

Assessing Risk and Resilience in Governance

Shann Turnbull PhD
sturnbull@mba1963.hbs.edu
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The cause of the 2008 financial crisis is typically attributed to excessive risks in sub-prime mortgages. While such risks existed it was not the “key cause of the crisis” according to the US Financial Crisis Inquiry Commission of 2011 (FCICR 2011; Turnbull and Pirson 2012). A core expertise of banks is analyzing risk. This led the Commission to conclude that the crisis was caused by “dramatic failures of corporate governance and risk management”.

Instances of governance failure can be identified in all types of social institutions, globally, and the effects of governance failure can ramify to the level of the 2008 crisis and beyond. The alarm bells were heard by some in the last century. In 1994 the founding CEO of the credit card company VISA international, Dee Hock (1994: 5) stated: “we are in the midst of a global epidemic of institutional failure.”

The alarm was heard globally with the collapse of Enron in 2001 along with other failures in the UK. This led the UK based New Economics Foundation to commission the writing of their Public Policy Booklet *A new way to govern: Organisations and society after Enron* (Turnbull 2002). It introduced a solution adopted by Hock for overcoming the systemic risks that are inherent in all hierarchical organization. The solution could well have relevance for the US security community and society generally.

A theoretically sound criterion for governance can become a guidepost for building global security. In recognition of the breakdown of global order that the US had once led, a search is under way for better governance, such as through the Global Challenges Competition (GCF 2017). This will clearly be an active area for both research and statecraft over the next 10 years.

One might suppose that the burgeoning attention to governance is just a repackaging of existing preferences for the rule of law or for democratization. These criteria are indeed relevant, but they are imprecise proxies that can benefit from more theoretically grounded assessment of governance structures. It is the architecture of democracy at the local, regional, national and global level that needs to be considered (Turnbull 2003). Is the existing governance architecture fit for purpose in identifying and managing existential risks for humanity? (Pirson and Turnbull 2015).

It will be an advantage to pinpoint the real risks and the real opportunities for improvement through international actions, while at the same time making allowances for differences among political and economic cultures. Good governance, properly conceived, is not a matter of imposing Western or American values, and in fact the West has much to learn about good governance and its contribution to justice, peace and wellbeing within and between nations (Turnbull 2017b).

There is an underlying assumption regarding human organization that there must be centralized control in some form, and that without centralized control, the organization is not properly governed. This assumption doesn't stand up to examination, either in theory or in practice.

In practice many thousands of small minded insects like ants and bees collectively make decisions on when, where and how to design, construct, occupy and maintain their complex dwellings without any centralized command and control hierarchy. Modern humans are the only social biota that attempts control complexity through using command and control hierarchies. As noted by Hock (1994: 5):

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Industrial Age, hierarchical command and control pyramids of power, whether political, social, educational or commercial, were aberrations of the Industrial Age, antithetical to the human spirit, destructive of the biosphere and structurally contrary to the whole history and methods of biological evolution. They were not only archaic and increasingly irrelevant; there were a public menace.

Complex living systems, most notably the human brain, are highly adaptable and resilient without central control. Neurology can tell us a great deal about how order is achieved through network governance (Craven et al. 1996; Hock 1999; Turnbull 2000, 2001). There is no reason to suppose that the principles of network governance that apply throughout nature don't scale up to social systems. "VISA had multiple boards of directors within a single legal entity, none of which could be considered superior or inferior, as each had irrevocable authority and autonomy over geographic or functional areas. No part knew the whole, the whole did not all the parts, and one had any need to" (Hock 1999: 191). Just like ants and bees.

Another example is the hundreds of networked controlled stakeholder firms established around the town of Mondragon in Northern Spain (Turnbull 2000: 205-225). These and other cases of successful human network governance are often treated as anomalies, or are force-fit to conventional categories untethered to any theory of how order in complex systems occurs. It would be better to understand how and why these organizations work, especially since they are proving to be highly resilient in increasingly turbulent environments. Conventional hierarchical organizations, in contrast, are becoming unsustainable within such environments, increasing the risk of damaging failures.

The John Lewis Partnership, for example, a major UK retailer, removed toxic governance by changing its constitution to introduce a separation of powers to simplify complexity comprehensively by localizing decision-making (Turnbull 2000: 190-194). The result was improved wellbeing for stakeholders and society, and the business gained competitive advantages with resiliency. There were no laws that prevented such a change. The advantages of network governance appear to be propagating in many unlikely locations, at several levels, throughout government and the economy.

Shannon (1948) showed how the reliability of communications could be improved as much as desired by introducing a requisite variety of independent crosschecking channels that are typically not established in hierarchical organizations. Ashby (1956: 206, 268) showed how the ability to control complexity could be improved as much as desired by introducing a requisite variety of independent controllers that are also not typically found in hierarchical organizations. The insights of Shannon and Ashby explicate why DNA has hard-wired social biota with contrary behavior so as to generate requisite variety of responses to survive and thrive in unknowable dynamic complex environments (Kelso and Engström 2006, Turnbull 2014: 172, 173, 181).

Technology now makes it possible to identify the physiological and neurological limits of social biota, including humans, to receive, store, process and transmit data in "bytes", the same units used to evaluate computers and the Internet (Turnbull 2014). The use of bytes as a unit of analysis points to an additional basis for the further exploration of the "theory of firms" (Turnbull 2017a) and social organisations as well as governance in general (Turnbull 2008).

Some may argue that nothing can change, that risky governance based on hierarchical organization is inherent to both our legal systems and culture, and that nothing can be done about it. Perhaps this is so, but the security community should at least be aware of what is occurring and be able to accurately track and report on our downfall as a civilization, if it

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comes to that. But there are also ample instances where hierarchies are being dissolved, and this may be recognized as a sign of where strength and wellbeing is emerging within and between societies.

A leading management thought leader, Harvard Professor Rosabeth Kantor, has recognized the need for non-hierarchical “Advanced Leadership” for what she describes as “multi-stakeholder coalitions”. In an interview discussing “Advanced Leadership” Kantor (2014) said: It's leading, not just your own team, it's leading lots of groups that don't report to you, that don't work for you, that have their own independent basis, that may be in different industries.

The current dominant form of governance, even in democracies, is largely dependent upon silos of centralized command control hierarchies. These introduce existential risks to the organization, society and humanity. The reason is that hierarchies simplify complexity incompletely to avoid physiological and neurological data overload. Network governance introduces distributed intelligence, like in our brains, to simplify complexity more comprehensively (Kelso 1995). Network governance, assisted by new media and the shifts in power to civil society may represent “A New Way to Govern”.

Further details of network governance theory and applications are presented in the references cited below. There are of course many other strains of research under the broader topic of human system governance, where advances are expected that will contribute to security.

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