**Governing Turbulence**

*An Outline for an Organizational-Institutional Approach*

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**Abstract**

This paper sets out three ambitions: First, it suggests ‘turbulence’ as a conceptual device for understanding governance in times of uncertainty and unpredictability and identifies three types of turbulence: environmental turbulence, organized turbulence and turbulence of scale. Second, the paper outlines an organizational-institutional approach that highlights the role of organizational and institutions in both producing and adapting to turbulence. Third, it elaborates a set of propositions that suggest how organizations and institutions are likely to respond to precipitous, conflicting, and novel—in short, turbulent—governance challenges.

**Introduction**

The decision of UK citizens to ‘Brexit’ in 2016 illustrates that Europe is in a stage of accelerating turbulence in search of political order (Olsen 2007). The unruly politics leading to the British referendum are now being followed by the chaotic politics of extricating U.K. political institutions and markets from the European Union (EU). More far-reaching still, ‘Brexit’ threatens serious cascading effects, such as intensified Scottish demands for independence from the UK. Meanwhile, across the Atlantic, the 2016 US Presidential campaign revealed an analogous kind of turbulence (Kristof 2016). The surprising nomination of Donald Trump as presidential candidate and his subsequent electoral victory has thrown American politics into turmoil, portending cascading political dynamics that will play out in unknown ways over the next decade. Both incidents illustrate competing and shifting ideas about the ‘forms of political association’ and increased turbulent governance (Olsen 2016: 5; Bulmer and Joseph 2016). Yet this paper argues that turbulence is hardly limited to such earth-shaking events. As argued, turbulence might be a normal and enduring, yet unrecognized, feature of contemporary public governance, not merely a transitional anomaly. Turbulent governance, we argue, requires public organizations to face governance challenges of *certain* kinds--situations where *events, demands, and support interact in a highly variable, inconsistent, unexpected and unpredictable manner* (Ansell et al. 2017; Easton 1965; Gunnell 2011; Miller 1971). The paper has three ambitions: First, it suggests ‘turbulence’ as a conceptual device for understanding governance in times of uncertainty and unpredictability and then identifies three types of turbulence: environmental turbulence, organized turbulence and turbulence of scale. Second, the paper outlines an organizational-institutional approach that highlights the role of organizational and institutions in both producing and adapting to turbulence. Third, it elaborates a set of propositions about how organizations and institutions are likely to respond to precipitous, conflicting, and novel—in short, turbulent—governance challenges.

The concept of turbulence originally developed in physics to describe chaotic fluid dynamics—such as stormy weather or complex river currents. A parallel was outlined by James N. Rosenau (1990 and 1997) in his attempts to conceptualize the dynamic complexity of governance in a turbulent world). Rosenau (1990: 10) depicted turbulence in world affairs as centered on *parametric change* along three dimensions. First, transformation of the overall structure of global politics (notably becoming multi-centric), changes in authority structures (a fundamental relocation of political authority), and revolution in the skills of citizens (becoming increasingly competent in politics). The ensuing consequence was uncertainty (Rosenau 1990: 8). Following Rosenau, this paper argues that turbulence directs analytical attention towards challenges as to how governing organizations handle unstable, unsettled and fluid public domains (Vigoda-Gadot and Mizrahi; Olsen 2017). Yet, how challenging is turbulence to public governance? The answer depends on whether we look at turbulence as a *condition* or a *dysfunction*. If an intensification of speed, complexity and conflict is understood to be a condition of contemporary governance – as argued by James Rosenau (1990) and earlier by David Easton (1965) -, then the implication is that efficient and effective governing institutions must manage turbulence as a critical parameter of the governing process. Government agencies that do not function well in turbulent conditions, for example, are likely to perform poorly, make mistakes and face criticism. Treating turbulence as a condition leads to an investigation of how well the strategy and structure of governing institutions are adapted to turbulent conditions. However, there is also another way of looking at turbulence. Rather than being understood as a governing parameter, turbulence is often commonly understood to be dysfunctional—that is, as exceptional, dangerous, or contradictory. Seen in this light, turbulence may push organizations and institutions to their limits and threaten surprising cascading dynamics that test the sustainability of existing governance arrangements. Or it might produce maladaptive behaviors that trap governance into suboptimal outcomes. From this perspective, the emphasis shifts from how governing institutions manage turbulence to how they produce, prevent, or resolve it. Governance in this paper is defined as steering society through interactive and hierarchical processes towards collectively negotiated goals (Ansell and Torfing 2016; Egeberg et al. 2016). ‘Governance organizations’ in this paper include public organizations – including governments, political parties, international organizations, and the like – and also semi-public organizations such as for-profit firms delivering contracted public services, public-private partnerships, and the like.

Whether understood as a condition or as a dysfunction, our goal is to set out a broad framework in which to examine how governing organizations and institutions interact with and adapt to turbulence. Drawing on institutional theory, organization theory, public administration and political science, our intention is to frame the issue of turbulence theoretically and orient researchers toward concrete empirical questions. To do this, we outline an organizational-institutional approach that emphasizes that organizations and institutions are critical structures and agents that directly influence the production, management, and adaptation to turbulence. They affect the basic factors that contribute to turbulence and their patterns of interaction; they also shape how different levels of turbulence interact and, via their strategies and resilience, affect the nature of institutional change. Exploring how organizations and institutions confront and create turbulence offers opportunities for scholarly reflection, rethinking, and may suggest new ways forward in the study of the organizational basis of public governance (Egeberg et al. 2016; Olsen 2010). Therefore, we set out a series of propositions that can orient researchers toward future opportunities for empirical research.

Why has turbulence become a ‘new normal’ in public governance and not merely transitional? There are a number of ways to address this question. One type of account might reference real-world events like globalization, disruptive technological changes, the end of the cold war, tensions around European integration, or the rise of terrorism (Giddens 2013; Papastergiadis 2013; Greenspan 2008; Rosenau 2005; Drucker 1993). Another kind of account might focus on the changing character of politics, which has become more pluricentric, fiscally volatile and polarized, with new forms of social media and a 24-hour information cycle that erode trust and speed political fallout (Margetts et al. 2015; Vigoda-Gadot and Mizrahi 2014; Sørensen and Torfing 2007; Ashworth and Heyndels 2002; Rosenau 1990). A third type of account might focus on the nature of public problems, many of which are now deemed ‘wicked’ or even ‘superwicked’. These problems are complex, multi-dimensional, and rife with value conflict (Head and Alford 2015; Levin et al. 2012). A fourth type of account might refer to organizational and institutional complexity, noting that supply chains are longer, policy books thicker, and public agencies must routinely deal with a dizzying array of stakeholder concerns (Room 2011; Rosenau 1990). Looking across these accounts, the intensification of speed, complexity and fluidity appear to be the common factors that that produce turbulent public governance.

The paper proceeds as follows: The next section offers an introduction to the concept of turbulence and suggests three types of turbulence: environmental turbulence, organized turbulence, and what we call turbulence of scale. The next section examines an organizational-institutional approach to turbulent governance highlighting three possible outcomes: punctuated equilibrium, path-dependency, and what we term institutional syncretism. Assuming that turbulence – and particularly turbulence of scale – has become an enduring characteristic of public governance, the paper then discusses how governments may live with it. It is argued that a dynamic and flexible approach to resilience and hybrid forms of organization may be important strategies for coping with turbulence.

**Conceptualizing turbulence**

Whereas some authors use the term ‘turbulence’ merely as a catch phrase (e.g. Waldo 1971), this paper builds on work that treats turbulence as an analytical concept (Emery and Trist 1965). We define turbulence as *interactions of events or demands that are highly variable, inconsistent, unexpected or unpredictable.* As an analytical concept, turbulence complements, but is not identical to, the concept of *crisis*. Consider the following commonly cited definition of a crisis from the crisis management literature: a crisis represents ‘a serious threat to the basic structures or the fundamental values and norms of a system, which under time pressure and highly uncertain circumstances necessitates making vital decisions’ (Rosenthal et al. 1989: 10). According to Boin et al. (2005: 3-4), key properties of crisis are *threat*, *urgency*, and *uncertainty*. A crisis occurs where an urgent response is required in an uncertain situation that threatens fundamental values or life-sustaining systems. While turbulence itself may ‘threaten’ basic structures or values, it is also possible that organizations regard turbulence as the ‘normal’ state of affairs. This has been noted for organizations operating in ‘high velocity environments’ (Bourgeois and Eisenhardt 1988), for ‘garbage can’ organizations (Cohen et al. 1972), for high reliability organizations (Casler 2014) and for ‘reforming organizations’ where reform has become routine (Brunsson and Olsen 1993). Turbulence may be seen almost as a constitutive and systemic part of the fabric of organizations. To say these organizations are in crisis stretches the concept beyond its useful limits.

Turbulence and crisis, however, may also be related in important but poorly understood ways. The Eurozone faced turbulence long before the sudden financial crisis hit Greece. This turbulence, however, remained largely unnoticed until the crisis revealed it. Turbulence may also continue long after the immediate response to a crisis and may reverberate beyond the specific domain of the crisis. The U.S. Department of Homeland Security was created in response to 9/11 as an amalgamation of 22 separate agencies; this unprecedented reorganization produced on-going turbulence for these agencies that lasted well beyond the immediate crisis.

Some scholars have noted that turbulence is not just a property of the environment, but also of the internal organization (Fisher 2012). Drawing on this literature, we suggest that turbulence may be seen as both *endogenous* and *exogenous* to organizations (see below). Most accounts of turbulence, though, look at it as an environmental property that triggers responses in organizations. Turbulence, however, should also be treated as a property *of* organizations. This point is particularly relevant for public organizations led by a political leadership and accountable to legislatures. The empirical focus on private firms rather than on political organizations may be one reason this point has been less appreciated. The mutual indifference of political science and organizational studies may be another (Arellano-Gault et al. 2013). Despite a vast contemporary scholarship on public governance and organizational theory, these two strands of research have a mutual disregard for one another (see Kettl 2002; Olsen 1991, 2010). One consequence of poor inter-disciplinary dialogue is scant knowledge of how public organizations contribute to and manage turbulence.

We can thus distinguish three levels of turbulence, with our original contribution relating mostly to the third:

* **Turbulent environments**: Turbulence may be produced by factors external to organizations – such as legal rulings, accidents, rapid technological change, wars, protests, partisan conflict, and so on;
* **Turbulent organizations**: Turbulence may be embedded into organizations and institutions through factional conflict, staff turnover, conflicting rules, internal reform, complex operations, and so on;
* **Turbulence of scale**: Turbulence of scale appears when what happens at one level of authority affects what happens at another level. A ‘good’ solution’ at one level might be considered a ‘bad’ solution at another level. This kind of turbulence typically characterizes federal or multilevel systems with dispersed authority where governance processes at one level produce governance challenges at another level.

These levels of turbulence often interact. Environmental turbulence may trigger turbulence within organizations, which may in turn have cross-scale consequences. Based on this discussion, we propose our first proposition:

*P1: The more interaction across the three dimensions of turbulence, the more challenging, intractable, and endemic turbulence becomes for governing organizations.*

While this proposition stresses the importance of interaction across the three levels of turbulence, we can also learn something by examining each type individually.

**Turbulent environments**: The traditional scholarly treatment of turbulence in organization theory regards turbulence to be a property of organizational environments--an exogenous condition that organizations confront and must adapt to either periodically or on a routine basis. Governing organizations experience this environmental turbulence in a number of consequential ways:

* Surprise: Environmental turbulence often produces surprises for organizations (La Porte 2007; Pina et al. 2006). An important consequence of surprise is that it makes planning difficult. As Wildavsky (1988) has put it, planning depends on the organizational capabilities available to ‘anticipate’ the future (see also March and Olsen 1995: 91). Planning based on fixed planning parameters will often fare badly in turbulent conditions, though other planning strategies like scenario planning may prove more robust (Ramírez and Selsky 2016).
* Mismatches: Turbulent environments are generally experienced as mismatches between exogenous problems and organizational solutions at hand. In the language of organization theory, there is a poor ‘fit’ or ‘alignment’ between the organization’s strategy and structure and the environmental conditions in which they much work (March and Olsen 1989; Volberda et al. 2012). This mismatch may represent a situation of ‘risk’ for organizations (Beck 1986) that may serve as an adaptational pressure for change (Cowles et al. 2001). External shocks may sometimes offer an opportunity to change agendas within policy areas perceived as deadlocked (Ackrill et al. 2013). In addition, when different parts of organizations face different environments, differentiated perceptions of turbulence are likely to occur. In large and loosely coupled organized systems, such as federal systems, the observer might experience the simultaneous occurrence of high environmental turbulence in some organizational sub-units and low turbulence in others (e.g. Trondal and Bauer 2017).
* Rapid adaptation: Turbulent environments change quickly and unexpectedly and may exhibit high volatility. To avoid mismatches with their environment, organizations are pressed to quickly adapt the organization to these changing conditions.
* Challenges to learning: Emery and Trist argued that environmental turbulence is experienced by organizations as if ‘the ‘ground’ is in motion’ (1965: 26). This means that the environment is changing even as the organization is attempting to adapt to it. A challenging implication of this situation is that it is difficult for the organization to draw clear lessons about the success of their adaptions (March 1991). Moreover, they often will not have the time to conduct evaluations or collect data before the environment shifts again.

While some organizations may thrive under these conditions, organizations are often forced into a reactive mode of response characterized by limited consideration of alternatives and ‘muddling through’ (Lindblom 1958). Facing roadblocks and turbulence in their environments, organizations may try to simplify, incrementally adjust, decouple, and so on. We refer to this reactive mode of response as ‘coping’ and suggest the following proposition:

*P2: The more governing organizations encountering environmental turbulence, the more attention and energy will be invested into coping strategies.*

Students of institutions suggest several coping mechanisms: Sociological institutionalism offers insights into how organizations use image making and the manipulation of symbols, myths, and ceremony to cope with demanding environments (Feldman and March 1981; Meyer and Rowan 1977). The array of organizational responses includes isomorphic adaptation of talk and/or decisions in organizations (Meyer and Rowan 1977), de-coupling of talk, decisions, and actions, and of actions and outcome (Bromley and Powell 2012), thus serving the ‘irrational’ surge for organizational hypocrisy (Brunsson 1989), organizational translation (Czarniawska and Sevòn 1996), among other factors. Bromley and Powell (2012) argue that decoupling occurs when sub-units or practices exist within relatively isolated organizational silos. Thus, internal organizational differentiation and compartmentalization may reflect organizations coping with multiple environmental demands (see below).

**Turbulent organizations**: Bringing public organizations into the study of governance is important in order to emphasize turbulence as not merely periodic and temporary exogenous periods, but also a generic and enduring feature embedded in public organizations. Partisan politics, in particular, embeds a certain kind of turbulence into public organizations that has not been fully acknowledged due to organizational studies’ neglect of public organizations (Arellano-Gault et al. 2013; Olsen 1983). As a result, there has been a subsequent unawareness of turbulence as an endogenous property of organizations. Government ministries, for example, are subject to complex external demands and bound by public obligations; they must be responsive to rapidly shifting changes in public opinion, electoral outcomes and shifting accountability practices and standards; and they are dependent upon legislatures for budgets and authority. In short, turbulence is embedded into their very organizational fabric.

This idea of turbulent organizations is not entirely new: ‘This view of political order harks back to a tradition from Plato, Aristotle, Polybius and Thomas Aquinas and their ideas about how “mixed” orders and combinations of competing, inconsistent and contradictory organizing principles and structures may co-exist and balance interest, values and claims to power’ (Olsen 2007: 13-14). The idea of conceptualizing organizations as turbulent departs from assumptions that organizations rest on the mobilization of multiple sets of actors, interests, decision-making arenas, values, norms and cleavages of conflict (Rosenau 1997; Trondal 2010). Such multidimensionality may in some cases be adaptive, since ‘[g]overnance systems thrive on variety…‘ (Rhodes and ‘t Hart 2014: 2). Moreover, internally diverse organizations might experience robustness when faced with external shocks (March and Olsen 1989) and internal diversity may create resources for innovation, improvisation and opportunism (Hood 1999: 70; Weick 1998).

While implicit recognition of turbulence within organizations has a long historical pedigree, the idea has only occasionally been theorized within organization studies. The focus has been on organizations adapting to turbulent environments rather than on how turbulence can become an endogenous property of organizations. A major exception to this claim has been work inspired by the garbage can approach, which characterizes organizations as ‘organized anarchies’ subject to problematic preferences, unclear technologies, and fluid participation (Cohen et al. 1972). Organizational decision-making and change is depicted as fluid, discontinuous, and loosely organized, where sudden windows of opportunity or external shocks activate actors’ scarce attention, their perceptions of problems, mobilizes initiatives and suggestions for solutions, and the ‘set’ of participants that are packed more or less randomly together (Heimer and Stinchcombe 1999: 28; Olsen 2001). Ambiguities are depicted as central to decision-making and attention is conceived as a scarce resource with decision makers only capable of managing a limited number of issues or issue dimensions at any one time (Cyert and March 1963; Mayntz and Scharpf 1975; Simon 1997). Garbage can organizations are therefore portrayed as essentially reactive and opportunistic in relation to the multiple streams of opportunities, problems, solutions, and decision opportunities. The chaotic quality of life in a garbage-can organization, however, may also create opportunities for creative decision making, policy innovation, and improvisation, opening the door to policy entrepreneurship (Kingdon 1984).

Some of those who have applied the garbage can approach may have overstated the lack of rules and organized practices, leading to an overemphasis on the ‘random nature of decisions’ in ‘organized anarchies’ (Heimer and Stinchcombe 1999: 27). The original garbage can approach, however, did in fact claim that organizational structure (‘choice opportunities’) may bias the degrees and types of ambiguities in decision situations (Sætren 2016: 25). Organizational structures may facilitate couplings of different streams of activity in decision cycles (Olsen 2001: 192) and link problems, choice opportunities, and solutions (Cohen et al. 1976: 31). As such, organizational structures supply decision-makers and decision situations with capacities to act by institutionalizing attention and access structures (Cohen et al. 1976; March and Olsen 1976: 40). Yet, one implication of garbage can idea is the possibility of a *relative* decoupling of problems and choices (Cohen et al. 1976: 36).

Building on this prior work, we state the following proposition about turbulent organizations:

*P3: Turbulence within (and between) organization produces conflict and ambiguity about which actors, problems, solutions, and consequences are deemed legitimate and efficient.*

Even unitary organizations do not necessarily ‘hang together’ and exhibit coherence and predictability. Different components of organizations may overlap, counteract, layer and sometimes be out of synch rather than integrated, coordinated and ‘ordered’ (Thelen and Steinmo 1992; Orren and Skowronek 2004). Moreover, turbulence often occur between organizations, particularly those that are tightly connected in governance processes. Tightly connected political orders are typically characterized by the co-existence of multiple and co-evolving governing organizations and processes (Olsen 2010). Loosely coupled organizations and organized systems are therefore paradoxically both a source of turbulence and a strategy for adapting to turbulence. One essential component of organized turbulence deals with its multi-temporal nature. Turbulence may for example accommodate and produce poly- or multiple-rhythmic governance patterns:

*H4: Turbulent organizations are characterized by units or tasks operating according to different and conflicting temporalities.*

Polyrhythmic organizations with several tempi would be considered more turbulent than organizations geared towards only one tempo. However, several rhythmic patterns may concurrently co-exist in governance processes in a mutually competing – yet compatible – whole. When several rhythmic patterns are layered like this, temporality becomes complex and challenging, but at the same time may unlock possibilities for innovation and change that are embedded in each pattern. As with the garbage can theory of organizations (Cohen et al. 1972) or the multiple streams approach to public policy (Kingdon 1984), temporal complexity calls attention to the dynamic and sometimes paradoxical interaction of problems and solutions. A solution may lead a problem to change, cause new problems, or simply have trouble keeping up with the changing nature of problems. Temporal complexity should thus be seen as one essential ingredient in our assessment of turbulent organizations (Trondal 2017).

A second temporal variable of relevance to organized turbulence is *tempo*. During turbulent times when tempo in organizations increases, established governance practices are arguably likely to be subject to test (March 2010: 16). One might assume that with increased speed comes a tendency for repetition and exploitation, suggesting the following propositino:

*P5: High-speed governance processes will encourage governance organizations to (i) repeat past successes, or what is perceived as past successes, and (ii) pursue less exploration of possible new courses of action.*

 As a result, organizations may be victims of trained incapacity to improvise – merely due to the high speed of conduct. If organizations are subject to up-tempo decision-making, repetition of patterns is sometimes necessary just ‘to keep the performance going’ (Weick 1998: 553). Slow moving decision-making, by contrast, might enable organizations greater leeway for embellishment of items and exploration.

**Turbulence of scale**: Governance in turbulent times depends on how organizations and institutions, which may themselves be internally turbulent, handle the highly variable, inconsistent, unexpected, and unpredictable environmental demands. Thus, governance depends on how governing organizations face the twin challenge of exogenous and endogenous turbulence. Turbulence of scale occurs when organizational solutions found at one level (for example, within one organization or at one level of government) causes new problems of turbulence at another level (or within another organization). The turbulence of scale that results is a quite frequent occurrence in tightly interwoven organized democracies, but often neglected by both reformers and most observers (Zohlnhofer and Rub 2016: 3). The European Commission, for example, tries to reduce its own internal turbulence by issuing calls for ‘better coordination’. This solution, however, may cause turbulence for member-state governments and involve an unintended consequence for administrative sovereignty within domestic government institutions (Egeberg and Trondal 2016). Creating more consistency among decisions horizontally as well as vertically is a commonly stated goal in contemporary western democracies. Recent administrative doctrines share a near universal belief in the desirability of ‘better coordination’ (e.g. Peters 2004). What is often not realized, however, is how the ambitions of combining strong coordination of governance processes at one level of government is incompatible with strong coordination of governance processes across levels (Egeberg and Trondal 2016). This illustrates the challenge of ‘nationally embedding a supranational project’ (Bulmer and Joseph 2016: 738). Turbulence of scale thus illustrates the ambiguities attached to suggesting ‘good’ governance solutions (Grindle 2017).

Turbulence of scale also has a temporal dimension to it. We may consider that certain rhythmic patterns within organizations match more easily with certain rhythmic patterns in their environments. Generally, ‘de-synchronization may occur between the time-scales of politics and that of societal change…’ (Rub 2016: 52). This perspective leads us to two propositions:

*P6: Poly-rhythmic governing organizations may adapt relatively easily to multiple rhythms in the environments while mono-rhythmic governing organizations will face more uncertainty and risk.*

*P7: The interaction of governing organizations operating at different institutional scales or levels will create more turbulence if they operate according to markedly different temporalities.*

**An organizational-institutional approach**

Organizations operating in institutionalized environments are the critical agents and structures that create and respond to the three types of turbulence described in the previous section. An organizational-institutional perspective is particularly important for understanding turbulent governance processes because it highlights factors that affect the vulnerability, adaptability, reliability and resilience of public organizations (Laporte and Consolini 1991; Weick and Sutcliffe 2007). While the robustness of organizations is often taken for granted during periods of stability, such systems tend to be subject to test, contestation and demands for reform during periods of turbulence. An organizational-institutional perspective also pays particular attention to how the layering, coupling, alignment or cooperation of organizations or institutions may produce diffusion, unintended consequences, interdependence, or even cascading dynamics that propagate across levels, causing governance dilemmas. Arguably, how environments and organizations are organizationally and institutionally connected may channel different degrees and types of turbulence. Following from the systems approach David Easton (1965) to contemporary thinking on democratic governance (March and Olsen 1995), our approach transcends a simple dichotomous distinction between organizations/institutions on the one hand and their environments on the other.

This section is presented in two steps: first, five claims are outlined on the importance of organizations and institutions in the governance of turbulence, and secondly three possible scenarios on the effect of turbulence are outlined. Organizations might (1) channel turbulence by structuring governance process; (2) make sense of and negotiate the surprises and uncertainties that accompany turbulence; (3) create new organizations and institutions in response to turbulence; (4) regulate the sources of turbulence, and (5) manage, absorb, and amplify turbulence through their active agency. Nest, the three scenarios discussed are (1) punctuated equilibrium, (2) path dependence, and/or (3) institutional syncretism.

**Organizational structure channels turbulence***:* Organizational structure can be defined in terms of role expectations about who can and should do what, how and when. In this sense, the organization structure is a normative structure that analytically separates structure from decision behaviour or process (Scott 1981). A particular organization structure may be expressed in an organization chart or in the individual and collective minds of office holders.

These structural dimensions may include variables like capacity, horizontal and vertical specialization, primary or secondary structures, tight or loose coupling, among others. It is well recognized in organization theory that such structural dimensions can significantly affect interaction, loyalty, coordination and information processing (Egeberg et al. 2016). For example, horizontal specialization refers to how work is divided horizontally within or between organizations (Gulick 1937). The idea is that organizational boundaries help to coordinate activities within entities, but they also tend to hamper such activities across entities. For example, territorial specialization may focus decision makers’ attention along territorial lines of cooperation and conflict, creating policy consistency within geographical units but inducing variation across such units. Thus, a structure may consist of sections signaling what kind of expertise is deemed relevant; such as legal, economic or technical. Organizational structures thus channel how turbulence may be governed.

**Organizations make sense of and respond to governance surprises and uncertainty:** Organizations make decisions about how to create and manage turbulence. In the face of turbulence, decision-makers ‘tend to perceive increased urgency to act, narrowing options and the need for dramatic response’ (Vaaler and McNamara 2004: 690). A particular challenge for organizations in managing turbulence is to deal with surprises. Since surprises are difficult to predict, and hence, to prepare for, they lead organizations to an emphasis on resilience—i.e., on creating the capacity to adapt to surprises (Hutter 2016). They also accentuate the importance of sense-making. A substantial body of literature describes how organizations engage in ‘sense-making’ in the face of rapid change, uncertain circumstances and surprise (Weick et al. 2005). For example, in a study of sense-making at the U.S. Federal Reserve in the face of the financial crisis of 2007, Abolafia (2010: 356) found that the organization drew on a repertoire of narrative plots to make sense of relatively routine events. However, surprise led to ‘narrative innovation’ designed to maintain the organizations’ identify and self-image.

**Organizations manage turbulence by creating new organizations and institutions:**

Governance is often understood to be an emergent process operating at the level of ‘institutional fields’ (Skelcher 2005; Najam et al. 2004). Organizations are critical agents of this process, because they mold their environments by creating organizations and institutions (Barley 2010; Trist 1983). There are numerous examples of how governance is shaped by organizations creating new organizations and institutions or routinely reforming old ones (Brunsson and Olsen 1993). For example, transnational private regulatory bodies like the Forest Stewardship Council are created as ‘settlements of conflict’ between states, NGOs, and global firms (Abbott et al. 2016; Bartley 2007: 309). Organizations are the agents of creating new organizations and institutions in order to respond to turbulent conditions.

**Regulation both manages and creates turbulence:** Regulation has been recognized as an increasingly prominent feature of contemporary governance (Levi-Faur 2012). Setting and enforcing rules and standards has a long history, but it is now being used in a far more extensive range of situations and in a wider variety of institutional forms. Regulation can prevent and manage turbulence, but it can also produce it. For example, global companies face the ‘regulatory turbulence’ of adapting and complying with changing regulatory regimes in the different countries where they operate (Wijen and Van Tulder 2011). Ironically, to prevent and manage some kinds of turbulence, regulators often have to create other kinds of regulatory turbulence.

**Organizations manage, absorb, and amplify turbulence:** Organization, however, do not merely passively channel turbulence. They may actively manage, absorb and amplify it. Turbulence creates problems and challenges for organizations that they must find ways to resolve or cope with. While turbulence may be productive or even restorative for some organizations and create new opportunities for action for others, it may also be constraining, destructive or even perverse (Fischer 2012: 1162). Thus, organizations are key agents of transforming turbulence, either by dampening it or amplifying it through their actions.

Institutions may respond in different ways to turbulence: Three broad scenarios cover a range of possible institutional responses to turbulence:

**Punctuated equilibrium**:Turbulence may entail a fundamental questioning of pre-existing governance arrangements and ‘long-cherished beliefs’ in existing solutions (Lodge and Wegrich 2012: 11) and cause institutional soul-seeking and the raising of fundamental questions about the nature of *res publica* (Emery and Giauque 2014: 24). Turbulence may also include sudden crises that may produce critical junctures that generate ‘windows of opportunity’ for significant policy change (Kingdon 1984; Matthews 2012: 228) and novel organizational solutions (Jones and Baumgartner 2005: 5). Turbulence may trigger organizational meltdown and create opportunity structures for organizational birth (Padgett and Powell 2012). Organizations facing turbulent environments may experience a disruption of equilibrium conditions - for example, a disruption of the balance between political leadership and independent expertise, between electoral representation through parliament and interest group involvement, and so on. Turbulence may also trigger a call for building new organizational capacities – such as supranational capacity-building in the European Union. Turbulent times may also spur the emergence of entirely new institutional arrangements. Contemporary European examples include the rise of new European Union financial surveillance agencies, the structuring of the new European Union banking union, the emergent European energy union, and so on (Trondal and Bauer 2017). Yet, as argued by Kettl (2014: 159), organizations may also have a tendency for ‘backsliding – toward resuming the previous equilibrium’ – which does result in modified, and not entirely new, institutional arrangements.

**Path dependence**: Turbulence may also reinforce well-known organizational solutions and governing arrangements. An organizational-institutional approach may suggest that governance systems and governance practices under stress revert to or reinforce pre-existing organizational traditions, practices and formats, reinforcing institutional path-dependencies (Olsen 2010: 96; Pierson 2004; Skowronek 1982). This may occur because organizations are thrown into a reactive mode of response. The lack of time for creating new institutions, for example, may render decision-makers’ ‘pursuit of intelligence’ *bounded* and their search for solutions *local* (March 2010: 19). Decision makers may have a tendency to replicate structures or procedures that have been perceived as successes in the past. However, there might also be less reactive reasons for institutional path-dependence in the face of turbulence. Pre-existing institutions may serve as an important source of stability in the face of turbulence, enabling organizations to ride out stressful times. Institutional robustness and ‘stickiness’ may also be produced by layering new reforms on pre-existing structures rather than by replacing existing ones (Thelen 2003).

**Institutional syncretism**:A third scenario is that organizations and institutions adapt in a more syncretic fashion, which is to say that change is neither profound nor path-dependent (Berk and Galvan 2009). As some scholars have begun to describe, institutional change is often best described as a process of recombination, refashioning or repurposing of existing institutions in an adaptive fashion. This view of institutional change emphasizes the ability of actors to combine existing institutions and new institutional innovation in a creative or improvisational way. This view breaks away from the dualism of change versus stability – where ‘stability is only a special example of change’ (Easton 1965: 106) -, exploring the way that institutional stability creates a resource for change and the way that change may enhance stability (Farjoun 2010; Ansell et al. 2015). This position is also consistent with work that stresses dynamic adaptability to fast-paced and uncertain circumstances (Laporte and Consolini 1991; Brown and Eisenhardt 1997). From this perspective, robustness and resilience may require continuous change that is not merely path-dependent, but does not constitute a radical break with preexisting institutions either.

**Turbulence and how to live with it**

Governance in turbulent times calls upon governing organizations and institutions to address situations of dynamic complexity where well-tested solutions may be inadequate and where failure is typically answered with fierce critique. Turbulence produces surprise, volatility, rapid and shifting operational tempos, contradictory demands, and uncertainty. Anticipating the future becomes difficult under such conditions, leading to a focus on resilience and on how organizations can adapt in real-time to unexpected events. Drawing on the wider literature on resilience, two complementary strategies of organizational resilience can be discerned.

The first is a ‘static’ or ’engineering’ logic of resilience. In the face of turbulent conditions, governing organizations adopting this strategy will take steps to maintain and restore equilibrium conditions. Because this is a strategy of resisting change, incremental change that enhances or supports, or at least does not threaten equilibrium conditions, will be given priority. Hence this strategy encourages institutional path-dependence. More significant change that shifts the equilibrium itself will only occur via external shocks—hence following the ‘punctuated equilibrium’ model of profound institutional change (e.g. Jones and Baumgartner 2005).

To maintain equilibrium conditions in the face of turbulence, this logic is likely to strive to get back to basics or ‘stick to the knitting’—reducing uncertainty and complexity in order to achieve order and stability. This strategy will probably also emphasize exploitation (activities to improve the functioning of existing arrangements) over exploration (experimentation and environmental scanning) (March 2008). From this perspective, resilience is enhanced by improving the ‘fitness’ of the organization with new conditions. To do this, planning is likely to be a distinct formal activity that strives to anticipate how the organization can successfully adapt to change. In addition, to improve stability, the organization will maintain dedicated ‘buffering’ capacity (organizational units and resources whose core task is protecting the organization from changing conditions). This discussion leads to the following propositions:

*P8: Large, vertically integrated, and hierarchical governing organizations are likely to adopt a strategy of static or engineering resilience.*

*P9: Governing organizations that adopt a strategy of static resilience in the face of turbulence will reinforce a pattern of institutional change characterized by institutional path-dependence and punctuated equilibrium.*

An alternative and complementary strategy of dynamic resilience can also be drawn from the organization theory literature. In this logic, stability and change are not so sharply drawn distinctions (Easton 1965). Governing organizations use stability to help them change and use change to help them to stabilize. No clear ‘equilibrium’ between the organization and its environment is easily discerned and the organization appears to be continually changing as a ‘reforming organization’ (Brunsson and Olsen 1993). This logic emphasizes the importance of maintaining multiple repertoires that can be flexibly redeployed to meet different changing circumstance. Rather than the sharp distinction between minor path-dependent incremental change and major exogenously-produced punctuated change, this logic anticipates endogenous change that continuously reconfigures the organization. The concept of recombination elides the distinction between stability and change since existing elements are conserved but organized in new arrangements as response to changing circumstances. In other words, this strategy of dynamic equilibrium fits with our third scenario of institutional change—institutional syncretism.

A strategy of dynamic resilience emphasizes the importance of building flexibility into organizational and institutional arrangements by absorbing complexity and incorporating requisite variety. If anything, this logic emphasizes exploration over exploitation, but a more balanced approach to these two modes of learning is advised. Strategy is more likely to be emergent than rationally planned, but this approach is more likely to emphasize the importance of building dynamic capabilities for adaptability (March 1994). Hence, we formulate two additional propositions that mirror those for static resilience.

*P10: Smaller, less vertically integrated and more networked governing organizations are more likely to adopt a strategy of dynamic resilience.*

*P11: Governing organizations that adopt a strategy of dynamic resilience in the face of turbulence will reinforce a pattern of institutional change characterized by institutional syncretism.*

This contrast between static and dynamic resilience is merely an ideal type. In practice, the two strategies are often combined, revealing a complex interplay between strategies of resilience and institutional change. A study of the German Ministry of Finance’s response to the financial crisis provides a good example (McCowan 2017). This classic bureaucratic hierarchy maintained impressive stability in the face of this turbulence, making this a case of path dependence. However, the study shows that the traditional hierarchical structures were not particularly flexible in adapting to the circumstances of the crisis. As a result, temporary and informal collegial structures (networks) emerged to meet specific transitional challenges and needs. These collegial structures were far more flexible and effective than the traditional hierarchical structure. These structures also exemplify the use of hybrid organizational solutions, as we will discuss below.

Although this case reveals path dependence, it also suggests two propositions about the relationship between the character of turbulence and the relative importance of these different resilience strategies:

*P12: If turbulence is periodic, governing organizations will aim for static resilience; if it is more continuous, they will perform better by adopting a strategy of dynamic resilience.*

*P13: Static resilience will often be the preferred strategy by governing organizations when turbulence is viewed as a dysfunction, but dynamic resilience will be preferred if it is viewed as a condition of governance.*

A key implication of dynamic resilience is the importance of ‘flexibility’ or ‘agility’ as important adaptive traits (Davis et al. 2009). Room (2011), for instance, argues that policymakers need ‘agility’ to deal with complex, turbulent policy, whilst Jessop (2009) argues that turbulence means that governance must adopt flexible repertoires (or requisite variety) to meet different types of situations. Similarly, Duit et al. (2010) talk about a ‘stability-flexibility’ tension in dealing with socio-ecological complexity. Flexibility and agility are seen as critical traits for organizations to operate successfully in rapidly changing circumstances (de Waard et al. 2013; Kotter 2012; Rudd et al. 2008; Power and Reid 2005; Volberda 1996) and employee flexibility and flexible product development strategies have been found to improve performance in turbulent conditions (Camps et al. 2015; Lansiti 1995). Flexibility is a broad concept, but the strategic planning literature has begun to distinguish different types of flexibility, including operational, financial, technological, and structural (Rudd et al. 2008). We summarize this discussion of flexibility by formulating the following proposition:

*P14: As turbulence increases, governing organizations will perform better if they are able to flexibly adapt their strategies and structures to rapidly or unexpectedly changing conditions.*

The association we have drawn here between dynamic resilience and the pattern of institutional change that we call institutional syncretism has additional implications as well for the adaptability to turbulence. Hybrid and interstitial organizational structures may be particularly important for coping with turbulence - particularly turbulence of scale. The development of such structures is best appreciated from a broad ecological perspective that reveals the chaffing of different institutional orders (Ansell 2013). Hybrid structures combine components from various organizational forms (Ansell and Trondal 2017), while interstitial structures mediate between structures (Batora 2017). In both cases, they help to create the structural flexibility necessary to respond to competing and varied demands. We formulate this argument in the following propositions:

*P15: Hybrid and/or interstitial organizational structures facilitate flexible responses to turbulent conditions.*

*P16: Governing organizations confronting turbulent conditions will adopt hybrid and/or interstitial organizational structures.*

Interestingly, the role of hybrid and interstitial organization in accommodating incompatible demands on public organizations has been largely overlooked because much literature has not fully appreciated the ecological context of organizations. For instance, the ‘governance turn’ in public administration studies was not accompanied by reflections on how multilevel systems may reshape domestic administrative life (e.g. Bouckaert et al. 2010: 264) and the larger system consequences of administrative reforms have been largely overlooked. Similarly, the ‘wicked problem’ literature has mostly focused on problems created by policy areas that cut across established boundaries and neglected the wicked institutional architecture of multilevel systems (e.g. Conklin 2006). Nor did the vast Europeanization literature adequately capture systemic consequences of the nitration of public organizations across levels of governance (e.g. Graziano and Vink 2007). This literature largely sees the EU and the member-states as separate but mutually interdependent systems. The concept of multilevel governance perhaps comes closest to acknowledging the ecological nature of institutions and public governance (e.g. Hooghe and Marks 2001; Trondal and Bauer 2017). The New Public Management (NPM) literature has also largely ignored the trade-offs between political-administrative autonomy and control at one level on the one hand, and coordination *across* levels on the other (e.g. Christensen and Lægreid 2006: 4). This literature has illuminated effects of agencification on domestic coordination, accountability, legitimacy, and autonomy, while overlooking studying the ensuing turbulence of scale (Van Thiel et al. 2012: 417). Processes of agencification inside sovereign states and within the EU system may have profound implications for the politico-administrative order in Europe and for how we should understand it. National agencies organized at arm’s length from their parent ministerial departments and partly de-coupled from direct ministerial steering can be captured by EU institutions, becoming building blocks of a multilevel EU administration (Egeberg and Trondal 2016).

Hybrid and interstitial organizations are often improvisational solutions to the governance dilemmas created by complex institutional ecologies (see Lægreid et al. 2014: 4). For example, through duplication of agency staff, political steering of agencies may be strengthened without fully integrating agencies into ministries (Egeberg 2012). Other examples include the programme management system installed by the Finnish government to identify cross-cutting issues (Kekkonen and Raunio 2011) or the national coordinators (‘tzars’) instituted by the Swedish government to better handle ‘wicked problems’ that transcend existing sector ministries (Statskontoret 2014). Such mechanisms might be interpreted as attempts to restore the capacity of the government centre (Dahlström et al. 2011: 17) without fundamentally reforming it. Task forces, duplication and overlap, new procedures, committee structures, and enlarged organizations may be interpreted as ‘second-best’ organizational solutions installed to compensate for governance challenges that were amplified by NPM reforms (Christensen and Lægreid 2007). So-called ‘post-NPM reforms’ are ‘seen as supplementary adjustments producing increased complexity in public sector organizations’ (Lægreid and Verhoest 2010: 290). Beyond structural measures, hybrid solutions may be supported by softer measures, such as re-establishing ‘common ethics’ and ‘cohesive cultures’ in public governance (Christensen and Lægreid 2011).

The European Union has ‘accepted’ the emergence of hybrid organizational forms to cope with ecological problems of scale. Not having its *own* agencies to implement EU legislation at the national level, the European Commission has instead, as the second-best solution, ‘adopted’ domestic agencies, by making them ‘double hatted’ institutions – not only national, but European too (Egeberg and Trondal 2016). The Commission thus seems to manage to live with the tension between the wish for uniform implementation across member states while at the same time not seriously interfering in national ‘administrative sovereignty’. This may not be a perfect organizational solution from the perspective of standardization of EU policies across member countries, but might be considered a satisfactory second- best solution given Europe’s administrative legacy.

Another strategy for dealing with turbulence of scale is organizational loose-coupling and de-coupling. Loose coupling can deter the failure of one component from reverberating across entire systems. ‘Bad’ solutions may therefore be implemented in parts of organizations without ‘ruining it all’. Decoupling of talk, decision and action has also been seen as a tool for governments to satisfy multiple audiences at different scales (Brunsson 1989). Moreover, this argument introduces agency into the analysis. Reformists may carefully de-couple organizational units in order to seek legitimacy from multiple institutional fields, thereby securing long term organizational viability (McCowan 2017). Such de-coupling exercises have been observed in EU member-states in their efforts to combine so-called ‘active European policy’ through government white papers while at the same time practicing a ‘hands-off’ European policy and a corresponding active EU bureaucracy. De-coupling may be a device for coping with the turbulence of scale by buffering parts of organizations from ‘bad’ solutions. Along with hybrid and interstitial organization, loose-coupling and de-coupling thus make it possible to develop an organizational infrastructure that allows EU coordination across levels, while maintaining leeway and room for policy manoeuvre across levels (Van Thiel et al. 2012: 423).

These ideas reinforce recent arguments that loose coupling and intermediary organizations help to mediate governance tensions in compound collaborations and in networks operating at different scales (Ansell and Torfing 2015; Ansell 2015). In general terms, such institutional mechanisms offer potential solutions to the turbulence of scale, allowing organizations operating at different levels and in different institutional fields to manage conflicting imperatives and demands. We summarize this discussion with three final propositions:

*P17: Loose-coupling and decoupling facilitate flexible response for governing organizations facing turbulent conditions.*

*P18: Loose-coupling and decoupling reduce the likelihood of cascading effects for governing organizations facing turbulent situations.*

*P19: Loose-coupling and decoupling may be particular important structural mechanisms for governing organization dealing with turbulence of scale.*

The propositions presented in the prior discussion are summarized in Table 1.

**<Table 1 about here>**

**Conclusion**

This paper has sketched an organizational-institutional approach to the governance of turbulence. We began the paper by arguing that governance needs to more fully recognize the importance of organizations and organizational processes. This is particularly true if one wishes to understand the governance of turbulence. In our densely populated organizational society, organizations both manufacture and manage turbulence. They structure how turbulence is experienced and they are the most important agents affecting how the governance of turbulence is conducted.

To reveal the importance of organizations and institutions in the governance of turbulence, we elaborated five claims. We have argued that organizations (1) channel turbulence by structuring governance process; (2) manage, absorb, and amplify turbulence through their active agency; (3) make sense of and negotiate the surprises and uncertainties that accompany turbulence; (4) create new organizations and institutions in response to turbulence; and (5) regulate the sources of turbulence. We have also argued that institutional change may be characterized by 1) punctuated equilibrium, 2) path dependence and/or 3) institutional syncretism Turbulent times thus provide opportunities to investigate the sustainability of governance systems as well as the character of organizational and institutional change and evolution.

Governance in turbulent times implies that decision-makers and institutions must act to address situations of dynamic complexity where well-tested solutions may be inadequate and where failure is typically answered with fierce critique. Governance in such circumstances entails balancing adaptability and experimentation on the one hand with continuity and resilience on the other. This balancing act entails confronting the ambiguities associated with unruly problems while maintaining existing organizational capacities and functions. This also entails a dynamic view of resilience. The static view of resilience is similar to the engineering perspective. It is ‘the ability to recover and pick up where one left off after an unexpected or stressful situation’ (Richtnér and Löfsten 2014: 138). By contrast, the dynamic view emphasizes ‘the ability continuously to keep pace with change and create new opportunities’ (Richtnér and Löfsten 2014: 138). Governance in turbulent times may thus require the constantly ‘reforming organization’ (Brunsson and Olsen 1993) which routinizes attention to reform as the ‘new normal’.

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