1 Why Do We Need Robust Governance?

Human life on the planet Earth has always been turbulent and full of perils and risks, including personal injury, famine, natural catastrophes, the spread of infectious diseases, economic depression, social and political unrest, violent clan struggles, and devastating wars. Political philosophers from Aristotle and Plato, through Hobbes and Locke, to Hegel and Marx have spent much time pondering whether and how a stable social order is at all possible. In modern times, we have tried to predict, forecast, and prepare for the inevitable spells of turbulence inherent in social life. We have built systems for national security and economic regulation together with elaborate welfare systems that socialize the individual risks of poor health, occupational hazards, unemployment, and old age. While these systems offer safety and comfort to the members of society, they are prone to failure and seem to generate new risks, either because the societal conditions for their functioning change or because the various systems interact in unforeseen ways, giving rise to externalities and occasional break-downs (Beck 1992). In the new age of globalization, digital communication, and accelerated technological innovation, the speed of societal transformation and the interpenetration of socioeconomic systems have increased, and the world has shrunk to a global village. This development spurs the production and experience of turbulence, defined as the complex interaction between unpredictable, partly unknown, and mutating events and developments with inconsistent and ambiguous effects (Ansell & Trondal 2018). Without denying the presence of heightened turbulence in the past (e.g., in the run-up to World Wars I and II), turbulent events and developments seem to be lining up in a hitherto unprecedented manner. Turbulence, we will argue, has become the new normal.

This increasing turbulence is a growing problem for public governance. Governance is basically about formulating and achieving common goals (Torfing et al. 2012), and the popular demands for and political ambitions of public governance have drastically increased in recent decades. One driver of these increasing public demands is that the frequent and overlapping crises create social and economic hardships calling for government interventions. Moreover, the rapid pace of technological and societal development creates new needs that are translated into new demands. Another driver is the digital-ization of information flows, which brings to light new problems and potential solutions at breathtaking speed that were previously unknown or ignored by citizens, organized stakeholders, and policy experts but are now generating demands for action (Aksin-Sivrikaya & Bhattacharya 2017). A final driver is the rise of new social media, which provide low-threshold opportunities for

citizens and organized interests to set the agenda and voice their demands. In many countries, such opportunities are exploited by a growing number of competent, assertive, and critical citizens (Dalton & Welzel 2014; Esser & Strömbäck 2014). Equipped with new knowledge and new communication channels, politically self-confident citizens are keen to demand tailor-made, high-quality public services that increase their quality of life, and when their life is negatively impacted by crises, they use all available means to cry for help, expecting the government to find new governance solutions.

At the same time, the ambitions of elected politicians and public managers have increased. Healthcare is no longer merely about curing illnesses but about preventing disease from occurring through health promotion. Employment policy is no longer merely about securing the livelihood of those who become unemployed but about training and educating these people to get them back into paid employment. Economic policy is no longer only focused on stabilizing markets but also seeks to enhance the structural competitiveness of national and regional economies. And the list goes on. The growing demands and ambitions seem ever more difficult to meet due to the heightened and near-permanent turbulence currently facing the public sector. Public governors must deliver more and more, but the conditions for doing so are deteriorating. They are increasingly busy, putting out small and large fires, and the unpredictable dynamism of politics, society, and the global economy is constantly jeopardizing the execution of public policies.

Public governance must deal with a growing number of turbulent events and developments that tend to interact and multiply, thus producing even more turbulence. This snowballing effect is clearly visible in the wake of the Russian invasion in Ukraine, which has triggered a refugee crisis, an energy crisis, an inflation crisis, and a security crisis, all within a very short time span. The public sector is ill-equipped to deal with heightened turbulence. Public governors can no longer avail themselves of the classical risk strategies of prevention, foresight, and insurance. These strategies are unable to deal effectively with the unpredictable emergence of complex and partly unknown problems that are constantly changing and have inconsistent effects. In response to this insight, governance researchers and public decision-makers have recently begun to look to either agility or resilience as strategies for dealing with turbulence.

Agility and agile leadership have received much attention and praise in the business management literature (Attar & Abdul-Kareem 2020; Theobald et al. 2020), which encourages business leaders to observe and quickly respond to new and changing social, political, economic, and technical conditions. Agile leaders build relationships, promote organizational learning, and encourage

teams to experiment with improved products and processes. The goal is to produce pervasive change at all levels of the organization in response to threats and opportunities and to stay ahead of the game in the pursuit of success. Agile leaders are visionary, curious, and willing to fail fast. They are good listeners, continuous learners, and "fast executors," who typically accept the unpredictability of change (Lang & Rumsey 2018).

In the public sector, agile leadership is needed to adopt and realize the benefits of new digital technologies (Mergel et al. 2018). More generally, agile government is important to reduce red tape and to mobilize talent and tacit knowledge in public organizations, to flexibly adjust policies in the face of changing conditions, and to produce value for citizens (Rulinawaty & Samboteng 2020). However, while permanent adaptation and radical innovation are essential for private businesses to survive in cutthroat markets and they may completely transform the form and function of a company as long as it makes a profit, public organizations are slightly different. Government organizations are formed to maintain and preserve some basic functions, goals, and values that cannot be sacrificed in the relentless search for new products, markets, technologies, and forms of organization. They must adapt and innovate their organizational form and its different procedures, processes, and outputs, but the need for change must be balanced against the need for stability. Or, in other words, in turbulent times, public organizations must change their *modus operandi* to uphold their stable foundation for delivering particular functions, goals, and values.

Resilience provides an alternative to agility that stresses the need for system maintenance and thus aims for a rapid and effective return to the status quo ante when the system is disturbed. A sociopolitical system is resilient if it has the capacity to bounce back and restore its original equilibrium when exposed to a shock (Davoudi et al. 2012). To illustrate, a community resilience plan is an action plan that allows for a community to rebuild after a disaster by mobilizing its citizens (Norris et al. 2008). While community resilience aims for adaptation to a one-time crisis, strategic resilience aims to continuously anticipate and adjust an organizational system in response to disruptive events (Shaw & Maythorne 2013). This approach is sometimes summarized by the conceptual trinity of protection, response, and recovery, which serve to underscore how resilience must be built before, during, and after a crisis. While the agility strategy may be too much of a senseless and directionless change-for-the-sake-of-change strategy for the public sector that risks compromising its key functions, goals, and values, the resilience strategy may be too much of a conservative return-to-the-status-quo strategy that risks blindly preserving the existing structures without contemplating either their attractiveness or the

need and opportunity to change them (Capano & Woo 2017). Hence, public governors may benefit from developing and adopting an alternative "dynamic conservatism" strategy, adapting and innovating the modus operandi of public governance to maintain some basic public functions, goals, and values in the face of heightened turbulence (Ansell et al. 2015).

A strategy that aims to find a middle road between agility and resilience can be detected in the suddenly emerging governance responses to the COVID-19 pandemic, which followed an unpredictable trajectory. The pandemic cost many lives, led to social and economic ruin for many, and disrupted the normal functioning of the public sector. Many public organizations were forced to operate in a highly turbulent environment with recurrent lockdowns, new and constantly changing health regulations, and increasing demands from citizens who were hit by the health crisis. Let us briefly consider some of the strategies pursued by local public employees, regional middle managers, and national policymakers. We shall present the various strategies as illustrative fictional vignettes, although they refer to real-life experiences.

At the local level, John and his colleagues at the local job center faced the challenge that the lockdown and health regulations prevented them from holding meetings with unemployed job seekers to help them find work. To uphold the law and conduct the mandatory interviews, the job center workers were forced to adjust their standard practices. They came up with an innovative solution: walk-and-talks with the unemployed in a nearby park. They found that walking together while enjoying the greenery produced good and constructive conversations that unearthed the job seekers' dreams and wishes, together with their need for new competences. This new practice enabled the job center employees to provide helpful advice and training offerings that facilitated the return of many of their clients to the labor market. Hence, flexible adaptation and proactive innovation of public services helped to maintain a key function in a public sector facing turbulence. While the new employment-interview format was suspended after the pandemic, important lessons were drawn that changed the interactive dynamics between the job seekers and center personnel.

The pandemic also posed an obstacle to Charlotte and her team in the local child protection office, which works with at-risk children and youth who have been removed from their troubled homes and placed with a foster family. Their job is partly to organize regular meetings between the children, foster families, biological parents, and the municipality, but the Corona restrictions prevented physical meetings. Charlotte's team quickly switched to online meetings, which were easy to organize, could be called by the kids themselves, and could include a wider set of actors (e.g., an uncle or older sibling living in another town). The online meetings facilitated the mandated interaction while also improving its

frequency and quality. The experiences were so positive that the new format survived as a supplement to face-to-face meetings in the post-pandemic period.

Jane, the chief regional health services manager, trembled in the face of the growing number of Corona patients, the demands for testing and vaccination, and the risk that health personnel would need more sick leave. There were already staff shortages prior to the pandemic, and the situation would soon become untenable. Other urgent healthcare tasks would have to be cancelled to meet the COVID-related demands. Jane feared the public reactions and critical news coverage if regional hospitals could not uphold their basic health services. Searching for solutions, Jane and her colleagues saw that another regional health authority had created a flexible reserve workforce comprised of retired nurses and doctors together with nursing and medicine students. This reserve workforce facilitated a flexible mobilization of hospital staff in response to the varying numbers of patients and vaccine availability.

National Deputy Minister of Employment, Cavani, soon realized that the national activation policy was under strain from worsening unemployment resulting from the pandemic and recurrent lockdowns. Moreover, the health restrictions and stress experienced by many families made job-seeking increasingly hard. After consultation with the major labor-market organizations, it was decided to temporarily suspend the requirement of unemployment-benefits recipients having to demonstrate that they were actively seeking work and participating in mandatory job-training offers. Policymakers learned that the unemployed were less stressed during the pandemic and gained self-confidence from investing fewer emotional resources in hopeless job-search activities, which typically foster a sense of failure and rejection. Paradoxically, the outcome of the adaptive suspension of conditionality requirements was that the unemployed became better job candidates with better long-term job chances.

Finally, Prime Minister Duvall was informed that there was a severe lack of protective equipment throughout the public sector, including many hospitals. Hence, the demand for protective equipment early in the pandemic clearly exceeded what was in stock, and the rise of global demand made new supplies difficult. Her advisors helped to put together a task force that solved the problem by involving global logistics companies to use their contacts and transport systems to procure necessary equipment and by persuading private plastics companies to retool their flexible production techniques to produce much-needed protective gear.

The lesson from these illustrative vignettes is that upholding basic public functions in the face of turbulence requires adaptation and innovation. It is

the strategy of making changes to preserve something valuable, which this Element refers to as *robustness*.

Robust strategies for dealing with turbulence are also found in some of the major crisis-management organizations, such as the Federal Emergency Management Agency (FEMA) and the United States Coast Guard (USCG). We have explored their strategies for dealing with unpredictable and dynamic events and developments.

The FEMA is responsible for protecting and preserving the lives and property of American citizens. Part of FEMA's role is to mobilize state and local governments, private entities, and non-volunteer organizations in the efforts to mitigate and prepare for disasters, coordinating their efforts during disaster response and recovery. However, FEMA only gets involved at the request of local authorities or federally recognized tribes. As such, it is a responsive organization that offers help when local actors cannot handle the situation themselves. The FEMA is governed by the National Response Framework, which provides a guide for the national response to disasters and emergencies. It is built on scalable, flexible, and adaptable concepts identified in the National Incident Management System.

Interviews with FEMA officials, conducted by the authors, confirm that FEMA is experiencing growing amounts of turbulence. The expanding range of problems, growing scope, and frequency add to the feeling that the agency is "looking at chaos." The informants expressed their concerns about whether FEMA will be able to respond adequately to the growing number of disasters and emergencies.

The FEMA spends considerable resources training local people to be resilient by preparing and insuring themselves for disasters. However, FEMA has also long worked with the "building back better" concept, thereby aiming to "bounce forward" rather than merely "bouncing back." Hence, FEMA aims to reduce future risk by building back safer and smarter. Damaged wooden power poles are replaced with new and stronger concrete poles. Houses, bridges, and roads are rebuilt in more robust ways, capable of resisting flooding and high winds. But FEMA can only invest in building back better if it is public (not private) infrastructure. Still, FEMA can help people to build back better by advising them to use new, more resistant materials. On a larger scale, the Hazard Mitigation Grant Program helps to mitigate wildfires and related hazards by funding eligible wildfire projects aimed at creating defensible space measures, ignition-resistant construction, and hazardous fuels reduction.

The work of FEMA to transcend simple repairs and attempt to build back better is based on adaptation, innovation, and resource mobilization. In the wake of massive criticism of its response to Hurricane Katrina, FEMA adopted

a new Whole Community approach to emergency management that reinforces the basic principle that first responders are only one part of the national emergency management team. The larger team includes relevant and affected public and private actors, such as public agencies from different levels of government, faith-based and nonprofit groups, private businesses, and individuals and their families. The FEMA aims to collaborate with all these actors based on shared planning and information to provide robust responses to enhanced turbulence.

The US Coast Guard (USCG) is a military service under the Department of Homeland Security that protects and defends the US coastline and inland waterways. It has a broad range of responsibilities, extending from maritime safety and security to marine law enforcement and environmental protection, also serving as an important first responder during natural and man-made disasters.

The USCG was one of the few organizations to receive praise for the government response to Hurricane Katrina, conducting many successful search-and-rescue operations. According to USCG officials, successful operations are conditioned on some key factors: (1) staff training, (2) establishing partnerships ahead of responses, (3) interagency collaboration, (4) the ability to delegate, (5) adaptive leadership, and (6) strong personal and team relationships. In line with the call for adaptive leadership, an incident commander observes, "The harder I tried to apply linear thought, prescriptive policy guidance, and structured procedures to my decision-making, the more I realized our response was not moving forward. I had to let go of my preconceptions about procedures and processes, and direct more of my time and focus on the problem" (Stewart 2020: 15). Hence, the key to mission success is the flexible adaptation of principles, procedures, and tools for the problem and the context in which they emerge.

The ability to adapt flexibly to concrete and changing circumstances and outside-the-box thinking relies on collaboration. Former USCG Commandant Thad Allen (2012: 321), who was the incident commander for the Deepwater Horizon oil spill in 2010, explains: "The central concept in successful adaptation and response in these cases is a focus on working across traditional boundaries (legal, organizational, and cultural) and understanding that trust, networks, collaboration, and cooperation are the building blocks." Hence, the lesson learned seems to be that as complexity increases and knowledge becomes more distributed, collaboration and bricolage are required to adapt and innovate in turbulent situations.

Those we interviewed praised the USCG for its good leadership system that makes it effective at stopping to reflect and then getting the right people involved in finding adaptive and innovative solutions. One of the informants referred to an incident where a large ship got stuck under a drawbridge and

damaged a bolt necessary for operating it. Procuring a new bolt would take weeks and negatively affect the Bay Area traffic. To find an innovative solution to the problem, the USCG pulled together many people, including several nontraditional players who did not know each other. The USCG leadership is good at gathering people and getting them to address a common problem and engage in creative problem-solving.

The FEMA and USCG cases inspire our thinking about robust responses to turbulence in different ways. The FEMA experience highlights the ambition to bounce forward and build back better, whereas the USCG experience emphasizes the importance of collaboration as a driver for adaptation and innovation. Bringing these insights together in a coherent account of how to deliver robust governance in turbulent times is a key ambition of this Element.

Based on the new ideas and practices in the health crisis management and disaster response fields, this Element aims to build, promote, and consolidate a new social science research agenda by defining and exploring the concepts of turbulence and robustness, and subsequently demonstrating the need for robust governance in turbulent times. The Element is structured as follows. Section 2 defines turbulence, discussing the origins of the concept and how it challenges public governance. Section 3 defines the concept of robust governance, explains its different dimensions, and assesses its distinctive contribution. Section 4 presents and discusses the repertoire of strategies for providing robust governance and reflects on their scope conditions. Section 5 accounts for the systemic, institutional, and actor-related conditions for robust governance. Section 6 summarizes the main points, draws some implications for practitioners, and sets out an agenda for future research.

2 Turbulence: A Challenge for Public Governance

Living in Turbulent Times

Thinking back, public governance has always been challenged by turbulence, defined as situations where events, demands, and support interact and change in highly variable, inconsistent, unexpected, or unpredictable ways (Ansell & Trondal 2017). There are multiple sources of turbulence, including government failures to address pressing problems properly and the implementation of ill-conceived solutions, both possibly provoking social protests, political conflicts, and economic problems that are difficult to resolve. Political scandals sometimes trigger so-called shitstorms, intensified political struggles, and government crises that lead to new elections, unpredictable political negotiations, and enhanced volatility. International conflicts and war sometimes prompt sanctions that challenge established supply chains, resulting in inflation, shortages, social

unrest, and political disputes. Economic crises caused by massive public debt combined with lost tax revenues resulting from tax evasion may give rise to austerity measures that create social problems, catalyze the formation of new political parties, and transform national economic structures and the relations to international financial organizations. Demographic changes, changing values, and new family structures may gradually undermine the eldercare system and create labor-market problems, which in turn give rise to demands for change, political disputes, and new migration patterns. Indeed, these and many other disruptive events demonstrate how public governance rarely operates in calm waters, often facing rough seas – and sometimes even a tsunami of unpredictable social, political, and economic dynamics that challenge the ambitions and effectiveness of governance.

Public governors rarely acknowledge this challenging turbulence explicitly; instead, they assume it to be business as usual. They carry on with standard procedures for formulating and achieving public goals, calculating the costs and benefits of different solutions, improving administrative structures and procedures, monitoring regulations, and delivering services in accordance with traditional Weberian values of fairness, transparency, and predictability. While the odd extraordinary crisis situation calls for a particular type of crisis management, many government officials will typically assume that the crisis will blow over and allow a return to business as usual.

Today, however, this tendency to neglect the pervasiveness of turbulence is becoming increasingly difficult to maintain. The basic level of societal turbulence has increased due to a combination of intensified globalization, structural transformation of the international order, spread of new technologies and communication systems, emergence of new lines of social and political conflict, and so on. Moreover, the basic level of turbulence is constantly heightened by a growing frequency of economic, political, social, and environmental crises that overlap and coexist and are only partially resolved, if at all. In effect, governments around the world are continuously struggling to make sense of and deal with all kinds of interrelated crises, chaos, and turmoil that come and go in unpredictable ways.

This development seems to produce a new and growing sense that turbulence is a chronic and endemic condition for modern governance. The ongoing COVID-19 pandemic has magnified the importance of building governance capacity to deal with turbulence. Experts may have warned us that a pandemic was imminent, but it was still unexpected when it hit and spread surprisingly quickly. The impact of the new virus in different countries and on different population groups varied, changing over time with new mutating variants. All parts of society were negatively affected by the attempts to contain and fight the

virus through lockdowns and extensive health regulations. The government response strategies around the globe varied in timing, scope, content, and impact, which created a series of social and economic problems that generated demands for compensation. The development, purchase, and administration of vaccines added yet another tumultuous chapter to the unfolding story of governance responses to turbulence. Perhaps more than anything else, COVID-19 convinced government officials that turbulence is less exceptional and more the new normal – and that something must be done to tackle unpredictable societal dynamics.

We are living in turbulent times that prompt governors to change public policy, institutions, regulations, and services constantly in order to create a provisional stability that allows basic societal functions, goals, and values to be maintained under changing conditions. When dealing with the increasingly turbulent conditions for public governance, public officials draw on the available and relatively stable institutions, arenas, and authority structures to prepare for the next wave of disruptive events. As such, government actors may come to appreciate that obtaining some degree of functional stability in a turbulent world requires change; and, reciprocally, that the continuous effort to make necessary changes requires some degree of stability. Recognizing the mutually conditioning stability–change relationship represents a big step forward for public governance, as it takes us beyond traditional ideas about long periods of stable governance occasionally disrupted by short periods of crisis, chaos, and turmoil spurring corrective change. In a turbulent world, change is permanent; stability is both the condition for and outcome of change (Ansell et al. 2023).

In support of this new insight, this section aims to trace the rise of turbulence as a distinct governance challenge. It explains the scientific use of the turbulence concept, identifies the drivers of turbulence, and discusses the crisis–turbulence relationship. Finally, it reflects on the many challenges that turbulence poses for public governance.

From Simple and Wicked Problems to Turbulence as a Governance Challenge

After World War II, many countries expanded the public sector to solve a range of fairly simple and "tame problems," where both the nature of the problem and the likely solution were clear to the decision-makers. Infants, children, and young people required daycare, education, and training before they could enter the labor market. Those who could not sustain their living through paid employment needed social assistance, unemployment benefits, or retirement pensions. The injured, ill, and frail required hospital treatment, healthcare, and nursing