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13/1/00

Dear Wiliam Clocksin,

Re: IA Exam, Paper 2   2000

Here are the question, solution notes and a marking scheme for my lectures on Professional Practice and Ethics.

Question:

What moral obligations are incurred through becoming a member of a profession such as the British Computer Society, and how would you justify these moral obligations?

Solution notes - see attached pages:
    For theories of justification see "Ethics -An Introduction".
    For obligations attached to professions see "Professional Practice".

Marking Scheme:

The candidate may choose to discuss moral justification in general, but this should only gain marks insofar as it is used as a basis for justifying professional obligations. The candidate may also discuss what constitutes a profession, and again this has value only insofar as it provides a basis for justifying professional obligations. Marks for these discussions should only be given insofar as they are relevant to the following discussion(s).

There are five different areas of professional obligation that I would wish to see discussed. These are obligations to:
    1. employers and employees
    2. clients
    3. the public in general
    4. other professionals
    5. maintenance of one's own competence and integrity
In general I would allocate four (4) marks to the discussion of each kind of obligation along with a justification for that obligation.

Obligations to employers, employees and clients can be defended in terms of justice and fair practice. Obligations to employees include loyalty and should include some reference to the sensitive issue of intellectual property carried by ex-employees. Obligations to clients depend on the model of relationship that is adopted - whether the professional acts as the agent of the client, adopts a paternal stance, or something in between.

Obligations to the public in general can be defended either in terms of an implicit social agreement the professional makes to act for the good of society in return for exclusive rights to practice the profession, or in terms of the advantage that her greater skill and knowledge give to the professional, coupled with her more general obligation to avoid harm.

Obligations to the profession, such acting with integrity toward fellow members, and supporting their professional development, are best defended in terms of the contribution this makes to the survival of the profession and future benefits that will arise from this survival.

The obligation of the professional to maintain her own competence and integrity cannot be overemphasised in the computing profession. The rapid growth and development of computing technology means that without constant upgrading computing skills and knowledge will become rapidly outdated and the professional will no longer be able to fulfill her obligations to employers and clients.

General remark:

Other kinds of professional obligation not covered in the above should also be allowed, particularly if they are justified well. In general I would be inclined to give higher marks for coherence and strength of argument than for detailed itemisation of obligations. Answers with some coherent originality of argument should be given preference to those which slavishly adhere to the lecture notes.

If there is any problem or unclarity with the above, please do not hesitate to get in touch with me.

Sincerely yours,

Richard C. Jennings

A. Utilitarian Theories and others

According to utilitarian theories we ought to do things which maximize pleasure or happiness for everyone, or, at least we should not interfere with people doing what gives them pleasure as long as it does not detract from the pleasure of others. A problem with this view is that not everyone makes pleasure or happiness their major goal. A more sophisticated version would aim to maximize satisfaction of preferences. But, even so, some people's preferences are not in their long term interests - children's food preferences, or drug addicts' preferences, for example.

B. Problems with Consequentialist Theories

There are a number of problems with consequentialist theories. First is the need to justify the basic claim that we ought to maximize pleasure (or happiness, or satisfaction of preferences). Second, there are real practical difficulties in quantifying happiness (or whatever). Third, since every act has some consequences, everything we do needs to be considered from a moral point of view. Fourth, they can lead us to treating certain individuals very badly if the total happiness is greater than their unhappiness.

V. Deontological Theories

An alternative way of answering the three basic ethical questions is to start from a consideration of what our duties are - irrespective of the consequences. One possible way of discovering our duties is through pure reason. Another is to work from the egoist point of view and argue that it is in our own interest to make some agreements with other people around us to refrain from certain kinds of actions like stealing and killing.

A. Rights and Obligations Based on Reason

Kant argued that some moral principles were rational. Kant's ethics is based on the 'Categorical Imperative': Act only on the maxim which you can at the same time will to be a universal law. This principle can be used to justify the principle of telling the truth because if we considered the principle 'lie when it is convenient' the institution of truth-telling would collapse and it would no longer be possible to lie.

B. Natural Rights

In a state of nature we are free to do whatever we want. Some of these freedoms we can agree to compromise in the interest of social accord, but others are too basic to compromise. The freedom to gather in groups and to speak together, for example, are necessary to achieving such agreements and social accord and therefore cannot be compromised. Other freedoms, such as the freedom to take what we want from what we see around us or the freedom to kill those whom we don't like, can be given up in the interest of social accord.

C. Social Contract Theories

Social contract theories suppose that our duties are determined by an agreement that we make with others in order to further our own personal goals. But in fact we are born into an existing social practice. For John Rawls the justice of a given practice can be analyzed by considering whether we would be satisfied to be born into any role in that practice. We may wonder if it is really possible to put aside our interests and look at a social practice through a "veil of ignorance".

VI. Communitarian Theories

Recent American philosophers have argued that ethical values are the result of collective discussion and criticism that takes place in open and confrontational but safe groups. The basic idea is that values are a result of dialectic interaction of individual intuitions. A similar view, called quasi-realism, is developed by the Oxford philosopher Simon Blackburn. Here the reality of values is established by placing them in a theoretical framework.

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Professional Practice

I. Professions

Modern computing science is an esoteric body of knowledge which is universally used and almost universally opaque. The computer scientist is in the position of providing for the general public a service which is taken on trust. In the public domain there is very little DIY computing because the effort and especially the knowledge needed to create or modify computer systems is beyond the capacities or interests of most users. In a word, the computer scientist provides a service which must be taken on trust and which, in the late 20th Century, is essential to public life.

A. The First Code of Ethics: The Hippocratic Oath

Rules governing the relations between members of a profession are aimed at maintaining the integrity and continuity of the profession, and minimizing conflict or competition between members of the profession. Rules governing the relations between the members of the profession and their clients, the public, are intended to ensure continuing public confidence in the profession and thus to maintain public use and support for the profession.

B. What constitutes a profession?

The law society defines a profession as follows:

> When a profession is fully developed it may be described as a body of men and women
> (a) identifiable by reference to some register or record;
> (b) recognized as having a special skill and learning in some field of activity in which the public needs protection against incompetence, the standards of skill and learning being prescribed by the profession itself;
> (c) holding themselves out as being willing to serve the public;
> (d) voluntarily submitting themselves to standards of ethical conduct beyond those required of the ordinary citizen by law
> (e) undertaking to take personal responsibility to those whom they serve for their actions and to their profession for maintaining public confidence.

Modern professional codes of ethics cover more relationships than the two basic ones covered by the hippocratic code. In general they also include relationships between employees and employers and between the professional and the public in general.

C. Professional Relationships

1. With employers

a. Loyalty

In general employees are expected to show loyalty to their employers - they are expected to recognize and help the employer achieve her ends. But there are limits to loyalty, for example the employee must retain the right to support the political party of their choice without threat of job loss, and they must not be expected to buy only company products, in preference to the competitor's.

b. Trade secrets

In a free labour market it is difficult to protect trade secrets. A company can afford to hire a competitor's employee at a higher price than the competitor if the employee carries information that gives the company a market lead over its competitor. Companies attempt to guard against this practice in several ways. Employees can be asked to sign agreements promising not to reveal trade secrets. They can even be expected to agree not to work in the same industry for a set period after they leave a company. There is a moral sense in which loyalty should carry over beyond the term of employment.

2. With clients

There are roughly three ways the relationship can be seen and it is necessary for a smooth running relationship that there be some agreement about what sort of relationship it is. Essentially the difference concerns the balance in decision making between the company and the client. If the company is seen as the agent of the client, it simply carries out the client's wishes, it does not make any significant decisions of its own. When it has to make a decision about aspects of design that are not obvious from the client's wishes, then it must return to the client for clarification. This is the agency model. At the other extreme, the client may transfer all the decision-making authority into the hands of the company. In this case the company first learns as much as it can about what the client wants and then, during the process of development, makes all the decisions about how best to realize the client's desires. This latter is the paternalistic model. In between these two extremes an interactive model where the client is engaged in making decisions but is advised by the company. The decisions are not entirely the client's, nor are they entirely the company's. Decisions are arrived at through a process of dialogue in which the client expresses her wishes and desires and the company advises on what is possible from a practical and what is advisable from their own point of view of superior experience.

3. With the public in general

The obligation of the professional to the public at large can be seen as a kind of implicit contract that the professional makes with society to allow him, and not just anyone, to practice his trade. Society in general, through its legal system gives the professional the right to maintain a monopoly in the practice of his profession, on the understanding that the professional will act for the good of society.

4. With other professionals

A popular image of the professional organization is that its sole purpose is to promote the interests of the professionals themselves. It is like a monopoly of practitioners who have managed to corner the market and convince the establishment that they have some special skill that no-one else has. Thus they manage to legalize their particular monopoly and squeeze out any other practitioners. Once organized they can set their own fees and standards of performance. One has only to recollect the legal profession as portrayed in Charles Dickens' *Bleak House* to get the image.

But even with such a cynical view of the professional organization, there is reason to suppose that it is in the interest of the profession to adopt some controls on the behavior of their members. An individual who does not act in the interest of the client will damage the reputation of the profession as a whole. And when the trust that people place in the profession is damaged, the people will begin to look for alternative sources of expertise - they will turn to alternative medicine, or begin to practice their own conveyancing.

D. Codes of Professional Ethics and Conduct

1. History

The first professional code of conduct was the Hippocratic Oath taken by physicians in ancient Greece. The first such code in the UK was a code of medical ethics drawn up by Tomas Percival in 1803. Between 1870 and 1910 many professional institutes of engineering and applied science incorporated codes of ethics into their professional statutes. between 1910 and 1960 there was little increase in the number of such ethical codes adopted by professional organizations, but between 1960 and 1989 the number of codes of conduct, or ethics, adopted by professional bodies increased by about a factor of ten.

2. Computer Society Codes of Conduct

a. The British Computer Society (UK)

The British Computer Society (BCS) has four sections in its Code of Conduct. The first concerns the public interest, the second concerns duty to employers and clients, the third concerns duty to the profession and the fourth concerns professional competence and integrity.

i) The public Interest

The section on public interest is short and sweet. It has four rules.

> 1. Members shall in their professional practice safeguard public
> health and safety and have regard to protection of the environment.
> 2. Members shall have due regard to the legitimate rights of third
> parties.
> 3. Members shall ensure that within their chosen fields they have
> knowledge and understanding of relevant legislation, regulations
> and standards and that they comply with such requirements.
> 4. Members shall in their professional practice have regard to basic
> human rights and shall avoid any actions that adversely affect such
> rights.

ii) Duty to Employers and Clients

This section covers two of the four kinds of professional relationships: relationships to employers and to clients. The kind of relationship to clients that is suggested in the BCS Code of Conduct is that of agency. Rule 5 states that:

> Members shall carry out work with due care and diligence in
> accordance with the requirements of the employer or client and
> shall, if their professional judgement is overruled, indicate the likely
> consequences.

Other rules advise completing work on time and within the budget, not offering or taking bribes, and not getting involved in work that would not be in the public interest. Rule 8 requires confidentiality of information that may be acquired in the course of professional practice, and rules 10 through 12 advise against offering potentially biased judgements and against taking advantage of the ignorance or inexperience of others.

iii) Duty to the Profession

This section has an ancestery that goes back to the hippocratic oath. Basically it says that the reputation of the profession should be upheld and the standards improved. Further, public knowledge and understanding of computing should be advanced. Within the profession members should act with integrity towards fellow members, and should encourage and support fellow members in their professional development, including new entrants to the profession.

iv) Professional Competence and Integrity

Professional competence and integrity, the contents of the fourth section, is a new topic. Rule 18 is of particular concern to the computing profession:

> 18. Members shall seek to upgrade their professional knowledge
> and skill and shall maintain awareness of technological
> developments, procedures and standards which are relevant to their
> field, and shall encourage their subordinates to do likewise.

Computing technology is one of the fastest developing technologies in the world today, and failing to continually upgrade professional knowledge and maintain awareness of technological developments would rapidly result in professional incompetence. Rule 20 requires that members only offer to do work or provide service which is within their professional competence, and that they do not lay claim to a level of competence they do not possess.

Dr. Richard C. Jennings
Professional Practice and Ethics