Managing Uncertainty:

Public administrators dealing with 'wicked' issues in public policy

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1. Introduction

There is a perception of the contemporary society as a «risk society» (Beck 1992), based on the observation that post-modern societies are risk prone to a higher scale than ever before (Smith and Fischbacher 2009). This state of things has brought with it a number of fears amongst large sections of society based on widespread uncertainty about the probable future outcomes of people's present actions. For public administrations these developments are important to tackle, states often being held to account for not offering their citizens the stability to which they feel they are entitled.

Older discussions around the «wickedness» and «messiness» of public policy issues (Rittel and Weber 1973) have recently re-entered academic debates (Clarke and Stewart 1997) in the context of the complexity of policy problems in post-modern societies. Complex policy problems differ from merely complicated ones in that they have a tendency to be cross-cutting and often need cross-sectoral, cross-organisational and cross-professional effort to yield sustainable, non-duplicating solutions (for example Clarke and Stewart 1997). They also tend to yield unexpected, emergent outcomes of the policy measures undertaken to tackle them. This is why uncertainty appears to play an important role in policy-making nowadays.

Two options are available to public administrators in dealing with uncertainty: one is to intensify regulations to cover for the «unpredictable» and another, to operate «on the edge of chaos» by allowing for flexible, flat, autonomous and empowered foci of decision-making (see Burnes 2005). While the first option is a natural choice for Weberian bureaucracy, the latter is specific to the paradigm of network governance. In the middle lies public management techniques borrowed from the market mode of social organisation.

The paper aims to explain the different demands on public servants posed by different stages of the structural transformations that public administration has undergone in the past decades in Western Europe. Complexity theory, precursor of uncertainty, is employed to analyse the various techniques characteristic to the three main public administration paradigms, emphasising the role that public administrators are expected to play in each of them. The paper concludes with the need for flexibility and «lean management» in post-modern public administration, as a way for administrators at both front line and senior levels to address uncertainty in policy making.

2. Theoretical framework

The overarching complexity theory is remarkably vast. As Lissack (1999) notes, it is more of a collection of ideas than it is an organised, rigorous theory. Ten years after Lissack's observation, little has changed in this respect and hence what is generally labelled as «complexity theory» is comprised of many «islands» of complexity «thought». Some with most relevance to this discussion are illustrated here.

A key element of the theory is the phenomenon of "emergence": Complexity theories are concerned with the emergence of order in dynamic non-linear systems operating at the edge of chaos" (Burnes 2005, 77).

The systems Burnes makes reference to are «complex adaptive systems». These consist of a large number of agents behaving according to their own laws (for example Fitzgerald 2002). The system comprised of these agents appears to be spontaneously self-organising because the rules apply to the individual behaviour of agents, rather than to the interaction between them. The resultant is a «complex whole» (Kauffman 1996) where outcomes «emerge» rather than being «caused» by such dynamic interactions or the properties of the agents themselves (ibid.). Thus, the issues that impact on a complex adaptive system can generate unpredictable outcomes which are often different from the added contribution of determining factors (Byrne 1998). Another key feature of complex systems is that they are non-linear, that is they do not rely on cause and effect laws (e.g. Haigh 2002). Hence, the outcomes of their processes are seemingly unpredictable (Lorenz 1993) as they cannot be accounted for, with reasonable certainty, by any limited number of causes. The implication of that for administrators is that the task of regulating complex systems is not easily (if at all) attainable. Finally, complex systems are made of components which undergo spontaneous self-organisation (Kauffman 1996), tending to transform a state of disorder into one of order. The correlate of that is that artificially organising 'disorder' may interfere with the natural process of self-organising.

The theory of complex adaptive systems is applicable to the context of organisations (Arndt and Bigelow 2000, Haigh 2002, Smith 2006b) in general and to government organisations, in particular (Kiel 1994, Overman 1996). The first challenge that the complexity paradigm generates in organisations is to the way they conceptualise and utilise knowledge. Rejection of causality in favour of non-linearity challenges the very concept of «knowable» (e.g. Allen 2001). Indeed, when one truth seen from one perspective is as good as any other seen from a different standpoint, we seem to have stepped into an era of supreme relativism. In policy-making contexts, inquiring efforts focus on ways to utilise reliable knowledge to inform policy formulation in ways that are most beneficial to the population and to ensure that professional expertise utilise their knowledge appropriately to implement these policies effectively. Secondly, the theories around complex adaptive systems help the understanding of organisational dynamism in adapting to changing exterior conditions (Smith 2006b). «Lean organisations of the context of the population of changing exterior conditions (Smith 2006b). «Lean organisations of changing exterior conditions (Smith 2006b). «Lean organisations of changing exterior conditions (Smith 2006b).

nisations» have been found to be successful in doing that, due to the fact that 'their fundamental structure embodies many of the characteristics of «self-organising» dynamic systems' (Jenner 1998) and also because they are

"...characterised by continual reorganisation, rapid new product development, and constant search for increased efficiency, all of which are the results of self-organisational processes." (ibid, 397)

The position of successful organisations «on the edge of chaos» (for example Burnes 2005, Smith 2006b), that is undergoing continuous change in order to better adapt to ever changing conditions to avoid falling into chaos, seems to be a characteristic of 'lean organisations' (Jenner 1998). The edge of chaos points at the three types of systems' positions on the order-disorder continuum: order, complexity, chaos (Kauffman 1996). It has been asserted that organisations are best positioned on the edge between complexity and chaos (for example Smith 2006b). The implication of this is that an adverse event is enough to push the efficient, lean, organisation from the 'complex' to the 'chaotic' state.

In the recent years we have been witnessing more and more adverse events yielding policy change (Birkland 1997) and this is said to be due to increased complexity of public issues (e.g. Smith and Fischbacher 2009) and of the configuration of public organisations dealing with them (Hudson 2004). An even more straight-forward explanation for the many times governments are pushed into a state of chaos is the difficulty to plan for the unknown. On the one hand, it is difficult to design policies for all citizens with diverse needs, rather than for a majority with mainstream needs. The need to do that is, however, paramount, since when a failure occurs, it is as damaging for the government when it affects one individual as it is when it affects a large number of people (due to the publicity that catastrophic failures entail). On the other hand, it is difficult to design a stable framework of policies for ever-changing conditions in the outside environment. For example, in the UK social policy, there have been a chain of adverse events involving children (DoH 1991) and the inquiry reports following them identified different root causes for each which have been found to be emerging from changing conditions in the society such as the social background of social workers or the ethnic structure of the client groups served by them. Each event took the administrators by surprise because even where laws and procedures were correctly applied, failure still occurred revealing a more fundamental problem, which is the inherent difficulty for regulators to conceptualise and incorporate in legislation cultural biases in the society (see for example Parton 2004).

How does the public sector deal with this state uncertainty rooted in complexity? One option is to intensify regulations and another, to learn to operate on the 'edge of chaos' by allowing for more flexible, flatter, autonomous and empowered foci of decision-making (see Burnes 2005). While the former option is a natural choice for Weberian bureaucracy, the latter is specific to the network governance. Between the two opposite paradigms of public administration lies a third one: government through markets. The next section illustrates how complex policy issues have been approached by public administrators in each of the three historical paradigms.

3. Three paradigms

The history of policy paradigms in the design and delivery of social policies is essentially one relating to the degrees of state intervention that are found to be acceptable in different time periods and under different governments. Over the past thirty years in Western Europe, there have been three such important periods. The first was one of strong state involvement and spending, ranging from the end of the World War II until the early 1980s. The second was brought to Europe by the so-called 'Thatcherism' (after the UK prime minister who initiated the unpopular reforms) and was marked by major state roll back and cost cutting of public services. This period could be seen as representative for the period between the early 1980s and the late 1990s. Finally, the period up to the present has been governed by the so-called 'third way' which is seen as a means of reconciling the previous two positions while aiming for community involvement into the business of the state (see Giddens 2000).

3.1. Traditional public administration

The first paradigm of state intervention by means of service design and delivery has its foundations in Weber's theory of bureaucracy and bureaucrats. Since this theory is, essentially, a method of rational organisation where 'obedience is owed to the legally established impersonal order' (Lawton and Rose, 1994, 30), the ethos of traditional public administration focuses around principles such as: legality, due processes, accountability, hierarchy, expertise, impartiality, and equality. The ethos characterised by these features help the bureaucratic system fulfil its purpose: providing services equally to all those entitled to them, regardless of their differences (for example Peters 2001). Going back to the theory of the three states of order in which a system can be located (order, complexity and chaos), it can be argued that traditional public administration covers the realm of the orderly. The system is largely centralised, designed and operated from the top, with clear lines of accountability running all the way to the bottom of the policy implementation. First line administrators are little more than simple executants of carefully laid out regulations and have almost no discretion at all in their jobs. Decision makers in policy issues are people placed in government departments and central agencies, who design policies based on 'objective' scientific evidence, which is univocal (see for example Houston and Griffiths's account of the 'objectivist' paradigm of risk traditionally embraced by public administrators -Houston and Griffiths 2000).

Despite the fact that, in a bureaucracy, the state seems to meet the citizens' needs in the most equitable and impartial way rationally possible, the system however has the inherent tendency towards inflexibility, alienation and red tape. Indeed, Virginia School thinkers (see for example Tullock 1993) claim that if, in the private sector, competition and the profit motive constrains the extent of bureaucracy, in the public sector such a constraint is inexistent. Thus, in the absence of competition, there is an impetuous need within bureaucracies to in-

crease their powers and maximise their budget, justifying these with the need to be responsive to service users (see for example Parton 2006). These bureaucratic tendencies align well with those of the politicians who have an interest in offering more services, to improve their prospects of re-election (Downs 1957). Therefore, political economists' critiques conclude that bureaucracies are inherently inefficient. The solution to this inefficiency was found in introducing market or quasi-market forces to bureaucracies in order to make them serve the clients for whose benefit they supposedly exist, rather than serve the convenience of the bureaucrats (Beetham 1996).

3.2. New Public Management

The introduction of competition in the public sector was a very influential idea in the reform agenda of Conservative, right-wing governments of the 1980s. The New Public Management, associated with the UK Thatcher government, created a major shift in paradigm importing the business rhetoric and procedures into the public sector, in an endeavour to make the sector more economic, efficient and effective (Lawton and Rose 1994, Hudson 2004). Thus, the government was to operate at arms length and largely via contractual transactions with other sectors, according to a supply and demand logic which was to replace to a large degree the bureaucratic creed in command and control. In the mode of governance through markets, public administrators cease to be the only decision-makers on policy issues. Non-bureaucrats get heavily involved in the provision of public services in which the state has high stakes, such as public transportation, health and education.

The public management techniques translated into the practice of the traditional public administration led however to a complex, fragmented configuration of the public sector (Klijn 2005). Moreover, 'the break-up of bureaucracies (...) introduced more players into the policy arena, making coordination and a holistic approach to service delivery more difficult' (Hudson 2004, 77).

Indeed, under this paradigm, the system of government seems to be stepping into the second system state: that of complexity. Thus, the system departed from that reliance on the orderly as designed at the top of the government and started to involve decentralised structures and, in some cases, non or semi-governmental ones in the decision-making. However, with complexity comes emergence, which gives way to uncertainty. Indeed, dense and complicated communication networks amongst a plurality of actors make the management of risk particularly difficult (Marais et al. 2004). It can be argued that, while striving for market values such as economy, efficiency and effectiveness, the practices of public management have contributed to the creation of vulnerable tightly-coupled system (Weick 1969) system, somewhat helping to create the conditions for crises (Smith 2006a) that seem to occur, in the recent years, in a higher number in than ever before (Smith 2005). This arguably inflicts crisis-proneness (e.g. Milward 1982) into the sector. To enable governments to take a more innovative approach to

tackling policy problems from multiple angles, a new change in paradigm occurred, from governance through markets to governance through networks.

3.3. Governance through networks

The introduction of networks as a means to both design and deliver public policies was undertaken with the aim of finding new conceptualisations of old problems, from multiple professional and organisational angles. Thus, network partnerships have gradually become the norm in the public sector as the solution to tackling complex policy issues, which with the previous two paradigms proved rather unsuccessful (Keast et al. 2006).

Almost any policy problem these days requires the involvement of more than one agency: 'wicked policy problems (...) make coordination and joint working a key for all agencies and managers working in the public domain' (Loffler 2004,163). Going back to the issue of relativity of truth, it could well be that 'wicked' policy issues have always existed, but our perception of them was not fit to see them as such, but rather as orderly.

The late 1990s and early 2000 found public administrations in Western Europe in an effort to adapt to a state of unprecedented complexity in policymaking. From the point of view of the administrators, decision-making points are at all hierarchical levels and more often than not, frontline staff find themselves in the position to take important judgement calls which affect fundamentally the lives of their clients (see for example Laming 2003). It is also widely accepted in the governance paradigm of public administration that, precisely due to this plurality of the decision-making, it is difficult to indicate which decisions created which effect. In terms of policy-making, it has become more widely accepted that policies are the result of political bargaining (Sabatier 1999) rather than of some unanimous acceptance of one 'true' order of things. Relativism in both policy formulation and policy implementation has reached a peak. One consequence of that is the fact that, often, regulations are expressed in very vague terms (see for example the newest safeguarding children policies in England and Wales -DfES 2004) whose terms are negotiated by the administrators who are closest to these regulations' beneficiaries. This is another feature of complexity, where the system tends to be governed by fewer, simpler rules than in an ordered system (e.g. traditional bureaucracy), encouraging self-organisation at the implementation level of the policy-making. While governance through networks is the most complex of the three alternative states of the government system, it is also the one that comes closest to the edge of chaos. There are a few indications for this. One is the relatively recent rise in the crisis management literature applied to the public sector (for example Smith 2005). Another is the growing number of government commissioned inquiry reports into adverse events with national relevance. Finally, it is the explicit observation that risk management in the public sector is getting particularly difficult due to the plurality of actors in policy-making (Marais et al. 2004) and that the public sector today is particularly prone to incubate conditions for crises (Smith 2006a).

4. Conclusions: Lean management in post-modern public administration

The three modes of public service delivery illustrated here are presented separately for analytical purposes only, as in reality they have overlapping elements (Newman 2005, Keast et al. 2006), many of the features that are key to one paradigm being carried over into the later ones. The carryover can be explained by the inability of one paradigm to apply to all purposes of a system as vast, as complicated and as essential to stakeholders as that of government. Therefore the current policy arena is generally comprised of all three governance modes (Keast et al. 2006).

Complexity has entered the public policy and management discourse as an ontological perspective that helps explain a number of features of the public sector today (e.g. Arndt and Bigelow 2000), in what regards emergent processes, inter-connectivity of policy issues and self-organisation. Applied to the three paradigms of public administration that co-exist in the policy arena, it becomes apparent that the networks mode of governance is the most complex of all. Coupled with the fact that in practice it is mixed with various features of previous paradigms, it follows that the overall picture of public service governance sits close to 'the edge of chaos' (Kauffman 1996). Previous examples of how governments crossed the edge into chaos (see DoH 1991) revealed costs to government in terms of reputation (Smith 2005), but also in terms of the general morale of public administrators (LGA 2009).

The low morale of public administrators confronted with the confusing and tightly coupled image of the policy problems they are to tackle is not helped by, on the one hand, the density of legislation (see Parton 2004) to cover for various scenarios in real life and, on the other hand, the lack of guidelines in some specific aspects (see Sanders 1999). While the latter can be seen as liberating in that administrators get the opportunity to make judgement calls rather than simply administering, it is reasonable to expect that in fact the contradiction between the two, coupled with the fear of liability in case of failure, is paralysing rather than encouraging leadership behaviour (see Dudau 2009). While the demand for leadership (understood here as taking charge of a non-straightforward problem and solving it creatively) is paramount for post-modern public administration (see Newman 2005), that of accountability is a defining characteristic of the public sector (Lawton and Rose 1994) and has therefore been carried over from the Weberian public administration paradigm into the newer network governance mode. Amongst the task demands put on public administrators working in nowadays 'crowded' policy arena (Keast et al. 2006) is the essential one of operationalising traditional concepts that the public sector cannot do without (such as 'accountability' or 'legality') within the new mind frame of complexity and network governance.

The expectation to which public administrators must raise in post-modernity is that they should be able to move freely and flexibly between the three paradigms of public administration, keeping a very fine, safe balance in place. Conversely, the exigencies for senior management in public administration are

around keeping their citizens safe from harm by leading a public administration apparatus that is capable of flexibility in the sense of moving freely amongst paradigms and amongst the techniques at hand to ensure a best fit mix of approaches in public policy.

Zusammenfassung

Die aktuelle politische Bühne ist voll von Elementen eines Verwaltungsethos, das zugleich traditionellen wie auch modernen Strömungen unterliegt. Sich in dieser Situation zurechtzufinden, ist für Verwaltungsangestellte nicht leicht. Der vorliegende Artikel befasst sich mit den verschiedenen Anforderungen an die Angestellten in vergangenen Dekaden und zeigt auf, dass in der Gegenwart so viel von Mitarbeitenden gefordert wird wie nie zuvor. Um mit den Ungewissheiten in der Politikgestaltung fertig zu werden, brauche es deshalb vor allem Flexibilität und "lean management".

Résumé

Il existe un flou hiérarchique du système de l'administration actuelle, où des courants traditionnelles et modernes existent en parallèle. L'article montre les exigences qui étaient posées à l'administration avant et celles actuelles. A l'heure actuelle les objectives ne sont pas claires, une instabilité dans le système du fonctionnement rend difficile le travail de l'administration. Pour y répondre beaucoup de flexibilité et « lean management » sont demandés.

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