Chapter 12
On the Normativity of Professionalism

Martin Meganck

> *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)

Abstract Why should engineers behave ethically? Often, this question is answered by qualifying engineering as a "profession", and professional organizations have codes of ethics that members should comply with. In many countries however, engineering is organized differently. The present chapter explores conceptions of "professionalism", inspired by evolutions in different occupational areas. A second part questions the idea that professionalism encompasses ethical responsibilities "beyond ordinary morality". The thesis will be defended that, although there may be specific rules for "professionals", the philosophical foundation of professional ethics yet rests on ordinary morality.

Keywords Professionalism • Engineering ethics

Introduction

> 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!

The passage just cited, was the intervention of an authoritative senior member of the international engineering scene, during a convention on philosophy of engineering and technology a few years ago. If stated that way, the foundations of engineering

M. Meganck (✉)
KU Leuven, Faculty of Engineering Technology, Technologiecampus Ghent,
Gebroeders De Smetstraat 1, Ghent B-9000, Belgium
e-mail: martin.meganck@kuleuven.be

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

Founding engineering ethics on this rationale, stumbles upon two problems: a pragmatic one and a fundamental one. The pragmatic question deals with the fact that in many countries a system of chartered engineers or of an engineering board or any similar organization is absent: countries where membership of an engineering organization is not compulsory to work as an engineer, or to carry the title. The tendency to institutionalize professions rather strictly is – according to Julia Evetts (2003, p. 398) – typical for countries with an Anglo-American background. The European-continental approach by contrast would focus more on expertise and employment questions, and less on organizational and regulatory questions. Looking at the situation of engineering associations in Europe, Evetts' analysis seems to be confirmed, with the exception of some countries in the Mediterranean area (Spain, Portugal, Italy) where the organizations do have a more stringent status (Didier 2015). If professional ethics finds its foundation mainly or exclusively in membership of professional organizations and in the regulatory activity thereof, many engineers will find themselves ethical orphans. In a more nuanced formulation, this view would imply that engineers who work under the rule of such a regulated, membership-based engineering profession may have more or other ethical obligations than those who live in a country where such a system does not exist – even if they have the same capacities and are doing essentially the same kind of job.

The second, and more fundamental problem with the aforementioned rationale, 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: e.g. because they emanate from a recognized authority, or after an evaluation of their contents.

The present chapter will dwell upon two questions: if professionalism cannot just be equaled with membership of a professional organization, what can be contemporarily valid interpretations of this notion? And what are the foundations of an ethics for professionals?

On Professionalism

Discussions about professionalism are stained by the reminiscence of traditional learned professions, with medicine and law as paradigmatic examples. These occupations require an extended and exclusive body of theoretical knowledge and of related practical expertise. Their services are of the highest importance, as well for individual clients/patients as for society as a whole. Because of the importance and the exclusivity of the competences, there is a strict control over the practice of the profession: the exercise of the profession requires membership of a professional body, that is also

responsible for monitoring the delivered professional services. A code of conduct serves as a tool for internal discipline, and as an external pledge soliciting the trust of society. In a very traditional view of these professions, they are further characterized by a set of attitudes, rituals, traditions and symbols that form together a professional culture (Greenwood 1957). Because of the importance of the field of activities and regarding the presumed incompetence of the clients or patients, the exercise of these traditional professions is not supposed to follow the logic of commercial supplier/client-relationships. Instead of (negotiable) prices on a free market, remuneration of professional work occurs through an (often fixed) fee or honorary. Commercial advertisements are usually judged unbefitting for a real professional.

Extending this view of professionalism to other occupational fields, stumbles on a few obstacles. In 1964 already, Harold Wilensky wrote that "nowadays everybody wants to become professional", and this tendency has not weakened since then (Noordegraaf 2007). The term *professional* can be used with almost any function or occupation: engineers, teachers, nurses, but also funeral undertakers, massage parlors, tanning centers, cleaning services and bicycle repair shops. It will be obvious that the degree to which this broad range of activities meets the rather strict set of attributes of traditional professionalism as described above, varies largely. For some of them, the importance of the delivered services, the necessary skills and knowledge, the modes of organization and the societal status may be similar to the corresponding qualities in the medical and juridical sector. But for some of the latter few examples in the list, the necessary knowledge or skills seem rather limited, and the idea of "professionalism" goes little further than what one does for earning one's living, or refers mainly to the use of specialized products and equipment. It may also be limited to the promise of following standardized procedures. Anyway, these would-be-professions will have more difficulties in making themselves perceived or accepted as pure professionals. Yet they too strive for a label of professionalism that should inspire trust, thereby appealing to the original idea of professionalism: i.e. to warrant the quality of delivered services, by controlling the access to and the exercise of the activity, by establishing standards and quality control systems, etc. Legal sanction of this desire to protect customers and users may result in criteria that make small scale or artisanal practice of the activity virtually impossible, notwithstanding the sympathy and trust that the public often has for this mode of operation.

This broadening of the concept of professionalism can result in an erosion of its meaning. The idea of public service e.g., or that the mission of a profession is in the aspiration of some public good, may fade completely. The idea of sound organization and specialized competences may prevail, like in Lance Armstrong's interview with Oprah Winfrey (where he qualified the doping program in which he participated as "definitely professional"), or like in designations like *a professional killer,* where the idea of efficiency and competences is "enriched" by the pecuniary aspect. And there are other instances still where being (or calling oneself) a professional is used to claim privileges or exemptions, or to advocate attitudes or traditions that would otherwise be rejected: e.g. the plea that traffic rules would be applied differently for people whose profession necessitates a lot of driving, or that fair play does not mean the same to a professional sportsman compared to a hobbyist.

Examples like these seem antagonistic to the original highbrow ideas of professionalism, or can make a caricature of it. But even without such extreme examples, several phenomena question the "old style", "pure" conception of professionalism. One is that traditional professions like medicine cannot be exerted without taking into account a wide range of influences and contexts that put pressure on the idea of professional autonomy. The passive, incompetent patient who was unable to define her own needs, has in some cases evolved to a client or partner with whom one has to negotiate about the presence and nature of a problem, about the desirability of different scenarios, and about the terms, circumstances and prices of the treatment (Stapel 2013). The individually operating professional with his individual client has in many cases been transformed into a member of a team or organization, directed and supervised by managers. These managers often do not belong to the same professional groups as their collaborators. Management may even be considered as a profession in itself, with its own set of competences and its own claims of autonomy. Professional managers should be able to run a school as well as a hospital, a chemical factory as well as a chain of supermarkets. Besides the manager, there are other colleagues in the organization with different occupational backgrounds, the expertise and operating modes of which have to be taken into account. And besides the immediate client or patient, external third parties may interfere in decisions about the financing or execution modes of projects and operations. This may be a threat to the idea of professional autonomy, or even make that "the contexts of work actually undermine the profession's fundamental purposes and its standards of quality and ethical practice" (Colby and Sullivan 2008, p. 408).

Add to that the striving for a professional status by other occupations: some with a highly intellectual character, some more skills-based, and a quasi-continuous spectrum in between. The degree of exclusivity of their skills and knowledge may differ widely. The organizational context in which they work may be very diverse: as individual service providers with individual clients; as employees of industrial or commercial companies; as public servants; etc.…. They may or may not have some degree of autonomy or protection towards their clients or employers. They may or may not have regular formal or informal contacts with colleagues having similar functions in other organizations. In short: the degree in which they meet the traditional criteria of the ideal type of professionalism, may vary largely.

Confronted with these deviations from the traditional ideal type of professionalism, different reactions are possible. Mirko Noordegraaf (2007) distinguishes three possible approaches:

– either one sticks to the traditional definition of professionalism. There can be no real professionalism outside these well-defined and well-organized traditional domains. Even if they work in contexts with interferences by management, consumers or other stakeholders, professionals must keep their autonomy. Noordegraaf refers to this as *purified professionalism*;
– or one accepts a form of *situated professionalism*: the organizational context in which many professionals work, is recognized and accepted. The traditional idea of elite professionalism has to be broadened to include experts;

– or one yields to the observation that the idea of professionalism is shifting, and that a strict definition has become impossible. Forms of *hybridized professionalism* arise, in which the relatedness to outside worlds is part of the professional identity. Interdisciplinarity, contextuality and interactivity become part of professional work. The professional's performance is multi-facetted; the awareness of this puts the professional in a network with other professionals stakeholders.

Several other scholars have made similar analyses, using a different terminology, but essentially dealing with the same questioning. Here are a few examples.

Donald Schön (2001) used the term *reflective practitioner* for describing the new professionals who are confronted with a *new epistemology of practice*. The traditional rigorous professional practice "depends on the use of describable, testable, replicable techniques derived from scientific research, based on knowledge that is objective, consensual, cumulative and convergent." But real world problems do not come well formed. New professionals do not just solve well defined problems: they are also involved in the process of constructing the problem to be solved. In this process, they must be open to "artistic, intuitive processes which bring to situations of uncertainty, instability, uniqueness and value conflict" (Noordegraaf 2007, p. 774). When facing a situation that is puzzling, unique or conflicted, reflective practitioners should be "able to turn thought back on itself, surfacing, criticizing and restructuring the thinking by which they have spontaneously tried to make the situation intelligible to themselves" (Schön 2001). This reflection-in-action puts pre-established paradigms under pressure, and confronts them with *tacit knowledge*; the input of third parties can in these instances be illuminating.

Edgar Burns (2007) focuses on the use of the term *post-professionalism*. The "post" in this term is an indication of the fact that the traditional conceptions of professionalism have become empirically inadequate; but it also reminds of movements like post-modernism, post-structuralism,… in philosophy and sociology: movements fundamentally questioning "narratives and discursive truths". Similar to Noordegraaf's notion of hybridized professionalism, the use of post-professionalism tends to include the different networks and relationships surrounding professional work: relationships with governments, business, and the voluntary or not-for-profit sector. On the one hand, this is a critique of the straightforward functionalist view on professionalism. On the other, there is also some sympathy with professionals: the "rules and expectations that are imposed on the professional by the public, governmental regimes and bureaucratic organizations, often entail huge compliance costs without – for the majority of practitioners – making a practical difference to the level of performance" (Burns 2007, p. 5). The "post"-thinking method is undoubtedly valuable in questioning paradigms and rhetorics, especially when they seem laden by suspicions of privileges and power. But after the "deconstruction" of the old concepts, the reconstruction of alternatives is difficult, fraught as it is by the uncertainties, precautions and auto-criticism that are inherent to the method itself.

Andrew Jamison et al. (2011) situate science and technology in cultural and historical perspectives, resulting in a form of *hybrid imagination* that is in line with Noordegraaf's idea of *hybridized professionalism.* Scientific and technological

professionals are invited to give up isolationism and hubris, and to acknowledge and foster the contextualized knowledge that is necessary to function properly with a sense of cooperation and social responsibility.

A provisional conclusion can be that, due to the changes in the landscape of professionalism, the traditional idea of professionalism still figures at the background of the reflections, as a kind of ideal type. Attempts to advance the discussion, taking into account the multitude of new would-be professions and the changing circumstances in which even very traditional professions actually operate, will often refer to that ideal type. The ideal type had the advantage of conceptual clarity, at the expense of eventually getting alienated from real life practice. Other approaches may have more empirical support, or may be more philosophically nuanced and critical, thereby risking to become confused, or at least: to lose visibility as a clearly set standard. Moreover, ordinary language seldom bothers about the results of semantic discussions about the proper meaning of terms. If – to say it with Wittgenstein – "the meaning is in the use", a "declaration of invalidity" of certain uses of the word professionalism may appear in the end rather fruitless…

On Keeping Focused…

One of the key elements in discussions about professionalism is the idea that the aim of professions *as a group* (even if they are not formally organized) is the pursuit of some important public good: be it health, justice, knowledge, etc.… At the same time, professionals *as individuals* are often seen as experts, valued for their knowledge and skills that they can put at the service of their individual clients, and their needs, desires and preferences. At first sight, both pictures seem equivalent. Yet it deserves further inquiry whether the aggregated needs, desires and preferences of clients are compatible with, promote or constitute the common good. Similarly, it can be questioned whether the aggregated microrational actions of the experts result in an evolution towards the common goal on a macrorational level. And finally, who is best placed to judge about the common good: the professionals (individually or as a corps), the clients, or other instances?

An outspoken example of the tension between the exercise of the technical expertise, and the attainment of the public good, was Albert Speer's self-defense for his functioning as "Hitler's architect" and (1942–1945) Minister of Armaments and War Production. His plea was that he considered himself as a *pure technician*, solely concerned with his technical skills, and that he had mentally kept his functioning as a trained architect separate from the moral implications and political reflection about the overall goals and consequences of Nazism (Sammons 1993, p. 179). In a memory to Hitler, he wrote:

> The task I have to fulfill is an unpolitical one. I have felt at ease in my work only so long as my person and my work were evaluated solely by the standard of practical accomplishments (Sammons, p. 190).

It was only later, in prison, that he realized that "becoming a human being requires stories and images a good deal richer than professional ones" (Sammons, p. 193). Traditionally, this example leads to discussions about the fragmentation between *acting as an architect* and *acting with respect for human dignity*. Reasserting oneself as a moral being then may require a "rebellious ethics", flirting with the question whether one can be obliged to act heroically. Sammons however refuses this line of defense: Speer didn't even act as a good architect, because his very own architectural insights unmasked Hitler's "lack of concern for the social dimensions of architecture" (Sammons, p. 185). Being a good architect would include working according to the internal values of architecture, whereas Speer, even in his building activity, was guided mainly by external concerns. Architecture could have given him a morality that Speer failed to understand…

In the context of law, Bradley Wendel (2005) takes a stance against the view that professionals are mere expert agents acting in the name of their clients. Lawyers have "to apply the law to her client's situation with due regard to the meaning of legal norms, not merely their formal expression". As the internal *raison d'être* of law is to serve the functioning of good institutions, lawyers should not participate in operations destined to subvert this cause. Law is "worthy of being taken seriously, interpreted in good faith with due regard to its meaning" (Wendel 2005, pp. 1168–1169). The good professional is – according to Wendel – not just a person knowing all the tricks and maneuvers with which the clients' interests can be pursued, but an expert working at the service of justice. And probably law is an eminent example of an area where the aggregate of the interests of individual clients does not automatically coincide with "justice" as a societal value… Similar observations can be made in fields like accountancy, salespeople,…: even if in each individual situation optimal use is made of technicalities on a micro-scale, this does not necessarily guarantee optimal effects on the macro-level.

In his studies on social work, Harry Kunneman (2007; also Driessens and Geldof 2008) too takes a stance against professionalism being reduced to mere technical expertise. Social work is the domain par excellence where a merely cognitive-technical expertise may be blind to moral and existential dimensions of a situation. Where professionals experience this tension, they can either adapt to the rules and structures of the organization, thus shifting responsibility towards higher levels in the organization. A second strategy may consist in the professional – on her own initiative, and often unknowingly to the organization – adding a complement to the services she is officially supposed to deliver. In some instances, where such services seem to imply too personal a relationship, this may even be interpreted as "unprofessional". Ideally, forms of *normative professionalism* can be developed, where the gap between the "system world" (the way the situation is perceived and framed by the professional apparatus) and the "life world" (the way the situation is lived by the client) can be bridged. For the further development of his views, Kunneman refers to social theorists like Habermas, Giddens and Castells, especially concerning their critique on the narrow view on humans that reduces them to beings who are to be empowered to become production and consumption oriented autonomous individuals. Instead of that, moral involvement, respect for existential values and attention

to relationships should become part of real professionalism, and thus help the profession to keep in touch with its proper objective: the well-being of people.

Taking fields like medicine and clergy as examples, Anne Colby and William Sullivan (2008, pp. 414–415) issue a warning against "misalignments": these may be caused when "extrinsic rewards [can] overwhelm and even actually undermine the ultimate purposes of the profession" or when there is a lack of "deep engagement with the profession's public purposes, along with a sense of meaning and satisfaction from one's work that is grounded in or aligned with those purposes." Evaluation and promotion criteria (and in general: criteria for recognition of the quality of work) may be diverse, and sometimes difficult to combine. When people experience that they are evaluated on criteria that differ from what they perceive as being adequate for the contents of their job, they may either adjust to these external criteria (sometimes at the expense of properly functioning in the job they were hired for), or be left behind with the feeling that their superiors are either incompetent or dishonest in judging what they do. Especially in competitive environments, *survival of the fittest* may lead to an adaptation of the individual's behavior to the survival criteria. Whether these criteria correspond to the ultimate purpose of the activity or the profession, is not always self-evident. In a context of financial management e.g., Ian Herbert refers to the possibility that knowledge workers may be driven "towards competitive advantage […] in which process controls and performance measures will ultimately win out over more subjective notions of 'doing a good job'" (Herbert et al. 2012, p. 54).

For engineering, threats for the over-all purpose of the profession by microrational or external influences can be found in cases of planned obsolescence: products may be designed to have a limited useful life, either by wear, by becoming unfashionable, or by being outdriven by newer products with which they are no longer compatible (Dannoritzer 2010). Products may also be unnecessarily complex, or equipped with a multitude of possibilities that the majority of clients do not need and will never use; yet finding old-fashioned or simpler apparatus may be virtually impossible. A market-driven industry may also focus more on luxury products for a wealthy group of customers, thereby neglecting more fundamental needs of larger and more needing populations.

Finally, if keeping focus on the ultimate purpose of the profession is a key element in the debate on professional ethics, a serious question is raised by Carl Mitcham (2009), especially in the context of engineering. Attempts to indicate the ultimate purpose of engineering can be found on different places. Adam Briggle and Carl Mitcham (2012, p. 294) refer to the traditional definition of engineering formulated by Thomas Tredgold (1828), when he was president of the Institution of Civil Engineers. He defined engineering as:

"… the art of directing the great sources of power in nature for the *use and convenience of [human beings]"* (our italics)

IEEE, in its Mission Statement and Vision Statement, declares:

"IEEE's core purpose is to foster technological innovation and excellence *for the benefit of humanity*," and "IEEE will be [...] universally recognized for the contributions of technology and of technical professionals *in improving global conditions*" (our italics)

In its Code of Ethics, IEEE wants engineers to "take responsibility by making decisions consistent with *safety, health and welfare of the public*". And also in other texts reflecting on the function of engineering, the ultimate purpose is usually defined in terms of human wellbeing, e.g., Allison Ross and Nafsika Athanassoulis in a study of the social nature of engineering in a context of risk taking:

> …the chief good internal to the practice of engineering is safe efficient *innovation in the service of human wellbeing* and that this good can only be achieved where highly accurate, rational decisions are made about how to balance the values of safety, efficiency and ambition in particular cases (Ross and Athanassoulis 2010, p. 159 – our italics).

Be it with slightly different words, all these sources seem to agree on engineering having as its ultimate purpose some form of human wellbeing. There can be – of course – discussion among techno-optimists and techno-pessimists about whether engineering or technology, in their final consequences, actually promote the human good. But even without going into that fundamental debate, Mitcham (2009) points to a major difference between engineering and some of the other traditional professions. As "human health" is the core business of medicine, medical students will – together with their courses on anatomy, pharmacology etc.… – acquire a robust view on what constitutes "health". And a typical law school curriculum will include a sound introduction into procedural justice, which is the raison d'être of their profession. One can, of course, question whether this makes these professionals the sole adequate instances to judge about how health or justice can be pursued (actually, the implementation of their codes of conduct suggests that there are external boundary conditions within which their conception of their ultimate good should be framed). Contrary to what seems the case for medicine and law however, engineering education often pays little attention to reflection on the alleged ultimate purposes of the occupation: what constitutes "safety, health and welfare", or how the "balance of values" should be reached or evaluated. The social construction of safety, health and welfare is a societal process that is difficult to grasp, and in which "engineers *qua* engineers are no more qualified to make such determinations than anyone else; they legitimately participate in making such determinations, but only as consumers, users, and citizens" (Mitcham 2009, p. 349). Definitions of the problems to solve, and decisions about how to solve them, do not belong to the jurisdiction of engineers alone, and it may be good to ask if they would be the most adequate judges. One can here compare with Nicolas Rescher's remark about the activity of scientists: "As war is too important to be left to generals, so knowledge is too important to be left to scientists and scholars without, at any rate, moral checks and balances" (Rescher 1987).

Beyond Ordinary Morality?

In Chap. 4 of this book, Michael Davis defines a profession as

> a number of individuals in the same occupation voluntarily organized to earn their living by openly serving a moral ideal in a morally permissible way beyond what law, market, morality, and public opinion would otherwise require (Davis 2015).

The question of the "moral ideal" in professions has been commented on in the previous section of this chapter. In this last section, the last part of Davis' definition will be dealt with: "… beyond what law, market, morality, and public opinion would otherwise require." This expression seems to presuppose the idea that the ethical evaluation of certain behaviors of professionals is founded by the idea of "professionalism" itself.

Of course, one can find many examples of types of behavior that would be evaluated differently, depending on whether the person in question is considered as a professional or not. In an attempt to circumscribe professionalism by listing a series of behaviors that would be deemed unprofessional, Erde (2008, pp. 14–15) indicates that some of these instances of unprofessional conduct cannot really be called unethical: among them misplaced forms of humor, or e.g. a doctor who would stand smoking at the entrance door of a hospital. Expectations about confidentiality may be different depending on the professional status. Boucher (2007) even refers to cases where compliance to rules of professional deontology may lead to decisions that would go against ordinary moral intuition.

Pragmatically and empirically speaking, there seems to be a professional ethics that may differ from ordinary morality. The foundation of this specificity however is less obvious. Starting from a distinction made by Boucher (2007), the following lines of argumentation can be seen:

Contractualist Arguments

When an individual voluntarily accepts to take up a professional role, she also accepts the complex of obligations, benefices and privileges that go with that role. This is clearly visible in contexts where professionalism is strictly regulated, e.g. in professional organizations with a code of conduct, or where an oath is part of the membership rituals (in religious orders, the "oath" sealing the membership of candidates, is called "profession"!). Such an oath or code of conduct may moreover be part of the social contract by which the professional group acquires its status in society.

Where professionalism is not organized in this way, the commitment of the practitioner may be formalized in a contract (employment contract, business contract,…), or simply by accepting to carry out a task in an environment where certain rules prevail. But also informally, creating the perception that one can deliver services "on a professional level" (or failing to adjust false perceptions in this regard) may entrain moral obligations: be it in cases that are not governed by formal regulations, or when one deliberately choses to keep things informal.

Boucher (2007) extends on some possible criticisms against this contractualist view (who are the contractants? and can one legitimately make a promise that may imply actions that would elsewhere be illegitimate?). Besides these, the idea of a "contract" presupposes that the contractants have equal liberty to accept or refuse it: a presupposition that can be severely questioned, especially when some of the stake-

holders are dependent on the others' services (as can be the case for professions). Whereas contracts imply (free) mutual agreement among contractants, the mere (implicit or explicit) unilateral *promise* of a quality of service can generate moral obligations, even without formal acceptance by the other party.

Fiduciary Arguments

A *fiduciary* argument points to the fact that obligations can be generated by the trust that clients, patients, and even society put in professions and professionals. For domains that may be of vital importance, we rely on the capacities and good will of experts. In this argument, two poles appear: the *capacities* of the professional on the one hand, and on the other hand the *dependence* (or even vulnerability) of the receiving parties. Organized professions can be an answer to this dependence, but the dependence would exist also without these organizations. And similarly, the (intellectual, physical, skills-related) capacities can be present with as well as without organized professions; professions can make a difference where legal authority is concerned.

Following Levinas' philosophy, the confrontation with the dependence and vulnerability of "the other" is the *fait primitif* of existence and therewith also responsibility (Levinas 1982). Responsibility grows when the other cannot but trust in one's capacity and willingness to take care of a situation; in cases where trust is less based on dependence, the contractual or promise-based logic reemerges. In this view, when faced with questions of vital importance, the obligation to use one's capacities to deal with it cannot be brushed aside by the mere argument that one is not a professional. For a person with adequate capacities, the obligation to take care of an emergency situation also stands without her officially recognized professional status. In less urgent situations, a person with sufficient capacities can shift responsibility towards a "professional", if such a professional is at hands; this however would be based more on the contractual or promise-based argument, than on the fiduciary.

Teleological Arguments

Finally, specific professional ethics could be supported by *teleological* arguments: the important common good purpose that professions are to pursue. The goals of professions, justified as they are, would legitimate the means that are necessary to pursue that goal. Boucher (2007) dissects this argument into four steps: (1) the acts of a professional are justified by professional rules or obligations; (2) these rules or obligations are justified by the professional's role; (3) this role is justified by the (institutionalized) profession; and (4) the profession is justified by its "ultimate purpose": the common good that it is supposed to serve.

It deserves careful attention to examine whether, in the trickling down from the (undisputable?) good objectives to the very concrete behaviors that are expected from a real professional, the rules of necessity are followed. In the concretization of expected techniques and procedures that should contribute to the common good, rules may appear that can be unnecessary, counterproductive, or at least questionable. And besides sometimes being unnecessary, they may also be insufficient: see the comments in the previous section on how professional rules may fall short in attaining the good that professions aim at, on how nowadays professionalism has to deal with external expectations that may divert from the profession's goals, on how sticking to merely technical micro-rationality – even if it is highly dependent on professional expertise – may "miss the point" of the profession's ideal purpose, and on how the professionals themselves may or may not be good judges of what the ultimate purpose can be and imply.

A more fundamental remark on this line of legitimation is the question whether the aim justifies the means. Can one accept that otherwise illegitimate actions are undertaken, even if they are well-intended and covered by a rule-utilitarian logic? A second critique points to the fact that a profession may be a rather composite complex of different roles with different purposes, and that the teleological justification of professions is therefore underdetermined. And finally: if the norms and rules of a profession are justified by the profession's ultimate purpose, this ultimate purpose in itself can only be justified by ordinary morality (Boucher 2007).

Conclusion

The tendency of these reflections is that attempts to justify a professional ethics on other grounds than ordinary morality, do in the end often fall back on principles of everyday ethics. This is not to deny that there may be rules or expectations that are specific for professionals. However, in the cases where these rules or expectations differ from what would be used for lay people, the basis for these deviations seems to rest on principles that are accepted in very common ethics too: the obligations that are created by making a promise, the responsibility that results from having the capacities to help – especially in situations where people are dependent and vulnerable –, or the pursuit of an important societal good, where – it is true – a rule-utilitarian approach may lead to other conclusions than act-utilitarianism. Claims for very specific rights or duties that would be linked to the idea of professionalism, deserve to be examined very critically.

The self-evidence of choices that are made within a professional paradigm, may meet resistance in a larger audience. Lay people may have other preferences than professionals. The choices professionals have to make recurrently, may be once-only events for lay people; the emotions and resistances that lay people experience in these cases, may have worn off in the hearts and minds of the professionals. In such instances, communication can be very important; and this may result in rethinking practices that were undoubtedly well-intended, but the efficiency or adequacy of which can from time to time be questioned.

It can be helpful to see professions as instruments, developed and used for well-defined purposes. But like in all instrumental rationalities, the relationship between the means and the goals should be monitored carefully: are the means adequate and efficient? And what are the side-effects? Building wastewater treatment plants can be a good measure to protect environment, but is it sufficient and efficient to make this the automatic choice? People may feel safer if they possess and know how to handle a weapon; but does one get a safer society when everybody is equipped with weapons? What about the possibility of means-end-inversions? A professional security corps may be instrumental in dealing with situations where people feel insecure, but does the security corps (as a corps) have interest in creating a safe society? Organizing things professionally and generalizing this choice, may change society in a way that may be unintended and unforeseen.

Professions and professionals: we need them. We trust them. But we have to be careful to keep them on the right track…

References

Armstrong, L. (2013). Interview with Oprah Winfrey. Transcript on http://www.bbc.co.uk/sport/0/cycling/21065539

Boucher, F. (2007). *Le problème de la moralité de rôle en éthique professionnelle*. http://www.intranet.idea.ulaval.ca/Documents/FB-role%20EP.rtf. Consulted 18 Aug 2012.

Briggle, A., & Mitcham, C. (2012). *Ethics and science. An introduction*. Cambridge, UK: Cambridge University Press.

Burns, E. (2007). Developing a post-professional perspective for studying contemporary professions and organisations. *Proceedings conference on critical management studies,* University of Manchester, July 2007. http://www.mngt.waikato.ac.nz/ejrot/cmsconference/2007/proceedings/newperspectives/burns.pdf

Colby, A., & Sullivan, W. M. (2008). Formation of professionalism and purpose: Perspectives from the preparation for the professions program. *University of St. Thomas Law Journal, 5*(2), 404–427.

Dannoritzer, C. (2010). The light bulb conspiracy. Documentary available at: http://dotsub.com/view/aed3b8b2-1889-4df5-ae63-ad85f5572f27

Davis, M. (2015). Chapter 4: Engineering as profession: Some methodological problems in its study. In S. H. Christensen, C. Didier, A. Jamison, M. Meganck, C. Mitcham, & B. Newberry (Eds.), *Engineering identities, epistemologies and values. Engineering education and practice in context*. Springer.

Didier, C. (2015). Engineering ethics: European perspectives. In J. Britt Holbrook and Carl Mitcham (Eds.), *Ethics, science, technology, and engineering: A global resource* (Vol. 2, pp. 87–90). Farmington Hills: Macmillan Reference USA.

Driessens, K., & Geldof, D. (2008). Normatieve professionaliteit in het sociaal werk. *Alert, 34*(2), 66–75.

Erde, E. L. (2008). Professionalism's facets: Ambiguity, ambivalence, and nostalgia. *Journal of Medicine and Philosophy, 33*, 6–26.

Evetts, J. (2003). The sociological analysis of professionalism: Occupational change in the modern world. *International Sociology, 18*(2), 395–415.

Greenwood, E. (1957). Attributes of a profession. *Social Work*, July 1957, 45–55. Reprinted in: Johnson, D. G. (1991). *Ethical issues in engineering* (pp. 67–77). Englewood Cliffs: Prentice Hall.

Herbert, I., Lambert, S., & Rothwell, A. (2012). Professionalism in the 21st century: Symbol or substance? *Financial management*, April, 54–55

IEEE (Institute of Electrical and Electronics Engineers). Code of ethics. http://www.ieee.org/about/ethics.html. Accessed Mar 2015.

IEEE (Institute of Electrical and Electronics Engineers). Mission and vision statement. http://www.ieee.org/about/vision_mission.html. Accessed Mar 2015.

Jamison, A., Christensen, S. H., & Botin, L. (2011). *A hybrid imagination. Science and technology in cultural perspective* (Synthesis lectures on engineers, technology, and society, Vol. 12). San Rafael: Morgan & Claypool Publishers.

Kunneman, H. (2007). Sociaal werk als laboratorium voor normatieve professionalisering. *Ethische Perspectieven, 17*(2), 92–107.

Levinas, E. (1982). *Éthique et infini*. Paris: Fayard.

Mitcham, C. (2009). A philosophical inadequacy of engineering. *The Monist, 92*(3), 339–356.

Noordegraaf, M. (2007). From "pure" to "hybrid" professionalism. Present-day professionalism in ambiguous public domains. *Administration and Society, 39*(6), 761–785.

Rescher, N. (1987). *Forbidden knowledge*: *Moral limits of scientific research*, as quoted in: Oger, E. Hoeveel waardevrijheid? In: P. Reynaert (Ed.). *Wetenschap en Waardevrijheid* (p. 35). Leuven: Garant, 1993.

Ross, A., & Athanassoulis, N. (2010). The social nature of engineering and its implications for risk taking. *Science and Engineering Ethics, 16*, 147–168.

Sammons, J. L. (1993). Rebellious ethics and Albert Speer. (Reprinted as: *Albert Speer: ethics, architecture and technology*). In: E. Katz (2006). *Death by design: Science, technology and engineering in Nazi Germany* (pp. 179–200). New York: Pearson Education.

Schön, D. (2001). The crisis of professional knowledge and the pursuit of an epistemology of practice. In: J. Raven, & J. Stephenson (Eds.). *Competence in the learning society* (pp. 185–207). New York: Peter Lang Publishing. http://www.heacademy.ac.uk/

Stapel, M. (2013). Beroepsethos versus patiëntenautonomie binnen de plastisch-esthetische chirurgie. *Filosofie en Praktijk, 34*(2), 25–40.

Tredgold, T. (1828). Description of a civil engineer. *Minutes of the Proceedings of the institution of civil engineers*, Vol. 2 (1827–1835), January 4, pp. 20–23, as quoted in Briggle & Mitcham (2012), p. 294.

Wendel, B. (2005). Professionalism as interpretation. *Northwestern University Law Review, 99*, 1167–1233.

Wilensky, H. L. (1964). The professionalization of everyone? *American Journal of Sociology, 70*, 137–158.

Martin Meganck M.Sc. in Chemical Engineering from Ghent University, Ph.D. in Chemical Engineering and M.A. Moral Theology both from KU Leuven. Lecturer in Philosophy and Ethics in the Faculty of Engineering Technology, and researcher at the Center for Science, Technology and Ethics and the Theological Faculty of the KU Leuven. Teaching areas: Philosophy of Science, Philosophy of Technology, Professional and Business Ethics. He was co-author and co-editor of *Philosophy in Engineering* (Academica 2007) and *Engineering in Context* (Academica 2009).