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# Navigating Complexity: The Future of Public Service

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## Abstract

It is now widely accepted that the complex nature of public service has a number of profound consequences which public servants must address (Haynes P, *Managing complexity in the public services*. Routledge, London, 2003; Bovaird T, *Public Manag Rev* 10:319–340, 2008; Rhodes ML, *Public Manag Rev* 10:361–379, 2008; Lowe T, Wilson R, *Soc Policy Adm* 51:981–1001, 2017). This chapter explores what is required of public servants in order to achieve their task of creating opportunities for positive social outcomes to emerge (such as improved well-being, increased employment, or reduced crime) in complex environments. A new conceptual framing for organizations which deal with complex problems is introduced – the “Human Learning Systems approach” – which explores the principles, cultures, and processes required to create a complexity-engaged organizational design for public service organizations. We explore this approach in practice through a theoretically informed case study analysis of four initiatives in the UK. The results contribute an informed account of the opportunities and challenges afforded by adopting a HLS approach in practice and highlight gaps which future research might explore.

## Keywords

Complexity  
Performance management  
Public Service Reform

## Introduction

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**Complexity** is increasingly recognized as an unavoidable feature of modern governance (Haynes 2003; Bovaird 2008; Rhodes 2008; Moynihan et al. 2011; Lowe and Wilson 2017). Building on the argument that the outcomes public servants seek are created by complex systems, not individual actors or organizations (Lowe and Wilson 2017; French et al. forthcoming), and drawing on recent practice-based scholarship in public management (Davidson-Knight et al. 2017; French and Lowe 2018a), the paper explores how complexity manifests in the work of public servants. The chapter then introduces and elaborates on the emerging “Human, Learning, Systems” (HLS) **approach** (Lowe and Plimmer 2019) to the funding,

commissioning, and management of **public services** and explores how this meets the challenge of complexity. Four illustrative case studies from two research projects with UK charitable foundations explore complexity-informed practice, in order to ground and solidify the HLS concept. It is argued that HLS provides a useful conceptual frame to position a constructive engagement with complexity in public management theory and practice; however caution should be exercised as institutional barriers to this approach are significant and require further research.

## The Complex Nature of Public Service

It is increasingly common in the business management literature to hear that managing any twenty-first-century organization is a complex task (Melnyka et al. 2014; Bourne et al. 2017; Okwir et al. 2018). Organizations now face a dynamic and constantly evolving operating environment as consumer habits change, technology evolves, supply chains diversify, and market conditions fluctuate (Mintzberg and Waters 1985; Melnyka et al. 2014; Bourne et al. 2017). They have also become more internally complex, comprising large numbers of diverse functions whose relation to one another is multilayered and dynamic (Okwir et al. 2018).

Modern governance, similarly, has become a more complex task as public service systems have fragmented and decentralized (Rhodes 1997; Kickert et al. 1997; Moynihan et al. 2011). Traditional approaches to **strategic planning and performance management** have faltered as twenty-first-century public service organizations have adapted and respond to an unstable and dynamic external environment (OECD 2017), within which good performance itself becomes a moving target (French and Lowe 2018b). Fast-changing policy contexts create a similar dynamism of the operating environment which demands continual adaptation (Eppel 2012).

Complexity theory has held value to **public administration** and **governance** scholars as a theoretical lens to analyze modern governance relationships (Teisman and Klijn 2008; Eppel and Rhodes 2018). A good case can be made that complexity has a distinctive profile in the public sector, since public organizations are charged to tackle goals that are complex, ambiguous, and wicked (Head and Alford 2015). The outcomes that public service organizations are commissioned to deliver are therefore emergent from dynamic, unpredictable systems, not resultant from discrete service interventions and services (Lowe and Wilson 2017). French et al. (forthcoming) develop this view, arguing that public service performance is determined not by how well public can conform to “best practice,” but by how effectively public services interface with the dynamic and interdependent complex systems from which outcomes emerge. Complexity is therefore most significant in the “human services” such as social care provision, healthcare, employment support, criminal justice, and education, where the complexity of need and lived experience is most significant.

French and Lowe (2018b) point out that complexity theory has been positioned as a problem in **public management theory** (Teisman and Klijn 2008; Pollit 2009; Eppel and Rhodes 2018), in contrast to business management literature where it has been understood as a constructive solution (Melnyka et al. 2014; Bourne et al. 2017). **Public servants** therefore have limited access to tools, methods, and conceptual frames for engaging with complexity in their practice. In the following section, the challenge of complexity is explored by considering how it has been constructed for business organizations and what the implications are for the distinctive context of the public sector.

## The Challenge of Complexity for Public Services

Taking stock of a range of complexity-informed management literature, De Toni and De Zan (2016) describe four challenges that complexity brings:

- Diversity: organizations face heterogeneity and variety across their operations.
- Interdependence: elements of business are interconnected, and therefore everything is related to everything else.
- Dynamicity: organizations have to react to flux and variability of their environment.

- Ambiguity and uncertainty: information to inform decision-making may be lacking, or it may not be clear how to acquire, select, or interpret it.

While De Toni and De Zan's (2016) four elements are not calibrated to the distinctive context of public service, they provide a general position from which to understand and engage with the challenge complexity brings to contemporary public management. Further research is underway to explore in greater depth and specificity the forms of complexity that pertain to public management and governance (French and Lowe 2018a; French et al. forthcoming). This following section explores the implications of these four challenges in a human services context.

## Diversity: Variety of Demand

Complex social systems are composed of heterogeneous and diverse components (Cilliers and Preiser 2010). In a human services context, French and Lowe (2018a) argue diversity is most readily understood in terms of the variety of human needs, strengths, and capacities which public servants are faced with in their day-to-day work. For example, in social care where developing the sense of well-being of the person being cared for is a primary goal, those responsible for this care must understand and respond to the particular combination of contextualized elements and factors which help to construct and maintain well-being for each individual.

This is of consequence to the public sector: in order to respond to diversity in its environment, public services must be capable of offering a suitably varied service response. Amid complexity, decisions have to be based on the ethics of public service, by, for example, "respecting otherness and difference as values in themselves" (Cilliers 2002), which leads to a more person-centered and empathic approach to public service relationships.

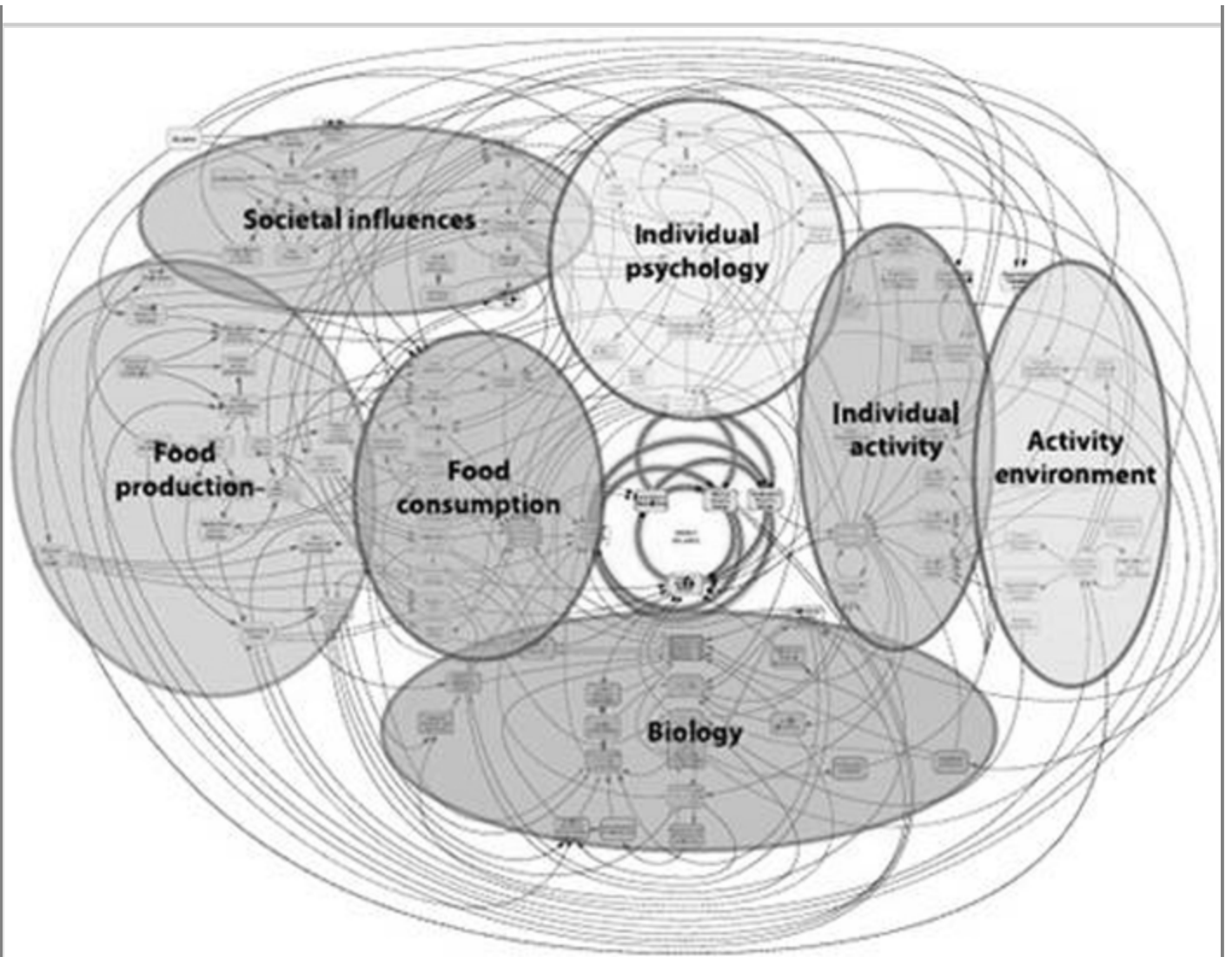
## Interdependence, Emergence, and Lack of Control

In complex systems, causal factors continually affect each other in dynamic and nonlinear configurations (Weick 1976), which result in the impossibility of being able to separate cause and effect (Stacey and Mowles 2015; Snowden and Boone 2007). The work undertaken by Vandebroek et al. (2007) for the Government Foresight Office to map the factors contributing to population obesity is a particularly vivid representation of interdependence. This is illustrated in a causal-loop diagram (Fig. 1 below).

The figure above shows that the outcomes which public services seek to create are the product of many interdependent elements working in concert. The results of such complex systems cannot be directly controlled, only shaped and influenced. For example, a local authority may desire to reduce obesity in the area for which it is responsible. However, obesity (see Fig. 1) is significantly influenced by a range of factors beyond its control or influence, for example, the food production systems which determine the availability of food, or how exercise and body image are represented in the media.

### Fig. 1

The Government foresight program obesity systems map (Vandebroek, Goossens, and Clemens. 2007)



If the outcomes produced by complex systems are beyond the control of any of the actors in the system, the required response is to grant actors the autonomy to shape their own patterns of behavior in a system (Bellavita 2006) rather than hold them to account for what they cannot control. It also requires that public servants seeking to change systems to more desirable futures pay attention to the extent to which actors in the system can coordinate and collaborate effectively.

## Dynamism

Complex systems are also dynamic, in that they change over time and adapt in unpredictable ways. A combination of constant nonlinear dynamic interaction, heterogeneity, and path-dependency in complex systems means that causality is highly context dependent (Boulton et al. 2015). This means that “what works” within a particular social intervention to improve the life of one person will not necessarily work for a different person in another context (French and Lowe 2018b). For example, the combination of housing, welfare payments, mental health support, employment, and substance misuse support that enables one homeless person to manage a stable tenancy carries no guarantee of working for a different person in a different place.

The required response to dynamicity is to treat public service as an ongoing learning process, a learning process that never arrives at a definitive and stable answer. This means that human services need to shift away from offering standardized and fixed responses and to instead adapt to changes in context. This turns each encounter between a public servant and the people they serve into a learning situation in which learning is constructed together. In the broadest terms, this necessitates a shift from a version of management which seeks control over processes which are perceived to work, to one which enables experimentation and learning.

## Ambiguity and Uncertainty

Complex systems are emergent and dynamic, and resultant patterns of causation often cannot be fully known. As a result, Byrne and Callaghan (2014) argue that uncertainty is endemic, and there is a need for humbleness with all knowledge claims in complex conditions. In addition, ambiguity and uncertainty results from the variety of human experiences and perspectives on how needs should be met. Complexity means that ambiguity also surrounds decision-making, since no single point of truth, or even a broadly shared perspective of social reality, can necessarily be assumed to exist (Mowles 2014). This makes it imperative that diverse perspectives within a system are made visible and validated and that these perspectives be involved in co-creating effective interventions. This viewpoint therefore cautions that the shared understandings necessary to design and pursue effective social interventions cannot be passively assumed to exist and must instead be actively constructed through processes of dialogue and negotiation.

## Summary

It is argued that complexity creates many challenges for public servants, which we have synthesized into four themes. High levels of diversity demand that public services respond appropriately to a range of individual needs. Interdependence requires interaction, connection, and coordination within and between systems to support positive outcomes. Dynamism requires context-specific bespoke responses that are informed by feedback loops and learning. To respond to ambiguity and uncertainty, decision-making should be informed by reflective practice and incorporate multiple perspectives.

While it has long been recognized that public management is a complex domain, scholars have borrowed from diverse and competing aspects of complexity theory (Teisman and Klijn 2008), leading to criticism of the utility of complexity as a theoretical framing for research (Pollit 2009). The analysis here points the way toward an alternative conceptual grounding to begin formalizing a complexity-informed approach to the management of public services and social interventions (French and Lowe 2018a; Lowe and Plimmer 2019; French et al. forthcoming).

## An Emerging Alternative? Introducing the Human, Learning, Systems Approach

So far the challenge of complexity for public service management, and the responses engendered within recent scholarship, has been discussed. In this section “Human Learning Systems” (HLS) (Lowe and Plimmer 2019) is described as an approach to the funding, commissioning, and management of human service interventions in complex systems, which may enable public service officials to better navigate complexity (Commissioning is the term applied to the process of assessing, planning, procuring, and monitoring services in the public sector of the UK.).

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The HLS approach has been informed by scholarly engagement with the handling of complexity in management and organizations theory and by work (in development) which applying complexity theory constructs to public management theory (French and Lowe 2018a). It is also significantly a practice-informed approach, which has been shaped by ongoing conversations with commissioners, managers, and practitioners in a range of public service sectors, and with charitable funders, philanthropic organizations, and delivery organizations in the voluntary and community sectors.

Two research partnerships with UK-based charitable foundations have in particular shaped the understanding of this approach. Firstly, a learning partnership established with the Lankelly Chase Foundation has explored place-based responses to service reform and system change across numerous areas of the UK, adopting an action research approach to inquiry (French and Lowe 2018b). Secondly, an action research project initiated with The Tudor Trust has explored the possibilities and barriers of complexity-informed practices to the commissioning and management of services, working with a range of initiatives and social interventions which explicitly recognize complexity as a challenge. Empirical findings from these research projects have fed into a practitioner-facing report exploring how the complexity described in the previous section has been managed in practice (Lowe and Plimmer 2019). A Knowledge Hub group (a UK-based online platform for collaboration and discussion for public servants) set up to support public servants to grapple with the

management of complexity in their practice has also helped to instill a critical engagement with the practical difficulties and challenges involved with embedding an HLS approach. In this descriptive section, the key features of the emerging HLS approach are outlined and described.

## Human

Complexity-consistent practice has in all cases encompassed a strong relational dimension with service “users.” To understand the variety of people’s needs and strengths to design appropriate services responses, practitioners are required to enact a holistic, responsive, and user-centered practice. This in turn requires managers and senior leaders to carry faith in the innate compassion and pro-social motivation of staff. This contrasts starkly with the gloomy assumptions of public servant motivation brought about through New Public Management and antecedent theories of public servant motivation (Buchanan and Tullock 1962), with the focus on extrinsic reward systems within performance management systems (Le Grand 2010). Staff grappling with these issues in Lankelly Chase and The Tudor Trust research sites frequently spoke of the required need for organizations to stop constraining staff autonomy and focus on enabling public service organizations to “be more human” (Lowe and Plimmer 2019).

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Further explorations into what such human-centered practice may look like as a response to complexity have explored four dimensions of this practice, captured by the acronym VEST – Variety, Empathy, Strengths, and Trust. This is a practice which:

- Recognizes the Variety of human strengths, needs, and experiences
- Builds Empathy between people – so that they recognize, and seek to act on, the emotional and physical needs of others
- Uses Strength-based approaches – recognizing and building on the assets (rather than deficits) of people and places
- Trusts public servants to act on their intrinsic motivation to help others and get better at what they do

## Learning

“Learning” is a continuous process of adaptation throughout the lifecycle of public service planning, implementation, and evaluation. The business management literature positions learning as a key engine of service improvement in complex environments (Mintzberg and Waters 1985; Bourne et al. 2017). Lowe and French (2018) argue that in a public management context that learning has a crucial role in supporting evidence-based practice in complex conditions. Lowe and Plimmer (2019) contrast this approach with a standard social innovation process in which a public service problem is identified, experiments are undertaken to identify “what works” in relation to that challenge, and successful experiments are then taken to scale. The “what works” approach can be seen in classic literature on social innovation, for example, the Young Foundation (2012)’s social innovation model that identifies six stages of social innovation, in which learning (“prototyping” in their nomenclature) is a particular stage of social innovation “where ideas get tested in practice” (Young Foundation 2012, p. 33).

The HLS approach identifies the following alternative ways that an ongoing learning approach has been operationalized (Lowe and Plimmer 2019):

- An iterative, experimental approach to working
- Funding and commissioning for learning, not services – shifting from commissioning-specified services to funding organizations’ capacity to learn
- Using data to learn – using monitoring data for reflection, rather than target-based performance management

- Creating a learning culture – building a “positive error culture” in which people are encouraged to talk with their peers about mistakes and uncertainties in their practice

## Systems

The “systems” approach begins with the perspective that outcomes are produced by systems, rather than delivered by organizations (Lowe and Plimmer 2019). Consequently, practitioners start from the perspective that “healthy” systems are more likely to produce desired social outcomes. In this context, “healthy systems” mean those in which the actors are able to co-ordinate and collaborate effectively. ~~rather than organizations should be the platform for social interventions.~~ Various case studies have experimented with creating a “System Steward” role to ensure that systems can operate effectively to produce desired outcomes. Lowe and Plimmer (2019, p. 37-8) describe several aspects of the role that Systems Stewards have played. These include:

- Building relationships and trust between actors in a system
- Establishing shared purpose
- Developing shared norms of behavior and common principles

Further, the authors identify the critical role played by commissioners in System Stewardship (Hallsworth 2011). They assert that how commissioners distribute financial resources (e.g., through competitive or collaborative processes) plays a crucial role in whether actors in a system can coordinate their activities effectively (Lowe and Plimmer 2019, p. 24).

## Human Learning Systems as a Response to Complexity: Empirical Findings from Two Research Projects

The key elements of an emerging “Human, Learning, Systems” approach have been described, which is conceptually equipped to respond to the challenges which complexity brings to public sector management. In this section empirical findings demonstrate how initiatives embodying this approach have tackled the four forms of complexity previously elaborated in this chapter.

Empirical data is drawn upon from two research projects, cited previously in this chapter, to explore complexity-informed management practice cited previously in this chapter. The first, Lankelly Chase Foundation’s Place Action Inquiry, is an exploration of Lankelly Chase’s evolving place-based funding practice for people facing severe and multiple disadvantages. Lankelly Chase’s strategy has been informed by understanding severe and multiple disadvantages as a wicked and systemic problem, whose determinants could not be modified by its funding power alone. It has accordingly moved away from a standard approach to grant making involving open, competitive funding criteria and pre-identified strategic priorities, toward a model which supports the creation of conditions which allow better outcomes for severely and multiply disadvantaged individuals to emerge. In this project, Lankelly Chase operated in six UK localities to co-create a funding strategy to support place-based system change (French and Lowe 2018b). Lankelly Chase itself became an additional research site to explore how its own funding practice and organizational arrangement might alter to better support its work in these areas.

The second research project is a program of work funded commissioned by The Tudor Trust to explore the opportunities and barriers presented by taking a complexity-informed approach to funding and commissioning social interventions. Seven case study areas were chosen based on their interest in reframing funding or commissioning practices to respond to complex environments. An action researcher was recruited to work alongside each case to navigate the challenges of embedding a complexity-informed working approach.

Taken together, these research projects provide a vantage point to explore how public servants consciously and concertedly go about navigating the challenges of complexity in practice. Four illustrative cases are explored in this section to show how initiatives undertaking a HLS approach have been able to respond to



each of the four forms of **complexity** described previously. The selection of cases for elaboration in this section was theoretically determined based on their potential to elucidate key theoretical relationships between the aspects of complexity previously described and key elements of the HLS approach (Eisenhardt 1989). The aim of this sampling approach is to give conceptual lucidity and empirical grounding to the construct of HLS. This approach lacks representativeness and cannot affirm the effectiveness of an HLS approach relative to other ways of working. In addition, it risks overlooking other significant causal factors and presenting an overly optimistic perspective. To counteract this, a theory elaboration approach was adopted in the analysis (Lee et al. 1999), seeking to contextualize HLS practice with the principal barriers and challenges which were uncovered during the empirical analysis.

## Responding to Diversity: Bespoke by Default Services in Gateshead

The recognition of diversity of need has supported experimentation with **personalization** (Needham 2011) and self-management (Laloux 2014) in health and social care. In Gateshead, a Lankelly Chase case study area, a similar recognition of diversity spurred the creation of an approach to prototype “bespoke by default” models of public service that respond to the unique context of each presenting individual.

The first prototype was an attempt to reform Council Tax (the UK’s local services tax) debt collection processes. Senior leaders recognized that the ~~enforcement of~~ standard practices of debt collection, e.g., reminders, warnings, ~~or~~ legal action, and the confiscation of property, ~~which~~ were ineffective recovery tools and often had damaging consequences for recipients. In the prototype, those identified as falling into ~~debt~~ arrears were instead contacted and invited to a conversation which enabled council staff to understand the broader context of their lives ~~about the root cause of debt~~ and how the council might support them better. A **Public Service Reform** team was created and given the autonomy to respond to the particular characteristics and context of the person, with just two rules governing the scope of their response – “do no harm, and stay legal” (Lowe and Plimmer 2019). The prototype had no access or eligibility criteria (anyone who asked for help was entitled), and the team had no standardized or prescribed set of activities. The basis of the Public Service Reform team’s role was therefore rooted in a relational practice with individuals, with opportunities to reflect on the appropriateness of actions and change course autonomously.

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An initial prototype working with just a few dozen individuals created hundreds of individual interventions and involved the **Public Service Reform** team operating across agencies and services as advocates of individual need. As one change leader reported:

Most of the specific things that were done that helped people were small and unspectacular. A coffee, a chat, a food shop whilst benefits were being processed, a bus pass to aid a job search (and just to get people out of the house), some basic clothes... They didn’t need supplying for and assessing for, but were decisions made by the workers in the work based upon the specific context of the person and their situation. – Public sector change leader

Granting autonomy for the team was enabled by attaining the support of senior council leadership; however coordinating effective responses required operating beyond council boundaries, with other public, private, and voluntary sector bodies. The lack of support from a broader service system was sometimes a barrier to responding effectively. Operating in its own right, however, the prototype could demonstrate the overall effectiveness of its “bespoke by default” service approach. Over a 6-month period, in addition to reducing debts, evaluative data collected suggested the Council Tax prototype demonstrated improvements in life circumstances like housing and employment and in reported mental health in three quarters of the people who had engaged with it (Lowe and Plimmer 2019).

## Responding to Interdependence, Emergence, and Lack of Control: Lankelly Chase Foundation

Lankelly Chase began its “Place Action Inquiry” **to** explore how **UK** localities operating as systems could best support people who experience severe and multiple disadvantages. Underpinning this were nine “System Behaviors” which describe the behavior of actors in a “healthy” system, developed through conversations with other funders, academics, independent experts, and people with lived experience of

systemic disadvantage (French and Lowe 2018b). The Place Action Inquiry began with the hypothesis that if actors in a system exhibit these Behaviors, the system will better help meet the strengths and needs of people who have experienced severe and multiple disadvantages.

Having initially operated significantly by funding a distinct “change agent” role based in the locality, Lankelly Chase found that quite often this one perspective was too narrow a prism to understand the local system well enough, or to marshal the necessary commitment from local actors to intervene effectively. French and Lowe (2018b) chart how Lankelly Chase’s approach evolved from operating through individual change agents to motivating a group of locally based actors, termed a “Steward of Place,” “Stewards of Place” (a form of the HLS “System Stewardship”<sup>22</sup> to take responsibility for developing the System Behaviors locally.

A number of the places participating within the Inquiry began to adopt the idea of System Stewardship (Hallsworth 2011). This defines the role of **System Steward** as a person (or group of people) who take responsibility for the “health” of a system (in this case, whether the System Behaviors are manifest) and who coordinate action to understand and promote the health of a system beyond their individual or organizational frame of reference (French and Lowe 2018b; Lowe and Plimmer 2019).

Actors operating within a “~~Steward of Place~~ System Stewardship” role brought a number of benefits: they combined different perspectives of their local system enabling better decision-making, and they could provide emotional support to one another and could better establish a collective identity, giving visibility and local strategic leadership to issues surrounding severe and multiple disadvantages. Over time, those places within Lankelly Chase’s action inquiry which established an effective System Steward~~Steward of Place~~ role proved more resilient and stable and were better able to attract interest in initiating cross-boundary interventions.

This strategy was not without its difficulties. In some areas, it was difficult to frame a ~~Stewardship of Place~~ role which did not significantly overlap with existing local infrastructure, particularly as many UK localities have established multi-agency groupings with complex and multiple needs as a strategic focus. Convening local actors into a ~~Stewardship of Place~~ body sometimes brought about challenges about the legitimacy and relevance of Lankelly Chase’s presence from existing organizations. Many of those playing an active role within the ~~Stewardship of Place~~ grouping also carried an ongoing organizational role in the local area, which could bring apprehension from other local actors that organizational agendas could shape its activity. These factors suggest that without due care and sensitivity, this approach could actually worsen existing relationships and effectively weaken the response to interconnected social problems.

## Responding to Ambiguity and Uncertainty: Acknowledging Multiple Perspectives and Negotiating Shared Purpose in York

In 2014, in response to a rapid rise in demand placed on emergency services by mental health-linked conditions, Lankelly Chase funded a partnership initiative to develop tailored support for individuals identified through emergency service access. A project change agent was funded to support the intervention to take on a system change role in the local authority and help it take on a system shaping beyond its organizational boundary. The service itself was very positively evaluated and eventually became commissioned by a statutory agency; however its systemic impact was more questionable. The change agent noted a number of organizations spanning housing, emergency services, healthcare, mental health, and social care were working in isolation to improve conditions for very similar target groups.

The change agent took on a coordinative and facilitative role for this broader grouping of services and interventions. A series of service mapping exercises showed six separate interventions dealing with significantly overlapping target groups and operating independently with little communication. This made explicit that ambiguity and uncertainty were a central problem. Organizations entertained a multiplicity of definitions of complex needs, divergent operational strategies, and different perspectives on ways forward. In addition, there was substantial uncertainty about if and how increased connectivity and communication across these initiatives would be helpful.

The change agent brought local actors together in a collaborative workshop to position multiple and complex needs as a crosscutting issue requiring more meaningful collaboration among key actors. It was recognized that a regularized platform was needed in order to enable more effective collaboration. Consequently, a “Multiple and Complex Needs Network” was formalized which brought together all the respective players into an ongoing dialogue about collaboration.

The network took an iterative approach to strategizing, building on knowledge and direction from those engaging with the network to gradually address ambiguity and uncertainty at subsequent meetings. A shared purpose was agreed, and further service mapping exercises were undertaken that made visible the current service offer to people with multiple and complex needs in the locality. Lankelly Chase was brought in to sponsor a systems leadership training program and to fund collaborative experiments in service reform. Subgroups were created to respond with greater focus on particular dimensions of complex needs, identified as priorities, such as involving lived experience in decision-making and mapping services for multiple needs.

Regular reflective network meetings provided an important space to work toward a more collective and strategic approach to complex needs in the city. However ambiguity and uncertainty created ongoing questions for network governance: should a unified and unambiguous decision be made, risking alienation of those with divergent viewpoints; or should allowed ambiguity and uncertainty be allowed to persist, recognizing the validity of multiple perspectives, but risking a lack of coordination and dissolution of shared purpose? The network’s experience shows that it was not possible, or even desirable, to eliminate ambiguity and uncertainty completely. For instance, there proved too much diversity of opinion to coalesce a single, authoritative definition of complex needs across the network membership. Some network members advocated task and finish subgroups to take forward mutually agreed action points; however the network eventually agreed that this would be too restrictive, opting instead to create subgroups for interested members to explore shared issues on a more self-organizing basis. Crucial to the governance of the network then was a space for dialogue and balanced decision-making about the treatment of ambiguity and uncertainty.

## Responding to Dynamism: Plymouth’s Approach to Continuous Learning and Adaptation

In order to respond to dynamic complexity, one of the key changes that commissioners of public services must address is to sponsor the capacity of organizations to learn and respond to the changing needs of the populations they serve, rather than act merely as effective purchasers of services. In Plymouth, a Tudor Trust case study area, local statutory agencies have initiated a large-scale reformation of their commissioning approach around learning and collective responsibility.

Disenchanted with its competitive purchaser-provider ~~commissioning~~ model, Plymouth began a transition to a cooperative commissioning model. Commissioners created an integrated fund, pooling ~~together~~ separate budgets from health, leisure, housing, and social care to form a single £638 million budget for the area ~~to commission on a whole-system basis~~. A major part of this was the commissioning of an integrated health and social care system for vulnerable adults on an £80 million, 10-year, city-wide contract. This was structured as an “Alliance Contract,” which is a model of collective responsibility originally designed for the oil industry, to pool risk across a range of partners. Notably this commissioning arrangement does not rely upon accountability of particular actors for specific outputs or outcomes, but seeks to achieve its goals through an ambitious program of deep learning and collaboration among contract signatories.

It was clear to leaders in this process that ~~no~~ off-the-shelf services or solutions would not be useful ~~could be purchased~~ and that instead a long-term process of learning and collaboration between a range of partners was needed to achieve population-level impact. The tendering process was therefore conducted as a series of design conversations between commissioners and providers in the Alliance, involving appreciative inquiry exercises, co-production events, and learning labs conducted over a year-long process. These activities were designed to help co-construct a shared vision and build relationships and trust among key partners.

In place of a strategic plan, these conversations helped co-create a set of core “Alliance Principles” principles which contract signatories committed to uphold and take forward. These principles functioned in place of

performance indicators as guidance for how partners were expected to act and interrelate, to facilitate reflective practice, and to hold partners to collective account for their behavior. These are reprinted below:

- (a) *to assume collective responsibility for all of the risks involved in providing services under this agreement;*  
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  - (b) *to make decisions on a “Best for People using Services” basis;*
  - (c) *to commit to unanimous, principle and value based– decision making on all key issues;*
  - (d) *to adopt a culture of “no fault, no blame” between the Alliance Participants and to seek to avoid all disputes and litigation (except in very limited cases of willful default);*
  - (e) *to adopt open book accounting and transparency in all matters;*
  - (f) *to appoint and select key roles on a best person basis; and*
  - (g) *to act in accordance with the Alliance Values and Behaviors at all times*
- Plymouth’s Alliance Principles 2019, in Lowe and Plimmer (2019)

With no detailed strategic plan, the Alliance partners were instead expected to improve systemic outcomes by learning and adaption, with the tender document asking ~~implementing~~ partners to “measure and reflect on the outcomes that the system is producing, in order to help the system continuously adapt and improve, and to help organisations understand their particular contributions to these outcomes” (Lowe and Plimmer 2019~~2009~~). While the work is remarkable in its scale and the difference in its approach from more traditional forms of commissioning in the UK, it is too early to testify as to its long-term effectiveness. Further in-depth research is underway to analyze the process and substantive results of this commissioning approach.

AQ9

## Conclusion

This chapter has introduced HLS as a new conceptual frame for undertaking a complexity-informed approach to the management of public services and has explored how this has been enacted in practice through four illustrative case studies. Table 1 shows how the conceptual elements of the HLS approach met the key challenges of complexity in the case study data reported.

**Table 1**

Aspects of complexity, required responses, and features of HLS approach

| Challenge of complexity | Required response  | Feature of HLS and example in practice   |
|-------------------------|--|--|
| Diversity               | Public servants understand the diversity of need and are trusted with the autonomy to respond effectively                              | Human – “bespoke by default” services in Gateshead   |
| Interdependence         | Public servants work to influence systems beyond their direct control and have a responsibility for the overall health of their system | Systems – “System Steward-of-Place” role in Lankelly Chase Foundation’s Place Action Inquiry |

| Challenge of complexity   | Required response   | Feature of HLS and example in practice   |
|---------------------------|---|--|
| Ambiguity and uncertainty | There are multiple “single points” of truth in a system. Evidence is used for reflection on practice, not performance judgment                  | Systems – establishing shared purpose through mapping and understanding service systems in York’s Multiple and Complex Needs Network<br>Learning – experimenting with new ways of relating and organizing in York’s Multiple and Complex Needs Network |
| Dynamicity                | Effective public service delivery is an iterative process of experimentation. An end to “command and control” methods of performance management | Learning – Plymouth’s approach to commissioning for collaboration and learning, rather than specific outputs and outcomes  |

#### AQ10

Empirical data from the four cases refine and flesh out the conceptual dimensions of HLS. The Gateshead case shows how public servants responded to the variety of human strengths, needs, and experiences in their “bespoke by default” public service approach. The Lankelly Chase case shows how a funder has built capacity for stewardship in localities to tackle complex crosscutting issues. The York case shows how public servants in a multi-agency network have tackled ambiguity and uncertainty by negotiating a shared purpose and experimenting with new ways of working and interrelating with one another. Finally, the Plymouth case shows how values of learning and collaboration can provide the basis for a commissioning approach which responds to the dynamic and unpredictable nature of managing large-scale social interventions in complex settings.

Clearly, the case studies reported cannot provide conclusive evidence of the effectiveness of taking an HLS approach, nor can they provide a comprehensive understanding of the range of ways this might be operationalized in practice. However, taken together, the empirical data contribute a rare illustration of how public servants can engage constructively with complexity using a new complexity-informed conceptual framework such as HLS.

The chapter lends further stock to the claim made in recent performance management scholarship (Davidson-Knight et al. 2017; French et al. forthcoming) that complexity-informed practice requires a concerted move away from the underpinning assumptions of New Public Management, which still underpin much contemporary performance management practice. Principally, it opposes the assumption that public servants must be controlled and performance managed for fear of unleashing a wave of self-seeking, “knave”-like (Le Grand 2010) behaviors. On the contrary, the cases give examples of how complexity can be effectively navigated when public servants are trusted to use their autonomy to act as stewards of common goals.

The chapter also contributes an important account of the difficulties and challenges of complexity-informed practice. While each case could evidence significant advancements, tensions were not always resolved, nor were barriers to practice mitigated entirely. For instance, the Gateshead case illustrates the difficulties public servants can face in moving beyond the institutional boundary in their service responses. The York case shows how uncertainty and ambiguity cannot be eliminated from practice, only managed through ongoing dialogue and reflection. No case has achieved what it has without difficulty or struggle, and collectively they show that the transition process to a HLS approach can be culturally and procedurally challenging to embed. Further in-depth qualitative research would therefore be valuable in helping elucidate the contextual difficulties in helping organizations transition to complexity-informed public management practice.

The case study research design also carries limitations. As mentioned, the case study sampling approach is not able, nor was it intended, to conclude the effectiveness of this approach. No significant long-term evaluations exist of any of the initiatives explicitly undertaking an HLS approach. There is also more work to be done in examining how HLS may operate across different institutional contexts, to isolate the contextual enablers and barriers to this way of working. To this end the conceptual components of HLS lend some classificatory criteria which could be used to structure comparative research, comparing opposing initiatives, such as payment-by-results models, with those embodying an HLS approach. Finally, given the active

participation of case studies with the research projects, it is likely that achieving an HLS approach is more straightforward in supportive social, institutional, and political contexts. Further research could helpfully explore the experience of organizations with less favorable environments.

Taken as a whole, the examples presented here indicate rather than demonstrate the effectiveness of an HLS approach. However it is considered that they can be useful material for interested public servants, providing some recognizable landmarks for navigating complex terrain. HLS is best positioned as an evolving practice, drawing from continued experiments as policymakers and public servants continue to confront the complexity of their operating contexts.

## References

AQ11

Bellavita, C. 2006. Changing homeland security: Shape patterns, not programs. *Homeland Security Affairs* 2 (3): 1–30.

Boulton, J., P. Allen, and C. Bowman. 2015. *Embracing complexity: Strategic perspectives for an age of turbulence*. Oxford: Oxford University Press.

Bourne, M., M. Franco-Santos, P. Micheli, and A. Pavlov. 2017. Performance measurement and management: A system of systems perspective. *International Journal of Production Research* 56 (8): 2788–2799.

Bovaird, T. 2008. Emergent strategic management and planning mechanisms in complex adaptive systems. *Public Management Review* 10 (3): 319–340.

Buchanan, J.M., and G. Tullock. 1962. *The calculus of consent*. Vol. 3. Ann Arbor: University of Michigan Press.

Byrne, D., and G. Callaghan. 2014. *Complexity theory and the social sciences: The state of the art*. London: Routledge.

Cilliers, P. 2002. *Complexity and postmodernism: Understanding complex systems*. London: Routledge.

Cilliers, P., and R. Preiser. 2010. *Complexity, difference and identity: An ethical perspective*. London: Springer Science & Business Media.

Davidson-Knight, A., T. Lowe, M. Brossard, and J. Wilson. 2017. *A whole new world: Funding and commissioning in complexity*. Newcastle University Business School and Collaborate. <http://wordpress.collaboratei.com/wp-content/uploads/A-Whole-New-World-Funding-Commissioning-in-Complexity.pdf>.

De Toni, A.F., and G. De Zan. 2016. The complexity dilemma. *Emergence: Complexity and Organization* 18 (3): 1–8.

Eisenhardt, K.M. 1989. Building theories from case study research. *Academy of Management Review* 14 (4): 532–550.

Eppel, E. 2012. What does it take to make surprises less surprising? The contribution of complexity theory to anticipation in public management. *Public Management Review* 14 (7): 881–902.

Eppel, E.A., and M.L. Rhodes. 2018. Complexity theory and public management: A ‘becoming’ field. *Public Management Review* 20: 949–959.

French, M., and T. Lowe. 2018a. The wickedness of public service outcomes: why we need a new public

management paradigm. Conference paper delivered at International Research Society for Public Management, Edinburgh 2018. [https://irspm2018.exordo.com/files/papers/833/final\\_draft/The\\_wickedness\\_of\\_public\\_service\\_outcomes\\_-\\_why\\_we\\_need\\_a\\_new\\_public\\_management\\_paradigm.pdf](https://irspm2018.exordo.com/files/papers/833/final_draft/The_wickedness_of_public_service_outcomes_-_why_we_need_a_new_public_management_paradigm.pdf).

———. 2018b. *Place Action Inquiry: Our learning to date*. Lankelly Chase Foundation. <https://lankellychase.org.uk/wp-content/uploads/2019/01/Place-Action-Inquiry-Learning-to-Date-Jan19.pdf>.

French, M., T. Lowe, R. Wilson, M.L. Rhodes, and T. Hawkins. forthcoming. In *Handbook on Performance Management in the Public Sector*, ed. D. Blackman, F. Buick, K. Gardner, S. Johnson, M. O'Donnell, and S. Olney. Cheltenham: Edward Elgar.

AQ12

Hallsworth, M. 2011. *System stewardship: The future of policy making?* London: Institute for Government. <https://www.instituteforgovernment.org.uk/sites/default/files/publications/System%20Stewardship.pdf>.

Haynes, P. 2003. *Managing complexity in the public services*. London: Routledge.

Head, B.W., and J. Alford. 2015. Wicked problems: Implications for public policy and management. *Administration and Society* 47 (6): 711–739.

Kickert, W.J., E.H. Klijn, and J.F. Koppenjan, eds. 1997. *Managing complex networks: Strategies for the public sector*. London: Sage.

Laloux, F. 2014. *Reinventing organizations: A guide to creating organizations inspired by the next stage in human consciousness*. Brussels: Nelson Parker.

Le Grand, J. 2010. Knights and knaves return public service motivation and the delivery of public services. *International Public Management Journal* 13 (1): 56–71.

Lee, T.W., T.R. Mitchell, and C.J. Sablinski. 1999. Qualitative research in organizational and vocational psychology, 1979–1999. *Journal of Vocational Behavior* 55 (2): 161–187.

Lowe, T., and M. French. 2018. The meaning of evidence in a complexity-informed public management. In *A recipe for action: Using wider evidence for a healthier UK*. London: Health Foundation.

Lowe, T., and Plimmer, D. 2019. Exploring the new world: practical insights for funding, commissioning and managing in complexity. Newcastle Business School and Collaborate. [http://wordpress.collaboratei.com/wp-content/uploads/Exploring-the-New-World-Report\\_Digital-report.pdf](http://wordpress.collaboratei.com/wp-content/uploads/Exploring-the-New-World-Report_Digital-report.pdf).

Lowe, T., and R. Wilson. 2017. Playing the game of outcomes-based performance management. Is gamesmanship inevitable? Evidence from theory and practice. *Social Policy and Administration* 51 (7): 981–1001.

Melnyka, S., U. Bititci, K. Platts, J. Tobias, and B. Andersen. 2014. Is performance measurement and management fit for the future? *Management Accounting Research* 25 (2): 173–186. <https://doi.org/10.1016/j.mar.2013.07.007>.

Mintzberg, H., and J.A. Waters. 1985. Of strategies, deliberate and emergent. *Strategic Management Journal* 6 (3): 257–272. <https://doi.org/10.1002/smj.4250060306>.

Mowles, C. 2014. Complex, but not quite complex enough: The turn to the complexity sciences in evaluation scholarship. *Evaluation* 20 (2): 160–175.

Moynihan, D.P., S. Fernandez, S. Kim, K.M. LeRoux, S.J. Piotrowski, B.E. Wright, and K. Yang. 2011. Performance regimes amidst governance complexity. *Journal of Public Administration Research and Theory*

41 (1). <https://doi.org/10.1093/jopart/muq059>.

Needham, C. 2011. *Personalising public services: Understanding the personalisation narrative*. Bristol: Policy Press.

OECD: Organisation for Economic Co-operation and Development. 2017. *System approaches to public sector challenges: Working with change*. Paris: OECD Publishing. <http://www.oecd.org/publications/systems-approaches-to-public-sector-challenges-9789264279865-en.htm>.

Okwir, S., S.S. Nudurupati, M. Ginieis, and J. Angelis. 2018. Performance measurement and management systems: A perspective from complexity theory. *International Journal of Management Reviews* 20 (3): 731–754.

Pollit, C. 2009. Complexity theory and evolutionary public administration: A sceptical afterword. In *Managing complex governance systems: Dynamics, self-organization and coevolution in public investments*, ed. G.R. Teisman, A. Van Buuren, and L. Gerrits. New York: Routledge.

Rhodes, R.A. 1997. *Understanding governance: Policy networks, governance, reflexivity and accountability*. London: Open University Press.

Rhodes, M.L. 2008. Complexity and emergence in public management. *Public Management Review* 10 (3): 361–379.

Schalock, R.L. 2001. *Outcome based evaluation*. New York: Kluwer.

Snowden, D., and M. Boone. 2007. A leader's framework for decision making. *Harvard Business Review* 85: 68–76.

Stacey, R., and C. Mowles. 2015. *Strategic management and organizational dynamics: The challenge of complexity to ways of thinking about organisations*. London: Pearson Education.

Teisman, G., and E.H. Klijn. 2008. Complexity theory and public management: An introduction. *Public Management Review* 10 (3): 287–298.

Vandenbroeck, P., J. Goossens, and M. Clemens. 2007. *Foresight tackling obesities: Future choices – Building the obesity system map*. London: Government Office for Science. [www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/295153/07-1177-obesity-system-atlas.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/295153/07-1177-obesity-system-atlas.pdf).

Weick, K.E. 1976. Educational organizations as loosely coupled systems. *Administrative Science Quarterly* 21: 1–19.

Young Foundation. 2012. *Social innovation overview: A deliverable of the project: "The theoretical, empirical and policy foundations for building social innovation in Europe"*. European Commission – 7th Framework Programme. Brussels: European Commission.