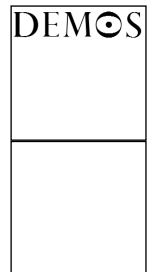


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**Towards a theory of
government**

Karen Stephenson



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3. Towards a theory of government

Karen Stephenson

Governments don't move; they morph. Built on the skeletal remains of past policies they grow incrementally like a coral reef, changing the ecosystem around them. And, like coral reefs, they are vast structures, difficult to chart thoroughly. But governments are not bureaucracies, no matter how much they may look and feel like a barrier reef at times. So what are they?

Commentators on both sides of the Atlantic have long lamented the existence of 'big government'. But size isn't everything. Sure, scale still matters: government sprawl – going from 1,000 to 50,000 to 200,000 employees – can and does make a difference. But what if there was an iterative pattern to the structuring of increasing scale? That's exactly the reason the French anthropologist Levi-Strauss once claimed to have found an 'atom' of kinship, an elementary structure common to every biological or fictive family.¹ As it turned out, his idea was more provocative than practical: there was no such reliably repeating structure. But what if there was an atom of organisation, a recurring structure of how people organise? And, if so, what implication does it have for leadership and governance?

Markets, hierarchies and networks

Let's try to answer these questions by starting with what we know. Assume a hierarchy. It was long thought that hierarchy was an island of planned coordination in a sea of market relationships, a pristine

paradise inhabited by vertically integrated tribes of employees.² But corporate anthropologists debunked the myth of the CEO, the savage noble burned at the stake in a bonfire of vanities, just as British anthropologists overturned the myth of the noble savage a century before. Why? Because whether the jungles are green and leafy or concrete, they are brimming with intricate webs of relationships, which when viewed from afar reveal elementary structures.

Initially, these elementary structures were sorted into a triptych of organisational forms: markets, hierarchies and networks. Standing at one end, a chorus of economists droned ‘market’ as their mantra – the genesis of organisational life. On the other end perched hierarchy, the logical evolutionary endpoint, the height of civilised achievement. Networks were largely ignored or dismissed as a mixed breed, a doomed hybrid nesting somewhere between the two.

But the resulting theoretical continuum of market – network – hierarchy was misguided, as was made profoundly apparent on September 11, 2001. Networks would prove to be core to the continuum, and hierarchy the hybridised half-breed. Networks were and are deeply linked to cultural genesis and genocide, and comprise the core DNA within any governance structure.

Transaction costs and organisational form

To understand how the old continuum, though mistaken, became accepted, we start with Ronald Coase’s classic paper on the nature of the firm.³ Coase suggested that firms and markets, while different organisational structures, nevertheless share common transactional practices. The distinction, later amplified by Williamson,⁴ was based on the amount of knowledge about a transaction (or ‘asset specificity’) that was required. Disinterested, non-repetitive exchanges occurred as market transactions (simple contracts). But exchanges that entailed greater uncertainty, and therefore a proportional amount of asset specificity, were best sheltered within the firm as a way to mitigate the greater risk.

Once these transactions were harboured in the firm, inefficiencies devolved. Williamson argued that these inefficiencies were tolerated,

in fact preferred, because of the firm's own bounded rationality – better the devil you know than the devil you don't – and theories of firm and hierarchy were conceived.⁵ In refining these propositions and terms a continuum of transactions emerged, beginning with the disinterested and discrete market transactions on one end and the interested, asset-specific transactions of a firm's hierarchy on the other.

Powell suggested that networks deserved a place on the continuum, for they permitted exchanges that required asset specificity but at the same time could move through semi-permeable organisational boundaries typical of family businesses, guilds and cartels.⁶ Networks collide and collude and are able to elude organisational boundary 'checkpoints' nimbly because of the trust and mutual reciprocity between the actors – in essence invisibly storing the asset-specific knowledge of the transaction in the trust relationship itself.⁷ Networks produce nuanced asynchronous and asymmetric exchanges, deftly avoiding both the visible hand of hierarchy⁸ and the invisible hand of the market.⁹

Sounds right, feels right – but it's wrong. Let's rethink the continuum in light of the logic of exchange and put the argument right. At one extreme are disinterested, non-repetitive exchanges typically found in markets. The logical inversion would be repetitive exchanges of mutual interest evidenced in networks. Hierarchy, comprised of routine exchanges (repetitive like a network) with a governing authority (more in keeping with the contractual characteristics of market exchanges), is now squarely in the middle, having qualities of both network and market. Table 1 summarises these organisational forms and features in their logical order.

Ramifications for organisations

What does this mean for organisations? In markets, it's a 'free-for-all' – a knowledge diaspora, information spreading virally to where it is most needed regardless of legal (or moral) boundaries. But in organisations, the interests are best if not 'self' served when knowledge is more closely held because of the routine and repetitive exchanges that result from established procedures and the knowledge

Table 1 Organisational forms and their associated exchange rates

Organisational form	ABCs of exchange
Market	Disinterested, non-repetitive
Hierarchy	Routinised by a governing authority
Network	Mutually interested, repetitive

shared among those in authority. Therefore, organisations and their governance are directly shaped by only hierarchies and networks. In broad strokes, these organisational structures can be distinguished by a very simple rule of thumb. First, in a hierarchy one person can perform the work of one: work is directly related to the job assignment – one for one and one for all; second, in a network shared collective intelligence is exponential: two people can perform the work of four. This multiplier effect is a result of the leveraging of individual efforts through bonds of mutual trust and reciprocity, as evidenced by sturdy hunter-gatherers who daily survived overwhelming ecological odds through cooperation. Small groups everywhere share this ancient and larger-than-life capability with their Kalahari counterparts.

Reciprocity is key to the power of networks, exerting a governing logic over them – the alchemy of mutual give and take over time turning to a golden trust. Primordially, trust was determined through face-to-face interactions, and to a large extent is still today. Therefore one needs to appreciate the profound truth that the face of trust is still a human face, a face that can mask a fundamental fear of differences. The stark truth about trust is that if you don't look like me, or dress like me, walk or talk like I do, then I am not likely to know or understand you. This fetish for the familiar is fundamentally tribal and resistant to diversification.¹⁰ A network of trust is the real invisible hand behind every act of deceit, fraud and betrayal. Trust is the caress of forgiveness and friendship, the unshakeable grip of family or tribe.

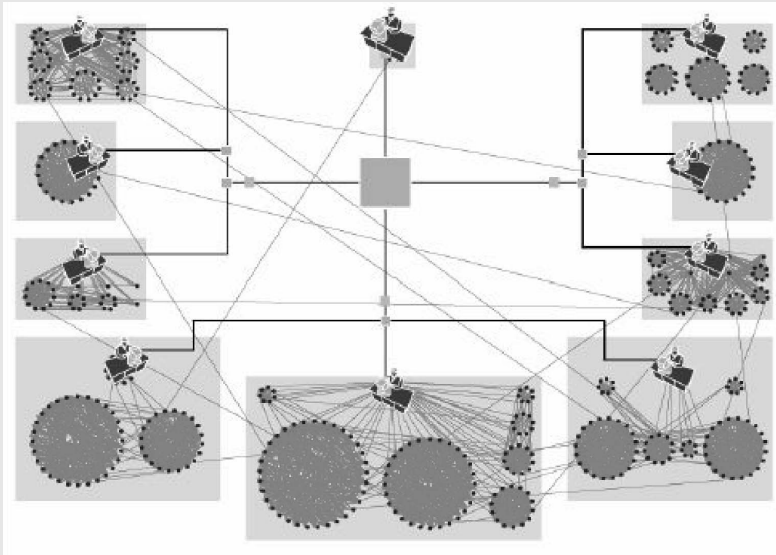
What happens when networks and hierarchy are misaligned? A bureaucracy is the logical but unfortunate result. Bureaucracies write over their past wrongs, exacting obedience by methodically numbing collective consciousness through the destruction or stoppage of careers. In fully mature bureaucracies, two people perform the work of one-half. This is the real truth behind budgetary shortfalls. So whether you are a hunter-gatherer or hunting and pecking your way through a bureaucracy, you are operating as you would in a network, not a market or hierarchy. Transactors and transactions change all the time in markets and hierarchies – in markets because the transactions are disinterested and non-repetitive, and in hierarchies because they are routinised regardless of who performs them. Although hierarchies are lauded, we've all heard the laughable refrain, 'I've worked for five heads of department!' Staying power is found not in who's at the top but in who's in the network.

Ramifications for government

Human networks have evolved from bands, tribes, 'segmentary lineages' and chiefdoms right up to the modern state. Government operations betray the signs of this evolutionary heritage, strikingly similar to a 'segmentary lineage' system.¹¹ When policies change or new needs arise, teams are created not from the ground up, but as sub-units of existing segments. As layers of hierarchy proliferate, units at each layer compete against one another, combining to work as a larger unit only when these too are drawn into competition. So within a government department one team jockeys for position with another, one directorate attacks another to protect its budget, and the department as a whole fights other departments to defend its turf. In these systems there is no internal structure or infrastructure to join the system as a whole; it is simply a network of hierarchies (vertically integrated silos). As such, they are never more than (and are often less than) the sum of their parts. Segmentary systems calculate power by comparing and contrasting their stock or status with that of other segments. Competition, not collaboration, is the watchword.

So it comes as no surprise when people in the public sector complain of being stuck in organisational ‘silos’, obstacles to be overcome by ‘joined-up’ working. What we don’t realise is that we are hard-wired to create these silos because of the constraints of segmentary systems. Figure 1 shows what a segmentary system looks like depicted graphically. It is the image of an organisational analysis that was conducted of the US government, three hierarchical layers down from the president. Within each organisational box or segment you can see smaller subgroups denoted by densely connected circles. The perimeters of the circles are made up of microscopic dots denoting real people and the criss-crossing lines that fill each circle represent the reciprocal communications between the individuals in each box. It is obvious that the relative density within the boxes eclipses the connections among the boxes, indicating that people

Figure1 Segmentary lineage within the US government



(Courtesy of NetForm International, Inc.)

spend their limited resources investing in segmentary or 'silo-ed' relationships within each box or segment. The unhappy result was that segmentary politics consisted largely of errors and their associated rework, achieved at the peril of overall organisational effectiveness.

It is easy to see from this example how segmentary politics can easily and perversely thwart overall objectives and goals. Real problems do not come neatly packaged. Whether in fighting terrorism or tackling corporate fraud, cross-cutting problems require cross-cutting solutions. Yet in segmentary systems of government there is no process in place to allow the seamless exchange of vital information laterally among the different units with an interest in tackling the problem with the knowledge or resources to do so. The result is that information disappears, deadlines are missed, fingers point and wrongs are papered over. The knowledge of how to put it right – to put a process in place – is in the networks of the people doing the work.

That is why it is important to understand the differences between how people actually work in their networks and how the process says they should work. When it was first elected, the Blair administration made much of the need for 'joined-up' working. This was exemplified by the agglomeration of several smaller departments and budgets into the giant Department for the Environment, Transport and the Regions (DETR). The failure and subsequent break-up of the DETR showed that putting people in the same building or changing the name on the signs does not automatically lead to integrated working. But this misalignment between the network of work and the formal processes is a continuous feature of every organisation, not least because market conditions are always changing and organisations are always adapting to keep up.

This phenomenon is exacerbated by the growing recognition within government of its limited capacity to tackle policy problems autonomously, and a growing desire instead to build partnerships of public, private and voluntary sector actors better equipped to address them. Are there any examples where governments are transforming

the way they partner with their stakeholders? Is there an established way to benchmark these kinds of public–private collaborations?

A step in the right direction

One exciting project involves a collaboration between HM Customs and Excise, the Government Office for the East Midlands and the East Midlands Development Agency. The project is using a new technique known as virtual network analysis (VNA) to try to improve partnership working.¹² The approach combines process mapping and modelling with what is known as social network analysis, or ‘people mapping’. In human networks the assets are tacit, intangible and intellectual. VNA maps and measures these intangible assets in order to make them tangible and the effective management of them more possible.

Three trials were commissioned by the Director of Crime Reduction in the East Midlands, addressing:

- domestic violence in Northampton
- burglary in Nottingham
- sport partnerships in Nottinghamshire.

The VNA trials are currently in various stages of completion. Already the findings are positive. Blockages have been identified and efficient integrated working solutions are being implemented. Some improvements have been immediate; others take more time. In the domestic violence trial in Northampton, for instance, the study revealed that ‘four different agencies all carrying out multi-agency training to different standards were unaware of each other’s work in this area’. When these shared practices were identified, knowledge was much more effectively leveraged through group learning. In the burglary trial in Nottingham it was discovered that one crime-solving division was holding crucial knowledge close to its chest to the detriment of other parts of the organisation. Systems for effective knowledge transfer and reward mechanisms for sharing information were explored.

Looking to the future

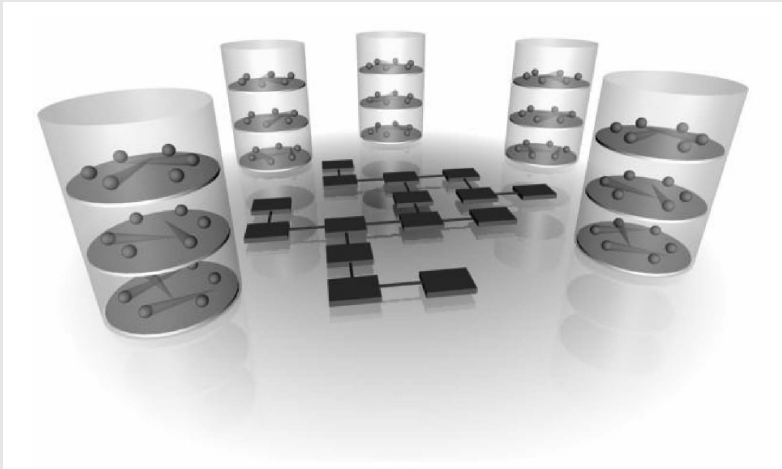
We know from the science of networks that there is hard-wiring embedded in the apparent ‘softness’ of social capital. Indeed, social capital has been the missing link in a performance equation that only valued human capital as measured hierarchically. The very nature of traditional performance measures is silo-esque – people are measured by those to whom they report. Now, by combining social and human capital measures, the intellectual assets of the organisation can be asserted, assessed and quantified. People can be measured by whether they run to, not away from, problems. This recognition carries with it the potential, at the very least, to neutralise the myopic exclusivity of the silo mentality. At best, it could hold the key to neutralising the destructive networks of international crime, fraud and terrorism.

VNA is an important approach in facilitating more effective cooperation between segments, but more work lies ahead. In particular, while processes may be mapped and aligned, who is looking after the leaders? Where does the leadership reside and what does it look like? Traditional leadership theory focuses on the typical ‘one leader’ approach and falls short of the mark. Within a segmentary system we must rethink leadership as a network of segment leaders, cooperating and coordinating at improved efficiencies for the greater good of the total enterprise. This is true infrastructure. Figure 2, developed for the VNA trials, tries to capture this concept. In this VNA world, leaders at some time or to some degree are followers.¹³ At any one time leaders may be leading:

- laterally for external partnerships
- laterally for internal partnerships
- downwardly for vertically integrated hierarchies and
- intermittently according to the exigencies of a decision process.¹⁴

The real lesson here is that the recombinant properties of a leadership network are just as important to model and understand as the processes they govern.

Figure 2 Model for government



(Courtesy of Enterprise Modeller Solutions Ltd)

The key point is this: just because you have an organisational chart at your fingertips does not mean you have a charter for your world. And having the networks mapped does not tell you about the cultural terrain you have to cross in order to lead effectively; the map is most certainly not the territory. Rather it is the lack of a coordinated leadership network within a network of hierarchies that produces the lurches, lunging and sputtering we frequently experience in government. What I have tried to do here is explain the science underlying the practical vagaries, which is essential for planning and predicting effective change.

With e-government and virtual operations increasing, it becomes even more salient to have government segments coordinated for rapid learning and operational adaptation. It's difficult to resign ourselves to living in a world where even the best-intentioned can undermine or devastate operations by a simple flip of a switch. But we do live in such a world and it is filled with this kind of risk. It's up to us to

engender the kind of trust and build the kind of government that will make it a better and safer place.

Karen Stephenson is professor of management at the Harvard Graduate School of Design and President of Netform, Inc. Her book The Quantum Theory of Trust will be published by Financial Times Prentice Hall later this year.

Notes

- 1 C Levi-Strauss, 'The mathematics of man', *International Social Science Bulletin*, no 6, 1955 and *The Elementary Structures of Kinship*, tr. J Harle Bell, J R von Sturmer and R Needham (Boston: Beacon Press, 1971)
- 2 Adapted from G B Richardson, 'The organization of industry', *Economic Journal*, no 82, 1972.
- 3 R Coase, 'The nature of the firm', *Economica*, no 4, 1937.
- 4 O Williamson, *Markets and Hierarchies* (New York: Free Press, 1975), *The Economic Institutions of Capitalism* (New York: Free Press, 1984) and 'Transaction cost economics and organization theory', *Industrial and Corporate Change*, no 2, 1993.
- 5 Management theorists put their imprimatur on the debate with derivative theories based on hybrid organisational forms and managerial approaches, such as the 'U' and 'M' organisation and Theories X and Y (D McGregor, 'The human side of enterprise', *Management Review*, Nov 1957) and Z (W Ouchi, *Theory Z* (New York: Addison-Wesley Publishing, 1981)) respectively.
- 6 W Powell, 'Neither market nor hierarchy: network forms of organization', *Organizational Behavior*, no 12, 1990.
- 7 M Granovetter, 'Economic action and social structure: a theory of embeddedness', *American Journal of Sociology*, no 91, 1985.
- 8 A Chandler, *The Visible Hand* (Cambridge, MA: Harvard University Press, 1977).
- 9 A Smith, *The Wealth of Nations* (Oxford: Clarendon Press, 1976).
- 10 K Stephenson, 'Networks', in *CRC The Technology Management Handbook*, ed. R Dorf (Boca Raton: CRC Press, 1999).
- 11 M Sahlins, 'The segmentary lineage: an organization for predatory expansion', *American Anthropologist*, no 63, 1961. In the early stages of human organisation leaders were typically charismatic and built a following by creating loyalties using generosity or fearful acquiescence through magic, demonstrated wisdom, oratorical skill, and so on. A change occurred between the segmentary lineage and chiefdom, where leadership was no longer carried out by a charismatic leader but by an instituted office authorised by God, coup or chad.
- 12 For more information see www.benchmarking.co.uk or contact Jeremy Hawkins at the East Midlands Crime Reduction Unit.

Network logic

- 13 M Sahlins, 'Poor man, rich man, big man, chief: political types in Melanesia and Polynesia', *Comparative Studies in Society and History*, no 5, 1963.
- 14 Detailed in M Kriger and L Barnes, 'Executive leadership networks: top management group dynamics in a high-performance organization', in *The SYMLOG Practitioner: Applications of small group research*, eds R Polley, A Hare and P Stone (New York: Praeger, 1988).