

WHISTLEBLOWERS - HEROES OR TRAITORS?: INDIVIDUAL AND COLLECTIVE RESPONSIBILITY FOR ETHICAL BEHAVIOUR

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Abstract: This paper reviews the literature on whistleblowing in the context of the ethical issues and conflicts of loyalties it raises. Factors which effect the likelihood of whistleblowing, such as individual and organisational characteristics and the severity of the incident, are discussed. Organisational responses, including retaliation, and the effectiveness of whistleblowing are considered, as well as the state of legal protection in the US and UK. The particular issues raised by whistleblowing in science and research are considered and the similarities and differences in the treatment of whistleblowers in the former Soviet Union and the US examined. *Copyright ©2001 IFAC*

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1. INTRODUCTION

Whistleblowing involves the deliberate disclosure of information about non-trivial activities which are believed to be dangerous, illegal, unethical, discriminatory or to otherwise involve wrongdoing, generally by current or former organisation members. The term 'whistleblowing' was first used in the 1963 publicity about Otto Otopka (Petersen et al, 1986; Vinten, 1994a), who had given classified documents about security risks in the new US administration to the chief counsel of the Senate Subcommittee on Internal Security. The term is apparently derived from English policemen blowing their whistles to alert the public and other police to criminal acts (Strader, 1993). Whistleblowing has been discussed in official reports by the OECD (2000) and in Australia (EARC, 1990), Canada (Ontario, 1986) and the US (Leahy, 1978).

There are several review papers of whistleblowing, including a review of the early literature and resource

materials by Bowman (1983) and a more recent review by Miethe et al (1994). Science and Engineering Ethics recently had a special issue on whistleblowing (Sci, 1998), which considered issues such as the psychology of whistleblowing, the scientific community's responses, personal experiences of whistleblowing and advice to whistleblowers for maintaining a career afterwards.

While there is some consensus on many features of whistleblowing, there is no universally agreed definition (Jensen, 1987; Judd, 1999; Bernstein et al, 1996; Near et al, 1985). Most of the definitions agree that whistleblowing involves the reporting of questionable morality and/or wrongdoing which is not confined to illegality. Disagreement relates to actor and recipient attributes, such as membership of the organisation being criticised, the circumstances of the disclosure and motive and whether disclosures must be external and unauthorised or can be internal and/or permitted to count as whistleblowing.

Most whistleblowers act on their own. De Maria (1992) suggests that this lone voice aspect often puts them in a particular conservative political context and can allow them to be recruited back into the system through internal disclosure. Bok (1981) concurs in this view that open door policies to encourage internal disclosure can turn into traps if the abuse is planned by those in charge. De Maria (1992) proposes that governments should encourage collectivised workplace dissent or whistleblowing as a class action in addition to protection for individual whistleblowers. However it is unlikely this approach will be adopted by governments or organisations trying to coopt whistleblowers and limit the effects of their disclosures to correcting specific abuses.

Attitudes to whistleblowers vary, as indicated by the terms used to describe them, such as conscientious objector, ethical resister, informer and licensed spy (Vinten, 1994). On the one hand there is a belief that whistleblowing is an ethical or even praiseworthy act, which is required to expose abuses of all kinds and avoid moral complicity in them. On the other hand whistleblowers may be seen as informers who betray colleagues and the organisations they work for. A particularly negative view of whistleblowing is expressed by Drucker (1981), who equates it with informing and gives examples of violent tyrannies that encouraged informers. However, the tone of the majority of articles is supportive of whistleblowers.

Whistleblowing is sometimes seen as a US phenomenon. However there is also a body of literature on whistleblowing in the UK and a smaller body of literature on, for instance, Australia (Caiden et al, 1994; De Maria et al, 1996; De Maria, 1999; Tucker, 1995), Hong Kong (Chua, 1998; Clark, 1994; Lui, 1988) and Russia (Von Hippel, 1993).

2. ETHICAL TENSION POINTS

Whistleblowing involves conflicts of loyalties and ethical tension points which have been divided (Jensen, 1987) into procedural and substantive. Procedural points include the gravity of the problem, information handling issues, motivation, anonymous versus open whistleblowing, the appropriate audience, and whether the whistleblowing act will be worth the costs to the whistleblower and accused in terms of time, money, effort and mental involvement.

Jensen (1987) and Judd (1999) both consider the main ethical dilemma in whistleblowing to be the conflicts involved in balancing values, multiple loyalties and obligations to the organisation, the general public, professional associations, family and friends and oneself. Judd (1999) also considers the relationship of whistleblowing to and differences from informing and dissent. Jensen (1987) suggests that whistleblowers challenge the assumption that what is good for the organisation is good for the

wider public. Bormann (1975) highlights the need for choices about loyalties when there are conflicts between group and society norms and ends. Jensen (1987) recognises that attitudes to group loyalty vary in different cultures. Devine (1995) suggests that whistleblowers are at the intersection of valid but conflicting fundamental values, including conflicts between the right to privacy and the public's right to know. Bernstein et al (1996) consider the violation of professional standards to be the most common cause of whistleblowing. This tension between the need to prevent abuses and to preserve trust is an important tension point in whistleblowing and a major source of ambiguity about it. Laframboise (1991) has suggested that the abhorrence of an act to peer group values rather than its illegality or impropriety determines whether whistleblowing is perceived as justified. However in some cases peer group values may accept behaviour which is, for instance, damaging to individuals, minority groups and/or the environment so that whistleblowing may be required to challenge it. There may also be tensions between consequentialist (based on likely consequences) and deontological (based on the intrinsic morality of an action) ethics, for instance whether minor wrongdoing can be justified to prevent severe consequences.

A number of authors stress the value of loyalty to the employing organisation and conflicts between this loyalty and duties to the wider society. Larmer (1992) discusses the type of loyalty owed by employees and suggests a definition of loyalty based on acting in accordance with what one considers to be the person's best interests, which could on occasion involve acting against their wishes. However this type of argument both sidesteps the emotional impacts of conflicts of loyalties (however defined) and conflicts between confidentiality and the duty of public disclosure. There seems to have been little research to test the assumption of loyalty to the organisation and whether its existence or degree is dependent on other factors, such as gender or belonging to a minority group. It is quite possible that women and minorities feel less loyalty or consider themselves as outsiders in many organisations and this may be one of the reasons for the lower reported whistleblowing amongst women.

Some managers consider that the duty of confidentiality to the organisation should override ethical or other concerns, and that employees with ethical concerns should resign (Winfield, 1994). However this is a high price to pay for behaving ethically and may be difficult or impossible for individuals with heavy financial commitments or dependants. Unless accompanied by whistleblowing, resignation is unlikely to effect the activity about which there is concern and may not even prevent retaliation. It is also open to question whether resignation without whistleblowing resolves the question of moral complicity.

Different types of employment often have their own specific conflicts and ethical issues. For instance in the medical and related professions there are possible ethical conflicts between publicising information about, for instance, inadequate, inappropriate, incompetent or dangerous treatments and protecting patient confidentiality, since reports are likely to be more effective if they include details of specific patients. Informing on colleagues also raises particular ethical dilemmas. In addition professional codes and practice may promote excessive loyalty to members of the profession and protection of them which can damage patients (Baab et al 1994). There are also issues of how genuine differences of scientific and medical opinion should be presented to members of the public and the extent to which medical professionals should be expected to sacrifice their own interests for their patients (Edwards 1996).

There are a number of well known examples, such as Bhopal and Chernobyl, where whistleblowing could have averted disasters, with the consequent loss of life and environmental damage. However, the power and wealth of big business in particular can make it difficult to take a stand. In addition workers in private industry may have less job protection than those in the public sector. Environmental, social and health impacts of industrial activity frequently extend beyond the borders of one state, but legal protection may be limited to whistleblowing about concerns within the boundaries (Sternberg, 1996).

3. THEORIES OF WHISTLEBLOWING

Most research on whistleblowing has been descriptive or considered some, but not all the characteristics of whistleblowing. Miethe et al (1994) consider that theories should incorporate personal characteristics of the observer, the situational context and the organisational structure, whereas the author considers that the type and severity of the activity of concern should be considered as an additional separate category. A number of social psychological theories such as motivation, resource dependency and reinforcement theory have been applied to whistleblowing, but their validity has not been empirically tested. Miethe et al (1994) suggest explanations of whistleblowing behaviour which use social learning, social bond and rational choice theory and that a crucial factor is whether whistleblowing is considered deviant or conventional behaviour. Anderson et al (1980) discuss the organisational conditions that give rise to concern or disagreement with organisational practices and try to put whistleblowing in the larger economic, political and professional context.

There have been several investigations of the characteristics of whistleblowers and/or workplace structures which lead to whistleblowing. Unfortunately few researchers have considered the

interaction between individual and organisational characteristics, type of wrongdoing and situational factors and most have investigated only individual characteristics or organisational structure. Hypotheses tend to be one rather than multi-dimensional and seem to ignore the fact that there can be different groups or types of individuals who become whistleblowers, for instance both loners/outsideers and conventional organisational identified individuals. The focus on whistleblower characteristics also makes the assumption, which has not been empirically tested, that there is a particular type of person who becomes a whistleblower, though there are more likely to be several whistleblower types. Though there may be personal characteristics that are strongly correlated with whistleblowing, it is probable that many or even most people could act as whistleblowers in the right circumstances. There do not seem to have been any attempts to categorise the range of situations that can result in whistleblowing in terms of consequences, ethical issues, conflicts of loyalties and other factors.

4. ORGANISATIONAL CHARACTERISTICS

There are generally advantages to organisations in encouraging internal whistleblowing and correcting abuses without the need for external disclosure Barnett et al (1993). A number of authors have carried out surveys to investigate organisational characteristics which influence whistleblowing behaviour and the ethical climate of the organisation. The surveys vary in size, percentage response rate and sector of the economy, but the results seem to show some consistency. Low response rates to surveys on ethical policies and performance, for instance (Winfield, 1994), may indicate that ethics are not a significant concern for many companies, though this is probably changing. Measures which could encourage ethical behaviour in organisations include a code of ethics, a whistleblowing system and ethics focused decision making (Lindsay et al, 1996).

Suggestions for reducing external disclosures include the development of internal disclosure policies and procedures, with appropriate communication channels, formal investigative procedures and guarantees of protection for good faith disclosures (Barnett et al, 1993); clear guidelines on acceptable and unacceptable behaviour, monitoring procedures and clear procedures for raising concerns, anonymously if preferred, at the highest level (Winfield, 1994); and cultural change with strong endorsement of ethical conduct and discussion of ethical issues by management, punishment for violations, and effective protection for whistleblowers (Benson et al 1998). However a survey of first level managers (Keenan, 1995) found that over half were uncertain of the protection offered by their firms to whistleblowers and a third were not confident that whistleblowers would not experience

reprisals. Fear of retaliation and knowing where to report were the main negative and positive factors in whistleblowing behaviour.

Although the evidence is not totally conclusive, surveys have found that larger companies and unionised companies perceive higher levels of external disclosure (Barnett, 1992) and that companies with disclosure policies have higher rates of both internal and external disclosures than those without (Barnett, 1993), possibly because employers adopt policies after negative experiences with whistleblowing. Firms with a codes of ethics, formal participation policies and committees for listening to employees seemed more aware of the importance of listening to employee concerns (Winfield, 1994). The following organisational characteristics generally encourage external whistleblowing: indirect and complex lines of communication and authority and discouragement or suppression or expressions of doubt or technical and other dissent (Perrucci et al, 1980; Westin, 1981; Elliston et al, 1985), lack of knowledge of internal communication channels (Miceli et al 1984) and complicated hierarchies (King, 1999). However even relatively open organisations can experience communication blockages (Anderson et al, 1980) which could lead to external whistleblowing. Survey also show (Callahan et al 1992) that most employees recognise a hierarchy of proper whistleblowing outlets, internal followed by law enforcement agencies, with news media last and that the majority of employees, including managerial and supervisory employees, support legal protection of whistleblowers, but more strongly for illegal than unethical activities.

Brock (1999) presents the Hanford Joint Council for Resolving Employee Concerns as a positive example of alternative dispute resolution principles (ADR). He highlights the fact that previously resolution of cases through litigation or settlement was expensive, but only rarely resolved the safety issues involved. The system is based on an ADR and an eight member Council with a neutral chair, two members from public interest community groups, two from the main Hanford contractors, a former whistleblower and two neutral leaders from the business, academic or labour communities. An informal network allows cases to be referred before they become polarised. Any existing procedures are put on hold with the support of the courts and other agencies. Brock considers the main factors in the Council's success to be its membership composition and tools, including the right level of authority and perspective and an agreement to implement consensus decisions.

Benson et al (1998) present the Sundstrand Corporation in Illinois as a viable model for cultural change. A penalty settlement of \$227.3 million, resulting from charges of ethical violations in the mid-80s, led to reassessment with a commitment of resources and the setting up of the new post of

Corporate Director, Business Conduct and Ethics. This director became the port of call for questions about ethical conduct and reports of unethical conduct. A code of business conduct and an ethics booklet were produced and supported by a well publicised training programme. A hot line was set up with all calls receiving a response within 24 hours. The fact that both these examples of positive approaches occurred in industries (nuclear and 'defence'), the very nature of which raises ethical questions, illustrates the fact that whistleblowing generally challenges wrongdoing within the system rather than the nature of the system itself.

5. WHISTLEBLOWER CHARACTERISTICS

Although there are a number of surveys and case studies of individual whistleblowers, the lack of an obvious sampling frame complicates systematic studies. The problems in identifying whistleblowers mean that surveys are either dependent on self-selected groups (Jos et al, 1989) or responses to scenarios. Thus surveys may be unrepresentative or only representative of certain subgroups of whistleblowers and responses to scenarios may differ from those in real situations. Survey results are often limited by the small survey size and restriction to one sector of the economy and there have been few if any international comparisons or comparisons across different sectors of the economy. The survey design may also be limited, for instance, by restricting the available responses to no action or external whistleblowing (excluding internal whistleblowing) or assuming a one stage process, rather than allowing both one and multi-stage whistleblowing processes.

Empirical research on characteristics which distinguish whistleblowers has focused on demographic factors such as age, gender, social class and psychological factors such as self efficacy, locus of control and moral development (Miethe et al, 1994). Whistleblowers are often characterised as principled individuals with strong moral convictions, high levels of moral development, universal standards of justice and self-efficacy and high levels of internal control. Evidence of demographic factors is mixed (Miethe et al, 1994). Some groups of whistleblowers have been found to have a distinctive approach to moral issues and decision making and a commitment to particular values, which allowed them to act against strong organisational and situational pressures (Jos et al, 1989). Some research indicates that women are less likely to be whistleblowers than men (Miceli et al, 1992) and it has been suggested that this is due to them being more likely to conform to a majority opinion (Costanzo et al, 1966). However women frequently have less secure and lower status positions than men and therefore are likely to be more vulnerable to retaliation. Since there are more men in senior positions women's concerns may be taken less

seriously. This combination of being less likely to obtain a positive response and more likely to experience retaliation could explain many of the observed differences in whistleblowing behaviour. This hypothesis is supported by Miceli et al (1992) who suggest that the gender of complaint recipient and whistleblowers may be correlated and women may be less knowledgeable about reporting channels.

Elliston et al (1985) have found that a strong sense of professional responsibility and/or commitment to the organisation's formal goals or successful completion of the project and identification with the organisation are likely to lead to whistleblowing, unless (Hacker, 1978) this identification leads to executive ambitions which will dampen whistleblowing. On the other hand loners are more likely to withstand group pressures for conformity that may prevent whistleblowing (Greenberger et al, 1987). It has been suggested (De Maria et al, 1997) that whistleblowers start off as system sympathetic people and only change their views when they experience reprisals, agreeing with other evidence that they are devoted to their work and organisations and successful until asked to violate their own ethical standards (Glazer et al, 1989). Surveys have found that external whistleblowers tend to have less tenure and greater evidence of wrongdoing, are more effective in achieving change, but experience more extensive retaliation, than internal whistleblowers (Dworkin et al, 1998a). Contrary to expectations low submissiveness to authority and self-righteousness have not been found to be predictors of whistleblowing (McCutcheon, 2000). One survey found that the overwhelming majority initially used internal outlets, and the majority then continued to external and/or public disclosure, probably due to frustration with the speed and/or quality of the internal processes and sometimes to clear their names and protect their careers (De Maria et al, 1997).

An investigation of whistleblowing behaviour in the context of corruption (Gorta et al 1995) found that public sector employees do not share a common understanding of corrupt behaviour, though there was correlation between considering behaviour corrupt and harmful, unjustified and undesirable. This may indicate problems with researchers imposing their own value categories on subjects, who may interpret them differently. They also found that some individuals would take action about behaviour they did not consider corrupt and/or not take action about behaviour they considered corrupt. The main factors that would influence decisions to take no action were beliefs that the behaviour was justified in the circumstances, reporting would not lead to action and that the scenario was not corrupt, as well as concern about retaliation and lack of supervisory status.

6. ORGANISATIONAL RESPONSES

Many surveys (De Maria et al, 1996, 1997; Glazer et al, 1989; Jos et al, 1989; Lennane, 1993; Soeken et al, 1987) and other accounts of whistleblower experience show that most whistleblowers experience retaliation, sometimes of a very severe kind. However problems with small samples, often of specific groups of whistleblowers, indicate that conclusions may be limited to the particular type of whistleblower. The severity of the potential risk is highlighted by the case of Stanley Adams, a former executive of the Swiss pharmaceutical firm Hoffman La Roche, who was imprisoned for exposing the firm's illegal price fixing methods to the European Commission in 1973 and whose wife committed suicide (Vinten, 1994).

There are indications of increasing retaliation against both relatively powerless employees and powerful but influential employees (Pamerlee et al, 1982), possibly due to likely degree of damage (Near et al, 1986) and reduced retaliation with perceived top management support and the merits of the case, but not perceived effectiveness (Near et al, 1983). A distinction (De Maria et al, 1996) has been made between official retaliation, in which punishment is covered up by policy and procedures to avoid charges of victimisation, and unofficial reprisals. 71% of one survey sample experienced official reprisals and 94% unofficial ones (De Maria et al, 1996), with multiple acts of reprisals in most cases. Formal reprimand was the most common official reprisal, followed by punitive transfer and compulsory psychiatric or other referrals. Dismissal occurred in 8% of cases. Workplace ostracism was the most common form of unofficial reprisal, followed by personal attacks and increased scrutiny. Another study found that managers who sacked internal whistleblowers generally acted very quickly, possibly after trying to silence or discredit them, but waited longer before firing external whistleblowers and tried to use nullification or isolation to silence them first, possibly as they have more evidence of wrongdoing (Dworkin et al, 1998a).

Another survey (Soeken et al, 1987) of 87 US whistleblowers from the civil service and private industry found that only one of them had not experience retaliation and harassment from peers and/or superiors. The majority in private industry and half in the civil service lost their jobs; 17% lost their homes; 8% filed for bankruptcy; 15% were divorced and 10% attempted suicide. Another study (De Maria et al, 1996; 1997;) found that 74 internal disclosures generated 104 (49%) negative, 41 (19%) obstructive and 69 (32%) procedurally correct organisational responses. The most common negative response was inaction. In 14 cases wrongdoing was substantiated but covered up by a superior and in 13 cases buck passing occurred.

7. WHISTLEBLOWING IN SCIENCE AND RESEARCH

Whistleblowing in science and research raises a number of issues, many but not all of which are shared by other areas in which whistleblowing occurs. A particular difficulty is the fact that reporting will often be of colleagues rather than management. Although trade union type solidarity is not particularly noticeable amongst researchers, there is still often a feeling of collegiality. Some of the consequences of wrongdoing in science may have wider implications, for instance in terms of implying a drug is safe and/or effective when it is not, whereas others may be unethical, but not have wider consequences. There may also be genuine disputes between scientists which do not involve misconduct, (Durso, 1996). However a particular problem, which is rarely highlighted in the context of whistleblowing, is the issue of gatekeeping with, for instance, women and ethnic minorities having less access to grants and publication in prestigious journals and difficulties being encountered in publishing theories which challenge accepted orthodoxies. There are also issues of indicating that results are controversial, particularly in areas such as genetically modified organisms which could have significant implications for the general public.

Professionals such as scientists are often expected to regulate themselves and this is often dependent on reporting. However publicised misconduct cases often reveal (Wenger et al, 1999) that reporting has not occurred. Whistleblowers may face sanctions from peers and/or the organisation. Sanctions from peers can often be professionally damaging as well as personally painful (Barnett et al, 1996). Cases of false or malicious accusation are considered to be rare (Edsall, 1995), but genuine, but unfounded accusations do occur. Unjustified whistleblowing can have damaging effects, including on individuals who are exonerated of misconduct (Klotz, 1998). Concern has also been expressed that whistleblowing could affect the public standing of science.

A focus group study (Wenger et al, 1997) of the normative ethical views of scientists and institutional representatives found that the scientists perceived strong agreement in the scientific community about norms relating to honesty, integrity and working towards the common good, but believed there would be disagreement about what is the common good. The institutional representatives strongly held that scientists have a duty to report scientific misconduct, whereas scientists feared being whistleblowers due to lack of support by the institution or other scientists. Both groups considered that attitudes to norms of scientific behaviour vary considerably across cultures and disciplines. The extreme competition for funding, which creates pressures not to communicate, not to be thorough and to publish too early was considered to be one of the main factors contributing

to violations. This indicates that improving funding could be the best way to reduce misconduct.

There have been a number of studies of both actual whistleblowing and scenario behaviour, for instance (Barnett et al, 1996; Braxton et al, 1996; Lubalin et al, 1999), but many of the findings are limited by sample restriction to one field of science. Wenger et al (1999) found that the overwhelming majority of their 606 scientist respondents would report unethical behaviour, but in a third of cases to the researcher and/or colleagues. This reporting would be educational or warning and unlikely to lead to a disciplinary response. The authors question whether this behaviour is self-regulation or a cover up. However it may be an attempt to reconcile conflicting loyalties and avoid sanctions while behaving ethically. An informal educative approach may be appropriate in all but the most serious cases of misconduct. Experiences of retaliation are similar to those of other types of whistleblowers. In a study of scientist whistleblowers and accused but exonerated scientists, nearly a quarter of the scientists were fired or did not have contracts their renewed. 8% of the exonerated were fired or did not have their contracts renewed; significant minorities were denied promotion or salary increases or lost research resources or opportunities; and the mental health of the majority suffered (Lubalin et al, 1999).

Concerns about drug companies trying to withhold or manipulate results or block publication of unfavourable studies have led to a number of prominent medical journals reserving the right to refuse to publish drug company sponsored studies unless the researchers involved are guaranteed scientific independence (Okie, 2001). Researchers at the University of California recently defied a corporate sponsor by publishing a study concluding that a particular HIV therapy product does not benefit patients already receiving standard treatments. The firm is seeking \$7-10 million damages from the university for harming its business. A University of Toronto physician lost a research contract with a Canadian drug company after publishing an article about a serious side effect of one of their drugs. The company claims that she failed to follow the protocol specifying how the study should be carried out.

In the US the False Claims Act allows whistleblowers to sue universities and scientists on behalf of the government for recovery of up to three times the amount of any fraudulent claims, with a percentage going to the successful claimant. In two cases of plagiarism and data falsification whistleblowers received substantial percentages of the combined penalties of more than \$3 million (Hoke, 1995). The possibility of large cash awards penalising universities for scientific misconduct by researchers may lead to behavioural changes at the administrative levels, but does not challenge the underlying problems of access to funding and power

structures within research. In another case a biomedical engineer filed under the False Claims Act after dissatisfaction with the results of university and funding body inquiries. He had been accused of unethical practices: he had failed to cite the paper of a colleague reporting the effectiveness of a drug, manufactured by one of his funders, whereas the whistleblower found no efficacy using the same data (Hoke, 1995). This case illustrates how easily attention can be sidetracked from substantive ethical concerns to more minor issues of professional etiquette.

Goldbeck-Wood (1997) discusses calls for a UK organisation similar to the US Office of Research Integrity or the Danish national committee for scientific dishonesty to investigate claims of scientific misconduct and impose sanctions. However Parrish (1997) questions the role of the Office of Research Integrity after the overturning and withdrawal of several of its findings of scientific misconduct. Particular problems are due to the fact that members of the appeals board are lawyers without a scientific background or understanding of scientific culture. For instance judges on the appeals board considered it acceptable to change numbers and results for the purposes of publication, as long as this did not affect the study outcome, whereas this would be unacceptable to scientists (CRI, 1994).

McKnight (1998) discusses the use of ethics policies in promoting ethical conduct in scientific societies and the way different codes treat the responsibility to expose misconduct. She suggests that a scientific society can further 'peer policing' by establishing an ethics committee and encouraging or assisting whistleblowers to report to this committee. Other proposals include more explicit guidelines for reporting and punishment (Bayles, 1981; AMA, 1997) and a witness bill of rights designed to protect the scientific community and ensure the free flow of information (Devine, 1995). Gunsalus (1998b) suggests that university administrators develop a non-defensive internal culture which does not consider a problem as an indictment of the whole institution. He provides a number of specific guidelines, such as setting boundaries with regards to time and topics, to avoid confusing personal and professional roles, and making clear any responsibilities to act on or report information received, which could interfere with maintaining confidentiality. He also suggests hearing at least two sides, not taking problems personally, stating clearly what action will be taken over what time frame and recognising when problems require more formal procedures. However these proposals all target abuses within the system, rather than wider issues such as the ethics of military research or vivisection.

A number of case studies have been developed, for instance for use in courses on research ethics. One study (Sims, 2001) presents a three part scenario with

discussion questions and commentary: a doctoral student, Sherry, discovers that her supervisor has submitted a paper based on her as yet incomplete research. Although a number of real-life ethical dilemmas are presented, the focus is solely on the student and not on the supervisor's responsibilities for monitoring and teaching ethical research practices (Johnson, 2001). The context of the threat to laboratory funding and relative importance of data points and the jobs of Sherry's coworkers could have led to an examination of the wider context of the ethical temptations posed by inadequate funding systems and the ethics of committing an unethical act in order to avoid much more serious consequences.

8. CODES FOR WHISTLEBLOWERS

A number of individuals and organisations have derived codes or sets of rules for whistleblowers to be used in decision making about whether to blow the whistle as well as throughout the process to increase the likelihood of a successful outcome and retaining a career. For instance Gunsalus (1998a) suggests that prospective whistleblowers should consider alternative explanations and the possibility of being wrong; ask questions rather than make accusations; identify and locate relevant documents; separate personal and professional concerns; assess their goals and seek and listen to advice. He also suggests a step by step procedure of obtaining and evaluating advice, deciding whether confidentiality can be maintained, keeping notes, obtaining support, deciding whether to blow the whistle and then determining an appropriate person or organisation with the power and resources to do something.

Bowie's (1982) requirements for justifiable whistleblowing include: appropriate moral motives to prevent unnecessary harm; using all available internal procedures before public disclosure if possible; having sufficient evidence; perceiving serious potential danger from the violation; acting in accordance with responsibilities in avoiding and/or exposing moral violations. Velasquez (1988) has combined questions from several authors as follows: how comprehensive and accurate is the information; what unethical practices are involved and why are they unethical; how significant and irreversible are the effects of these practices and are there compensating benefits; what is the obligation to disclose these practices internally or externally; and what will the likely effects and consequences be.

9. LEGAL PROTECTION IN THE US AND THE UK

Increasing awareness of the problems faced by whistleblowers in terms of loss of jobs, victimisation and other types of retaliation and their role, particularly in detecting and preventing fraud, has led

to the development of whistleblower protection legislation. This section will concentrate on legal protection for whistleblowers in the UK and US, where there are contrasting legal climates. The US has a mixture of state and federal legislation, as well as a political environment which (at least in theory) protects freedom of information and speech, but does not have comprehensive unjust dismissal legislation (Peritt, 1987), whereas the UK has legal protection against unjust dismissal, but a highly entrenched culture of secrecy (De Maria, 1997).

The US Congress established the Office of the Special Counsel in 1979, with the protection of employees from reprisals for protected activities, including whistleblowing, as one of its main purposes. Fong (1991) suggests that federal reprisal law has been complicated by two different and sometimes contradictory approaches to policy. One of these policies encourages disclosures, whereas the other promotes management's discretionary authority to sack workers to eliminate disruptions.

O'Leary (2000) highlights the ways in which the combination of federal and state laws in the US can often fail to protect whistleblowers. Federal protection is generally for the purpose of enforcing statutes which promote public welfare rather than in its own right, whereas comparable protection in state laws is about protection of the employee rather than support for other legislation. The federal Whistleblowers Protection Act of 1989 increases protection to federal government whistleblowers who disclose government waste, fraud and abuse of power. The first and fourteenth amendments to the US Constitution also give public sector whistleblowers some constitutional protection (Barnett 1992). However federal protection is limited, with some acts such as the Civil Service Reform Act and Whistleblowers Protection Act only applicable to federal employees, thereby giving most whistleblowers little protection at federal level. The main remedies for retaliation in federal whistleblower legislation are recovery of lost wages and benefits and reinstatement. Most statutes allow court costs, including legal fees, and a few compensatory or exemplary damages (Poon, 1995). However federal statutes are generally narrowly restricted by subject matter and applicability, whereas state statutory and common law generally provide wider protection (Poon, 1995).

More than half the US states now recognise the public policy exception to employment at will which allows employers to arbitrarily sack employees without contracts. This exception increases protection if the job losses are considered to be inconsistent with public policy and there is a broad definition of public policy. 37 states have general whistleblower statutes (Benson et al, 1998), but only seventeen of them protect private sector as well as public sector employees (O'Leary, 2000). One of

the earliest was a 1981 Michigan act which prevents employers sacking, threatening or discriminating against an employee who reports a violation of federal, state or local laws, rules or regulations to a public body (Benson, 1992). There is also a great variation in the level of protection and available remedies in state legislation (Benson et al, 1998). The statutes with the broadest coverage protect whistleblowers who make disclosures concerning suspected violations, mismanagement, gross waste, abuse of authority and threats to health and safety. A number of states require whistleblowers to first disclose complaints internally, but a number of federal and state laws require external whistleblowing (Poon, 1995). A summary of the employees covered and the designated reporting bodies under the different state whistleblower statutes is given by Callahan et al (1994).

Most statutes define prohibited retaliation broadly and allow victims to file civil law suits, but may require them first to use administrative procedures. In most cases the burden is on whistleblowers to demonstrate that retaliation has occurred, though some statutes put the burden on employers to show that their acts are unrelated to whistleblowing, sometimes by rebuttable presumption i.e. the assumption that negative workplace treatment such as relocation is in retaliation for whistleblowing if it occurs within a certain period after a public interest disclosure (De Maria et al, 1996; Westman, 1992). Remedies include reinstatement or recovery of damages, with only a few allowing punitive compensation and some providing for civil fines and other penalties (Barnett, 1992). The *qui tam* provisions of the US federal False Claims Act allow any citizen with knowledge of a fraud against the US government to bring a case in the name of the government and obtain 15 - 25% of the proceeds when the government intervenes and 25-30% otherwise (Raspanti et al 1998). Damages can be three times government losses and there is protection for employees who are discriminated against in any way as a result of a *qui tam* suit.

Dworkin et al (1998b) discuss the contradictory trends of the increasing use of secrecy clauses and increasing legislative and judicial encouragement to employees to blow the whistle. Although such nondisclosure agreements are only supposed to protect trade secrets and confidential information and should only be enforced if they are reasonable, they have been used to silence whistleblowers (Short, 1999) and journalists (Roberts, 1995). For instance a Michigan state court allowed General Motor to use a nondisclosure agreement to prevent a former engineer testifying about the dangers of fuel tank design in product liability suits. Brown and Williamson, the third largest US tobacco company, used nondisclosure agreements to obtain a temporary restraining order against a former company executive to prevent him disclosing information about the

dangers of smoking cigarettes. Both rulings deprived the public of important health and safety information (Short, 1999). A TV company was forced to apologise and pay \$15 million to two tobacco companies to avoid a \$10 billion lawsuit after an investigative show had exposed an internal memo showing tobacco firms add higher doses of nicotine to make cigarettes more addictive (Roberts, 1995).

In the UK whistleblowers are now protected in certain circumstances by the Public Interest Disclosure Act 1998 (PIDA) (Lewis et al, 2001; Bowers et al, 1999). There are six specific categories of what are called qualifying disclosures and no 'other' category. However the legislation is complex and this complexity could possibly cause problems in implementation. Qualifying disclosures are those which tend to show that one or more of the following has occurred, is occurring or is likely to occur in the future: a criminal offence, failure to comply with legal obligations, a miscarriage of justice, danger to health and safety of any individual, environmental damage and deliberate concealment of information relating to the five previous categories (Bowers et al, 2001). An interesting question relates to protection for disclosures of offenses under international law. There is protection against victimisation and dismissal for making a protected disclosure is automatically unfair dismissal. However the degree of protection depends on whom the disclosure is made to, with the greatest protection for disclosure to an employer, and there is no right of action against any third party other than the employer who victimises the worker. When a worker has been victimised an award of compensation for the loss incurred can be made. Awards are assessed on the basis of what is 'just and equitable in the circumstances' but could be large, particularly if the whistleblower is unlikely to obtain another job.

Dworkin et al (1987) discuss state whistleblowing legislation in Michigan, Maine and Connecticut in some detail and consider the impact of the legislation in these three states. They conclude that the statutes are no more effective in providing protection for whistleblowers or encouraging whistleblowing than the common law. Massengill et al (1989) again survey a number of early cases and conclude that there are restrictions on employer retaliation even when there is no specific protection. There is a clearly a need for investigations of the effectiveness of the legislation in protecting whistleblowers.

10. WHISTLEBLOWING IN THE SOVIET UNION

Lambert (1985) reports a study of 70 cases taken from the Soviet press between 1979 and 1983 and discusses eight cases in detail. There were 29 cases from the service sector, 12 cases about construction, nine about agriculture and one about a police officer. 80 offences are mentioned, including report padding

16 times, false reporting and other complaints about wages and bonuses 12 times, embezzlement 11 times plus four strong hints. In nine stories managers were accused of illegally using organisational resources for personal ends such as house building; and in six stories of using administrative control over goods and services to illicitly favour certain employees, particularly through control over the allocation of housing. Bribery was only mentioned four times, but this may be due to the fact it is relatively easy to conceal from outsiders and both bribe giver and taker are breaking the law. There were also many complaints about unfair dismissal and other disciplinary measures.

90% of the complaints were apparently personal, for instance about not receiving a flat or bonus or being dismissed, but could have been part of a wider social concern, whereas 10% were about general injustices, such as embezzlement, unjust distribution of flats or poor conditions at work. Lambert (1985) considers the group of disinterested protestors unusual in internalising the official ethic of responsibility and rejecting informal privilege and patronage. Although, in many ways supportive of these whistleblowers, press reports have various negative labels for them, such as 'quarrelsome', 'obdurate' and 'pedantic'. This labelling of whistleblowers is typical of reactions in, for instance, the US and UK where attention focuses on the whistleblower, who is labelled as the problem. Taking the official humanist and personal responsibility ethic seriously made these ethical whistleblowers outsiders. However Lambert considers that the fact that they are following the official ethic to be one of the reasons that complaints about abuse get so much coverage in the Soviet press.

As elsewhere, whistleblowers in the Soviet Union experienced retaliation. Despite apparently strong legal protection against arbitrary disciplinary measures or dismissal, managers did not find it difficult to get rid of employees who asked awkward questions. In 26 out of 66 cases the whistleblowers were dismissed at some stage of the conflict (although some were reinstated) and four left voluntarily, whereas 13 received some other form of penalty (Lambert, 1985). Management may retaliate, for instance, by setting up whispering and letter writing campaigns against critics or even trying to get criminal charges of slander brought against them or accusing them of blackmail.

Thus there are many similarities between the treatment of whistleblowers in the Soviet Union and, for instance, the US. In particular it is often the whistleblower rather than the 'offender' who is disciplined. However the underlying ideology and the mechanisms are different. In capitalist economies the profit motive gives rise to temptations to ignore safety standards and environmental costs and to pay low wages. In the Soviet Union the need

to meet or if possible to exceed the various plans and the distribution problems and resulting deficits of goods and services led to temptations to bribery and report padding in order to obtain the materials necessary to fulfil plans or give the false impression they had been fulfilled. Therefore, though report padding occurs elsewhere, the need to fulfil targets probably made it more common in the Soviet context. Although breaches of law were not unconditionally tolerated (Lambert, 1985), there seems to have been some unofficial or even quasi-official acceptance of certain types of breaches of law in order to make the system function. There are again parallels in the US and UK, where, for instance, many firms in a number of industries fail to follow health and safety standards or dump chemicals (with toxicity beyond the official limits) into the environment, frequently without sanctions.

As elsewhere, Soviet whistleblowers were often isolated within the organisation, whereas the 'offender' often had some official support. However conflicts of loyalties may have not been as important as in, for instance, the US and the UK. Lambert (1985) considers whistleblowing to be part of long established and very widely used procedures for making individual petitions to state and social organisations, with the requirement of a prompt response with well argued decisions, including the grounds for any refusals. The party leaders encouraged citizens to act as watchdogs and blow the whistle on any illegal practices they discovered and promised protection from possible retaliation by management and local officials. Despite suspicion of informers, this may have led to a cultural acceptance of whistleblowing, with loyalty to the party and its leaders or the wider society rather than the specific organisation.

11. HOW EFFECTIVE IS WHISTLEBLOWING?

In a number of cases whistleblowing has achieved at least some of its specific aims, but probably more rarely had an effect on public policy. Policy effects are generally difficult to determine, as there are often several contributory factors. However there is no research evidence on success rates, degree of success or compensation to vindicated whistleblowers. Therefore the fact that this section discusses 'successes' should not be interpreted as an indication of the overall effects of whistleblowing. Johnson et al (1990) report two cases of whistleblowing which did lead to policy change in the mid-80s and suggest that this was partly due to the status, credibility and political skills of the whistleblowers. They suggest that changes which are salient, specific and administratively feasible are more likely to succeed and that the particular political context with a Republican president and Democrat House of Congress may have also played a role. However other researchers (Soeken et al, 1987,

Trueslson, 1987) suggest that whistleblowing generally does not have a policy impact.

Hal Freeman, the regional manager of the San Francisco Office for Civil Rights in the US Department of Health and Human Services (HHS) resigned in protest at OCR policy discriminating against people with AIDS and related conditions. The subsequent publicity and group action amongst civil rights and gay activists led to a total change in policy. This would probably have happened eventually, but over a much longer time span if he had not resigned.

In the mid-80s Howard Kaufman, an influential professional in the Environmental Protection Agency (EPA) disclosed that the EPA was jeopardising public health by failing to enforce hazardous waste and toxic chemical laws and arranging deals with polluters and alleged that senior EPA personnel were failing to comply with environmental law on toxic and hazardous chemicals and misusing Superfund money. His allegations were repeated on a popular TV programme and he developed a coordinated strategy in association with two Congressional Representatives. Although he experienced reprisals, he was able to deflect efforts to silence him. His role in leaking critical memos and the investigation of his activities by the EPA, which drew further attention to EPA mismanagement, led to the replacement of the top leadership of the EPA. It also fed into increasing public concern about the risks of toxic chemicals and hazardous wastes. Hazardous waste law was strengthened and the Superfund programme expanded.

Whistleblowers in the US have also had a significant impact on the development of the anti-nuclear movement and public policy debate on nuclear energy (Bernstein et al, 1996). In the 1970s engineers at the US Atomic Energy Commission (AEC) leaked information to the Union of Concerned Scientists (UCS), indicating that the emergency core cooling system in nuclear reactors had failed major tests (Bernstein et al, 1996). AEC had suppressed these results to speed up the licensing of new plants. UCS published this information, leading to AEC hearings in 1972, at which the engineers reluctantly testified. The hearings, which lasted more than a year, contributed to the formation of a network that became the core of the anti-nuclear movement. After these hearings the focus changed from environmental issues to the threat of catastrophic accidents (Nelkin, 1971). Various bad construction practices became major issues, partly as many whistleblowers raised them at individual plants and attention shifted to the general competence of the utilities and the nuclear construction industry (Jasper, 1990). Three US engineers resigned from General Electric (GE) in 1976, due to concerns that GE was producing a reactor with known flaws, likely to cause a major accident. They helped focus criticism on generic design issues and contributed to creating public

debate. They also drew attention to the willingness of regulators and the industry to suppress information and deceive the public (Bernstein et al, 1996). Whistleblowers have also been prominent in battles over particular nuclear plants. For instance the Government Accountability Project worked with local safe energy groups and supported whistleblowers and used their disclosures to help close two plants, Zimmer and Midland (Bernstein et al, 1996).

12. CONCLUSIONS

First they came for the Jews and I did not speak out -
because I was not a Jew

∴

and I did not speak out -
because I was not a trade unionist
Then they came for me
and there was no one left to speak for me
Pastor Niemoeller, victim of the Nazis in Germany

As this quotation indicates, whistleblowing is about speaking out. The consequences of not speaking out can be very grave, but speaking is not easy and generally involves a risk of retaliation, which could lead to loss of employment, relationships and mental health. However in some cases it may be appropriate, at least initially, to raise issues with the person concerned rather than publicly. Decisions to whistleblow generally involve balancing loyalties and duties and the likely consequences of both action and inaction. Although certain types of people may be more likely to whistleblow, whether whistleblowing occurs in a particular case probably depends on a combination of individual characteristics, organisational structures, the type and seriousness of the incidents and/or concerns and situational factors. There is an increasing body of legislation to protect whistleblowers. However, though there have been few scientific studies of its effectiveness, published reports indicate that many whistleblowers still experience retaliation.

Whistleblowing generally focuses on abuses within the system rather than challenging the nature of the system itself, which would require collective action by a union or workplace. Whistleblowers challenge fraud, health and safety violations, but not the nature of their organisation's activities. A number of companies, for instance, totally legally, sell weapons to regimes with bad human rights records, often to be used to suppress political opponents and human rights campaigners, as in the case of Indonesia. There is surely a contradiction in challenging fraud or safety violations, but not the basic abuses of such firms and the governments they support.

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