rating. When you inquire, you are told that your writing skills are inadequate, and your management recommends that you take remedial writing training. This occurs during a year when you have a number of articles published both in national professional journals and in popular science journals.
- You and your coworkers are told by your management that henceforth, as a matter of course during all field assignments, you and your colleagues will have to work extensive overtime without either overtime pay or comp time. When you raise an objection, your management tells you that otherwise the consulting organization that you work for will lose the contract because labor costs would be too high (they obtained the contract by underbidding). Implicit is the threat of layoffs. (An analog for technical workers of 'speedup on the assembly line'.)
- As a general gesture in apparent retaliation against your efforts to abide by professional ethical guidelines, travel funds are withheld when you are already committed to give a professional paper at a national meeting.
- You have teamed up with some biologists in an experiment to examine whether exposure to electromagnetic fields leads to excess cancer or other adverse health effects in laboratory animals. Representatives of People for the Ethical Treatment of Animals heckle you when you give a presentation on this work at a professional meeting.

- Here's a recent explicit example of harassment from APS "Whats New": "SECURITY: REASON FOR LIFTING SECURITY CLEARANCE IS A SECRET! After he published papers cleared by Argonne National Lab and based entirely on public information, DOE security officials lifted Alex DeVolpi's clearance (What's New 19 April 96). They won't tell him why because he doesn't have a clearance. But he thinks he knows. In a letter to Secretary of Energy Hazel O'Leary, DeVolpi points out that officials have censored or classified half of everything he's written on plutonium demilitarization. DeVolpi suspects it's a coverup going all the way back to the results of a 1962 test supposedly involving reactor grade plutonium. His fellow gadfly, Hugh DeWitt at Livermore, who was charged with a security infraction for quoting open congressional debates, has had his infraction suspended by Secretary O'Leary pending review." (quoted from What's New for June 14, 1996, by Robert L. Park, American Physical Society).