Normative Environments for Engineers[1]

On the use of "professionalism" as a foundation for ethics

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"It definitely was professional, and it was definitely smart, if you can call it that, but it was very conservative, very risk-averse, very aware of what mattered."
(Lance Armstrong, Interview with Oprah Winfrey, January 2013)

INTRODUCTION

In tracing back the history of engineering ethics as a discipline, engineering organisations and institutes of engineering education appear as the main loci for reflection and action on this theme. In se, this should not be a surprise, as these institutions offer a context in which "engineering" is the main reason and theme of the meeting of engineers. As a consequence of this, the styles of dealing with ethics may differ a lot, depending on the roles and status of the engineering associations if different countries, and on the educational traditions. Statements on why and how ethics is part of engineering work that make sense in one area, may sound very strange in the ears of engineers with other regional or educational backgrounds. Everybody seems to agree that engineers should behave ethically, but for very different reasons. In this paper, I will reflect on how views on "professionalism" have an impact on the discourse about engineering ethics.

1 WHY SHOULD ENGINEERS BE ETHICAL?

"Why should engineers be ethical? Well: engineers are professionals. And professionals are members of professional organisations. And these professional organisations have codes of ethics that regulate their activity. That's why engineers should be ethical!" This was the intervention of an authoritative senior member of the international engineering scene, during a convention on engineering philosophy and ethics a few years ago. If stated that way, the foundations of engineering ethics are

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simple: ethical is what the code of ethics declares to be ethical, and as an engineer you are bound to the rules of your engineering association.

Founding engineering ethics upon this reasoning, stumbles upon at least two serious questions: a pragmatic one first, and also a more fundamental one. The very pragmatic question has to do with the fact that in many countries there is no system of "chartered engineers" or "engineering board" or anything the like, or that membership of such an organisation is not compulsory for men or women to work as an engineer, or to carry the title of engineer. If professional ethics rests mainly or exclusively on membership of professional organisations and on the regulatory activity thereof, many engineers will find themselves "ethical orphans".

The second, more fundamental problem with the abovementioned reasoning, has to do with the assumption that "being ethical" or "behaving ethically" equals "rule compliance". This seems to presuppose that

- either the act of compliance constitutes ethical quality as such, whatever the rules are;
- or that the ethical qualification of the rules is accepted. This may be done formally, e.g. when one recognises the authority of the instance that issued the rules (be it a divine authority, a legal system, or any other mechanism or institution to which one vows obedience). In such cases, there is always a risk of forms of fundamentalism popping up. The other way of assuring the ethical qualification of the rules would be by an evaluation of the contents of the rules themselves: they may either inherently lead to rights or duties the validity of which is accepted, or their consequences may be such that compliance would generally lead to positive results (i.e. a more utilitarian approach).

The use of codes of conduct as a basis for ethics (be it in professional bodies, business or industrial corporations, or other kinds of organisations) has been discussed widely before [1, 2]. Some of the criticisms include: if ethics is about taking responsibility, referring to a code of conduct is like shifting responsibility to other instances; codes of conduct (and also mission statements, principles and values declarations,…) can too easily be misused for "window dressing"; codes tend either to be unrealistically idealistic, or stick to a legalistic minimalism; and by focusing on micro-ethical situations, they divert the attention from macro-ethical issues. By contrast, not having a code of conduct may be interpreted as if one does not find ethics important enough; codes may not only contain do's and don'ts, but may also confer rights and support for the users; and the mere fact of having a code of conduct – especially if it was accepted after a process of due participation and debate – is a sign that ethical issues are legitimate points of discussion within the organisation. For the remainder of this text, we will leave the discussion about sense and nonsense of working with codes of conduct aside, and focus on the normative aspects of professionalism, and its use in the context of engineering.

2 ON ENGINEERING AND PROFESSIONALISM

The style of linking the ethical aspects of engineering work to membership of professional organisations and to their regulatory activities, stands in the tradition of other "learned professions", like medicine and law. A whole discipline of "sociology of professions" has tried to delineate the characteristics of "real professions" (see e.g. [3] and [4]). Typical among these attributes are the presence of a systematic body of theory; professional authority based on the exclusiveness of the required knowledge and skills; the sanction of the community, conferring exclusive rights to a professional

organisation to control the access to and the conditions of exercise of the profession; the presence of a regulative code of ethics; and a set of (often informal) values, norms, symbols, rhetoric,… constituting a professional culture. While some of these attributes may also be recognisable in engineering education, organisation and practice, it is clear that in many instances engineering's compliance with these "attributes of a profession" is less clear-cut. The relationship between engineers and the people they work for (be it clients or employers) is not fraught by the same asymmetry as the traditional relationships between physicians and their patients, or between lawyers and their clients. Many people with an engineering degree have colleagues with other initial trainings (mathematicians, physicists, economists,…), and yet they would consider their work as real engineering work. And whether or not the organisation and monitoring of engineering is similar to that of medical boards or lawyers' bars, may differ a lot depending on local traditions and legislation.

Especially the presupposition of professional autonomy that is behind this traditional view of professionalism, is questionable for engineering. Many engineers work for employers (be it industrial or business corporations, public administrations, insurance companies, etc…) where decisions about policies and projects are not (or at least: not exclusively) in the hands of engineers. And whereas the professional's autonomy is traditionally needed and appreciated in cases where specialised expertise is needed in complex cases or cases where degrees of uncertainty prevail, many engineers see their activities regulated by procedures, norms, quality control systems etc…: instead of scientific insight and technical skills being the tokens of professionalism, the focus is more on familiarity with rules, procedures and the like. And it is a fairly common complaint among engineers, that the amount of attention and energy needed for formally following these procedures is not always in a correct proportion with its final effects. "Professional authority" seems then not to be in the hands and minds of engineers, but in these of the bodies issuing the standards and procedures.

3 ON PROFESSIONALISM AND ETHICS

It is not uncommon to hear the idea of "professionalism" used in a way where ethical implications are not the same as what would follow from the values, norms or standards of "ordinary people". The system that made it possible for Lance Armstrong to use "otherwise forbidden" performance enhancing products, was qualified by him as "definitely professional". And it would take very little time for anyone to find mentions of "professional criminals" in newspapers, television shows, and legislative policy reports. The use of the word "professional" will most of the time imply organised, specialised and performant skills, but it certainly does not coincide with conceptions of ordinary morality.

But there are other, less obvious cases where there may be a tension between even well-intended and highly performant professional action on the one hand, and its perception in terms of "appropriateness" or "ethics" on the other hand. Professionals are supposed to be familiar with the possibilities of action in their domain. They have experience, built up in treating a large number of cases, and thereby had to explore the limits of what was scientifically and technically possible. This may however make that their feeling about what is appropriate or normal, drifts away from what the public in general, or their clients in particular, may experience as such. To their clients, the professionals' service or products may in some cases appear as disproportionate: in size, in quality, in cost,… Furthermore, there are instances where clients feel reduced to a "case that is to be solved", and where the professional – although applying all the technicalities that are inherent to his or her expertise – even seems to miss some

of the needs, desires or aspirations of the client. The “professional values” that are inherent to the paradigm in which the professional was trained and in which he or she operates, may not be in phase with the client’s preferences. In several other disciplines, attempts have been made to redefine “professionalism”, in order to take this phenomenon into account. Mirko Noordegraaf, in studying professionalism in public service, mentions a shift from “pure” to “hybrid” professionalism [5]. Harry Kunneman develops the theme of “normative professionalism” in social work [6]. Similar developments can be found for law, education and medicine.

CONCLUSION

Even without making use of cases where “hard professionalism” ended in closed corporatism, mere image building, or covering up cases of abuse of professional authority, it seems preferable to make sure that professionalism keeps in touch with its public, and that the professional standards can also be reasonably explained to a lay public. Lay people’s own experience may also constitute a kind of “expertise” that cannot simply be overruled by professional authority – well intended as it may be. Definitions of professionalism that imply a behaviour different from what ordinary morality would require, may have difficulties in building up the trust that is necessary for the moral ideals of their activity to be reached [7, 8].

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