Relations industrielles / Industrial Relations

Navigating Professional Dilemmas: How Public-Sector Engineers Navigate Ethical Tensions Arising from Conflicting Institutional Logics

Marie-Pierre Bourdages-Sylvain and Tracey L. Adams

Volume 79, Number 2, 2024

URI: https://id.erudit.org/iderudit/1115807ar
DOI: https://doi.org/10.7202/1115807ar

See table of contents

Publisher(s)

Département des relations industrielles de l'Université Laval

ISSN

0034-379X (print)
1703-8138 (digital)

Explore this journal

Cite this article

Bourdages-Sylvain, M.-P. & Adams, T. L. (2024). Navigating Professional Dilemmas: How Public-Sector Engineers Navigate Ethical Tensions Arising from Conflicting Institutional Logics. *Relations industrielles / Industrial Relations*, *79*(2). https://doi.org/10.7202/1115807ar

Article abstract

Over the last few decades, collegial forms of organization guided by norms of professionalism and shared decision-making have given way in public organizations to more corporate organizational forms that prioritize efficiency and economy. A growing body of research has explored these conflicting institutional logics, and identified the challenges of professional workers as they attempt to reconcile them on the job. At times, however, conflicting logics may create ethical dilemmas for professionals faced with competing imperatives, such as efficiency and public safety, if choosing the ethical imperative threatens their job security or professional standing. Their responses to such dilemmas have been under-explored in the literature. In this paper, we examine such dilemmas, and the responses to them, using qualitative data from public-sector engineers in two Canadian provinces. Public-sector engineers are ideal for such analysis because they work in changing environments where the tension between professional and managerial logics may be keenly felt. We find that these professionals have a range of responses, sometimes resisting and sometimes marginally acceding to workplace pressures. Light is thus shed on the circumstances under which ethical tensions might escalate.

Relations industrielles / Industrial Relations
79(2) 2024

Navigating Professional Dilemmas: How Public-Sector Engineers Navigate Ethical Tensions Arising from Conflicting Institutional Logics

Marie-Pierre BOURDAGES-SYLVAIN
École des sciences de l'administration, Université Téluq, Québec, QC Canada, G1K 9H6, 1 800 665-4333 p.5249, lead and corresponding author
marie-pierre.bourdages-sylvain@teluq.ca

Tracey L. ADAMS ORCID logohttps://orcid.org/0000-0002-6649-5988
Department of Sociology, The University of Western Ontario, London, ON Canada, N6A 5C2

Editorial Note

Funding sources: Fonds de recherche du Québec – Société et culture / Social Sciences and Humanities Research Council

Abstract

Over the last few decades, collegial forms of organization guided by norms of professionalism and shared decision-making have given way in public organizations to more corporate organizational forms that prioritize efficiency and economy. A growing body of research has explored these conflicting institutional logics, and identified the challenges of professional workers as they attempt to reconcile them on the job. At times, however, conflicting logics may create ethical dilemmas for professionals faced with competing imperatives, such as efficiency and public safety, if choosing the ethical imperative threatens their job security or professional standing. Their responses to such dilemmas have been under-explored in the literature. In this paper, we examine such dilemmas, and the responses to them, using qualitative data from public-sector engineers in two Canadian provinces. Public-sector engineers are ideal for such analysis because they work in changing environments where the tension between professional and managerial logics may be keenly felt. We find that these professionals have a range of responses, sometimes resisting and sometimes marginally acceding to workplace pressures. Light is thus shed on the circumstances under which ethical tensions might escalate.

Keywords: Professions; Ethical tensions; Institutional logics; Public organizations; Engineers; Canada

https://doi.org/10.7202/1115807ar

Résumé

Au cours des dernières décennies, les formes d'organisation collégiales guidées par des normes de professionnalisme et de prise de décision partagée ont cédé la place dans les organisations publiques à des formes d'organisation plus corporatives, privilégiant l'efficacité et l'économie. Un nombre croissant de travaux a exploré ces logiques institutionnelles conflictuelles et identifié les défis auxquels les professionnels sont confrontés lorsqu'ils tentent de les concilier. Parfois, ces logiques sont susceptibles d'engendrer des paradoxes éthiques pour les professionnels - lorsqu'ils sont confrontés à des impératifs concurrents, tels l'efficacité et la sécurité publique - avec des risques potentiels pour leur sécurité d'emploi ou leur réputation professionnelle. Les réponses des professionnels à de tels paradoxes ont été peu étudiées dans la littérature. Dans cet article, nous examinons ce phénomène à travers l'expérience vécue d'ingénieurs du secteur public de deux provinces canadiennes. Ces derniers constituent un groupe idéal pour une telle analyse, car ils travaillent dans des environnements en transformation, où la tension entre les logiques professionnelles et managériales peut être vivement ressentie. Les résultats montrent que les ingénieurs adoptent différentes stratégies pour résister à ces pressions, mettant en lumière les circonstances dans lesquelles les tensions éthiques peuvent s'intensifier.

Mots-clés: Professions; Tensions éthiques; Logiques institutionnelles; Organisations publiques; Ingénieurs; Canada

About a decade ago, the Charbonneau Commission exposed the corruption in construction, in politics and in the awarding of public contracts in Quebec. The *Commission d'enquête sur l'octroi et la gestion des contrats publics dans l'industrie de la construction*, chaired by France Charbonneau, was established in 2011 to explore the possible infiltration of organized crime into the construction industry and the management of public contracts (CEIC, 2015). The Charbonneau Commission revealed shocking evidence of collusion and corruption that implicated political and business leaders alike. Front and centre in this controversy was the engineering firm SNC-Lavalin, which was found to have paid $22 million in bribes to land a $1.3 billion contract to build a "super-hospital" associated with the McGill University Health Centre (CBC News, 2018; CEIC, 2015). The Commission's findings particularly affected professional workers, who have fiduciary duties to the public. Indeed, its findings led to changes in 2017 to the *Professional Code of Quebec*—the framework law governing all of the province's professions. The Code was changed to encourage reports of wrongdoing by professionals, to protect whistleblowers and to make investigations into unethical behaviour easier (Bill 98, 2017; Radio-Canada, 2016).

The SNC-Lavalin scandal provides an extreme example of unethical conduct by professionals and the firms that employ them, but it is just one of several engineering scandals and high-profile failures to impact Canadian engineers, including the Elliot Lake mall collapse in Ontario and the Mount Polley dam failure in British Columbia (Bélanger, 2014; Radio-Canada, 2021). These events have likewise prompted policy reforms. While relatively few engineers get embroiled in such high-profile scandals and failures, many more face ethical dilemmas at work (Adams, 2020). For sociologists who study organizations and professions, the resulting tensions have been understood through the lens of new institutional theories as reflecting competing logics (Greenwood et al., 2011; Pache & Santos, 2013a). The logic of professionalism seeks to improve service to the public (Freidson, 2001; Noordegraaf, 2015). The logic of the market or managerialism seeks to meet tight deadlines and maximize profits (Ibid). These logics need not always conflict, but when they do professionals may face challenging dilemmas, i.e., situations with contradictory demands. For example, how can one maximize product quality and public protection while meeting a deadline so tight that it might require skipping some steps or cutting some corners?

Previous research on conflicting logics in such sectors as healthcare suggest that conflicts between logics are not restricted to the private sector (Reay & Hinings, 2009). They may also affect public-sector workers because public-sector workplaces have been adopting private-sector managerial strategies based on New Public Management (NMP). The resulting ethical challenges have received little attention (Currie et al., 2019). Moreover, research has seldom explored how workers respond to more routine ethical dilemmas. It has instead tended to focus on high-profile failures rather than on the smaller, periodic tensions that professionals may experience when torn between competing logics.

In this paper we will present the findings of our research on how Quebec and Ontario public-sector engineers have experienced the ethical dilemmas arising from conflicting logics, and we will explore how they have responded. Our qualitative findings provide an opportunity to see whether public-sector engineers experience such dilemmas, and how they resolve them. We will show that professionals have a range of responses, sometimes resisting workplace pressures and sometimes marginally giving in to them, and we will describe the circumstances under which ethical tensions might escalate.

https://doi.org/10.7202/1115807ar

1. Engineering, Workplace Change and Conflicting Logics

Over the last few decades, researchers have documented how workplace change has impacted professionals in a variety of fields (Powell et al., 1999). Collegial forms of organization guided by professional standards and shared decision-making are giving way to more corporate forms of organization that prioritize efficiency and economy (Brock, 2006). Private-sector managerial practices aimed at increasing profit and efficiency have spread to the public sector through New Public Management (Pollit & Bouckaert, 2017). These changes are creating new pressures for professional workers.

To understand these trends, researchers have drawn on new approaches, especially new approaches to institutional logics. Institutional theory can provide insight into "the socially constructed, historical patterns of material practices, assumptions, values, beliefs and rules by which individuals produce and reproduce their material subsistence, organized time and space, and provide meaning to their social reality" (Thornton & Ocasio, 2008, p. 101). Central to this theory is the understanding that societal and institutional logics shape social action and decision-making, and that actors may respond to such logics in a variety of ways and even push for change to these logics (Thornton & Ocasio, 2008). Institutional logics are patterns of interests, values and beliefs that shape action, interaction and inequalities within organizations (Friedland & Alford, 1991; Pache & Santos, 2013a). Multiple logics co-exist in society, but within organizations one logic tends to prevail (Thornton & Ocasio, 1999; Reay & Hinings, 2009). Nonetheless, several logics may operate concurrently, and the dominant one may shift over time (Blomgren & Waks, 2015; Thornton & Ocasio, 1999). The focus of research has been on professional, market and managerial logics (Freidson, 2001), but others might be influential, including political logics aligned with the state system.

Key contributions to this field include work by Noordegraaf (2007) on conflicting logics in professionalism, managerialism and professional hybridity. He argues that professional work was previously governed by a logic of professionalism that prioritized drawing on knowledge and skill to provide the public with valued, high-quality services (Noordegraaf, 2007, 2015; see also Evetts, 2006; Freidson, 2001). In contrast, the logic of managerialism emphasizes rationalization and efficiency with a view to producing more products and services at less cost for more profit or, in the public sector, to curb spending (Evetts, 2006; Noordegraaf, 2007). The result has been changes to professional work, along with reductions in professional discretion and collegial control. Professionals are increasingly managed either by professionals in managerial roles or by managers with no training in the profession they manage. Professional and managerial logics conflict because the former prioritizes quality, collegiality and humanity, and the latter efficiency, profitability and hierarchy (Noordegraaf, 2015).

When faced with conflicting logics, professional workers respond in different ways. Some continue to adhere to the logic of professionalism while learning to navigate the logic of managerialism without fully embracing it (Reay & Hinings, 2009). Others might abandon the logic of professionalism in order to adhere entirely to the logic of managerialism, especially if they wish to become managers (McGivern et al., 2015). Noordegraaf (2007, 2015) and several others have explored the emergence of hybridity, where professionals embrace aspects of both logics as they go about their work. Hybrid professionals try to remain committed to professional ideals for service quality, while simultaneously meeting managerial demands for efficiency and economy. They may in fact be able to bridge the conflicting logics and help manage institutional complexity (Blomgren & Waks, 2015). Those who succeed demonstrate what Noordegraaf (2015) calls "organizing professionalism"—a new logic that combines managerialism and professionalism.

Despite the large literature on hybrid and organizing professionalism, few researchers have examined the impact of conflicting logics on ethical conduct. Workers can create dilemmas for themselves by trying to adhere to both logics at the same time. By “dilemma,” we mean a situation where a professional cannot easily meet the demands of both logics simultaneously, and is thus faced with a dilemma: either comply with the demands of the job or comply with those of professional ethics. For example, professionals are under pressure to increase efficiency by reducing the time and cost of work, yet they have a duty to minimize risk and maximize safety. No one has fully explored how such dilemmas are resolved.

One reason for this relative neglect is a tendency to see ethical conduct as a reflection of personal morals and individual character. Unethical practice is done by “bad apples” for self-gain, and is defined as encompassing a wide range of behaviours—from illegal activity to conduct that violates normative expectations and professional codes of ethics (Currie et al., 2019: 152; Gabbioneta et al., 2019; Muzio et al., 2016: 143). Nevertheless, a growing number of studies have stressed the organizational and interactional aspects of ethical conduct at work. For example, research from the 1970s and 1980s showed that these aspects affect ethical conduct in the public sector, while also demonstrating that trade union membership protects against ethical conflicts (Slayton & Trebilcock, 1978; Fraser & Goldenberg, 1974). Later research has shown that ethical conduct is encouraged by some contexts and discouraged by others (Arnold & Kay, 1995; Dinovitzer et al., 2014). Professionals are influenced by their organizational position, their relationships with clients and their job security when they are under pressure to behave unethically (Dinovitzer et al., 2014). For example, those in more precarious roles may give in more easily to pressure and engage in unprofessional behaviour, while those in managerial positions may be better able to resist. Moreover, workers who identify more with their organizations, and less with their occupation, seem more likely to engage in unethical behaviour that benefits the organization (Coppins & Weststar, 2023). This research has encouraged researchers to look at the organizational contexts that might foster misconduct or discourage it (Cadieux & Laflamme, 2009; Currie et al., 2019; Muzio et al., 2016; Fey & Amis, 2023). Here, we will focus on organizational / institutional logics.

Recent studies of professional misconduct have tended to focus on illegal activity or ethical lapses with dire consequences. Yet there is a broader range of petty misconduct, as well as situations of potential misconduct, including interactions with clients, coworkers and supervisors. There have been few studies on dilemmas that are less high-profile but more frequent. It is important to examine them, in order to gain insight into the factors that favour either compliance or noncompliance with professional standards. In this study we specifically ask two questions. Do public-sector engineers face ethical dilemmas arising from conflicting logics? If so, how do they respond? By focusing on public-sector engineers, we do not imply that private-sector engineers are exempt from ethical dilemmas; previous research has established that they do. Public-sector engineers, however, have received little attention in the literature, including how they experience conflicting logics, and how they cope.

2. Engineers in Ontario and Quebec

Engineers, especially those in public organizations, are ideal for studying the ethical tensions that may arise from conflicting institutional logics, since they work in changing work environments and are exposed to professional and managerial logics simultaneously; however, unlike private-sector engineers, they have received little attention in the literature. Since the 1980s, public organizations in Ontario and Quebec have been under pressure to change their organizational processes, with a view to bringing them into line with private-sector notions of optimal work processes (Oiry & Vignal, 2016). This logic of managerialism, and the private-sector practices that go with it, has been widely disseminated throughout the public sector, in the process disrupting

https://doi.org/10.7202/1115807ar

some of that sector's long-held values (Bryson et al., 2014; Pollit & Bouckaert, 2017). There is now a new framework of thought and action, which promotes the imperatives of economy, effectiveness and efficiency through increased use of subcontracting, particularly in engineering. As a result, many public-sector engineers now perform a more managerial role by overseeing engineers who work on contract. Many public-sector engineers have thus become hybrid professionals whose organizational duties and interests are not always aligned with their professional ones. These hybrid professionals are interesting subjects of research because they have likely learned how to deal with conflicting logics, how to reduce the scope of ethical dilemmas and how to navigate the solutions to such dilemmas.

Canadian engineers may face particularly acute dilemmas in light of high-profile scandals and evidence of misconduct, which have resulted in organizational and regulatory policy changes to control their daily practice with more guidelines and oversight. At the same time, they are faced with more and more issues as they cope with accelerating technological change, increasing specialization and ever more complex projects and infrastructures (Niosi et al., 1990). They must now consider social, legal, economic, scientific and technical issues that go beyond their conventional concerns (Cruikshank & Fenner, 2007). Additional burdens are thus being placed on engineers at a time when they are already under pressure from high work demands, rapid change and growing complexity. In Quebec, this burden is particularly heavy because it has been compounded by the engineering crisis due to the revelations of the Charbonneau Commission (CEIC, 2015). The Commission's recommendations have led to new policies, measures and practices that affect the day-to-day work of engineers. Ontario engineers are also subject to oversight in their work; however, they have not experienced the same policy changes as their Quebec counterparts. Ethical engineering is a government priority in both Quebec and Ontario, whose respective codes of ethics for engineers prioritize public needs, fairness to others, honour, integrity and competence in performance (Code of ethics of engineers, 2023; Professional Engineers of Ontario [PEO], 2023).

In day-to-day practice, engineers must strike a balance between their duties to clients, employers and the public, while keeping in mind that the protection of the public remains a priority for which they are accountable to their profession's regulatory body, whose discipline committee may punish or disbar any engineer found to have acted unethically.

3. Methodology

To explore professional dilemmas that might create ethical tensions among public-sector engineers in Ontario and Quebec, we will analyze data from two distinct qualitative surveys. The first was conducted by (author1) on Quebec public-sector engineers. The second was conducted by (author2) on the work experiences of Ontario engineers in the public, private and non-profit sectors. Only data from public-sector engineers are included here. Ethics approval was received for both surveys. Both touched on the engineers' experiences with ethical tensions. In the present study we will explore how the engineers experienced and responded to dilemmas arising from conflicting institutional logics.

For the Quebec survey, we interviewed public-sector engineers from different departments as part of a larger research project to assess how New Public Management has affected the dynamics of change within the profession and the engineers' lived experience.[1] Our approach was qualitative: we wished to interview a smaller number of engineers at great length, rather than a larger number summarily; hence, our sample was limited to 21 engineers from different environments as an adequate sample size for saturation. The sample was obtained using a non-probabilistic method with a view to maximizing diversity in terms of professional background, age, gender and years of practice. Our interviewees were recruited through snowball sampling and LinkedIn. Semi-

structured interviews lasting 90-120 minutes were conducted in 2021-22 in person or via videoconference, recorded and transcribed verbatim.

The interviewees were asked primarily about the following: their career trajectory; how organizational changes were affecting their practices; their role in the public service; and their relationship to their work. They discussed the supportiveness of their work environment and their involvement in their work. One series of questions focused on the following: the potential ethical tensions or conflicts the engineers encountered between managerial demands and the professional code of ethics of the Ordre des ingénieurs du Québec (OIQ); their strategies to resolve such tensions or conflict; and their manager's role. We also asked them about how the Charbonneau Commission had affected their work and how society perceives engineers. The interview guide included several other questions on where the pressures were coming from, on their professional autonomy, on their relationships with external firms, coworkers and superiors, and on how values in their work environments had changed. They could thus freely discuss their challenges, particularly those caused by the contradictory institutional logics that unfold in their work environment.

For the Ontario survey, we interviewed 53 licensed professional engineers and engineering degree holders (10 currently in the public sector, 41 in the private sector and two in the non-profit sector). Our interviewees had volunteered for this survey after taking an earlier one about their work experiences in engineering. We selected the ones to be interviewed not only by sector of employment but also by gender and job role. Semi-structured interviews, lasting an average of 55 minutes, were conducted over the phone, over the Internet or in-person in 2017. The interviews focused on the interviewees' career trajectories and their work and learning experiences. One question specifically addressed the ethical tensions they might encounter in their work. After we pointed out that some engineers had indicated on the earlier survey that they had experienced pressures that raised ethical issues, the interviewees were asked to share their insights on why some engineers might feel ethically conflicted. We intentionally did not ask them for a description of their ethical conflicts to minimize social desirability bias and interviewee discomfort. In their responses, they discussed their experiences with such issues. They also discussed how they responded when such issues arose. Our study included only those engineers who currently worked in the public sector (10) or had recently worked in the public sector (2).

The Ontario and Quebec interviews were both semi-structured, with slightly different questions, and with different probing questions and follow-up questions to clarify the meaning attributed by the interviewees to their experiences. Both datasets provided comparable data, collected only a few years apart, on experiences by public-sector engineers under pressure to violate their code of ethics. By bringing these qualitative datasets together, we were given a rare opportunity to compare the ethical tensions experienced by public-sector engineers in the two provinces. We found that public-sector engineers reported strikingly similar experiences in Quebec and Ontario despite the different geographic contexts.

3.1 Data Analysis

A comprehensive approach was used to analyze the data in three stages (Corbière & Larivière, 2020). First, we conducted a within-case analysis, i.e., the interviews were examined individually. Using NVivo software, we analyzed each interview by theme to identify the contradictory injunctions, tensions and dilemmas faced by engineers, as well as their strategies for such conflicts (Braun & Clarke, 2006). To this end, we first conducted an initial coding through multiple readings of each transcript, followed by descriptive and open coding and, finally, by a more focused coding. Attention was paid to identifying the workplace challenges reported by the interviewees and to identifying the ethical challenges and their causes. There were additional rounds of targeted deductive coding to identify themes related to conflicting logics and how the interviewees

https://doi.org/10.7202/1115807ar

responded to ethical dilemmas. Conflicts relating to costs, time and pressure to cut corners were identified.

Second, we performed a comparative analysis of interviews from the same province to identify recurring themes. We thus analyzed the interviews using broader categories to identify patterns in the interviewees' responses to pressures. In particular, we examined the ethical dilemmas and strategies for coping with tensions arising from contradictory institutional logics.

Third, we conducted an interprovincial analysis to identify recurrences, as well as differences between the two provinces. This inter-provincial comparison enabled us to assess how conflicting logics and work organization create dilemmas that generate ethical tensions and dilemmas for public-sector engineers in Ontario and Quebec. It also revealed similarities in their experiences, particularly in the way they dealt with such dilemmas, thus providing insight into the ethical tensions that public-sector engineers may face.

4. Results

We should first point out that a minority of the interviewees from both Ontario and Quebec stated that they had never experienced such ethical dilemmas for various reasons: nature of the job; subordinate status; or limited experience. Nonetheless, most reported experiencing ethical tensions and dilemmas. Typically, the tensions or dilemmas arose from a conflict between professional and organizational logics. On the one hand, the interviewees had to work in a manner that ensured public safety and compliance with codes, guidelines and policies. On the other, they faced a high level of demands that sometimes made compliance challenging.

Our Quebec interviewees highlighted the enhanced attention to ethical issues of recent years. The OIQ and the government have developed mechanisms to prevent and punish breaches of ethical standards: "*Since the Charbonneau Commission, in the department, everything related to lobbying and the code of ethics has been very closely monitored.*" (Q-02). The effects have been felt as much on practices as on the image of the profession.

Our Ontario interviewees did not mention any enhanced attention to ethical issues at the time of the interviews. In fact, some expressed frustration that the regulatory body (PEO) was not more proactive.

4.1 Conflicting logics and ethical tensions

Our interviewees identified a number of workplace practices and developments that, together, caused ethical dilemmas for them. In this section we will discuss four of them and connect them to conflicting organizational and professional logics: i) work pressures to control costs and manage time in a context of limited resources; ii) changing policies, codes and oversight; iii) pressures due to being both a manager and an engineer; and iv) politics. The influence of politics appears to be an additional logic that these public-sector engineers must cope with, unlike their private-sector counterparts.

4.1.1 Resource Pressures: Time, Money and Human Resources

The public-sector interviewees reported facing demands for increased efficiency. Such demands might compromise professional standards when pressures to limit project resources and time enter into conflict with the goal of producing a quality outcome. For example, one Ontario engineer explained that pressure to complete assessments and make decisions quickly sometimes led to inaccurate assessments, and hence more work down the line. He believed "*the better overall*

solution" was the one that met not only regulatory obligations but also "*moral and ethical obligations too*" (O-33). He reported that his employers prioritized a basic level of quality—the cheapest one—rather than the one that maximized public benefit. Quebec engineers echoed similar sentiments about possible discomfort due to clashes between managerial demands and ethical standards:

> *"My biggest challenge is to get along with the authorities. […] In the profession, we have to be rigorous as engineers. Often, this rigour is confronted with: "You should give me something, it should go quickly, or you should approve this file because I have political pressure." That's where our rigour and our professionalism are tested a little bit more. That's part of the big challenges of convincing that the case isn't complete enough, that it's lacking information, that I don't have everything I need to do a good job."*
>
> Q-08

Interviewees discussed a constant "*pressure to keep the budget down*" (O-03), which led to dilemmas when quality and safety were threatened. Another recurring challenge was lack of human resources:

> *"Often, we don't have enough human resources and budget for what we have to do, there are extremely tight deadlines. "I want this yesterday, so make sure you get it for me!" That's the challenge, it's the clash with the authorities".*
>
> Q-08

Several interviewees from both provinces said the resources available for their work had decreased over time. For example, one of them mentioned that access to certain analysis software was sometimes denied, given the high costs. In this context, due diligence, which is part of an engineer's main mission, is difficult if not impossible. This situation is difficult to deal with because engineers are accountable for their work. Lack of time, budget or human resources can prevent them from fulfilling their fiduciary responsibilities and hence create an ethical dilemma.

4.1.2 Changing Policies and Practices, Enhanced Oversight

The demands on engineers have intensified with changing policies and enhanced oversight. As their profession constantly evolves, they must cope with new legal, societal and environmental issues. An Ontario engineer explained there was a demand for "continuous reading of codes and standards" and pressure to "review them, compare them and keep documents updated" (O-15). Our Quebec interviewees most often mentioned the impact of changing policies and enhanced oversight in the wake of the extensive changes made in response to the Charbonneau Commission's recommendations. They reported being subjected to multiple sources of pressure—from their regulatory body, their employer, the public and others—and increased scrutiny.

> *"In all the cumbersome administrative procedures, there is a big part that is related to the Charbonneau Commission. It's burdensome, just to reassign a contract. It's long and not efficient because everyone is checking every little detail. […] Making sure that everything is clearly fair and equitable, that's definitely a good side. But the bad side is that there's a fear of doing anything wrong. It makes the processes a lot more cumbersome."*
>
> Q-21

https://doi.org/10.7202/1115807ar

Although the policies are often intended to foster good practice, they sometimes require writing up reports that take engineers away from their duties. They now have more variables to consider in their decision-making, but not more time or resources to do so effectively. Their working conditions are thus deteriorating, with a possible outcome of their becoming less able to use their expertise and, ultimately, to fulfil their mission to protect the public.

4.1.3 Public-Sector Engineers as Managers

Many public-sector engineers are in hybrid roles, i.e., they are professionals in managerial positions. To cut costs, public-sector organizations have over the years reduced their engineering workforce, preferring to contract out for engineering expertise on an as-needed basis. Those engineers still in the public sector oversee work by contract workers and private firms, as well as work by small numbers of engineers and others in the organization. This hybrid role has several implications for their ethical commitments.

For instance, public-sector engineers may be forced to sign off on work they did not do. They may also lack the cutting-edge skills required to evaluate whether such work has been done properly and thoroughly. Even when they do have such skills, they may find that their expertise or even their authority is not recognized.

> *"When we arrive on a job site, we are not supervisors, we have no formal role. When we tell them, 'This isn't working what you did here,' some people are offended, they don't like it. We've had to deal with conflicts, people who weren't pleased with our interventions."*
>
> Q-07

Overseeing the work of external firms can be challenging for these public-sector engineers / managers, as they cannot necessarily influence the content of the work despite being ultimately accountable for it. Because they feel compelled to shoulder professional responsibility for projects they cannot fully control, they may compromise their ethical commitments. The growing number of actors and bureaucratic procedures has made accountability more difficult, thus contributing to some dilution of professional responsibility.

Additional pressures on engineering managers include use of new management tools, such as performance indicators. Their professional autonomy is thus reduced, and the focus has shifted toward productivity and optimization, thereby exacerbating the tensions and dilemmas to some extent. Engineer/managers today seem to have less freedom in decision-making because of the increased importance of budgets and pressures to optimize costs, effectiveness and efficiency.

Another impact of managerialism on engineers is the presence of non-engineer supervisors, who, according to engineers in both provinces, may create ethical tensions due to their limited knowledge of either engineering or the engineers' ethical responsibilities. The risk is that managerial concerns for efficiency are prioritized, thus placing engineers in an uncomfortable position regarding their ethical obligations and their subordinate status. One interviewee gave an example of a situation where his non-engineer supervisor asked him to do things not legally permitted.

> *"I had to fight to explain that no, it takes plans and specifications signed, sealed by engineers and architects. That's the law, that's the regulation. Yes, non-engineers can understand, but there are many who do not understand the regulations. I made a promise to myself that I would never work for non-engineers again."*
>
> Q-11

Ontario engineers reported similar tensions. For example, one was asked by his manager to break the rules, and he too pushed back by going to his public organization's ethical compliance office for support:

> *"You know it was intense, because the manager really didn't like that I was pushing back and saying, this is not ethical. I'm not prepared to lose my job over this project."*
>
> O-13

The above comments show how upsetting these ethical conflicts can be, and their implications for future employment.

4.1.4 Politics

In addition to conflicting organizational and professional logics, public-sector engineers must sometimes grapple with an additional logic that affects their work, i.e., politics. Political demands can take professional engineers away from their primary mission of protecting the public. They may be asked to support or accelerate a political decision on a project, and such requests will lead to discomfort and resistance:

> *"It's already happened that we've been told: 'It should pass. Find a way for it to pass' or, on the contrary, 'Find a way for it to fail.' It gets a little frustrating to be pressured into a decision that is just political. It seems like the engineer stamp is often seen as the silver bullet. If an engineer says it, the government is absolved politically because they don't agree if their engineers don't agree."*
>
> Q-08

> *"Often we would get a request from a [politician] ... and they would say: 'We want [this] ... I want you to make it happen.' And so I would run the analysis and collect data and do my little analysis. And I would say 'Well, it's not warranted.' There's a lot of political pressure to make engineering decisions which would go against really what would be applicable."*
>
> O-32

Research on conflicting logics has tended to focus on private-sector professionals, and hence has not identified politics as a competing logic that affects professional workers. Our public-sector interviewees, however, indicated that political demands can conflict with professional commitments, although all of them said they resisted political pressures.

https://doi.org/10.7202/1115807ar

4.2 How do engineers respond to these dilemmas?

When faced with these conflicting logics and resulting ethical dilemmas, how do engineers respond? Our interviewees described at least six different strategies: adapt their practices to minimize the conflicts between competing logics; speak up and refuse; rely on their expertise; report to a higher authority; turn a blind eye and choose their battles; cut corners ethically; or leave their job. The strategies were both upstream and downstream; that is, the interviewees may have initially tried to avoid conflict, but if that strategy failed, they would move on to a different one.

4.2.1 Adapting Professional Practices to Prevent Conflict

Some interviewees were aware that conflicting logics could result in ethical tensions, and they reported taking steps to adapt their practices to avoid conflict. This was particularly the case among our Quebec interviewees. One strategy was to educate themselves on their professional obligations and the ethical rules and standards in engineering. Many had taken courses offered by the professional regulating body to refine their knowledge of the engineers' code of ethics. They used this knowledge not only to inform their own practice but also to make coworkers aware, particularly in work environments with fewer engineers.

To prevent potential conflicts, engineers can enhance transparency by justifying their decisions, such as by providing descriptions of the complexity of a case, its associated challenges and its potential impact on public protection. Another strategy is to find a middle ground that reconciles competing pressures between managerial demands and professional ethics. For instance, if work is being rationalized and intensified, with the outcome being a lack of resources, engineers can gather evidence to support taking a particular way forward.

Engineers can make known their uncertainties about a potentially litigious file, and this is the preferable option, both to warn authorities about possible risks and to protect themselves. As one interviewee pointed out, engineers in such situations can honour their mandate, while making clear the limits of their professional responsibility.

> *"We're into communicating uncertainties a lot. […] I have a lot of constraints, so be aware that this is what's going to happen. Are you okay with that? If not, we don't have a lot of choices: either you give me budget, resources or time."*
>
> Q-08

Others would take additional measures to protect their professional responsibility whenever they had limited control over a decision. One interviewee, for example, would sign and seal his reports, even though this practice is uncommon in the public service.

> *"In the public service, few engineers sign and seal reports. They are anonymous, even though they are highly technical. There isn't a consulting engineering firm that won't have the signatures with the seal on their report. At one point, I started doing this. […] By putting my seal on, the manager is caught with my recommendation. He may not do it, but I have a document that protects me in front of my professional body."*
>
> Q-18

The interviewees also reported avoiding situations that could be prejudicial to them. Several claimed to be particularly cautious in their interactions with engineers from outside firms, taking extra steps to avoid any appearance of conflict of interest.

4.2.2 Speaking Up

Although the interviewees took proactive steps to avoid conflict, most had nevertheless experienced ethical dilemmas in their work. When asked how they would handle pressures to violate ethical standards, many simply said they would push back, “put their foot down” (O-15) and say ‘no’ because of their responsibility to protect public safety.

> *"There is no one who would ask me to do something that goes against my code of ethics, I swear! I know the limits of my knowledge, my skills, what I'm allowed to do and what I'm not allowed to do, then they don't try to get me out of it. The answer is going to be no."*
>
> Q-20

> *"I have always joked to my boss: "You are an administrative boss: my real employers are the people who walk the roads. I work for them; they are my bosses."*
>
> Q-18

It can be challenging for engineers to resist requests from those who have power over them “*because this person gives you a job at the same time*” (Q-10). Public-sector engineers know that refusing to comply with demands from others may result in job penalties and even job loss. To soften their refusal, they may cite their expertise and professional standards, while informing their superiors of the risks or work conditions that hinder optimal performance.

> *"When you make your decisions based on the priority of public safety, you are rarely wrong. If I'm asked to do one project over another that has safety as its goal, I'll always be able to reason with those around me."*
>
> Q-16

This strategy involves not only communicating but also providing evidence to explain the refusal while proposing an alternative (O-32). Quite often engineers are confident that their advice will be heeded as long as they explain the safety and protection implications.

4.2.3 Reporting the Problem

Some interviewees would go through official channels to report ethical violations to higher authorities or regulatory bodies. They would often start off by informing their immediate supervisor—a valuable step, as this person’s support could be helpful if they had to take their concerns to a higher level.

https://doi.org/10.7202/1115807ar

> *"We felt we had no choice, we had to pull the professional liability card. We had the support of our manager because we had convinced him of the problem."*
>
> Q-01

Sometimes, though, the supervisor was the source of the problem. For example, one Ontario public-sector engineer recounted that in one job his bosses pressured him to violate protocol. In response, he reported them:

> *"I ended up going to the ethics and disclosure office and asking: 'We're on the same page right, I mean, this is wrong, I'm new here, but … I understand these rules. This is going to get us fired isn't it?' … And so, fortunately, the manager and the director backed down"*
>
> O-13

This was a risky strategy, of course. The engineer could either lose his job by violating the policy or face repercussions from his boss by reporting it.

Reporting to the regulatory body or the union was another option, but typically not the interviewees' first recourse. The engineer's concerns might be resolved with the help of a supportive supervisor. Sometimes such a supervisor would encourage handling the concerns in a certain way.

> *"I wouldn't go so far as to say we're discouraged from doing it, but there's certainly no support from management to go to a mechanism like the OIQ to complain. There's more of a tendency to say, "We'll report to the firm."*
>
> Q-07

Thus, there was reluctance to inform the regulatory body when concerns were minor and could be resolved through other means. Some of the reluctance could reflect distrust of the regulatory body, as neither the one in Quebec nor the one in Ontario had a good reputation for dealing with misconduct effectively. Especially in Ontario, many interviewees were not unionized, and hence reporting to a union was seldom mentioned.

Engineers may feel more confident about reporting when several of them share the same concern. When acting as a group, they may not feel they are risking job loss by reporting.

In a few instances, engineers might take their concerns even further. One interviewee took concerns about an aging system to the deputy minister.

> *"Our system had been obsolete for a long time, and then there were always delays due to the constraints of the support department. At one point, it got so extreme that we decided to inform our employer that it's not just those constraints that matter, but the engineering aspects as well. […] We notified them by letter that as engineers, we felt they had to take this risk into account. It was well received. The letter went all the way up to the deputy minister, who had bluntly told the people in the support department to take into account our professional advice."*
>
> Q-10

Overall, if you have an ethical concern or wish to identify a risk to the public, you may report it to your supervisor, your organization, your union, your regulatory body or even state actors. In these instances, an engineer may invoke professional ethics as a resistance strategy to pressures from organizational logics.

4.2.4 Turning a Blind Eye / Choosing Your Battles

Our interviewees were clear that, when faced with a significant ethical dilemma or a practice that could potentially harm the public, they would stand up to their superiors, and even report. However, many of their ethical dilemmas were minor. The risk to the public might seem negligible, and the point of concern might not even be within their own purview. In such instances, they might "turn a blind eye" and just ignore what was going on. To be clear, most of the interviewees mentioned this strategy as something *other* people might do (not necessarily themselves). But there was some agreement that engineers might sometimes ignore some minor infractions. Recounting his experience with a previous workplace, one Ontario engineer explained why he and his coworkers did not speak up, even though they were aware that some workplace practices were not all they should be:

> *"The work was enjoyable, the people we were working with were okay and in some cases very good people, and the conditions were alright. That allowed you to turn a blind eye and that allowed you to not get bent out of shape by unethical behaviour. I mean we saw a lot. We saw a lot of nepotism and we saw cases where people—we suspected that people had been hired without a proper vetting."*
>
> O-29

In this situation, some practices seemed unethical but posed no immediate risk to the public, and the (young) engineers decided not to report their bosses.

Since going against one's superiors could have negative consequences for one's career, some had to be convinced that wrongdoing was occurring and that it would have negative consequences for others.

> *"I was against the project, but it wasn't my decision. When the decision is made at the top, you don't want to go back on it. At some point, you let it go. We choose our battles."*
>
> Q-04

Another interviewee elaborated on this dilemma:

> *"It's double-edged to report ethically problematic situations, you have to be intimately convinced first. You feel that it carries weight because it's hard to go against an engineer's official opinion. Managers know that as soon as it is signed by an engineer, they have to take it into account because, if it becomes public, they will be incriminated. But our "client" is our employer. We're in a situation where we can't overuse this. It has to be based on honest beliefs."*
>
> Q-10

https://doi.org/10.7202/1115807ar

Because whistleblowing or resistance can significantly hurt one's career, our interviewees "chose their battles" and sometimes "turned a blind eye" to situations that made them uncomfortable but did not have an obvious or immediate impact. In doing so, they could protect their jobs without necessarily violating their ethical responsibilities.

4.2.5. Cutting Corners Ethically / Trying to Make it Work

When faced with conflicting organizational and professional logics, some engineers search for ways to meet the demands of both. As the literature on hybrid professionals explains, they may try to prioritize efficiency in such circumstances, while not sacrificing their professional commitments (Noordegraaf, 2007). In a context of limited resources, they may be pressured to skip some steps or cut some corners to expedite tasks at minimal cost.

> *"There are cases where I think it is appropriate to... I'll put it this way, to ethically cut corners. There are cases where the regulation situations are not really sensible, even though they may be technically applicable."*
>
> O-29

Depending on the situation, engineers might find that they can hurry a step along or not fully worry about regulatory compliance to some extent without compromising safety. As another engineer explained, "*it's all about schedule, pressure and cost-cutting realistically*" (O-30). While they would rather not take such actions, a few said they could, at times, cut corners without undermining their ethical responsibilities. They were clear that they would prefer to have more time and space to do their work and be confident that it was done to the highest quality. They were pragmatic, however, and learned how to cut corners in a manner that minimized risk.

Quebec engineers, too, reported that they sought to reconcile competing logics when they could: "*There is a way to find compromises. I was more on that, to be able to negotiate and then arrive at an in-between...*" (Q-20). These hybrid workers found ways to manage the conflicting logics and competing pressures. When the concerns were minor, this goal was not necessarily difficult to reach.

4.2.6 Leaving the Job

Data analysis reveals two types of scenarios. On the one hand, when faced with ethical tensions, some public-sector engineers opt to change jobs while remaining in the public service. Because the transition is made easier by job security and numerous mobility opportunities, they can distance themselves from a problematic work environment without losing their benefits. On the other hand, our analyses show that the public sector can be an appealing exit strategy for private-sector engineers caught up in ethical tensions. It was for such reasons that several interviewees had left jobs in the private sector. They turned to the public sector with the aim of having a lighter burden of ethical tensions, although most of them still reported some difficulties, as we have described. One interviewee had switched to the public sector for such reasons, saying:

> *"There were business decisions that I didn't really agree with. I didn't like it, I felt that my work was losing its meaning. I asked myself: "Why spend so much time for a company that I don't really support? That's when I decided to go to work for the Department of the Environment, where I found that it made sense for me. I could work for my community, to truly protect the lakes and rivers."*
>
> Q-09

The public sector appears to be a refuge for some engineers, thanks to its public service ethos, which makes it less vulnerable to managerial and market logics. Our data nonetheless show that this sector is not free from ethical tensions, as New Public Management and conflicting institutional logics can create dilemmas for professionals even there.

5. Discussion

As previous research has shown, professionals in organizations may end up in conflict with the logic of professionalism, which makes increased efficiency the organization's goal (Blomgren & Waks, 2015; Noordegraaf, 2015; Thornton & Ocasio 1999). Our research shows how conflicting logics may sometimes create ethical dilemmas for professional workers, like public-sector engineers, notably when the drive for efficiency encourages professionals to rush or cut corners to meet strict budgets and schedules, thus preventing them from investing the time and attention needed to ensure public safety. Our interviewees attributed such dilemmas to four causes: emphasis on minimizing time, costs and human resources; changes to policies, practices and oversight; managerial challenges (related to supervising work at a distance, non-engineer supervisors and bureaucracy); and politics. Our Quebec interviewees were under a higher degree of oversight, with the result that several of these challenges were more formidable for them (especially the one of complying not only with policies and practices but also with politics).

These hybrid workers would engage in a variety of strategies to navigate the conflicting logics. We identified six: i) avoiding conflict; ii) saying no; iii) reporting to a higher authority; iv) turning a blind eye and choosing one's battles; v) cutting corners ethically; and vi) leaving. The last strategy was adopted by public-sector engineers when they were in the private sector; they then sought public-sector work with the goal of minimizing ethical dilemmas, which admittedly did not disappear. Our Quebec interviewees were most likely to mention their ability to evade conflict by drawing on their expertise and their commitment to ethical responsibilities. Given the higher level of attention to these responsibilities in Quebec, this strategy may have been more feasible for Quebec engineers in the early 2020s than for Ontario engineers in 2017. In addition, the amendments to the Engineers Act in 2020, which brought significant changes to the definitions of the scope of practice, reserved activities and powers of the OIQ, may have helped reduce ethical tensions to some extent. Beyond such generalities, we cannot quantify the likelihood of public-sector engineers choosing one response over the others. These issues require further study with quantitative and possible longitudinal data.

In the literature on institutional logics, researchers have examined the challenges of professionals in navigating this sometimes-complex terrain, but they have rarely looked at the ethical implications of conflicting logics, instead focusing on the worker's identity or the worker's decision to align with one logic over another (or to try to blend the two) (Bévort & Suddaby, 2016; McGivern et al., 2015; Reay & Hinings, 2009). The literature on professional misconduct has tended to focus on major scandals and criminal activity by professionals, missing the more subtle tensions and dilemmas that professionals navigate more frequently (Currie et al., 2019; Fey & Amis, 2023; Gabbioneta et al., 2019; Muzio et al. 2016). Nonetheless, this literature does stress the importance of organizational contexts in determining whether misconduct occurs or not. Our research combines these approaches to show how conflicting logics in organizational contexts can create dilemmas that do not necessarily escalate into misconduct. In fact, our hybrid engineer-managers used many strategies to manage such dilemmas, at times calling on the logic of professionalism to support resistance. Thus, our research provides insight into competing logics and hybridity by revealing the various institutional logics at work in the public sector, and how professional engineers deploy various strategies to navigate contradictory injunctions, to maintain their agency and to minimize ethical tensions.

https://doi.org/10.7202/1115807ar

Several of their responses were consistent with hybrid professionalism. When public-sector engineers avoid conflict, they are trying to navigate both logics with a view to meeting organizational goals while maintaining their ethical commitments. In a different way, those who "turn a blind eye" and "choose their battles" also try to meet the demands of both logics, but in some work environments this requires them to ignore small, potential infractions of their code of ethics. This is consistent with unethical pro-organizational behaviour, where some workers juggle professional, ethical and organizational interests while putting the interests of the organization first (Coppins & Weststar, 2023; Kim et al., 2023; Mukherjee, 2024). Those who say they might, at times, "cut corners ethically" are also demonstrating hybridity, as they try to fulfil responsibilities to their organizations without endangering the public. Note that, in the last two instances, there is room for violations of ethics to occur. Such violations could eventually escalate and lead to greater misconduct or engineering failures (such as the Elliot Lake mall collapse noted earlier).

Other responses appear to reflect a prioritization of the profession's logic (and occupational identity). Engineers who "just say no" take a hard line with their employers and coworkers to maintain their ethical commitments, as do those who report problems when faced with them. For many, however, there is a reluctance to report violations to the regulatory bodies whose role is to ensure that professional practice serves the public interest. This reluctance may hinder the ability of these bodies to police professional ethics.

It is important to remember that engineers have the option of pursuing several strategies to resolve an ethical dilemma. For example, they may first try to avoid conflict but then "say no" and/or report the behaviour. The chosen strategy may also depend on the magnitude of the conflict: major issues are more likely to result in a firm stand and a report, and minor ones in "turning a blind eye." The last strategy may nonetheless give misconduct enough opportunity to escalate in circumstances where engineers lack the backing of their coworkers or immediate supervisors, where the latter are not engineers, where they are only tangentially made aware of an issue and thus find it easier to ignore and where they feel that standing up may jeopardize their job security.

This research does have some limitations. Most notably, the data were drawn from two qualitative datasets, collected a few years apart, based on slightly different questions. The timing of the interviews was different, as was the focus of the projects, thus yielding different data. Moreover, the sample sizes are on the low side, especially in light of the diversity of the public-sector engineers and their work experiences. The structure of the public service in the two provinces is also different. Given these differences, it is striking that so many concordances were found among the interview findings. Moreover, it should be remembered that we have focused on public-sector engineers here. Their experiences, as the interviewees themselves told us, likely differ from those of private-sector engineers.

Although we have focused on public-sector engineers, our approach is not limited to them and could be extended to other professional groups in future research. To help all professionals deal with ethical dilemmas, there must be workplace support to ensure they can meet their fiduciary responsibilities. There must also be support and advice for professionals caught up in ethical dilemmas to help them resolve such dilemmas before serious conflict arises.

Note

[1] Around 1,800 engineers work for the Quebec public service, mainly in Transport (68%) and The Environment (17%) (APIGQ, 2022).

References

Adams, Tracey L. (2020). 'This happens all the time': organizations, rationalization and ethical dilemmas in engineering. *Work, Employment and Society*, *34*(6), 985-1003.

Association professionnelle des ingénieurs du gouvernement du Québec (2017). *Pour en finir avec la vulnérabilité du gouvernement du Québec en ingénierie*, APIGQ.

Arnold, Bruce. L., & Kay, Fiona. M. (2009). Social capital, violations of trust and the vulnerability of isolates: The social organization of law practice and professional self-regulation. In: *Knowledge and Social Capital* (pp. 201-222). Routledge.

Bélanger, Paul. (2014). The events leading to the collapse of the Algo Centre Mall, Canadian Electronic Library. Ottawa, Ontario.

Bévort, Frans & Suddaby, Roy. (2016). Scripting professional identities: How individuals make sense of contradictory institutional logics. *Journal of Professions and Organization*, *3*(1), 17-38.

Bill 98 (2017). An act to amend various legislation mainly with respect to admission to professions and the governance of the professional system. (Date of Assent, June 8, 2017). (https://www.assnat.qc.ca/en/travaux-parlementaires/projets-loi/projet-loi-98-41-1.html)

Blomgren, Maria, & Waks, Caroline. (2015). Coping with contradictions: hybrid professionals managing institutional complexity. *Journal of Professions and Organization*, *2*(1), 78-102.

Braun, Virginia, & Clarke, Victoria. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101.

Bryson, John. M., Crosby, Barbara C., & Bloomberg, Laura. (2014). Public value governance: Moving beyond traditional public administration and the new public management. *Public Administration Review*, *74*(4), 445-456.

Brock, David M. (2006). The changing professional organization: A review of competing archetypes. *International Journal of Management Reviews*, *8*(3), 157-174.

Cadieux, Nathalie & Roch Laflamme. (2009). Éthique professionnelle et éthique en ingénierie. *Relations industrielles / Industrial Relations*, 64(2), 307–325.

Causer, Gordon, & Jones, Carol. (1996). Management and the control of technical labour. *Work, Employment and Society*, *10*(1), 105-123.

CBC News. (2018). Former SCN-Lavalin VP pleads guilty in MUHC corruption trial. July 10, 2018: (https://www.cbc.ca/news/canada/montreal/former-snc-lavalin-vp-pleads-guilty-in-muhc-corruption-trial-1.4741765)

Cherry, Paul. (2018). MUHC bribery scandal: A timeline of 'the biggest fraud in Canadian history'. *Montreal Gazette*, Nov 28. 2018: (https://montrealgazette.com/news/local-news/muhc-bribery-scandal-a-timeline-of-the-biggest-fraud-in-canadian-history)

Code of ethics of engineers. (2023). *I-9, r. 6 - Code of ethics of engineers*. (https://www.legisquebec.gouv.qc.ca/en/tdm/cr/I-9,%20r.%206) .

Commission d'enquête sur l'octroi des contrats publics dans l'industrie de la construction. (2015). *Rapport final de la CEIC*. Bibliothèque et Archives nationales du Québec.

Coppins, Trevor & Weststar, Johanna. (2023). What about my occupation? A multidimensional view of workplace identification and unethical pro-organizational behavior', In: Gabbioneta, C., Clemente, M. & Greenwood, R. (Eds) Organizational Wrongdoing as the 'Foundational' Grant Challenge: Definitions and Antecedents (*Research in the Sociology of Organizations*, Vol. 84). Emerald Publishing Limited, Leeds, 153-170.

Corbière, Marc & Larivière, Nadine. (2020). *Méthodes qualitatives, quantitatives et mixtes*, 2e édition: Dans la recherche en sciences humaines, sociales et de la santé. PUQ.

https://doi.org/10.7202/1115807ar

Currie, Graeme, Richmond, John, Faulconbridge, James, Gabbioneta, Claudia, & Muzio, Daniel. (2019). Professional misconduct in healthcare: setting out a research agenda for work sociology. *Work, Employment and Society*, *33*(1), 149-161.

Cruickshank, Heather J., & Fenner, Richard A. (2007). The evolving role of engineers: towards sustainable development of the built environment. *Journal of International Development: The Journal of the Development Studies Association*, *19*(1), 111-121.

Dinovitzer, Ronit, Gunz, Hugh, & Gunz, Sally. (2014). Unpacking client capture: Evidence from corporate law firms. *Journal of Professions and Organization*, *1*(2), 99-117.

Evetts, Julia. (2006). The sociology of professional groups: New directions. *Current Sociology*, *54*(1), 133-143.

Fey, Laura & Amis, John. (2023). Organizational Wrongdoing, Boundary Work, and Systems of Exclusion: The Case of the Volkswagen Emissions Scandal. In Gabbioneta, C., Clemente, M. ad Greenwood, R. (Ed.) *Organizational Wrongdoing as the 'Foundational' Grand Challenge: Definitions and Antecedents (Research in the Sociology of Organizations*, 84), Emerald Publishing Ltd, Leeds, 171-192.

Fraser, Donald & Goldenberg, Shirley B. (1974). Collective bargaining for professional workers: the case of the engineers. *McGill Law Journal*, vol. 20, p. 456.

Freidson, Eliot. (2001). *Professionalism: The Third Logic*. University of Chicago Press.

Friedland, Roger & Alford, Robert. (1991). Bringing Society Back in: Symbols, Practices and Institutional Contradictions. In Powell, Walter W. and DiMaggio, Paul (eds) *The New Institutionalism in Organizational Analysis*. University of Chicago Press, 232–63.

Gabbioneta, Claudia, Faulconbridge, James R., Currie, Graeme, Dinovitzer, Ronit, & Muzio, Daniel. (2019). Inserting professionals and professional organizations in studies of wrongdoing: The nature, antecedents and consequences of professional misconduct. *Human Relations*, *72*(11), 1707-1725.

Greenwood, Royston, Raynard, Mia, Kodeih, Farah, Micelotta, Evelyn R., & Lounsbury, Michael. (2011). Institutional complexity and organizational responses. *Academy of Management Annals*, *5*(1), 317-371.

Kim, Jin, Kang, Hyejin, & Lee, Kyungeun. (2023). Transformational-transactional leadership and unethical pro-organizational behavior in the public sector: does public service motivation make a difference? *Public Management Review*, 25,(2), 429-458.

Mazouz, Bachir, Sponem, Samuel & Rousseau, Anne. (2015). Le gestionnaire public en question. La difficile conciliation des logiques bureaucratique et managériale, *Revue française de gestion*, 250(5), 89-104.

McGivern, Gerry, Currie, Graeme, Fitzgerald, Louise & Waring, Justin. (2015). 'Hybrid manager-professionals' identity work: the maintenance and hybridization of medical professionalism in managerial contexts', *Public Administration,* 93:412-432.

Mukherjee, Ujjal. (2024). Unethical pro-organizational behavior: a systematic literature review and research agenda. *International Journal of Ethics and Systems*. (https://doi.org/10.1108/IJOES-11-2023-0243)

Muzio, Daniel, Faulconbridge, James, Gabbioneta, Claudia, et al. (2016). Bad apples, bad barrels and bad cellars: a boundaries perspective on professional misconduct. In Palmer Dona, Greenwood Royston and Crowe-Smith, Kristin (eds) *Organizational Wrongdoing: Key Perspectives and New Directions*. Cambridge University Press, 141–175.

Niosi, Jorge et al. (1990). *La montée de l'ingénierie canadienne.* Montréal : PUM.

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

Noordegraaf, Mirko. (2015). Hybrid professionalism and beyond:(New) Forms of public professionalism in changing organizational and societal contexts. *Journal of Professions and Organization*, *2*(2), 187-206.

Oiry, Ewan & Vignal, Jérémy. (2016). Peut-on manager un changement tout en le subissant? Le cas des managers de proximité. *Question (s) de management*, (2), 61-72.

Pache, Anne-Claire & Santos, Filipe. (2013b). Embedded in hybrid contexts: How individuals in organizations respond to competing institutional logics. In: *Institutional Logics in Action, Part B* (pp. 3-35). Emerald Group Publishing Limited.

Pache, Anne-Claire & Santos, Filipe. (2013b). Inside the hybrid organization: Selective coupling as a response to competing institutional logics. *Academy of Management Journal*, *56*(4), 972-1001.

Pollitt, Christopher & Bouckaert, Geert. (2017). *Public Management Reform: A Comparative Analysis —into the Age of Austerity*. Oxford University Press.

Powell, Michael J., Brock, David. M., & Hinings, Christopher R. (1999). The changing professional organization. *Restructuring the Professional Organization: Accounting, Health Care and Law*, 1-19.

Professional Engineers Ontario (PEO). (2023). *Code of Ethics*. (https://www.peo.on.ca/licence-holders/code-ethics) .

Radio-Canada. (2016). Ordres professionnels: Québec veut protéger les dénonciateurs, May 11. (https://ici.radio-canada.ca/nouvelle/780931/quebec-ordres-professionnels-projet-loi-ethique-gouvernance-commission-charbonneau)

Radio-Canada. (2021). Deux ingénieurs sont blâmés dans le déversement de la mine de Mount. Brend, Yvette & Trochu, Mélinda. (2021). August 11. (https://ici.radio-canada.ca/nouvelle/1815959/canada-mines-ingenieurs-barrage-mont-polley-cb)

Reay, Trich, & Hinings, Robert (2009). Managing the rivalry of competing institutional logics. *Organization Studies*, *30*(6), 629-652.

Slayton, Philip & Trebilcock, Michael J. (ed.). (1978). *The Professions and Public Policy*. University of Toronto Press

Thornton, Patricia H., & Ocasio, William. (1999). Institutional logics and the historical contingency of power in organizations: Executive succession in the higher education publishing industry, 1958–1990. *American Journal of Sociology*, *105*(3), 801-843.

Thornton, Patricia H., & Ocasio, William. (2008). Institutional Logics. In: Greenwood Royston, Oliver Christine, Sahlin Kirsten & Suddaby, Roy (eds.) *The SAGE Handbook of Organizational Institutionalism,* Newbury Park: SAGE Publishing: 99-129.

https://doi.org/10.7202/1115807ar