Chapter 15. In: Research Handbook on the Governance of Projects,
Cheltenham: Edward Elgar Publishers, pp. 171-183
DOI:10.4337/9781802208078.00022

Normalization of Deviance in Projects:
Its Causes and Implications for Effective Governance

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Prepared for: Drouin, N., Müller, R., and Sankaran, S. (Eds.), *Research Handbook for the Governance of Projects*, Edward Elgar Publishers

Portions of this chapter were derived from: Davis, K. and Pinto, J.K. 2022, "Organizational Error and the Normalization of Deviance in Projects: Using narratives to identify current trends," *IEEE Transactions on Engineering Management*, (under revision to resubmit).

Final Draft

Introduction

Recently[1], an electrical worker employed by the sub-contractor of a major utility was fatally electrocuted while working on a project in a "hot zone." This was a dangerous work environment due to the proximity of a number of high-voltage electrical lines and adjacent towers. Because this environment is considered very high risk, continuous employee safety training and rigorous enforcement are mandated by state law. Following the subsequent investigation and from depositions of key members of the contractor and utility organizations, it was determined that the utility was fully aware of the dangers of working in this area, had a number of codified safety policies and best practices in place, but routinely failed to enforce them – either for their own employees or for those of contractors, in spite of legal obligations to do so. When questioned, members of the organization acknowledged the lack of enforcement efforts and painted the picture of an organizational culture that encouraged and rewarded its project managers for the quick completion of projects, even if safety steps had to be cut along the way.

In early 2018, the large UK construction firm Carillion was forced to enter liquidation proceedings, with a debt of £7.1 billion and a string of some 30,000 creditors, suppliers, employees, shareholders, and customers left with significant financial losses. In the aftermath of this financial disaster, a report by two parliamentary select committees criticized the regular actions of directors, auditors and the regulatory bodies as the main reason behind the collapse (House of Commons 2018). A system-wide lack of control systems led to three specific types of normalized deviance: "late payments to suppliers, aggressive accounting and payment of high dividends to shareholders despite the troubled financial status of the firm" (Hajikazemi, et al, 2020: p. 1122).

What these two stories have in common is a fundamental willingness of organizations creating cultures that reward behaviors, which are ultimately deviant in pursuit of some other acceptable goals (for example, profitability). That is, the challenge here is not that employees are ignorant of required standards of behavior or accepted practices; quite the opposite, in fact. The problem, from a governance perspective, is that unsafe or unethical practices are fully recognized, as well as potential problems resulting from their disregard, but it does not matter. Individuals and entire groups (even up to the corporate level) routinely and willingly transgress accepted standards of behavior. What may have once begun as a "this one-time

[1] Some key details have been deliberately obscured for legal reasons.

only" deviation from standard operating rules become, with enough repetitions, ''normalized'' practice patterns.

Normalization of deviance in projects and project management is a concept that has become increasingly important in recent years, as we better understand the expanded nature of project managers and their teams in pursuing organizational goals through the use of project-based work. As we will see in this chapter, in many ways normalization of deviance (NoD) is a natural consequence of failed governance, toxic or benign operating cultures, and skewed reward systems. Our goal is to introduce the idea of NoD, identify its causes and their consequences, and offer a model for identifying the warning signs of NoD and active steps organizations can take to quickly address and minimize the role NoD plays in both the failure of projects of immediate concern, as well as the manner in which these behaviors can continuously poison the ground for future project efforts.

It is generally recognized that the term "normalization of deviance" was first coined by Diane Vaughan, a Columbia University professor who studied the original Space Shuttle Challenger disaster in 1986 and found its cause resulted from a series of missteps, flawed assumptions, and a NASA culture of risk-taking. "Social normalization of deviance means that people within the organization become so much accustomed to a deviant behavior that they don't consider it as deviant, despite the fact that they far exceed their own rules for the elementary safety" (from Villeret interview with Vaughan, 2008). Equally importantly, Vaughan's work has found that people grow more accustomed to the deviant behavior the more it occurs; that is, NoD is the progressive state of loss of effective control. Put simply, normalization of deviance suggests that *the unexpected becomes the expected, which becomes the accepted* (Pinto, 2006). If we consider this dictum, it implies that toxic or inappropriate behaviors may occur once, result in no organizational sanctions or loss of operational effectiveness, and so are continuously repeated, often without negative consequences *until the inevitable catastrophe occurs*. Thus, one phenomenon of this normalization of deviance is that while a series of behaviors may appear deviant to people outside the organization, for personnel within the firm, the deviance often goes unrecognized; that is, it is simply assumed to be normal occurrence. It is usually only with hindsight that people within an organization can realize that their seemingly "normal" behavior was, in fact, deviant (Vaughan, 1996; 1999; 2004; Vaughan, et al., 2005).

Part of the challenge in recognizing and addressing normalization of deviance is the role that the "gradualism" phenomenon plays in promoting these concerns. As Starbuck and Milliken (1988) have noted, acclimatization within an organization to "deviance" behavior occurs as a process of steps, often over an extended period. The unacceptable behavior does not occur all at once, but rather, may serve as the summation of multiple decisions made or avoided, with no visible or discernible negative effects. Thus, the potential for catastrophe is never envisioned as an option until it occurs. In a project setting, we see gradualism occur in scope adjustment, safety standards modification, or incremental changes to plans and other control documentation (Winch, 2013; Eden, et al, 2005) and often experience the effects that gradualism plays in ballooning project costs and schedules. Or, more tragically, gradualism may affect the adherence to safety standards in which lengthy or seemingly obstructive safety checks are, over time, ignored with increasing frequency until a catastrophic event occurs. As Winch (2013) noted, a constructivist perspective yields a number of causes of project escalation – many involving elements of gradualism – including strategic misrepresentation, "endgaming," "governmentality," culture, and escalation of commitment on major projects (Clegg, et al, 2006; 2002).

There is an important difference between the ideas of "deviation" and "deviance" as they relate to project development (Bourrier, 2005). It is commonly understood that projects are prone to deviation during the development process, as specific technical, commercial, or environmental issues can lead to nonconformity with the expected standards (c.f. Morris and Hough, 1987; Hällgren and Soderholm, 2010; Geraldi, et al, 2009). Deviation from plan, for example, may be a "normal" element in the development of most projects and our response to these deviations – efforts to "stabilize the situation" (Hällgren and Soderholm, 2010) – can be viewed as an important, but relatively commonly-applied component of the project development process (Orr and Scott, 2008; Jin and Levitt, 1996). Indeed, the practice of configuration management is often predicated on the expectation that deviations will naturally (and necessarily) occur in the project between its original plan and final delivery. The challenge of dealing with deviations in this sense lies in determining how effectively an organization reacts to unexpected events; i.e., how quickly they are able to get a project back on track with minimal lost time or expense. Deviance, on the other hand, becomes an attitude that members of an organization adopt as cultural norms both prior to and during the project development cycle. This behavior doesn't deny errors or misuse of organizational actions, but it attempts to "normalize" these errors as simply part of the project's (or firm's) normal

operating procedures. When "the unexpected" fully migrates to "the accepted," the danger for organizations is that they have rationalized away destructive behaviors or created an environment where deviance is permitted to thrive. Thus, "deviation" is normal in projects; "deviance" is represented as normal, but actually results only through a willingness to accept toxic behaviors and look the other way.

There are reported examples of the normalization of deviance phenomenon in multiple industries and professions including engineering (Gerstein, 2008), medical care (Banja, 2010; Green, 2004; Prielipp, et al., 2010), and industrial and financial organizations (Ashford and Anand, 2003). Although widely observed, normalized deviance differs from the more commonplace nature of organizational accidents due to engineering overreach (Petroski, 1992) or other design or development failures. Errors, particularly due to unexpected risk factors (e.g., "unknown-unknowns") will continue to remain a part of organizational life despite firms' attempts to identify and therefore minimize their effects as much as possible, leading to the "normal accidents" which are the price paid for the failure to jointly design technology and organization (Perrow, 1999). Further, some risks are accepted as a process of rational cost-benefit analysis, as has been argued to have occurred with NASA's decision to launch Challenger in the face of technical concerns. In this case, technical risk was outweighed by political risk, where NASA faced tremendous pressure to carry out missions to support the image they had created, that space flights had become both routine and a profitable enterprise through contracting for satellite launches (McConnell, 1986). A more recent example of a similar phenomenon occurred with Boeing's 2018 introduction of their widely-used 737, upgraded as the 737 Max. In the aftermath of two fatal accidents and the deaths of over 300 people, the company has been charged with negligence through pushing these design and software upgrades too rapidly, even though they fundamentally changed the flight characteristics of the aircraft. In this case, commercial pressures were assumed to trump technical concerns, as the changes were rationalized as simple "upgrades" to a proven airframe. Normalization of deviance represents a cultural attitude that consciously creates conditions in which mistakes are made; in effect, it provides a perfect petri dish environment for corporate (or project) misbehavior. As Vaughan (1996; 2005) notes, with normalization of deviance, individuals, teams, and organizations repeatedly drift away from what are acceptable standards of practice until the drift has become the norm.

What Contributes to Normalization of Deviance?

We see the roots of NoD behavior emerge from the same backdrop of other forms of unethical or misguided organization behaviors. That is, just as the phenomena of: 1) socialization, 2) institutionalization, and 3) rationalization enable corrupt practices to flourish in otherwise competently-led organizations (Ashforth & Anand, 2003), we can find these same occurrences are similarly at work in the evolution of deviant behavior among project organizations and members of project teams. Underlying this process is a contributing culture within the organization that is either accustomed to such practices and actively looks the other way, or may actually reward such behavior. Early research on the formation of corporate cultural norms, for example, traced the development of a firm's values and assumptions often to a series of critical incidents, or defining behaviors, which demonstrate – despite formal professions of corporate values – what it really takes to succeed (Hatch, 1993; Kilmann, 1985). As we consider each element in turn, we can reflect on how these not only help develop a culture of NoD, but also how they contribute to a project governance system that fails to provide the necessary process control of people and organizational systems (Banja, 2010).

1. Institutionalization exposes newcomers to deviant behaviors, often performed by authority figures, and explains those behaviors as organizationally normative. When new members of project teams are first assigned, they are quickly immersed in the rules (written and unwritten) that govern project activities. Because new members may be aware of the "right way" to perform tasks, institutionalization processes are intended to show them "how we do it here" in order to quickly forestall their objections should these behaviors seem unethical or unsafe.
2. Socialization, which is often mediated by a system of rewards and punishments, aims at determining whether the newcomer will or will not join the group by adopting the group's deviant behaviors. This step is where governance and operating culture most directly collide, as new members are exposed, through experiencing critical incidents and subsequent rewards or sanctions, to expected behaviors and are at this point presented with the implicit choice of joining in to get along, or risking isolation and social ostracism by not submitting to the cultural norms of the project team.
3. Rationalization enables organizational members to convince themselves that their deviances are not only legitimate, but acceptable and perhaps even necessary. The gradualism at work in NoD is most often demonstrated as part of the rationalization

step. Repeated missteps or deviations from accepted operating norms and principles are ignored to the point where they become institutionalized and accepted – even expected – on the part of project team members.

It is important to note that institutionalization, socialization, and rationalization work in a mutually reinforcing manner to dissolve anxiety among the uninitiated by representing deviant behaviors as thoroughly rational and not immoral responses to work performance challenges (Ashforth & Anand, 2003). For a project team or for a project-based organization, these moves away from standard operating procedures require a series of deliberate actions taken, or not taken, which, when no harm appears to have occurred, can be safely assumed to represent the true wishes of the firm's executives. In this way, NoD is not so different from other forms of unethical behaviors, as they share the same root causes; namely, a process of inculcating less-than-satisfactory decisions and/or actions throughout the organization to the point where this behavior is simply accepted and ignored.

Let us consider, then, some of the more common NoD behaviors and how they are demonstrated within project-based firms.

Normalization of Deviance Practices in Project Organizations

Research on NoD in projects has led to some useful understanding of how these behaviors can arise, as well as the way in which NoD affects project outcomes. Perhaps the best-known study of projects and NoD comes from Pinto (2014), which used a questionnaire and semi-structured interviews with project managers in three large project-based corporations in the US. More recent work by Davis and Pinto (2022) employed narratives from respondents across multiple industries and project responsibilities. Their findings suggest that there are primarily four consequences of NoD behaviors within firms that can adversely affect project activities. Specifically, the consequences identified included:

1. Project proposals and strategic misrepresentation - A common theme was found of strategic misrepresentation occurring as firms sought to win project business, particularly in competitive bidding processes or as part of final scope negotiations with a customer. The term, "strategic misrepresentation," comes from the work of Flyvbjerg and colleagues as they studied the phenomenon of gaining approval for large public works projects (Flyvbjerg, 2005; Flyvbjerg et al., 2002) and refers to

the deliberate use of misleading or false information for political purposes or agency issues. Thus, one avenue for NoD lies in the tactics employed by firms to win these competitive bids, often through falsifying pertinent information, minimizing risks, making unrealistic project delivery promises, and so forth. Knowing full well that in many cases, these initial promises, though perceived as crucial for winning the business, are based on well-understood falsehoods, project organizations tacitly (and sometimes overtly) encourage these behaviors.

As a recent example, an investigation of wide-spread corrupt practices in the Canadian construction industry in 2011, resulted in the Charbonneau Commission identifying bid-rigging and price fixing in the awarding and management of public contracts. The commission announced that the corruption and collusion were "far more widespread than originally believed" in the construction sector (Saint-Martin 2015). According to Courtois and Gendron (2017), the situation had worsened to the point where collusion had become the "usual" way of managing public contracts in the construction sector.

2. Client/contractor relationships – A fascinating feature of many client/contractor relationships is that they often follow a common "rival camps" dynamic. Rather than explore opportunities to create partnerships and open communications, critical project information is often hoarded and either misused or doled out selectively. Left to our own devices, as a result, the emergent pattern (to follow Bresnen's (2010) argument) among clients and contractors is often one of indirect conflict and opportunism. Put another way, many firms believe it is more advantageous in the short-term to support opportunistic behavior that trumps a more client-centered approach emphasizing partnering and relationship development.
3. Planning and scheduling dynamics – To create accurate schedules, it is necessary for project managers to have full information and a constructive, trusting relationships with senior managers. When a project manager is asked to develop a schedule, there is an implicit assumption that estimates will be in good faith and the resulting project plan reflects a reasonable path to completion. However, it may not be this way at all. By scheduling dynamics, we are referring to the myriad pathologies that often occur during the project planning and scheduling cycle. These issues coalesced around problems in perception, false manipulation or

hijacking the planning process outright, and pressures that senior executives often bring to bear to artificially adjust the schedules. These issues routinely pit top management against the project manager, functional department heads against each other, the project manager against the team, the project team against the customer, and so forth. A relationship between the project manager and senior executives that enforces deliberate manipulation of information, data, and project schedules encourages the maintenance of a combative culture in which normal governance cannot function.

4. Workplace safety – another critical example of NoD behaviors occurs when organizations gradually allow safety standards to relax while pursuing project outcomes. That is, as the original example in this chapter typifies, there are any number of projects in the construction industry, for example, that fail to enforce safety standards (cf. Hajikazemi, et al, 2020; Andersen, et al, 2018; Smith, 2019). In effect, although everyone – site workers and management – is aware of unsafe practices and fully recognizes that such behaviors should be eschewed, there is often an unspoken sub-text accompanying these prohibiting rules in which it is not only possible but often expected that safety rules can be relaxed or ignored. Examples of NoD in workplace safety requirements are numerous and involve a variety of justifications for cutting corners, including pressures for on-time project delivery associated with financial penalties. Moreover, beyond the construction industry, we can see many examples of the consequences of NoD on workplace safety in healthcare systems (Holden, et al, 2011), offshore oil operations (Rundmo, et al, 1998; Ingersoll, et al., 2012), and even agricultural activities (Seo, 2005).

The project management literature is rich with research on the causes of project failure. It is helpful, therefore, to contrast the pathologies that can lead to cost or schedule overruns, technical failures, cancellations, and other negative results and the more insidious dynamic of normalization of deviance, as it applies to project management. Researchers have examined numerous issues that can derail projects, including identifying "decision traps" in project development (Van Oorschot, 2013), political issues (Levine and Rossmoore, 1995; Gil and Pinto, 2019), bureaucratic red tape (DeHart-Davis and Pandey, 2005), team dynamic problems (Thamhain, 1990), leadership challenges (Müller and Turner, 2010) among the

more common forces acting upon project development. However, it is critical to define a conceptual difference between this myriad of project "pathogens" (Love, et al, 2009), including errors of commission or omission, and normalization of deviance in project management. For example, conflict is seen as a natural phenomenon both in organizations in general and project management processes in particular, occurring for a variety of reasons, including differences in goals, functional roles, personality issues, differences in perceptions of behavior and threat, and so forth. That is not to suggest that organizational conflict behavior necessarily equates to normalization of deviance. Problems do arise, however, when behaviors such as these become culturally embedded and destructive but remain viewed as a normal part of organizational processes without questioning the assumptions driving them. For example, intra-organizational conflict involving deliberate attempts to discredit or sabotage the work of another functional department because they are perceived as "the enemy," may be a form of conflict, but its origin lies in destructive cultural processes allowed to run unchecked. In this manner, normalization of deviance is typically the result of a series of deliberative choices that have become institutionalized over time. As noted above, the nature of normalized deviance is one of gradualism and the accumulation of (and organizational acclimatization to) a series of decisions that individually, may not signal disasters but taken collectively, and applied continuously to a project setting, will eventually, lead to serious repercussions (Starbuck and Farjoun, 2005).

Battling Normalization of Deviance Behaviors – What Can be Done?

The Project Management Institute's Body of Knowledge (2021: p. 240) defines project governance as "the framework for directing and enabling an organization through its established policies, practices, and other relevant documentation." Perhaps a better and simpler definition guiding our fundamental understanding of governance is offered by Müller (2009) as "the conduct of conduct;" that is, it is a form of self-regulation "where the regulator is part of the system under regulation" (Müller, 2009; p. 2). Müller further suggests that, "governance provides a framework for ethical decision making and managerial action within an organization that is based on transparency, accountability and defined roles (Müller, 2009; p. 2). Such governance systems offer organizations the most effective means to counter a toxic culture and resulting practices associated with normalization of deviance. This latter point is particularly relevant because NoD practices arise and are informally reinforced

through cultural lapses that often point to ethical concerns as well. Consider, for example, the "project" developed by Volkswagen engineers to develop a system that would allow their diesel engines to cheat emission detection equipment. No one within the Volkswagen engineering staff questioned this dubious undertaking because NoD attitudes were so deeply ingrained (Gaim, et al, 2021).

Using the organizational governance model, there are several ways that project organizations can begin resolving the potential (or actuality) of normalization of deviance (See Table 1). Among these remedial steps are (Pinto, 2014):

Analyze standard operating processes for examples or overt symptoms of deviant behaviors. Before they can begin to address the manner in which normalization of deviance is affecting our operations, organizations must first establish a monitoring and oversight mechanism to identify instances of willful or benign behaviors that may be characterized as normalization of deviance. Initially, these mechanisms may require the use of external consultants or other members of unaffected (non-project-based) components of the organization to provide the outside view that Flyvbjerg (2011, 2013) and others argue is essentially for recognizing decision biases. The key deliverable from this remedial stage should be a process diagram that shows examples of deviant behavior and identifies some of the principal actors involved and motives that are likely incentivizing this behavior.

Educate organizational members how to identify decision traps that can encourage normalization of deviance as part of their own operating processes. This step is necessarily difficult because the normalization model specifies that all too often, organizational members adopt dysfunctional practices gradually, without realizing they are doing so. Thus, the actions may be historically based or so ingrained in the prevailing culture, operating or reward systems, that this behavior is not simply "allowed" to occur, but may be actively promoted. If we apply Argyris's model of single-loop versus double-loop learning (Argyris, 1976; Argyris and Schon, 1978), we can gain some insight into how this educational process can best be addressed. Single-loop learning is defined as organizational members making repeated attempts at resolving the same goal, without ever adjusting the methods or modifying the goals sought. Argyris (1976) argues that double-loop learning, on the other hand, recognizes the criticality of feedback loops in which an individual or organization, having attempted to reach a goal on other occasions, modifies their approach or the goal in light of previous experience and learning. Governance mechanisms permit the firm to

modify behavior, working from the perspective of a double-loop model, whereby past goals must now be modified to support non-deviant behaviors.

Clarify standards of acceptable behavior. Many project governance models suggest that it is critical to highlight the expected behavior as a standard for future behavior. The standards clarification step often consists of reconnecting to an ethical model of behavior because, absent standards, it is not surprising that self-promoting behaviors will occur. An important corollary of this step must be to ensure that members of the organization are comfortable recognizing and calling out NoD practices without fear of sanction or retribution. As Banja (2010; p. 146) noted, "[s]ystem operators need to feel safe in speaking up." Once standards are established and clear demonstrations are made that identifying and naming NoD behaviors are riskless, organizational members are more inclined to willingly adopt these behaviors, particularly if reward systems support them, as we will discuss.

Ensure transparency throughout the organization. Normalized deviance occurs because organizational actors are either unaware that what they are doing is inappropriate, or, as with many models of ethical behavior in organizations, is allowed to occur without proper oversight and necessary exposure. Müller (2009) and others have identified the critical importance of developing a culture of openness and transparency as part of the governance model so that all actors understand the standards, their behaviors are judged against them, and they can perceive the ways in which these standards are working to the advantage of the organizational whole. Exposing the use of techniques that can only be seen as normalized deviance is a critical step in correcting this behavior on an organization-wide basis.

Reward compliance with the new standards. Just as an organization begins to create and enforce standards for appropriate behavior, care must be taken to tie reward systems to these new standards of behavior. Put another way, it is possible to sanction deviant behavior as an element in a new reward structure, but it is often more useful, powerful, and long-lasting to establish positive expectations for future performance, including concrete ways to measure compliance. We need to not only reward compliant behavior but ensure that organizational members see it directly tied to the introduction of new methods, or as a result of the elimination of older, deviant behaviors.

Conclusion

Normalization of Deviance represents a set of cultural norms whereby willful deception, manipulation of information, poisoned customer relationships, and dangerous or passive response to unsafe workplace conditions are allowed to develop and thrive. They are, essentially, a demonstrated result of skewed or absent governance. As this chapter has noted, these behaviors do not suddenly occur, but are the byproduct of a gradualism that steadily erodes expected standards of conduct. Unfortunately, because of institutionalization, socialization, and subsequent rationalization, project-based firms often find themselves caught in a vicious cycle of bad consequences and uncertainty about how to remediate these conditions. This chapter offers some perspective, based on previous research, on some of the dynamics of NoD practices, the manner in which it is most commonly found to affect organizational activities, and some remedial steps to begin recognizing and ultimately, correcting NoD before it reaches its inevitable and potentially tragic results.

Step 1: Process analysis	Critical to first establish a mechanism to identify instances of willful or benign behaviors that may be characterized as normalization of deviance
Step 2: Educate organizational members	Organizational actors must be trained to identify instances of normalization of deviance as part of their own operating processes and the motives behind these actions
Step 3: Clarify standards of appropriate behavior	Organization-wide standards for acceptable interactions with stakeholders, planning, and scheduling activities must be established and uniformly enforced
Step 4: Ensure transparency throughout the organization	Oversight mechanisms can offset many opportunities to fall back into deviant behaviors
Step 5: Reward compliance with the new standards	Recognizing and rewarding instances that support new standards is a critical final component of the change process

Table 1 Countering normalization of deviance: steps in the governance process (from Pinto, 2014).

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Chapter 15: Normalization of deviance in projects: its causes and implications for effective governance

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2023-09-15

Pinto JK, Davis K. (2023) Chapter 15: Normalization of deviance in projects: its causes and implications for effective governance. In: Research Handbook on the Governance of Projects, Cheltenham: Edward Elgar Publishing, pp. 171-183

https://doi.org/10.4337/9781802208078.00022