Chapter 6 Engineering and Business Ethics: Revisiting the Higher Aims of Professionalism



Christelle Didier

Abstract The distinction between professions and occupations has been a highly controversial statement in the academic literature since its emergence. Many scholars have taken it as a fact strengthened (reflected) by the common usage. Others, aware of the difficulties of this distinction have been defining and redefining its borders theoretically. Others, who have found this distinction irrelevant or biased, have considered it as the hallmark of US cultural imperialism or as a means to hide the protectionist attitude of some privileged occupational groups behind a virtuous project (the « higher aims » of « professionalism »). Many contemporary discussions in the U.S. about engineering and business ethics take the concept of profession as central to the debate. Michael Davis aims to found engineering ethics « everywhere », by enlarging the concept of profession to engineers « everywhere », i.e. beyond the cultural and linguistic specific US context. Rakesh Khurana in turn whose goal is to re-moralize business, wants to make business a true profession, as the founders of the first U.S. MBA aimed at. Between the obviousness surrounding the concept and idea of profession and the rejection of any kind of relevance, the author of this chapter looks for a third way. She invites to replace the (Anglo-American) distinction between profession and occupation in a larger context, through a socio-historical investigation into the construction of several professional models which have structured western Europe since the Middle Age, thereby contributing to open new paths to the cross-cultural scholarly discussions about engineering and business ethics.

Keywords Engineering ethics \cdot Business ethics \cdot Religion \cdot Culture \cdot Profession \cdot Professionalism

C. Didier (🖂)

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Département des sciences de l'éducation UFR DECCID, Université de Lille, Villeneuve-d'Ascq, France e-mail: christelle.didier@univ-lille.fr

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6.1 Introduction

In 2008, Michael Davis, Professor at Illinois University and a respected scholar in the study of engineering ethics, claimed that engineers should be considered as professionals, i.e. members of a profession, all over the world, and not only in the US (Davis 2008). But he noted that the generalization to "everywhere" has been facing difficulties because the definition of engineering as a profession was not yet accepted in some countries. The reason he gave was that ordinary people as well as engineers themselves were lacking a proper definition of what it means to be a professional, and this applied even to scholars, especially in social sciences. According to him, sociologists have been unable to say if engineering was or was not a profession everywhere because of their failing to yield a satisfactory conceptual definition of profession.

With the help of a "Socratic" approach to philosophy, Davis coined a definition of profession as "a number of individuals in the same occupation voluntarily organized to earn a living by openly serving a moral ideal in a morally-permissible way beyond what law, market, morality and public opinion would otherwise require" (Davis 1997). According to him, with this definition in hand, social scientists should be able to answer "yes" to the question "Is engineering a profession everywhere?" (Davis 2008). The consequences of this acceptation would be major on ethics education, because recognizing engineering as a profession, such as he defined it, would enable to go beyond the mere teaching of a code of ethics. It would also give a reason for engineers to obey the standards gathered in the codes.

In 2007, the American sociologist Rakesh Khurana, currently the dean of the prestigious Harvard College, published a book that was welcomed with enthusiasm and received several prizes in the US (Khurana 2007). The outcome of his ambitious socio-historical investigation was that business schools in the U.S.A. had failed to fulfill their original mission which was to pass on to managers the desire to pursue "higher aims" and make management a true profession. Instead, according to Khurana, business schools had over time lost sight of their goal. And managers had lost their legitimacy in the face of a widespread institutional breakdown of trust and self-policing in business (Khurana and Nitin 2008). Business schools transformed themselves into mere training organizations dedicated to delivering diplomas and purveying networks to students, eager to "sell themselves to the highest bidder. Khurana's book was not only a historical investigation into the emergence of business through its professionalization.

For Davis as well as for Khurana, being a member of a profession, carrying on an activity which is considered a profession or professionalizing one's occupation, is a key issue to think ethics education for engineers and managers and to (re-)moralize business. Since the early professionalization movements of the nineteenth century in the US, some scholars have considered the issue of being or not being a profession as unavoidable in dealing with ethics education. Their way to approach professional ethics embraces the premises of academic professional ethics pioneers, such as US philosopher Tom Beauchamps and Quaker theologian James Childress (Beauchamp and Childress 2001 [1979]). Co-authors of the world's premier medical ethics handbook for students, reedited several times since then, translated into many languages and still in use today, they both have had a great influence on all the academic field of professional ethics. According to them, without any doubt, the concept of profession is necessary to study ethics: "we need a more restricted meaning for the term profession in order to appreciate the context of professional ethics" (Beauchamp and Childress, p. 6). But, other scholars have considered the professional paradigm as inappropriate, useless or parasitic to the discussion.

It has especially been the case in the fields of business and engineering, which are our focus here. Our aim in this chapter is not to participate in this endless controversy over engineering and business being or not being professions, or over the need (or not) of a well-defined concept of profession to discuss ethical issues and to set up ethical education. Our aim is to get a better understanding of the historical development of the relationship between ethics and occupations and/or professions. I believe that it is a relevant goal for ethics research and teaching, especially in a global context, to study the cultural environment into which research and education take place today, but also to study the emergence of the professional paradigm and its relation to local/national issues, historical contingency and theoretical framework.

6.2 Profession As a Multidimensional Controversial Issue

6.2.1 Linguistic Dimension

The task of defining professions has been taken very seriously in social sciences in Great Britain and in the US since the beginning of the twentieth century. The first sub-domain of the academic field called "professional ethics" which has led to the creation of many top level conferences and specific academic journals, was medical ethics. The works of sociologists, like British Alexander Carr-Saunders and Paul Morris and American Talcott Parsons, have generally inspired the theoretical framework of medical ethics, and professional ethics. Carr-Saunders and Wilson stated that the distinguishing mark of a professional was the possession of "an intellectual technique acquired by special training", and that a profession could only be said to exist when there were "bonds between the practitioners, and these bonds [could] take but one shape – that of the formal association" (Carr-Saunders and Wilson 1933, pp. 200–298), but they did not provide a conceptual definition of the profession.

Although Parsons' works and his definition of a profession as the provision of a service, based upon a body of expert, scientific knowledge (Parsons 1968, p. 356) have served as references to many scholars, the search for a conceptual definition of the professions did soon become a problematic endeavor (Goode 1957). Scholars of

the professions neither agreed on the list of traits clearly separating the professions from other occupations nor on the list of undisputed professions. Moreover, outside of the English language areas, which were the linguistic context of the pioneers in this field, many scholars have not found it relevant either to study "the professions" or to conceptualize the word "profession".

David Sciulli, a US scholar of the professions, observed that "not a single continental language either before or after the Second World War developed indigenously a term synonymous with or generally equivalent to the English term 'profession'" (Sciulli 2005, p. 915). Not referring to the word profession might then depend on the absence of an equivalent term in another language. Sometimes there seems to be one, like the French word profession, but it is actually a "fake friend". Sciulli wrote that French sociologist Pierre Bourdieu considered the very term profession as a manifestation of Anglo-American cultural imperialism (Sciulli 2009, p. 13). Interestingly enough, Pierre Bourdieu and Loïc Wacquant actually used the expression "Anglo-American cultural imperialism" in their work and applied it to several concepts in the paper quoted by Sciulli (Bourdieu and Wacquant 1998). But they did not apply it to the word "profession" in their original French version, maybe (that's our hypothesis) because it would not be so meaningful for their French readers. On the contrary, they took the concept of profession as an example of Anglo-American imperialism in the English version of their work (Bourdieu and Wacquant 1999), as it might be meaningful to English readers (our hypothesis, again). Actually Bourdieu did not study the professions and would rather have used his concept of champ (field) to discuss such issues.

6.2.2 Political Dimension

Scholars who study the professions often recall the Latin etymology of the word, with pro- meaning « forth », leading to profess, which means, "to declare something publicly". Besides, they often recall the common language opposition between professional and dilettante or novice. Those for whom defining the professions and their distinctive features is relevant also often refer to a conference given in 1915 by Abraham Flexner, which they regard as seminal (Flexner 1915). In this conference entitled "Is social work a profession?", the US education reformer listed six criteria that he deemed essential in defining the boundaries of a profession. His criteria selection was based on what he designated as the "few professions universally admitted to be such, - law, medicine, and preaching". Flexner claimed that social work - as well as nursing and pharmacy - could not be seen as a profession but as a "mediating occupation, coordinating the activities of other professions". On the contrary, "with medicine, law, engineering, literature, painting, music, we emerge from all clouds of doubt into the unmistakable professions". Flexner's taxonomy generated many other demarcationist endeavors of the same kind. Also using the trait-approach, British scholars Alexander Carr-Saunders and Paul Wilson started their own historical works on the professions by establishing a list of occupations

which, to a greater or lesser degree, came closer to being a profession, i.e. closer, as they wrote, to the "ancient, learned and accepted profession of medicine, law and the ministry and university teaching" (Carr-Saunders and Wilson 1933, pp. v, vii). According to them these occupations had exhibited the same characteristics and patterns which were founded in their origins, nature and activity.

In a paper called "The Flexner myth and the history of Social Work", David Austin, a pioneer in Social Work research in the US, recalled that the 1915 conference was not given to a scholarly audience in a scientific congress. According to him its issue was not a scientific but a political one and the definition of profession given by Abraham Flexner was not the outcome of a concept construction making this conference. It was "a prime example of the extent to which untested social science pronouncements can become endowed with the weight and authority of scientific trust" (Austin 1983, p. 357). In 2001, Austin was the guest editor of a special issue on Flexner's conference, with included a reprint of the conference (Austin 2001). To date, this reprint is the journal's most quoted paper (google scholar, 1240 in 2017), whatever the critics made.

6.2.3 Theoretical Dimension

The disagreement about the relevance of the concept of profession can also be independent of the issues of translation or the difficult quest for its universalization. While the functionalists, who were prevalent among US sociologists in the twentieth century, opted for a definition of the professions that tends to essentialize them around certain core features, the proponents of symbolic interactionism, whose pioneers were also US scholars, saw in the professions activities that were evolving and developing in interactive ways, as a consequence of negotiations with their environment. Everett Hughes wrote, as early as 1951, that what was called a profession in English did not properly describe a body of occupations which should be distinguished from others: "The concept of 'professions' in our society is not so much a descriptive term as one of value and prestige" (Hughes 1994, p. 58). Before Bourdieu, Howard Becker had considered that the word profession matched with the definition given by Ralph Turner to "folk concepts" (Turner 1957), a concept which has a scientific value only as a belief to be analyzed and demands that sociologists take into account the gap separating it from the observable reality (Becker 1962).

Using the concept of profession is not only a question of language (of disposing of the signifier and the signified), it is also a question of theoretical framework. The need of a precise definition is also a question of framework. Thus, there are scholars who never questioned the reality of a specific type of occupations called professions, because they were developing their theories in an Anglo-American context, and have still contested the relevance of searching for a very precise definition of the profession, like Andrew Abbott (1983, p. 856). He wrote later that "Because the term 'profession' is more an honorific than a technical one, any apparently technical definition will be rejected by those who reject its implied judgments about their favorite pro-

fessions and non-professions. To start with definition is thus not to start at all" (Abbott 1991, p. 18). Michael Prichard, who co-authored one of the classic student textbook on engineering ethics (Harris et al. 1995) wrote in a later book that although "there are no accepted generally accepted definition of 'profession' or 'professional' this should not present a barrier to fruitful inquiry" (Pritchard 2006, p. 4).

Our thesis is that Khurana's project to professionalize business and Davis' design to extend worldwide the concept of profession he coined for engineers, do not need so much to be judged as being ideological, as an expression of imperialism or serving a hidden agenda. They have to be understood in their particular context and analyzed as belonging to a chosen theoretical framework. The difficulty for many non-US scholars to embrace, like Davis and Khurana, but also Childress and Beauchamp or Harris, Pritchard and Rabins, the professional paradigm is neither an accident nor the result of a temporary misunderstanding. The problem is deeper, because the core words used in their specific theoretical framework - and the framework itself – belong to a history of ideas, which is anything but universal. I believe that the controversies around the professional paradigm are worth being studied for anyone interested in professional ethics, because this work might enrich the crosscultural discussion on the ethical issues of many occupations, regardless of their being considered as professions in some societies or being contested professions like business and engineering. I am aware that the investigation into the story of the professional paradigm I propose, from a Western European point of view - and maybe at times only from a French point of view, is anything but universal.

What has been considered since the end of the nineteenth century in the Anglo-American world as an essential and structuring frontier between the professions and the other occupations is not a natural border. This demarcation is the result of one specific type of evolution of labor organization and industrial relationships, one type among others. In many other regions of the world, even within the Western world, the frontier between occupation and profession does not mean anything. But other dichotomies might have appeared, which are locally very meaningful, like the distinction in France between *cadres* and other categories of employees (Boltanski 1982). The word *cadres* comes from a post-Revolution military term for officers and non-commissioned officers (*cadre* also means frame) and started to designate employed engineers after the 1936 general strikes. Today it designates managers and many highly skilled employees who enjoy a large degree of autonomy, and it has become an unavoidable "social category".

Although not protected by law, it nevertheless has a legal status: an employee who is officially promoted *cadre* by her employer has different employment and pension rights. The usual translation of the term into executive or managers in English does render the term's full social and legal meaning. In a paper written for an English-reading audience, the French sociologist Luc Boltanski explained that although *cadres* was an obvious category for most people, "it [posed] a particular problem for sociology: that of its very existence. The 'native category', peculiar to France, is specific both by virtue of the term that designates it (there is no equivalent in English or in German for instance) and by virtue of the range of occupations it covers. It combines in the same aggregate social groups which are very different

from one another in most respect" (Boltanski 1984, p. 469). Unsurprisingly the *cadre* category has been a much more discussed by French sociologists in the twentieth century than the professions (Bouffartige and Gadea 2000). It is believed that an historical investigation can help us understand how the professional paradigm happened to structure the social space as it does today in the US, and thereby help us understand the way professional ethics also developed in various areas.

6.3 A Historical Perspective on Professional Models

6.3.1 The Catholic Model of the Body: The French corps d'état (The Estate System)

In feudal times, three orders structured the political life in Western Europe: the clergy (*oratores*), the nobility (*bellatores*) and the working people representing 90% of the population (*laboratores*), who were mostly famers. Each order had its responsibilities, privileges and special honors. This trifunctional organization which has been found in most Indo-European societies (Dumézil 1941) went through a period of crisis in the twelfth century. The living context in Western Europe changed, stimulated by a dynamic revival of a commercial economy, the development of trade, craft and the emergence of medieval universities. A higher consideration was given to labor which had long been despised, and considered a necessary evil tainted with the original sin, because located outside the two upper orders: clergy and nobility.

One of the references which founds the distinction between profession and occupation, which can be named a "sacred-profane" dichotomy after Durkheim (1915 [1912]), is an old opposition between mechanical arts (*artes mecanicae*) which were transmitted within the family or the workshop from master to apprentice or from parents to children, and the liberal arts (*artes liberae*) which were taught in specific places dedicated to the transmission of intellectual knowledge. But this distinction was only one of the several oppositions that structured medieval Europe.

The most fundamental one was between people having an *état* (or *métier*, estate in old English), i.e. having a qualification and belonging to an occupational community, and those without. This estate enabled people to differentiate one another, gave them an identity and distinguished them from the people without any social status, the marginals (Dubar and Tripier 1998, p. 33). But there was not much difference between the mechanical *métier* of those who made and sold their work within the crafts and the liberal *professions*, made up of intellectuals trained in the liberal arts and later getting a specialization, and whose services could be paid for (like medical practitioners or lawyers). Actually, all those who mastered an art whether acquired through apprenticeship or learnt through formal teaching were gathered in the same type of organizations. In France, these groups were called, until the French Revolution, *corps* (from the Latin *corpus* meaning body, translated by the generic term *guild* in English since the nineteenth). During the classical Middles Ages, civilian or ecclesiastic authorities in several Western European countries gave teachers the monopoly of conferring degrees. Masters and students gathered to pursue freely research and teaching. This gathering called *universitas* was soon recognized as an official scholastic *corps*. The master of *arts* degree became the equivalent of the masterpiece that enabled the *compagnon* (journeyman) to apply for a position of master in a *corps d'état* (craft guilds) (Le Goff 1980, p. 317). The development of the medieval university came from the need for skills in computation and reading, not for the clergy only but also to support the development of economy. Its vocational dimension, much discussed nowadays, was very present then: universities were probably "more vocationally-orientated in the Middle Ages than at any other time in their history" (Rospigliosi et al. 2016, p. 193). The research-oriented Humboldtian model, which is dominant today in many countries, is a concept of holistic academic education that emerged in the early nineteenth century only in Germany.

The Dutch historian William Sewel identified, beyond the various types of *corps* in medieval society (called *corps*, *ordre* and *communauté*, in French), the same "corporate idiom" i.e. "an expression of the *corps* as a moral community". Among their common traits, one was more specific to France, the legal recognition of the *corps*: they were organized by the State and the king alone was the guarantor of the universal law. The royal patent established the estate as a sworn body (*état juré* or *métier juré* whose status was called *jurande*) and transformed the community into a legal person, a subject of the king (Sewell 1980). Like Christ, the monarch had a double body: a natural (actual) one and a corporate (fictional) one, which was the aggregate of the king's subjects.

This model of the double nature body was rooted in the Catholic theology and the Christological dogma of the two natures of Christ. It also fitted the political doctrine of the time, which sacralized secular power. This model flourished better within a centralized vision of political life, already present in feudal times and which strengthened over time in France, a country characterized by a high degree of administrative and political centralization. The expression "political body" (*corps politique*) and "social body" (*corps social*) became very important in the political discourse of the Enlightenment and of the French Revolution.

The development of commerce and trade, the creation of the royal manufactories and the expansion of liberal ideas started to set out the end of the corporative model before its destruction by the Industrial Revolution and its abolition by the French Revolution and the 1791 law (Castel 1995). A new model of labor had already appeared since the fifteenth century with wealthy merchants in Flanders, England and Northern Italy organizing production chains in order to control the entire production process (Dubar and Tripier 1998, p. 30). Later on, Colbert, a finance minister of King Louis XIV created in the seventeenth century the Royal glass and tapestry manufactories as public commercial and industrial properties. They were granted a royal patent, which gave them an industrial monopoly to develop a strong national industry. In those manufactories co-existed the social functioning and stratification of the corporative model and new exemption rules meant to free the labor. Simultaneously, the first *Grand corps d'Etat* (with a capital E) were created in France.

Although a kind of proto-*Grand corps* had been organizing the corps of lawyers since the fourteenth century (Karpik 1999, p. 32), Colbert established this model as a typical French institution, not founded anymore on the transmission of traditions from master to apprentices, but based on science and rationality. The first two he created were engineering corps: a civil one, the *Corps des Ponts et Chaussées* (related to roads and bridges) founded in 1716, and a military one, the *Corps du Génie Maritime*. Others followed, administrative as well as technical ones, like the *Corps des Mines*. The distinction between *Grand Corps* and the other *corps de l'Etat* (still capital E), like the early *corps du Génie* created by Vauban in 1690, has always been a question of prestige and reputation only, two characteristics which are variable and subjective. Still today, there is no legal definition of what is a "*Grand*" corps.

When the *Revolution* took place, the corporative model was already weakened. The new society was not compatible with the existence of intermediary *corps* between the State and the citizens who were not "subjects" of the king any longer. All forms of *corps* were abolished in 1791, and Napoleon's armies disbanded them in most of the continental nations that they occupied during the next two decades. The university was abolished, as well as the faculty of medicine and the general hospital in the name of free exercise of medicine; the Catholic Church lost its privileges. But while the *corps de métiers* (also called *corps d'état*, crafts guilds) disappeared, the administrative *corps de l'Etat* organizing state employees have survived until today.

What today is still called *Grands Corps* (Conseil d'Etat, Cour des comptes, several General Inspections, and also several technical Grands Corps) became major institutions in the French society. Reluctantly, Napoléon re-organized the structuration of a few liberal professions such as the *Compagnies des notaires* and the *Bureau des avocats* (lawyers) with a state-controlled registration and codes of ethics without any force of law (Karpik 1999). Medical doctors who had embraced the anticorporation and liberal ideas of the *Révolution* were organized into an Order in 1941 only, in the troubled political context under the Vichy Government: actually, 9 of the 16 actual French orders were created and reorganized between 1941 and 1947. Their status was clarified by a decision made by the State Council (*Conseil d'Etat*) in 1961, making them private organizations in charge of a public service mission. The latest oders to be established were created in 2006 (nurses, physio-therapists and chiropodists).

After the *Révolution*, French historians coined the word *corporation* (still in use today) as a generic term to designate the various types of *Ancien Régime corps* that had just been abolished. Unlike the English "corporation" it has never designated, any society or economic entity. Despite the destruction of the *corps*, the French expression *corps d'état* (with a small "é") still designated in the middle of the nine-teenth century a community of individuals engaged in the same activity. Nowadays it is used only in the field of construction where an *entreprise tout corps d'état* is an all-trade company. The word "corporatism", also coined in the nineteenth century

designates a political ideology, unknown for a long time in the US, which developed at the end of the nineteenth century among French and German Catholic leaders whose goal was to find a middle way between liberalism and socialism (Wiarda 1996). The word has taken on a pejorative connotation and become a synonymous of the defense of private interests against the overall community interest.

6.3.2 The Collegial Model of Brotherhood in Germanic Law and Puritan Ethics

The generic term chosen by English historians to name what is called *corps* in French was also coined in the nineteenth century, but the translation is not accurate because "guild" designates crafts guild as well as the older religious non-professional guild, but also merchants guilds (still called guildes or hanse in post-Revolution France after their abolition). While the word corporation, made out of the oldest term corps, had clear Catholic origins and suggested an analogy between the king's body and Christ's body, the term guild conveys a very different connotation and comes from a very different etymology. Also spelled gild, it probably derives from the Anglo-Saxon root "geld" (to pay, contribute). The noun form of geld meant an association of persons contributing money for some common purpose; another etymology of geld is "to sacrifice, worship" (Richardson 2008). The first guilds, whatever their spelling, seem to have existed early in the history of western continental Europe: they were found for instance in the laws of Ina, king of Wessex in the seventh century (Stanley Jevons 2001 [1887]). They were formed for religious and social purposes (neither professional nor commercial). Historians also identified "firth" (peace) guilds operating in the medieval English towns. Contrary to the legally recognized French corps d'état, those guilds were voluntary in character. The most widely accepted theory among historians originates this model in pagan traditions of solidarity developed around sharing food and drinks (convivium) and mutual protection and defense in a spirit of revenge, while the corps might be a kind of survival of the Roman Empire's collegio.

The sociologists Claude Dubar and Pierre Tripier in their *Sociologie des professions*, the first French academic book with such an explicit title -, which is a landmark in this field of scholarly research in France (Dubar and Tripier 1998), identified an alternative to the Sewell corporative model. They found its best formulation in the work of German historian Otto Von Gierke on German cooperative Law (*Genossenschaftsrecht*) (1868, 1872, 1881). The authors chose the word *confrérie* (confraternity) to name this model whose roots are to be found more in the Scandinavian and Saxon worlds than in the regions influenced by the Roman Empire, like the south of France, Italy or Spain. They founded this alternative model on an analysis of several types of European organizations sharing similar traits.

In this model, the "profession" is considered as a self-governed community of equals in the same occupation. Access to the association is free and voluntary. An oath constitutes the confraternity of members who share the same values and are personally engaged. Decisions are based on consensus and do not take into account any outside or superior authority. Members have rights and duties, such as defending the group against outside attack. There is a "code of ethics" (actually bearing another name) including a moral discipline. The profession is understood as a personal vocation, a calling to follow God's will. There are a few common points between Sewell's "corporate model" and the "collegial one" coined by Dubar and Tripier, such as the existence of an oath and of a code of ethics, but their logics are deeply different from one another. In the *corps*, the oath resembles the monastic vows (to be obeyed rather than professed) and the code of ethics is more like an *esprit de corps*, an ethos, rather than a moral discipline meant to prevent an excessive status and power imbalance (Dubar and Tripier 1998, p. 39).

The first example developed by Dubar and Tripier is the "German version" of their alternative model. According to Von Gierke, Germany was characterized from the thirteenth to the sixteenth century by the creation of confraternal guilds, with a strong sense of egalitarian ethos, rooted in the oldest German traditions. Those guilds of monks, noblemen or craftsmen were in charge of their own affairs in their own territory. They organized a social order founded on the autonomy of local organizations in free towns, which was later codified in Germanic law. Princes were elected and gathered in a collegial council. In time of peace, the State did not have a unique head. In time of war, they chose among themselves the peer who would take over the high command. Some German people had a king, but also a prince elect: this model based on the freedom of the people and the sovereignty of the authority was as far from the Roman Republic as from the absolute monarchy. Germanic law was not imposed from above by the prince but derived from the practices and customs of the citizens.

Although this model of regulation had to face absolute monarchy in Prussia in the seventeenth century for instance and the inclusion of Roman Law, Gierke still identifies in the nineteenth century traces of this confraternal model in the constitution of the *Länder*. He also sees it in the proliferation of community education organizations, the which development of which faced more difficulties in France. This alternative model did not develop only in countries with Germanic Laws but also in other areas sharing a common ethos. The Protestant culture, with its defiance of established authorities and its valorization of an egalitarian ethos, has been particularly favorable to the development of this model, as well as a context of autonomous communes which developed independently from nobility, such as the German free-cities.

The second example developed by Claude Dubar and Pierre Tripier is the puritan community. The Puritans were religious dissenters who thought that Anglicanism, the *via media* between Protestantism and Catholicism adopted for personal reasons by the King of England in 1534, was too similar to Catholicism and needed to be purified. When they realized that James I, king of England (1603–1625), would not reform Anglicanism, they joined the Great Migration to the New World where they brought with them a collegial, self-organized model which had a great influence on the shaping of North America. They also founded a religious *état d'esprit* marked

by a sense of individual responsibility for each Christian in front of God, without channeling through a clergy endowed with a sacramental authority. For the Puritans, work was a "key to order and the foundation of all further morality" (Walzer 1965). And this inner-worldly ascetic attitude attributed by Max Weber to the first Calvinist entrepreneurs (Weber 1930 [1904–1905]) was actually the ethos of the whole community (Walzer 1965). According to the Puritans and also the Quakers, both following Martin Luther and John Calvin's ideas despite their different view on religious freedom, the Christian calling was not a condition of one's birth but a sacred task to select for oneself and a path toward perfection in one's earthly journey.

English casuist William Perkins was the most influential English theologian of the late sixteenth and early seventeenth centuries and wrote three treatises on vocations. According to him beggars' idleness was considered a soul-disorder, but the monkish kind of living was also damnable because it was not profitable for some society or body (Perkins 1626 [1605], p. 756). Perkins also made a distinctions between two sorts of calling: every Christian had a general calling, but few of them had a particular one which stood higher because it was "of the essence and foundation of any society": in the family, there was the calling of the master (as opposed to the calling of the servant), of the husband and the father (versus the calling of the child) and in the Commonwealth, the calling of the magistrate, church minister and physicians (versus the calling of the subject) (Perkins 1626 [1605], p. 758). This distinction between general and special callings can be seen as another root of the nineteenth century English language distinction between profession and occupation, less concerned with the nature of the knowledge (liberal or mechanical) than with a religion-founded commitment to community.

The contemporary English historian Rosemary O'Day detected in Perkins's discussion of particular vocations "several elements which later became associated with the learned profession" (...) At the root of this teaching was the belief that the call to profess and perform such a service came directly from God and that the accountability of the professional was to God" (O'Day 2000). Her thesis is that sociologists of the professions did not take enough into account the real history of the occupational groups, their actual activities and the inner differences between them because "they have been too readily absorbed by the model that they have constructed, which can bear little resemblance with the individual cases". According to her, they looked into the past for the origins of the present instead of understanding professions as historical constructs.

After quoting George Fox, the founder of the Religious Society of Friends (Quakers), she began her introduction discussion it: "George Fox *assumed* the existence of three learned professions – the clergy, the lawyer and the physicians" (our emphasis). Then she explained how contemporary historians and sociologists have derived the feature that they attributed to the profession from their observations and views of the nineteenth and twentieth century occupations called "professions" in North America. "Features that are seen distinctive in todays' world (such as autonomy or flexibility of work practices) seemed unremarkable in the 16th and 17th centuries" (O'Day 2000). She even remarked that if the "*continuum* method" was used to measure how closely an occupation matched the characteristics of the twen-

tieth century concept of professionalization, medicine should be considered as the last of the ancient professions to "be professionalized". Andrew Abbott also wrote that "English barristers do not necessarily train in university but rather by apprenticeship and eating dinners 'in hall.' American clergy do not generally have codes of ethics Yet both groups are unmistakably professions" (Abbott 1988, p. 8).

The peculiar occupations which were considered, in Perkin's context, as answers to special callings, because they were supposed to serve an "essential function for society", are what Flexner named the "few professions universally admitted to be such" (Flexner 1915) and sociologists Carr-Saunders and Wilson, the "ancient, learned and accepted profession" (Carr-Saunders and Wilson 1933). Their members, the professionals, have later on been described as pursuing "higher aims" following the functionalist theory developed by Parsons, but even more by the early ethicists such as Edmund Pellegrino. A major US pioneer of bioethics, Pellegrino was the world second lay president of a Catholic university. He considered that the professionals' claim "[lied] less in their expertise than in their dedication to something other than self-interest while providing their service". According to him, these occupations "are in this sense "professed" i.e. publicly committed to the welfare of those who seek their help. They thereby become ethical enterprise" (Pellegrino 2002, pp. 378–379). This is close to Michael Davis' position concerning engineers, their profession and their ethics.

6.4 Beyond Misunderstanding

6.4.1 Western Scholars vs. Western Scholars

In 2009, I received the reviewers' comments on a paper proposed for publication after the Delft Workshop of Philosophy and Technology (which initiated the actual Forum of Philosophy, Engineering and Technology) (Didier 2010). One of my anonymous reviewers wrote: "At first reading, I was convinced that the author could not possibly be serious. "Engineering ethics was invented in the United States"? What nonsense! Engineering ethics has always existed as engineers have made moral decisions. What we have done during the last half century is to begin to articulate and examine these decisions. So my first reaction was that the author was either ill-informed, or joking. But as I read the rest of the paper, it became clear that the author was not ill-informed, and *he* was not joking, but had something interesting to say to the rest of us *who have always assumed that what we were talking about made perfect sense to others*. I would lean toward accepting this paper, but I wish I could have been in the audience, in the front row, ready to pounce!)" (our emphasis). This particular comment on my work is actually what led me to explore more deeply the history of the professions and language issues around professions.

I knew from reading *Sociologie des Professions*, a book co-authored by Claude Dubar and Pierre Tripier which marked the renewal of this long-abandoned field in France, that the use of the term profession in French was different, and especially more polysemic than its English equivalent (Dubar and Tripier 1998, p. 7). I had understood that in the United States and also in other English-speaking countries, the idea that some occupations were distinct from others had gradually become a social norm, but I did not imagine, for instance, that the *cadre* category would not mean anything to most of them. For some US scholars, the distinction between professionals to the good of the community. For others, it is based on prestige or on the professionals' capacity to constitute closed labor markets or to impose a socially constructed distinction as essential. Whatever the origin of this distinction, it had become an indisputable legal reality in the US and some other regions of the world.

While I very often have used the term *profession* as a synonym for a trade, as is customary in French (Dubar and Tripier 1998), I have become aware that the definition of profession could be more specific in another language than mine. For instance, the contemporary Oxford English-language dictionary defined profession as "a type of job that needs special training or skill, especially one that needs a high level of education". I should have specified before "as is customary in French language as it is used in France" since the Quebec conception of what constitutes a *profession* – and the use of the word – is much closer to the English and US definition and the Parsonian ideal-type than in France (Dussault and Borgeat 1974). Members of the occupations are called in Quebec French *gens de métiers* (which sounds like a denomination from the Middle Ages for a French person) and are grouped in associations whereas members of the 46 *professions* are organized in *Ordres professionnels*.

I have long considered the Anglo-American concept of profession of little use to study the means to develop an ethical sensitivity during the training of future French engineers. The international meetings and conferences I have attended, especially the Workshops on Philosophy and Engineering followed by the Fora on Philosophy, Engineering and Technology have made me believe that scholars coming from other countries than France, such as Japan, for instance, could face the same problem. The Institution of Professional Engineers founded in 1951 adopted a code of ethics in 1961, but because of the general lack of interest in engineering ethics, this code was not widely promoted. The explanation of the Japanese professor Jun Fudano and US ethicist Heinz Luegenbiehl is that "the concept of engineering as a profession is unequivocally absent in Japan, most likely because the development of engineering was dominated by the state and industry, rather than by public forces" (Fudano and Luegenbiehl 2005).

Moreover, the aim to professionalize management as a means of moralizing business, through the writing of codes of ethics and the setting up of a license to exercise management is also unlikely to be heard of in France, as I have argued in my research on whistleblowing for engineers (Didier 2007) and whistleblowing policies (Didier 2011). And, France is undoubtedly not the only country where this way to deal with ethical issues would encounter a form of resistance, which would not merely be the expression of delay or conservatism.

6.4.2 A Response Quest

Several explanations have been given about the importance of the professional paradigm in the United States. US historian Burton Bledstein traces the fascination of the middle classes for the professions back to the beginning of the nineteenth century (refusal of any form of inherited privileges, power to acquire social wealth and consideration if one tries to develop his/her capacities so as to increase his/her social utility). According to him, "for middle-class Americans, the culture of professionalism provided an orderly explanation of basic natural processes that democratic societies, with their historical need to reject traditional authority, required. Science as a source for professional authority transcended the favoritism of politics, the corruption of personality, and the exclusiveness of partisanship. (...) The culture of professionalism was at the basis of the habits of thinking and acting of the middle class and that most American people of the 20th century have taken for granted that any modern and intelligent person shall organize its private and public attitudes toward this value" (Bledstein 1976). Our historical journey through the French corporations and the collegial model, and into the impact of the Reformation on the conceptualization of specific callings, its extension in the US sociology of the professions and in the emerging academic field of professional ethics aimed to open up new avenues for research.

Our research actually highlighted more ancient roots of the professional ideal and the role of the political and religious contexts in which it grew up.

Concerning the religious background, Pierre Tripier considers that "behind the affirmation of Parsons that the more a society modernizes, the more it professionalizes; the more it becomes professionalized, the more it pacifies, there would not only be the family picture proposed by Durkheim in the second preface to *De la division du travail social* (Durkheim 1984 [1902]). There would also be the cultural form left by Puritanism, which legitimates the profession's privileges (its ability to refuse the laws of the market and democracy) by the right of everyone to trace a path in relation to his propensities and the demands of his conscience, and the benefits that would accrue to the community" (Tripier 1998).

Concerning the political context, the American professions appear to embody what Alexis de Tocqueville called the "intermediary bodies". The French political scientist observed that in a highly decentralized and individualistic nation like the United States, individuals tended to gather in multiple associations that stood between them and the State. They concurred toward the integration of individuals, limited the power of the state and defended individual freedoms (de Toqueville 1838 & 40 [1835 & 40]). More recently, US sociologist Eliott Freidson opposed the hierarchical states (where an important administrative apparatus imposes dirigist orientations) to the coordinating States (whose action is essentially reactive and coordinating initiatives of civil society groups). According to him, professions have found their best conditions for self-fulfillment in regions where the State did not interfere in their functioning and where they did not experience competition from other institutions entrusted with the common good (Freidson 2001).

German social psychologist Harald Mieg contrasted the countries were professions developed "from within" and gained a strong social status like England and the US and a Continental pattern of professionalization where the main occupation had been shaped "by above". He gives as an example France and Germany (Mieg 2008).

I discussed a lot in this chapter the various understanding of what it meant to be a profession, and how this debate could contribute to a better understanding of the status and stake of ethics in various occupations and/or professions and in the higher education preparting to them in a global world. There would also be much to say about the various understandings of the term ethics across cultures, and the impact of religion on ethics discussion, but this was not our goal here. Besides, others scholars have done it already.

Today, one of the major issues in the academic field of business ethics in a global world, is its secularization. Business ethics in the US – where it was "invented" like engineering ethics-, has actually largely been until now an expression of religion, an attempt "to marry the realities of business practice with the moral teaching of Christianity" (Mees 2012). According to Bernard Mees, "even in the less publicly devout European West, much of the recent discourse of business ethics has remained decidedly Christian in its formulation". Already in 1987, US philosopher Richard T. De George, one of the founders of the study of business ethics also described the contributions of the Christian religion, both Catholic and Protestant, as primary one in the field (De Georges 1987). Daniel Callahan, co-founder in 1969 of the Hastings Center, the world's first bioethics research institute, which was instrumental in establishing bioethics as a field of study, stated in 1990 that "the most striking change over the two past decades or so [had] been the secularization of bioethics" (Callahan 1990, p. 2). But this autobiographical reflection where Callahan acknowledged the diminishing relevance of religion in his own life, he also wondered about the risk for pluralism which was celebrated as a moral achievement to become "oppressive if it is not open to the insights of particular traditions and communities".

6.5 Conclusion

The distinction between occupation and profession, which was central in our reflection here, does not belong to the cultural matrix of many regions outside the USA, England and some Commonwealth countries. In France, for instance, the social space is structured around a separation between the employees and the non-wageearners, with on the one hand the members of the liberal professions and the selfemployed, and on the other the employees of the State, called *fonctionnaires*. There are also strong hierarchies within each group: one is a member of a more or less prestigious *corps d'Etat*. Some employees are also *cadres*. Some have the privilege of having a *Contrat à Durée Indéterminée* (CDI) which is an open-ended employment contract which is very protective for employees, while some do not have this privilege. Status can overlap: a doctor may be an employee in the private sector, or in the public sector, or self-employed and paid on a fee-for-service basis. But in any case she is today in France a member of a regulated profession managed by an order.

The equivalent of the American professions that Davis wants to apply to engineers all over the world or which Khurana wants to re-establish for businessmen cannot be found in France neither in todays' *professions libérales* (exercised under an independent status which does not say anything about higher aims to be pursued, a skiing instructor belongs to a liberal profession as well as a translator-interpreter), nor in the regulated professions (the French *bistrotiers* who must have a license are considered as members of a regulated profession in the European sense).

Our comparative investigation into words, culture and professional arrangements does not allow us to say what professional or occupational ethics for engineers and business people should be. However, it recalls us that the concept of profession is a theoretical concept that can serve the scholarly work and ethics education in some parts of the world but not "everywhere". It also recalls us that the project to build a more equitable society where engineers and managers – whether regarded as *cadres*, professionals or *gens de métiers* – would take their share according to their role, position, knowledge and power, cannot be thought of without seriously studying the relations between individuals, the political regime and the moral insights of the religions and philosophies, which have shaped the local culture. It invites us to increase our awareness of the explicit and implicit relations between the formulation of the professional ethics discourse and Christian world views and anthropology.

The USA where profession is the current paradigm of most scholarly works on occupational ethics is a young state born on an individualistic basis without the legacy of medieval feudalism and Ancien Régime corporatism that continental Western Europe (and not so much England) had experienced for nearly a thousand years, with the estate system and the tradition of corporate privileges. People in what has become the USA, created institutions and developed a culture, which has many things in common with Western European countries, compared with Africa or Asia. But the industrial relationships, the relationships between the State and the citizen, and between religions, the State and the people, have many singularities when compared with Old Europe, which again is far from being uniform in that respect. Contrary to what Michael Davis believes, sociologists - and historians too - could help us understand better those differences, which have taken a lot of energy and writing and brought so much misunderstanding. Theoretical disagreements are sometimes founded on diverse ways to analyze and interpret the observed reality. But when the discussion tries to take place in the global world in a multicultural environment, what looks like a disagreement of explanation can also be founded totally or partially on a misunderstanding. Most probably philosophy can be relevant to discuss engineering and business ethics but as a major US philosopher of twentieth century wrote, "it is not more relevant than many other fields of study (such as history, law, political science, anthropology, literature, and theology)" (Rorty 2005).

The engineers and managers' ethics may not be determined by a sacred "status" that would be reminiscent of a Christian-type of calling. It might have to be founded

on their expert knowledge (what they know as graduate engineers and managers which others cannot), their position in the socio-economic system (what they can see from where they stand which others cannot), their power (what they can do individually and collectively which others cannot). Although engineers and managers do not have exactly the same expert knowledge, power and position, they share many traits, especially the type of organizations for whom they work as high skilled employees (I would say *cadres* in French). To whom are they ready to sell their skills? And on which conditions?

There are many ways to distinguish engineers from managers: they do not have the same training, might not always have the same social and cultural background and careers expectations, do not have the same kind of jobs in general, and all this varies from one country to another. Still engineers and managers have much in common and many good reasons to build together, and with other members of society, their ethical sensitivity, their ability to discuss ethical issues, to think and have a say about the habits, rules, hard and soft-laws regulating their practice. Ethics education is neither a mere question of transmitting a corpus of standards of a defined profession. If teaching ethics was like preaching, it would be an easier task. But as Immanuel Kant believed that it was impossible to teach philosophy, it might be impossible to teach professional ethics: "[t]he youth who has completed his school instruction has been accustomed to learn. He now thinks that he is going to learn philosophy. But this is impossible, for he ought now to learn to philosophize" (Kant 2011 [1765]). But following Kant, we can think that it is possible to learn to practice ethical reflection, to be able to raise ethical questions in situation with many others and take into account its social, legal, but also cultural, political and religious dimensions and to aim "at the 'good life' with and for the others, in equitable institutions" (Ricoeur 1991).

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Christelle Didier BS in Electrochemistry Engineering, MA in Education, PhD in Sociology from Ecole des Hautes Etudes en Sciences Sociales (EHESS) Paris. From 1993 to 2013 Assistant Professor at Catholic University of Lille, France, Ethics Department. Assistant Professor, Université de Lille, Département des sciences de l'éducation UFR DECCID. Co-author of *Ethique industrielle* (DeBoeck, Brussels, 1998) and *International Perspectives on Engineering Education* (Springer 2015); author of *Penser l'éthique des ingénieurs* (PUF, Paris, 2008) and *Les ingénieurs et l'éthique. Pour un regard sociologique* (Hermes, 2008). She has published many articles on ethics and social responsibility in the engineering profession and education, and on the engineering profession's values (from interviews and extensive surveys). Research areas: engineering ethics and values, including historical, cultural and gender perspective, sustainable development and corporate social responsibility, social responsibility.