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editorial

The theme of public services forms the core of this issue of *risk®ulation*. The definition of what constitutes a public service – and how it is supposed to be organized, funded and regulated – is a classic question in the study of risk and regulation. It is fundamentally tied to understandings of the role of the state, what is considered ‘public’ and how the role of citizens as users of and participants in social and economic activities is being understood.

Articles in this issue reflect on a variety of themes that inform debates about public services. One central theme here, as the article by Andrea Mennicken and Fabian Muniesa shows, has been the rise of quantification as a means to assess, compare and steer performance. The article by Nathalie Iloga Balep and Christian Huber highlights how the system of German federalism rather than facilitating benchmarking and competition between different sub-national jurisdictions is actually impeding such decentralized ‘discovery’ processes. Elsewhere, there has been a rise in calls for more ‘customer engagement’ in the regulated industries. Drawing on their work on the UK’s air traffic management system, Eva Heims and Martin Lodge highlight which key prerequisites need to be considered before advocating ‘more’ customer engagement. Beyond engagement, there has also been considerable interest in the use of algorithmic regulation to ‘optimize’ (the regulation of) public services. In view of this interest, Andrea Mennicken and Martin Lodge suggest that the regulation of and by algorithm has to become a central concern for students and practitioners of public policy generally.

Relatedly, in an age of ‘post-factual’ politics, the role of public and private sector fact-checkers in public life has become prominent. However, how such fact-checkers and myth-busters can act in ‘real time’ to tackle cynical forms of misinformation requires considerable regulatory nous, as noted in the article by Miran Norderland and Martin Lodge.

Questions about capacity and approach also feature in debates about regulation in post-Brexit UK. Peter Bonisch and Mustafa Cavus note areas in which such nous will be required in the future to ensure public interested outcomes. In the area of economic regulation, Claire Forbes highlights the communication challenge for regulators, offering the case of

the English and Welsh water regulator, Ofwat, as an example. Changing contexts, whether it is by growing complexity or transboundary effects, raise also issues for national regulation dealing with public services. Bridget Hutter notes how environmental law continues to play a critical role in shaping regulatory regimes.

Closer to **carr**'s home, higher education as part of the wider education sector represents a critical example for public services. As Maarten Hillebrandt and Michael Huber note, the demands for increased managerialism in university administration has not been just an Anglo-Saxon ‘disease’ but has spread to different state traditions, including Germany. The highly political nature of public services was also evident in the British debate about higher education in the summer of 2017. On the one hand, there was the view that teaching and research were engines for continued economic and social prosperity. On the other hand, universities were accused of being a problem, whether this was because of lacking responsiveness to ‘business needs’, inadequate provision of services to student demands, high vice-chancellor salaries, or appearing as bastions of internationalism. Whatever the merit of these criticisms, they highlight that public services are inherently political. They attract debate about underlying societal values that will never be far away from public attention. Whether public services are intended to maximize efficiency, service quality, fairness or resilience will be reflected in particular regulatory approaches, leading to their own side effects.

We hope you enjoy this latest issue of *risk®ulation*. Producing this bi-annual magazine as part of **carr**'s activities is not just about voluntary accountability; we seek to contribute to public debate and showcase research in the belief that rigorous scholarship on major substantive problems can make a significant contribution in the long-term. **carr** is both a venue for the production of this kind of research, and for communication and exchange. It is in both of these senses that **carr** seeks to provide a public service. We are dependent on your support to fulfil this function. We are looking forward to your comments and support over the coming period.

Martin Lodge & Andrea Mennicken



A public service for all seasons?

Martin Lodge and **Andrea Mennicken** highlight the continuing tensions in regulating public services

During and following the UK general 2017 election, the Labour Party called for the nationalization of mail, energy and water companies. It similarly was very critical of the performance of the economic regulators. Whatever the basis of these claims and the likelihood of them coming to fruition, public services have clearly returned to contemporary debates about the role and relevance of the state, the private sector, and of citizens and consumers.

What public services entail is contested. They include critical infrastructures that enable social and economic life, such as water, electricity and communications and finance, as well as welfare state institutions, such as education and health. However, the exact contours of what constitutes a public service, of what should be publicly provided and/or funded and at what level, remains a matter of political preference and debate.

The organization, regulation and financing of public services is critically related to wider understandings of the state. Focusing on how public services are defined and 'delivered' during periods of state transformation provides, therefore, valuable insights into what exactly is being 'transformed' in terms of statehood. Accounts of state transformation would point to key themes that have emerged since the 1980s: the rise of managerialism, marketization, regulation, privatization and state fragmentation are said to have fundamentally changed the nature of public services – including the people working in these services and those making use of them. These changes are supposed to have signalled a move from citizen to customer in terms of 'user'. The state has changed from owner and provider to regulator, 'enabler' and 'investor' (see also the article by Mennicken and Muniesa in this issue).

More generally the very distinction between public and private has become blurred and its analytical usefulness can be questioned. Considerable ambiguity and hybridity has emerged in the practice of public services. For example, blurring occurs in the area of failure (Kurumäki and Miller, 2011). Failure regimes that one would expect to see in 'private markets' in the case of financial insolvency have been considered for implementation in the area of health (at least in England), whereas they might be said to be still glaringly absent in the private setting of banking where institutions not seldom are considered as 'too big to fail' and the state is seen as lender of last resort. The same may be said about the utilities companies in the UK, none of them having lost their licence on the basis of financial or operational failure.

Questions of ownership have become increasingly complex and moved beyond the simple distinction between 'public' (state-owned) and 'private' (private shareholder-owned). Ambiguity over ownership not just results from the widespread use of so-called 'public private partnerships' in all their

different shades (and near inevitable state-backed cost over-run and risk non-transfer), but also because the nature of the 'investor' has changed. We know very little about the long and short term incentives of investors that include sovereign wealth funds of different countries, pension funds and state-owned development banks. In the UK, regulatory regimes have been accused of encouraging (offshore) shareholder-oriented debt restructuring by private equity investors at the expense of customers who are footing the debt interest bills for capital expenditures (Ford, 2017).

In the past, observers noted the problems of national regulators seeking to deal with international public service providers, especially in terms of expertise and financial resources. Such problems have come to fruition in terms of, for example, problems in procuring information technology. These changes in ownership structure however raise also more fundamental questions about 'control'. In lesser developed countries, for example, the availability of new sources of funding provided by sovereign wealth funds and the like might coincide with fewer or different demands regarding good governance. More generally, the rise of such kinds of 'new' state-backed institutional investors has triggered a return to debates about strategic industries and golden shares to prevent the abuse of public services in the pursuit of 'foreign' interests.

Increasing hybridity and ambiguity affect furthermore the role of the 'user' of public services. Public services are intended to enhance the capacity of individuals to participate fully in public life as citizens. Much has been said about the shift from citizen to consumer in an age of privatized and marketized public services. This includes a greater emphasis on choice, on voice (in terms of complaint handling and such like) and less attention on questions of representation. There has also been an increased significance on regarding the user as a competent (i.e. well informed) customer, although it is questionable whether this has led to more effective and efficient choices. Similarly, considerable interest has been paid to those supplying public services under managerial conditions. It is not just in higher education where demands for greater marketization have led to a growth in managerial positions to manage blame and liability at the expense of discretion at the frontline. This 'audit explosion' (Power, 1997) might be said to have increased juridification and gridlock rather than encouraged entrepreneurial-discretionary behaviours.

Another dimension of hybridity and ambiguity concerns the publicness of different public services. Publicness refers to questions that go beyond ownership, namely the ways in which services are funded and controlled, how explicit such regimes for the steering of services are, and how accountable and responsible they are to citizens and political life. The rise of regulatory agencies as watchdogs for public services has highlighted the challenge of combining questions about



Governing through value: public service and the asset rationale

Andrea Mennicken and Fabian Muniesa discuss underlying changes in understandings between citizens, government and regulation

accountability and responsiveness on the one hand and statutory 'independence' and autonomy on the other. Beyond these questions, there is also the question of value. The past few decades of supposed marketization, privatization and managerialism were supposed to be all about efficiency. However, public services are also about fairness and resilience. Whether systems of regulation of public service have succeeded in addressing these values remains debatable and might be said to have contributed to the wider calls for extensive reform in recent years.

None of these debates about the blurring of state and non-state, about the role of citizen-consumers, or about the publicness of public services reflects on particularly novel debates. As public services are inherently political, it is inevitable that each generation will return to debates about trade-offs and values. The blurring and hybridizing of public-private boundaries similarly highlights the inherent instability and contestability in existing regimes.

Nevertheless, the contemporary age is also shaped by distinct dynamics. The first novel dynamic relates to the rise of digital technologies ('big data') that can be used as both source of and for regulation. Using social media, data sourced from different channels and algorithms as tools of regulation call for a new set of regulatory skills and competencies that complement those of the economist and lawyer (see also the article on 'algorithmic regulation' in this issue). In addition, in times of growing demand for 'engagement', regulation requires more focus on coordinating fragmented market participants.

The second dynamic to consider relates to the effects of austerity. How different public services are financed and regulated is under challenge in an age when regulators have to reduce their headcount and where public services are lurching from one funding crisis to another (such as the NHS in the UK). Privatization was once seen as the tool to release particular sectors from the shackles of depleted public funding. However, the past decades have highlighted the continued role of the state whether as regulator or as funder of public services, even in areas characterized by private ownership, whether this relates to questions about future energy generation sources, the provision of broadband in remote regions, or the need to support loss-making transport services. How public service can be controlled and financed in an age of continued austerity, especially as systems degrade over time, remains a central question for the future.

Finally, the third component concerns demography. Regardless of potential technical breakthrough technologies, the costliness of public services is likely to surge given increasingly heterogeneous and ageing societies. What the implications of such demographic change will be on the demand for public services, and how public services will be able to adapt in view of digitalization and austerity, remains a challenge, especially as politics requires thinking in electoral cycles rather than the long-term.

Public services – their definition, organization, regulation and funding – have always been central to debates in public policy. Contemporary dynamics, combining both the accumulative effects of previous reforms and the pressures of contemporary dynamics, mean that public services require heightened attention in the study and practice of risk and regulation, especially in view of the challenges posed by digitalisation, austerity and changing demography.

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The financial and managerial transformations that are frequently associated with New Public Management include among their prime rationales and key vehicles for implementation the transition from standards of public 'expenditure' to principles of public 'investment'. This transition implies an emphasis on the 'return' of public money and on the assessment of its capacity to 'create value'. The investment rationale that these transformations entail deserves further scrutiny. Considering something in the terms of an 'asset', i.e. in its capacity to create value from the perspective of an 'investor', involves not only a transformation of the thing/service under consideration. It redefines also the role and subjectivity – in short, the very 'making up' (Hacking, 2002) – of public service users and providers. It thus changes relations between government, citizens and regulation, and it leads to a redefining of understandings of democratic accountability.

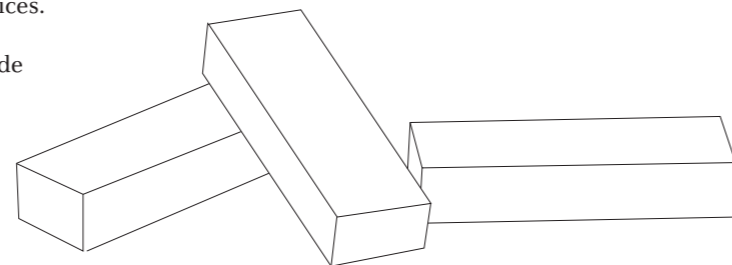
To briefly examine this hypothesis, we focus on three areas of public service which have been exposed to the above mentioned modernization policies: healthcare, higher education and the correctional services. We concentrate on France and the UK, where distinct styles of New Public Management have translated into particularly problematic processes of quantification and economization. We suggest that the 'asset rationale' operates at both a political and cultural/anthropological level. On the one hand, it is characterized by rhetorical efficacy and practical habit. On the other hand, it also carries profound political significance. It determines which actor is best positioned to reason as an investor and, therefore, to take influence on the public policy domain, including relevant policy decisions about where 'investments' are to be made.

As most of its higher education sector continues to be considered as a form of public service, France provides an intriguing example of how the asset rationale permeates public management. Musselin (2017) has analysed the central role played by new budgetary arrangements in the transformation of the management of French universities. Two important reforms played a pivotal role. The first was the creation of a large national agency in charge of the funding of scientific research (ANR, Agence Nationale de la Recherche) and a national authority for research assessment (AÉRES, Agence d'Évaluation de la Recherche et de l'Enseignement Supérieur, later replaced by the Haut Conseil de l'Évaluation de la Recherche et de l'Enseignement Supérieur, HCÉRES). Both institutions are to guarantee the establishment of a culture of competition based on the capacity to comply with various performance metrics. The second reform involved the implementation of budgetary 'autonomy' and 'responsibility' (LRU stands for *Loi Relative aux Libertés et Responsabilités des Universités*, a bill passed in 2007). This reform transferred the entire budgetary responsibility to universities, including wages. Previously, compensation policies were directly handled by the Minis-

try of Higher Education, with universities largely playing an administrative role. Nowadays, the universities' responsibility for financial management has led to the empowerment of financial departments within universities and the introduction of an 'asset management' viewpoint. Where are the 'assets' within this reconfiguration? Facilities and real estate are an obvious aspect, but so are research units, educational programmes and faculty members. Students matter, too, insofar as enrolment metrics provide data that can be used in budgetary negotiations.

In the British case the introduction of nationwide performance measurements of research and teaching, variable tuition fees, and autonomy in the (self-)governing of universities, have led to the creation of what Shore and Wright (2000) have termed 'the new cultural epoch of managerialism'. Attempts have been made to instil a pseudo-market where universities compete for expanding student numbers. Universities have been redefined in terms of 'corporate enterprises' (see here also the 1985 Jarratt Report). Departments and universities are competitively ranked against each other through Research Excellence Framework (REF) and Teaching Excellence Framework (TEF) league tables. Students have been redefined as customers, and education has become a target for investment in one's future employability (see here also the annual THE Global Employability Rankings).

Similar developments can be observed in the healthcare sector. During the 1990s, several marketization initiatives were launched in the British National Health Service (NHS) which were accompanied by the introduction of a range of performance indicators. Failed reorganization attempts in the 1980s, and a perceived NHS funding crisis, paved the way for the introduction of (internal) markets into the NHS with the 1989 White Paper 'Working for Patients'. The changes that followed included a move from employing managers to control doctors to a strategy that sought to turn some doctors into managers through the establishment of clinical director posts which were provided with freedom to direct their units as semi-autonomous, self-managed units within the NHS (Llewellyn, 2001). In 1998, a National Reference Costing system was introduced that sought to benchmark hospital costs across the sector. To enable comparisons and the calculation of cost averages, the benchmarking exercise involved the creation of categories and classification systems for clinical activities. These reforms transformed clinical managers into 'asset managers' who are responsible for the provision of good care, efficient working capital management, and for the management of the resources/assets entrusted to them, including patients. Patients are no longer merely recipients of care, but also sources for economic 'value creation' as their treatment has come to be linked to specific, variable financial returns.



Juven (2016) has documented the introduction of activity-based costing in public hospitals in France. What was previously considered in mere terms of expenditure derived from a global budgetary envelope is now thematized in terms of 'financial flows' that require a 'responsible' managerial attitude. The hospital bed has become a resource that needs to be calculated – a cost, certainly, but also an 'asset' insofar it can, if properly managed, generate a return. Managing hospital teams and medical equipment, but also diseases and treatments, have become enrolled in activities that can be described as activities of asset management. Maximising the 'value created' is not something that is only thought of in terms of monetary benefit. But it requires some sort of a monetary imagination, as the 'financial state' of the hospital is incorporated into the mundane practice of performing (or not-performing) a medical act.

The operation of prisons has been repeatedly confronted with issues of better financial management. In contrast to the past where the business angle was developed through the idea of the inmates' productive labour, today's dominant way in which this business angle develops is 'privatization'. A crucial episode in the recent history of French prisons consisted in the recourse to private enterprise for the construction of a set of new prisons in the mid-1980s (Salle 2009). The initiative ('Programme 13000' or 'Programme Chalandon') did not affect the penal functions as such (direction, surveillance, court registry). Rather, it involved a series of ancillary services, such as maintenance, amenities and accommodation, and new forms of 'mixed' management where specific functions, including inmate labour or education, were 'delegated' to private companies in public-private partnerships. These companies derive their revenues from contracting with the penal administration, that is, the 'public investor'. The development of performance metrics that accompany these contracts allows for a fine-grained identification of the quality of the service delivered. The prison 'facility' is thereby adopting the traits of an asset.

Similarly, the UK prison sector has been reconstructed as market-oriented accounting entities. At the time of writing, there are 14 private prisons contractually managed in England and Wales by private companies. Privatization was aimed at introducing 'innovative' approaches into the management of prisons and prisoners. In April 2003, the Government launched a benchmarking programme which required both public and private prisons to undergo regular formalized performance or market tests. Since 2004 all prisons (public and private) are publicly rated on a 1 to 4 performance scale. Level 1 indicates a 'poor performer'. Level 4 is awarded for 'exceptionally high performance'. The standardized performance measurement was to encourage an ethos of competitiveness and contestability within the Prison

Service. Such initiatives can change prison values; prison officers and governors may lose sight of traditional prison values, such as rehabilitation, prisoners' decency, safety and security, but also prisoner staff morale and job satisfaction. With the private security corporations new stakeholders have entered the picture: investors (such as banks) and shareholders (e.g. shareholders of security corporations which are globally operating and cross-listed on multiple stock markets). Punishing people has thus turned into a business, an activity for which also monetary returns are sought.

A shift to the vernaculars of economic 'value creation' can be identified in all three empirical fields. This shift involves the development of a particular culture in the conduct of public administration or, put differently, a new form of considering what the state consists of. Prisons, hospitals and universities are put to the test in a very specific understanding of their economic viability; the services they 'produce' are gauged from the point of view of an investor. The state does thus not 'pay' or 'fund' any longer. Instead, it 'invests' in an accountable manner. It is the idea of a prospective benefit, whose 'value' ought to be articulated in the terms of a return of investment, which is key (Muniesa et al., 2017).

The political consequences of such a cultural shift are manifold. One particularly salient implication consists in the emergence and empowerment of new experts, particularly managerial experts, that have come to rule the conduct of the public services, first and foremost, accountants and consultants. Such transformations shift the locus and focus of governing and democratic accountability. They redefine relations between public service users and providers. Public service users and providers are 'made up' in economic terms, as investors and investees, as choice makers and takers. Such shifts are often at the heart of controversies and disputes. Some of these controversies and disputes revolve around the very problem of assessing the 'true value' of a public service provided. The asset rationale implies a particular characterization of the complex of verification (here, of the value of public service) that Foucault (2008) once identified in neo-liberal government; a characterisation according to which the 'user' of public service needs to adopt at once the position of an investor and that of an investee.

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Trading promises for money: effects of quantification in the German higher education sector

Maarten Hillebrandt and **Michael Huber** comment on the rise of managerialism and budgetary constraint

The failure and success of policies, organisations and individuals are increasingly marked by benchmarks, indicators or risk assessments. These numbers, however, do not only represent performance, but change perspectives and behaviour of both regulators and regulatees considerably. In the higher education (HE) sector, academics and faculties are progressively made to recast their activities in terms of quantifiable performances to ensure continued funding. Key performance indicators (KPIs) have come to redefine professionalism and quality. In addition, they have also added new criteria that are supposed to lead faculties to internalize external expectations, such as gender equality or research contributing to societal prosperity.

Such developments can be found across many other national higher education systems. Their effects, however, vary greatly. In the German HE sector, for example, the reach and scope of external performance-based incentive systems has been far more modest than in the English HE sector. This variation can be largely explained by an unwillingness – shared by universities and politicians alike – to differentiate the relatively opaque and homogenous university landscape that was established with great effort after 1945. Still, the fact that performance-based budgeting was introduced in combination with broad budget cuts meant that universities had to respond.

The rise in quantification has been accompanied by a shift from ‘government by rules’ to ‘governance by numbers’ – in other words, the collecting and processing of numbers to managerial ends. Numbers, such as KPIs, have come to form new calculative infrastructures for the resolution of resource allocation decisions and value trade-offs. Quantification is frequently seen as a natural companion to New Public Management (NPM) reforms. NPM-type decision making emphasizes, as far as quantification is concerned, comparability as a key requirement. This contrasts with peer-based academic decision making, which typically revolves around case-centric, argumentative evaluations (e.g. of a research article). NPM replaces these evaluations with rankings or benchmarks expressed in terms of quantified indicators. The underlying ambition is to make differences in quality and performance unambiguously visible and comparable.

This transformation did not fall from the sky, but evolved over time. To appreciate the main steps of reform in the case of Germany, we must recall the development of financial governance. Academic decisions were traditionally reserved exclusively for professionals. Academics developed their own methods to address the dilemmas and constraints triggered by research and teaching activities, while the state ensured the stability and continuity of the budget. Numbers already played a central role in this so-called cameralistic model of resource allocation, yet their application hardly amounted to a quantification in a managerial, i.e. performance-oriented, sense. The numbers of the cameralist system formed part of an inflexible budgeting system that ensured predictable and pre-structured university budgets. Each activity was captured in a separate financial title and volume defined the size of the allocations. Following the notion that each unit and staff member were provided with the resources they needed, cameralism could be typified as adhering to a ‘pay per performer’ model.

Unsurprisingly, the cameralist system left little room for either innovation, experimentation, or differentiation. Moreover, the fixed resource allocation for specific activities (book acquisitions, for example) meant that the legitimacy of the specified financial sums was only confirmed when all resources were indeed used up. This led to accusations of a ‘December fever’ of inefficient and wasteful end-of-year expenditure by universities.

In the early 1990s, an NPM-inspired ‘pay for performance’ model was introduced in an attempt to overcome the rigidity and waste inherent in the cameralistic system. This reform was Länder-specific rather than nation-wide, yet it marked a general shift from counting (i.e. operational volumes related to students and various resources) to quantification, where numbers turn into performance indicators upon which funding decisions are formed. On the basis of this general pay-for-performance model (called LOM after the German Leistungsorientierte Mittelverteilung), each of the 16 German Länder developed their own idea of quantification-based NPM, highlighting specific features and suppressing others (as is apparent in the varying ‘baskets’ of KPIs that were employed,





and the relative part of universities' budget that was freed for competitive allocation). A common theme, however, was the wish to replace the detailed budgeting characteristic of cameralism with global budgeting, which traces the steps from a centrally allocated, line item type allocated budget to one that is set on predetermined objectives and measurable factors. This was aimed at introducing incentive structures to help to detect quality differentials in the hitherto relatively egalitarian HE sector. Global budgeting, for example, removed expenditure deadlines, thereby avoiding the 'December fever' effect and offering universities a wider time-frame for financial planning. As it was also an exercise in cost cutting, the Länder introduced various combinations of KPIs to approximate a form of algorithmic steering that was to realize a competition-oriented notion of 'pay for performance'.

This novel situation of performance-based budgeting on the basis of a shrunk overall budget forced universities to adjust their teaching and research activities. In Germany, strategies such as externalising costs to students or gaining income through private funds or endowments are limited. Instead, universities had to internally redistribute their scarce resources. In response, they began to collect their own quantified performance data and to build internal performance-oriented allocation models on the basis of that data. Thus, universities gradually internalized the external performance demands and accompanying financial pressures. The central administration, which had become an arbiter between the faculties, gradually transformed into a management department that started to develop its own strategic goals and ideas. This change was supported by a cascade of legal modifications over the last two decades.

The new micro-management system of financial resource allocation developed out of the LOM model. Like the LOM model itself, it formed a response to some of the existing system's structural shortcomings. Firstly, the performance model is extended to the intra-organisational level. Internal performance budgeting on the basis of quantified indicators offers a persuasive strategy by which small, 'digestible' alterations in faculty budgets can be used as a means of creating greater flexibility and manoeuvrability in the overall budget. Secondly, university administrations actively promote a university-wide 'profile' by privileging specific research projects over others. As the allocative algorithms of LOM are mainly focused on the distribution of resources intended for the faculties, central administrations were left with little

or no financial resources to develop university-wide strategic policies. Responding to this shortcoming, central administrations emphasized their managerial function by restructuring internal financial allocation models that now include a portion to be divided on the basis of an organisational 'strategic vision' that they themselves developed.

Faculties, in order to maintain levels of funding, are now encouraged to participate in a 'pay for promise' system in which central funds are allocated on the basis of project applications, i.e. activities with a limited time horizon that are based on anticipated research 'deliverables' or enhancements in teaching quality. The allocative algorithms of LOM are complemented by negotiations between central administration and individual researchers or faculties, in which the latter, more than ever before, are made dependent on the former's assessment. Although promises are frequently based on quantification, they are not retrospectively verified and the negotiation process reintroduces a degree of opacity and unpredictability, as strategic priorities shift over time and relevant KPIs shift as a result as well.

As LOM finance is given to universities as a lump sum to be internally allocated as seen fit, academic autonomy is therefore preserved in principle. Yet, over time a role reversal has become apparent, in which the university's central administration has changed from agent into principal. The administrative centre has gained influence both as addressee of external communication and negotiator with the state, and as arbiter and moderator of internal decisions. As such, NPM-based quantification has clearly lent the central administration growing agency at the expense of faculties' autonomy.

Central administrations have now begun to apportion (in some cases) considerable parts of faculty budgets on a competitive basis. As a consequence, and in spite of the fact that the faculties continue to be only loosely coupled, the success of one faculty (e.g. in form of additional publications or third party funding) now challenges the financial possibilities of all others. This is felt in faculty budgets and leads to changing strategic interaction with the central administration.

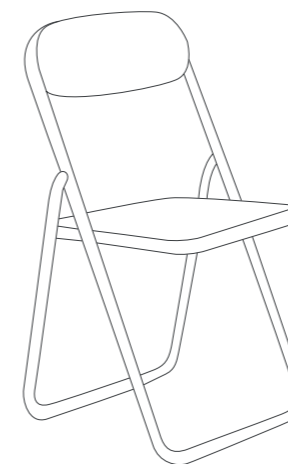
Besides competing to earn some of the funds back on the basis of project applications that contain quantifiable promises, faculties and their staff resolve the funding problem by amassing new savings to create a financial buffer by not using available – often even earmarked – resources. The strategy of

the 'December fever' has thus turned into a strategy of accumulating resources but without immediate pressure to spend them. This triggers issues of legitimacy (are departments allowed not to use earmarked resources?), economy (in a state financed system, when do savings become inefficient?), and morality (how much can students be deprived of chances?).

Studying such dynamics of quantification helps us better understand the internal operations of the German HE system and its modification over time, with regard to changing power relations in the constellation of HE actors, as well as the manner in which performance indicators come to form new stakes in resource allocation games. Recently, stakeholders in the HE sector have called for the reinforcement of the state's commitment to a stronger (unconditional) basic budget. For the moment however, German academics, like their colleagues in neighbouring countries, continue to experience both the managerialism and budgetary constraint that come with quantification-based resource allocation.

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Quantification, Administrative capacity and Democracy

The QUAD (Quantification, Administrative Capacity and Democracy) project brings together researchers from Carr, the Centre de Sociologie de l'Innovation at the Ecole des Mines de Paris, the Sociology Faculty at the University of Bielefeld, the Helmut Schmidt University in Hamburg and the Institute of Political Science at Leiden University. The QUAD project is an international project co-funded by the Agence Nationale de la Recherche (ANR, France), Deutsche Forschungsgemeinschaft (DFG, Germany), Economic and Social Research Council (ESRC, UK, Grant Ref: ES/N018869/1), and the Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO, Netherlands) under the Open Research Area Scheme.

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Quantification times 16: When decentralization stands in the way of markets

Nathalie Iloga Balep and **Christian Huber** consider the effect of federal diversification in the German prison sector

In the German prison sector, quantification – the institutionalized production and consumption of numbers – has been widely practised over the past decades. However, the absence of comparison and benchmarking amongst the 16 federal Länder (states) precludes wider marketization and competition. This is in clear contrast to the UK, where since the 1980s private sector accounting instruments have transformed the prison from a ‘rules-based, bureaucratic institution to a calculating, economically minded organisation’ (Mennicken, 2013, p. 207). We trace here the role of quantified data in the German prison sector and explore how quantification, benchmarking and competition are linked therein. The context of the German federal system plays an ambiguous role. While the federal structure should be expected to encourage competition between the Länder’s penal systems, it actually precluded national comparisons across Germany.

The lack of increased competition is particularly surprising in view of the large-scale reform of federalism in 2006 in Germany that was expected to bring about increased benchmarking, comparisons, and, as an unintended consequence, a ‘competition of shabbiness’ (Dünkel and Schüler-Springorum, 2006), meaning a ‘race to the bottom’ (especially with regards to goals of rehabilitation) amongst the 16 federal Länder. The wider federalism reforms introduced a strict principle of subsidiarity into the prison sector, giving each of the Länder the right to pass their own laws regarding penal administration. The most debated issue in this context is how the 16 Länder interpret federal law in terms of balancing resocialization and security (Rowe and Turner, 2016) and how this influences the practices of penal administration. Similarly, regulations setting out the way in which different Länder approach open prisons and systems of parole display major differences in the treatment of prisoners depending on their Land of residence at the moment they committed the crime. Debates continue until the present day about the fairness and impact of legal diversity among different Länder. Granting full authority to the Länder raised the spectacle of prisons becoming hostages to fast-moving political agendas and interests. Instead of the anticipated (and feared) rise of comparison and competition, the collection of numbers has instead served two other main purposes: internal steering and statistics.

The first purpose of the use of quantified data in the prison sector lies in Länder- and the internal prison steering processes. Data is collected by the ministries to compare prison performance within their own Land. Lower Saxony, for ex-

ample, introduced one of the first and rather sophisticated budgeting tools for the entire public sector in 2006, including prisons. Lower Saxony’s Performance-Oriented Budgeting (Leistungsorientierte Haushaltswirtschaft Niedersachsen (LoHN)) is based on five pillars: (1) the Balanced Scorecard (BSC), (2) a target system, (3) a reporting system, (4) budgeting and, more recently, (5) benchmarking. Benchmarking is based on the results of cost and performance accounting as well as several law enforcement statistics. Lower Saxony even included benchmarking of all of its own prisons into the Land’s penal administration law. Further, prison directorates and their middle management use their own additional indicators to adapt steering within the facility to their individual needs and interests. The few prison system comparisons amongst Länder are mainly due to initiatives of individuals located in ministries, criminological research institutes and prison administrators. Lower Saxony, Hesse and Baden-Württemberg, for example, belong to the few Länder, which during a seven-year project used their different quantification instruments as joint benchmarking tools. They still partly continue these efforts currently. However, these efforts are hampered by different compositions of single indicators which establish a low degree of comparability. In addition, comparison is hindered by Land-specific redefinitions of priorities in view of changing governmental agendas regarding the prison sector.

Quantified data serves further descriptive statistical purposes since the 1960s when the Federal Statistical Office began issuing a countrywide yearly report on demographic and criminological characteristics of detainees. These statistics contain inter alia information on age, nationality, type of crime, duration of detention and possible readmission of the detainees. Overall, quantification in German prisons is not a new phenomenon. The puzzle remains, however, that even though the federal structures in Germany could, in theory, be conducive for comparisons between Länder, accounting and statistical information on the German prison sector is neither used for comparative performance measurement nor for systematic benchmarking amongst the Länder.

The major fear with regard to the reform of federalism was that the main over-arching political and public reference point would be cost, as cost is often mistakenly considered to be one of the most easily comparable indicators. To illustrate, amongst the 16 Länder, Bavaria reported the lowest cost per prisoner, whereas Hamburg the highest cost in 2011. Research,

however, suggests that even such a seemingly straightforward comparison has no legs to stand on. Numbers are calculated differently. Prisons in Hamburg are rather old and the maintenance costs are included in the expenditure ratio; Bavaria has mostly new detention facilities and the construction costs are not considered part of the expenditure ratio. There is also disagreement about what the numbers actually imply. While some see low expenditure as proof of an efficient and well functioning prison system, others regard high expenditure as a signal of high quality and better services. Another example concerns the prisoner transportation costs. While in most Länder prisoners are transported by the prisons themselves (for example, to court hearings), in Bavaria the police carries out this task. Again, this leads to lower transportation costs in Bavaria than in other Länder. In other words, without adequate background information cost data is misleading.

The fear that the reform of federalism would lead to a 'competition of shabbiness' in the sense that Länder would compete on cost-cutting and thus compromise quality of prison services has not materialized. Different reasons exist. One explanation is that the federal law of penal administration still serves as a binding framework, so that the autonomy of the Länder is constrained with regard to major legislative changes (Rowe and Turner, 2016). Another explanation is that 10 out of 16 Länder based their new penal laws on a common draft, so that they are, after all, quite similar. Third, even though they were not yet laid down in different legal frameworks, differences in practice amongst the Länder have been in existence previously (Feest, 2011). If Länder had wanted to 'race', then they could have done so earlier. Federalism reform therefore did not particularly encourage a 'race to the bottom'. Finally, competition necessitates comparison. Yet, there is no systematic benchmarking amongst the Länder in the way it is known in other (often centralized) penal systems, such as the Prison Service in England and Wales. Differences therefore are likely to remain unnoticed.

The lack of systematic benchmarking across the Länder is particularly surprising as it received considerable attention. First, in May 2006 the Federal Constitutional Court of Germany demanded benchmarking efforts and the integration of scientific insights into prison work in the area of juvenile detention to assure a high and consistent quality of these prison services across different institutions. Second, shortly thereafter, Paragraph 91d was added to the German constitution. This Paragraph enabled benchmarking studies amongst the Länder as well as the publication of results. Although the court judgement only addressed the area of juvenile detention and the constitutional addition 'allows' but does not 'mandate' benchmarking, both events suggest that benchmarking was desired at the federal political level. Nevertheless, no systematic benchmarking amongst all Länder is practised.

Overall, Germany's 2006 federalism reforms have facilitated discussions on legal differences and on different forms of performance measurement in the prison sector (Rowe and Turner, 2016). Experts feared that a federalist system could serve as a basis for a regulatory race to the bottom with negative consequences. However, in the German prison sector, differences in practice have not visibly increased with the reform: neither a 'competition of shabbiness' nor a more ambitious kind of competition on performance has taken place so far. This is not due to a lack of quantified data. The collection of numeric figures and performance management through indicators are an increasing trend throughout the Länder. Concrete numerical values and figures could be used to reveal differences. However, the federalism reform stands in the way of such competition and comparison by (so far) inhibiting the existence of an over-arching calculative infrastructure across Länder and a comparability of indicators in use. The constitutional sovereignty of the different Länder stands in the way of any attempt to harmonize relevant data, and the existence of a legal framework encouraging benchmarking and various individual initiatives cannot change that. The German prison sector can therefore be considered as a non-constructed market with multiple decentralized calculative practices, but without market structures, with all the positive and negative attributes this might bring about.

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Regulation of and by algorithm in public services

Martin Lodge and Andrea Mennicken point to the distinct characteristics of algorithmic regulation

The regulation of and by algorithms has become of growing relevance to the delivery of public services, coinciding with the related interest in open and big data. Debates about the consequences of the rise of algorithms have been however limited. Early contributions considered whether the rise of algorithmic regulation and new information technologies represented a fundamental (mostly benevolent) change in opportunities for citizens and states. Others pointed to the likely reinforcement of existing power structures (such as the detecting powers of states), or the rise of new unregulated and private sources of surveillance, and yet others noted the likely complexification effects of the use of computerized algorithms in generating new types of unintended consequences.

What, however, can be understood as ‘algorithmic regulation’? Is there something clearly identifiable and distinct from other types of regulatory control systems that are based on standard-setting (‘directors’), behaviour-modification (‘effectors’) and information-gathering (‘detectors’)?

One distinctive feature is that algorithms can ‘learn’ – and that the codes on which these algorithms are ‘set’ and ‘learn’ are far from transparent. A second component is the supposedly vast computing power in processing information. A third characteristic concerns the enormous ‘storage’ capacity that allows (potentially) for comparison and new knowledge creation. A fourth element might be the insidious nature in which ‘detection’ does take place: users casually consent to highly complex ‘conditions of service’ and are not necessarily in control of the ways in which their ‘profiles’ are being processed and utilized.

Similarly, behaviour modification is said to work by using architecture and ‘nudges’. In other words, one might argue that algorithmic regulation is an extension to existing control systems in terms of their storage and processing capacity; they are qualitatively different in that much of the updating is performed by the algorithm itself, in ways that are non-transparent to the external observer, rather than derived from rule-based programming; and it is distinct in its reliance on observation and default-setting in terms of detecting and effecting behaviours.

At the same time, the notion of decision making and ‘learning’ by the algorithm itself is certainly problematic. No algorithm is ‘unbiased’ in that the initial default setting matters, and so does the type of information that is available for updating. To maintain ‘neutral’, algorithms might therefore require biased inputs so as to avoid highly undesirable and divisive outcomes. Instead, what is called here ‘by the algorithm itself’ is that the ways in which these algorithms ‘learn’ and what kind of information they process is not necessarily transparent, not even to those who initially established these codes. Understanding the ‘predictions’ of algorithms is inherently problem-

atic: they resemble the multiple forecasting models used by hurricane watchers where one day’s ‘perfect prediction’ might be completely ‘off’ the following day.

In addition, there are a number of critical issues for regulation. Firstly, what is the impact of algorithms on ‘users’ of public services? One might argue that algorithmic regulation brings in new opportunities for users as it generates powerful comparisons that potentially grant users greater choice options on the market (and quasi-market) place than before. Similarly, algorithmic regulation can also be said to increase the potential for ‘voice’: enhanced information can be used for a more powerful engagement with users (e.g. users of public services). The threat of ‘choice’ and ‘voice’ might make providers of services more responsive to users.

At the same time, the fact that simple search results can already have powerful choice-deciding consequences raises questions as to how informed user choice can be obtained in an age of ‘google knowing’ (the unquestioned acceptance of the most prominent search results).

As individual experiences disappear into ‘big data’, engagement is mediated. The lack of transparency about the ways in which user experiences are mediated – and through which means – remains a central part of the debate. Different means of mediating such experiences exist – they might be based on explicit benchmarking and league-tabling (thereby relying on competitive pressures), or on providing differentiated analyses so as to facilitate argumentation and debate, or on enhanced hierarchical oversight. As noted, algorithms are not neutral. They are not just mediation tools, but are of a performative and constitutive nature, potentially enhancing rather than reducing power asymmetries. In short, the regulation by algorithm calls for the regulation of the algorithm in order to address their built-in biases.

Secondly, as regulation via algorithm requires regulation of the algorithm, questions arise as to what type of controls are feasible. In debates about the powers of state surveillance, one argument has been made that the state’s ‘intelligence’ powers are more accountable than those of private corporations. Such a view is controversial, but it raises the question as to how state and non-state actors should be held accountable (i.e. reporting standards potentially backed by sanctions) and transparent (i.e. allow for external scrutiny). Transparency might also increase potential vulnerability to manipulation. Given the transnational nature of much corporate activity, it raises also the question of jurisdiction and the potential effects of national and regional regulatory standards (such as those relating to privacy).

Thirdly, there are questions that concern the kind of regulatory capacities required for the regulation of and by algorithm. Arguably, this is the age of the forensic data analyst and pro-

Who you gonna call? Myth-busters

Answering the call for myth-busting regulators of political life is far from problematic argue **Miran Norderland** and **Martin Lodge**



grammer rather than the lawyer and the economist. Altering regulatory capacities in that way may prove challenging in itself. However, it is also likely to be testing as the analytical capacities of the 'forensic data analyst' need to be combined with other capacities in terms of delivery, coordination and oversight. It also requires new types of combinations of analytical capacities; for example, when it comes to the regulation of information, it is not just the presentation of particular 'facts' that requires monitoring, it is increasingly also their visualization. In the field of energy, it requires, for example, the combination of engineering and data analysis.

Furthermore, there is the question at what point such regulation of the algorithm could and should take place. One central theme in ethical debates has been the default setting – algorithms should not be set to make straightforward ethical choices, but should be programmed so as to make 'context-dependent' choices. Such a perspective is problematic as no algorithm can be 'neutral'. As information can emerge and 'wiped' (but not everywhere), and as complex information systems generate new types of vulnerabilities, as information itself can be assessed in remote (non-intrusive) ways, regulatory capacity is required to deal with information in 'real' rather than 'reactive' time.

An additional central issue for the regulation of algorithms is vulnerability to gaming and corruption. We define 'gaming' as the use of bots and other devices to mislead; information flows are generated that might, at first, appear as 'real', but, on second sight, reveal that they are generated by artificial means and/or are inflated so as to provide greater visibility to some 'information' than others. This might be related to the use of social media to communicate certain messages, or it might be used to enhance the visibility of certain websites on search engines. In contrast, corruption is the explicit attempt to undermine the functioning of the system rather than its exploitation. This is therefore the world of cyber-security and the protection of critical infrastructures that increasingly operate in the cloud without sufficient protocols to deal with 'black swans', let alone 'fancy (or cozy) bears' (Haba, 2017).

In response, it might be argued that regulation by algorithm makes gaming less likely when it comes to oversight. Performance management by target and indicator is widely said to suffer from extensive gaming and manipulation. The power of algorithms to deal with information could be said to enhance the possibilities of regulators to vet information in unpredictable ways, thereby reducing organizational opportunities to game. However, assessing complex organizations

via algorithms remains a complex undertaking that does not necessarily enhance the predictive powers of regulatory oversight.

Finally, fundamental ethical questions remain. Artificial intelligence devices can quickly turn racist as they process embedded information and their explicit and implicit biases.¹ This raises issues about the transboundary effects of national (state and non-state) efforts to set standards, and the differential interests of users – insisting on 'privacy' on the one hand, but also demanding 'ease of use' on the other. Lastly, it raises the ethical question about the nature of public policy: what kind of expertise should be prioritized?

In sum, the question of how to deal with the regulation of algorithms returns us to the underlying normative position established by Harald Laswell in his call for an interdisciplinary field of 'policy analysis', namely the need for a population with knowledge of and in the policymaking process. How, therefore, the regulation of and by algorithm in the area of public service is pursued is of critical importance for the study and practice of risk and regulation.

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This is supposed to be the age of 'fake news' and of disseminating cynical falsehoods in political life. Much ink has been spilt on the potentially detrimental effects of such strategies on trust in institutions. How to respond to these politically attractive strategies has also generated considerable interest, in terms of types and kinds of fact-checking. One of the primary recipes against the spreading of fake news and misleading statistics is the creation of regulators to fact-check and publicly warn against continued misleading statements. One example of such a regulator is the UK Statistics Authority that plays the role of the watchdog on the use of statistics in the discourse of politicians and government.

Calling for the creation of real-time watchdogs with considerable bark and bite is one thing (Kuper, 2017). Being a fearless watchdog and statistical myth-buster is another. What, then, are the challenges facing such a real-time regulator of the use of statistical, let alone factual information? These challenges relate to the use of statistics themselves on the one hand, and to the institutional position of such a myth-buster on the other.

One critical question is, of course, how much statistically misleading information is 'out there' and whether there has been more of it in recent years. After all, the role of numbers in political life is said to have become increasingly prominent. For example, numerical indicators dominate discussions about the quality of public services, benchmarking is used to suggest that governmental performance can be assessed and compared as in private business life. Social media is also said to contribute to the tendency to communicate numbers in direct and amplified ways.

To assess how frequently statistics are used in misleading ways is a problematic undertaking. Firstly, one requires knowledge of the volume, frequency and type of numerical statements that have been initially made in the political discourse. To come closer to the question of 'how much is out there', the first step involves an assessment as to whether there has, indeed, been a rise in the use of numerical statements over time.

Such an undertaking is inherently difficult. In our research, we focused on a range of 'data chambers' (party conferences, parliament, government communication and Twitter), ministerial departments and senior politicians, as well as different numerical statements. The findings of this exercise are far from straightforward and paint a complex picture.

Looking at political speeches by party leaders made during party conferences, for example, suggests that, during the period 1967–2016, it was Edward Heath in 1969 who made most numerical statements during a party leader's conference speech. Labour party leaders' speeches tend to be more number-heavy than those of other party leaders, but that does not apply to specific numerical keywords. Similarly, speeches in parliament are not becoming more number-heavy. Ministers make more numerical statements than backbenchers, but it was the 1980s that featured numerical statements most prominently (as seen from 1967–2017). It is not the case that recent years and decades are more number-heavy than others.

The same mixed patterns apply to other forms of communication. Different keywords (such as rates, billion, numbers) feature across separate government departments in diverse forms of communication and at various times.

So, it is difficult to suggest that there are now 'more' numerical statements out there. Numerical statements seem to be driven by wider political dynamics. However, this does not mean that the role of a myth-busting fact-checker deals with limited complexity; it is arguably the ways in which numbers are used and their consequences for wider political debate that have changed. This context requires an approach towards the regulation of the use of statistics in political discourse that includes a number of key demands: *transparency* (in terms of source and method of calculation of the figure in question), *accuracy* (factual correctness), *frequency* of the statement (how often is that statement made) and *traceability* in terms of its recoverability so as to enable 'holding to account'. For example, this might involve the requirement that any use of Office of National Statistics or departmental data has to include statements as to whether the original data or visualization was (re)adapted, including a URL link as to where the presented data set is located. Such requirements address some issues, but they cannot address more tricky questions that relate to questions of misleading interpretation.

Secondly, it requires a broad approach that focuses on a range of keywords and not just numbers per se. Different types of numerical statements and keywords dominate at different times, therefore requiring a broad monitoring of the type of statements made, visualized and formatted.

Thirdly, it requires an understanding of the different channels in which numbers are being communicated. Such an understanding requires a dashboard approach to identifying



relevant sources and monitoring their activity in real-time. The challenge of understanding these different forms relates in particular to social media. For example, when focusing on Twitter, it is one thing to monitor how MPs communicate and present (visualize) statistical information within the constraints of a 140-character tweet. However, it is much more critical to understand the potential reach. For example, when looking at Twitter communication, very different patterns regarding volume emerge when focusing on the number of Twitter followers of politicians and the amount of re-tweets. In other words, regulation needs to focus on channels for application as much as on the source and presentation of potentially misleading statements themselves.

Fourthly, while the deliberate use of mis-information as a political strategy, whether on campaign battle buses or in newspaper columns, might generate most headlines, there are far more insidious ways of misleading recipients of information, namely, through visually generated data-information. How to assess whether the graphical representation of statistical information is misleading (or not) will require a distinct set of skills and competencies. These competency demands include not just statistical competency, but also data forensics (detecting and tracing information) and wider digital skills.

Finally, however, the creation of myth-checking regulators also brings with it its own political dynamic. While it might be attractive for politicians to call for regulation to curb others' apparent misconduct, they will quickly turn on 'out of control' and 'loose cannon' regulators should these watchdogs be found to restrict their own room for manoeuvre. In part, regulators need to perform highly sensitive fancy footwork when any censoring might be accused of entering wider political battles in a timely manner. This might place additional transparency requirements on myth-busting watchdogs. More generally, myth-busting regulators risk becoming part of the political contest over the 'rightness' or 'wrongness' of larger issues rather than independent referees. This, in turn, is likely to harden attitudes and enhance distrust in political institutions rather than enhance them. In other words, creating a regulator that is unafraid of the sources of misleading statistics is one thing, how to ensure its continued viability to stand up to politicians and be perceived as unbiased is another.

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Of Brexit, regulation, tales and tails

Peter Bonisch and **Mustafa Cavus** advocate a fundamental rethink of the UK's regulatory regimes in the wake of Brexit

With Brexit bearing down on us, the issue of the repatriation of regulatory responsibilities from the European Union and European Commission has gained renewed salience. But, is the UK ready for their return? What will be required to rebuild a domestic regulatory capability? And, with a Government commitment to replicate the existing regulatory position – the EU legislative and regulatory *status quo ante* or *acquis communautaire* – at Brexit via the UK Repeal Bill, what, really, is at stake and over what horizon? Most importantly, who is thinking about the broader issues involved, and how well?

What we can observe gives little cause for optimism as Britain's recent history of regulatory intervention is somewhat patchy. Regulation across financial services, privatized utilities, corporate business, health and education, for example, has led to variable outcomes and considerable controversy about appropriate regulatory frameworks. In many contexts, recent UK regulation has been, more realistically, translation of (UK-informed) EU-defined rules into UK rulebooks and devising local supervisory regimes to oversee compliance and produce national reporting thereon. Much criticism has been levelled at the propensity of UK regulators to 'gold-plate' EU regulatory requirements, especially in financial services. Most significantly, for a couple of generations, UK regulators have not autonomously been responsible for defining regulatory principles, nor for evidence collection and analysis to specify regulatory problems or to formulate regulatory policy.

The UK's post-Brexit regulatory *oeuvre* must also adjust to new technological and resulting economic and social realities just as much as to Brexit. In other words, Brexit may delimit the timeframe for action; it does not and need not delimit the scope of attention.

Debates about requiring ministerial departments and regulators to plan for multiple post-Brexit scenarios are an indulgent distraction; such entities should perpetually plan across multiple scenarios. The current requirements could easily be cast as a sound discipline that should occur periodically anyway. What is far more troubling is the apparent lack of such work historically or maintenance of skill base or frameworks or the availability of meaningful data sources with which to do so.

The need for a substantial rethink of Britain's regulatory frameworks in the wake of Brexit offers an extraordinary opportunity: to reconceptualize regulation as an economic and social as well as political activity. The problem is that the options regulators now face are path-dependent; they are critically dependent on where they have been as well as where they might be going. That makes change all the more difficult and all the more necessary.

For example, with risk, most of the action is in the tail of the distribution of outcomes – extreme exposures or contingent events and thus impacts to which the response must cater.

Too often, regulatory frameworks focus on more routine outcomes, distracting from their real purpose. A recent example is the long overdue initiative in 2014 by the Financial Reporting Council (FRC) to focus corporate attention to risk on potential threats to longer-term viability, encouraging firms to adopt scenario-based approaches and stochastic analysis to assess their long-term solvency; such methods have already proved useful in refocusing attention in operational risk in financial services firms. These methods can readily augment (and even substitute for) more traditional and bureaucratic risk-register type approaches; importantly, they have the potential to redirect executive and board attention to where it matters – the tail of the distribution of risk outcomes.

But, as ever, the devil is in the detail. Not only must a regulatory framework accommodate the significance of these tail risks; it should also address what regulation is and does, by whom and to whom (Koop and Lodge, 2017). Conceptually, it should represent (formally or otherwise) a theory of purposeful and goal-directed actors guided by interests, and their actions and interactions; in Coleman's (1986) phrase, 'connecting intentions of persons with macrosocial consequences'. It is also important that whatever approach the regulator adopts should not compound the problem it was designed to solve or create new problems along the way (Stiglitz, 1994). In the terminology of Merton (1949), the regulatory framework will fulfil a combination of *manifest* functions (intended or recognized impacts) and *latent* functions (unintended or unanticipated impacts); some of these functions will be positive, some negative ('dysfunctions'), some irrelevant ('non-functions').

A useful regulatory framework requires a set of cognitive or behavioural rules applying to humans and corporate agents (i.e. the subjects of the rules) and the social or organizational and technical rules the subjects must apply to their activities (or 'objects') (Dopfer and Potts, 2009). In addition, a framework will contain what these authors call 'orders of rules'. These are (i) the generic 'constitutive' rules applicable across all actors and actions (legal, political, social and cultural rules); (ii) the subject and object 'operational' rules as well as (iii) 'mechanism' rules about how to change frameworks and regulations.

Across a range of regulatory contexts (including extensively in financial services and recently at the FRC), considerable effort is being devoted to the vexed issue of culture. It is both right and proper for executives to attend to their organizations' cultures (plural, note) and how they manifest and interact as well as their latent impacts. Yet, most of this work seems divorced from the rigours of referring to any established discipline or body of knowledge. Executives should attend to the organizational practices (routines and rules, symbols, stories or 'tales') and values they demonstrate by their observable actions, that they communicate and then reinforce through pecuniary and non-pecuniary incentives

and rewards; these may contrast their espoused values and any gaps their observed behaviours reveal. It is quite another thing for regulators to attempt to intervene therein or to suggest instrumental approaches to culture that will surely be overcome by latent dysfunction (Merton's actual term for 'unintended consequences'). Culture is a complex, emerging social phenomenon that is highly contested and not readily operationalized. Any existing psychometric methods are individual but culture is social; individuals' perceptions can be measured and contrasted but sociometric approaches to culture are problematic at sub-national levels. And few regulators or supervisors have invested in the anthropological or sociological skills or resources necessary to observe and opine meaningfully on culture. It is a difficult area not subject readily to instrumental or deterministic interventions.

Repatriation of regulatory functions as part of Brexit offers a remarkable opportunity to address Britain's regulatory architecture – both intellectually and organizationally – from first principles. Such an exercise should seek to design and implement a sustained programme to rationalize regulatory rules and to enhance the use of web technologies (usually referred to as 'RegTech') in order to reduce the burden on businesses and improve the efficiency of compliance validation and assurance. Doing so will require a recognition of the limits of current regulatory practice, efficacy and capacity and the need for a substantial enhancement of regulatory coordination as well as the economic, policy, technical and analytical skills effective coordination requires. Muddling through the process in superficial ways will only add costs and reduce businesses' competitiveness.

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Fake news, gifs and hashtags: responding to a changing media landscape

Claire Forbes illustrates the challenges of communicating economic regulation

When economic regulators meet, conversation rarely strays to communication. The need to communicate is often seen as secondary to the detail of regulatory decisions. Concern about imprecision or misunderstanding means that documents can run to hundreds of pages, while news releases talk of complex financial penalties, rather than headline-friendly 'fines'.

At first glance, such caution seems appropriate. Popularity expressed by 'likes' or re-tweets is hardly the right indicator of success for independent regulators. Concepts such as RPI-X rarely enter public discourse while regulatory rulings encompass detail and complexity not typically delivered in 140 characters. Emojis may be described as the UK's fastest growing language (Ofcom, 2017: 25), but expressing policy through smiley faces risks imprecision and accusations of dumbing down.

Regulators are, of course, alert to changes in consumer behaviour and the impact on the markets that they regulate. Yet they may prefer to be detached observers, leaving engagement to their communications team. As consumer habits veer from boomerangs on Instagram to vloggers on YouTube, it can be hard to see the relevance of such channels for regulatory policy. Regulators may take comfort from the assumption that a regulated sector will engage with their latest announcements, however dense the document or arcane the language.

Yet this shifting media landscape cannot be the domain of the communications team alone. At Ofwat, the economic regulator for the English and Welsh water sector, journalists ring to ask for comment on our tweets, rather than the actual policy or decision that they promote. Parliamentarians tweet us to ask about investment in regulatory assets. Our social media content is shared in minutes across the world by individuals whose personal interest in water ranges from birthing pools to ice rinks and allotments.

Three trends in particular highlight the need for a more sophisticated regulatory approach to communication. The first is falling trust in institutions, a decline that is well documented (Edelman Trust Barometer, 2017). Reuters Institute's Digital News Report (2017) shows that fewer than half of people trust the news they read. Trust has been replaced by emotional responses, where news is 'liked' rather than believed (Beckett and Deuze, 2016). Instead of relying on an editor's judgement, people are more likely to trust

news which is recommended to them by their social networks, friends and family.

As trust in news media declines, traditional channels used by regulators to communicate become less relevant. Most broadsheet newspapers – the long-preferred outlet for regulatory news releases – use online paywalls, making content less accessible. Models of news are changing: the Huffington Post, one of the most popular websites in the UK, is a blogging platform.

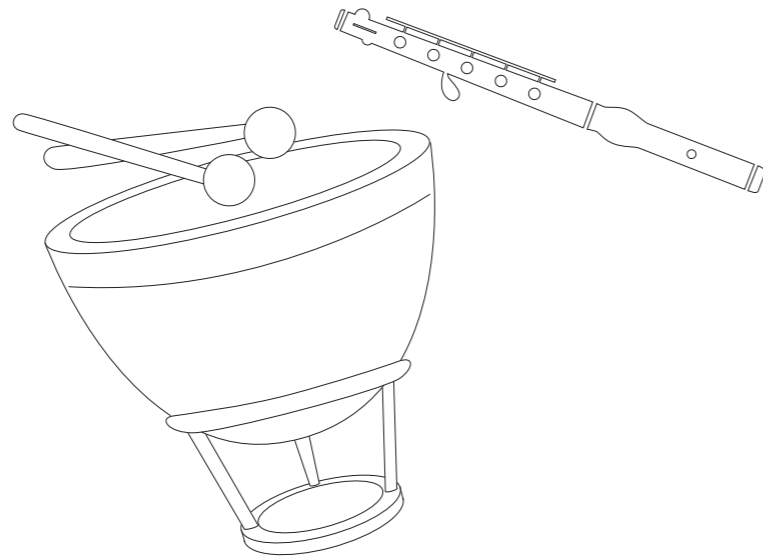
Consumers – particularly younger ones – are increasingly getting their news from social media and research shows they trust these channels even less (Reuters, 2017). Technology lowers barriers to influence and anyone with a phone can generate debate online. The speed at which news spreads – fake or otherwise – means that timeliness becomes all important. An internet minute represents millions of posts, pictures and messages. The spread of rumour or alarm across social media networks about bills or company performance can leave regulators struggling to respond swiftly in a way that is both empathetic to emotion and accurate in detail.

The second trend is in how people are accessing media. The growth of mobile technology makes interaction with news and information more fleeting and more intimate. People are more likely to access news and information in bed than sitting at their desk. The growth in the use of apps for life-style transactions such as ordering food or booking transport means that websites are no longer the first port of call. And while regulators are not yet using Facebook or Instagram for communication, these channels are being subsumed by more private newsgroups, such as Whatsapp, where content is more reliant on recommendations than on algorithms.

The third trend for regulators to consider is in content. Moving, animated and easy to understand content, which communicates without the need for sound, is now the norm. The traditional distinction between business to business and business to consumer communication is blurring, as short form content prevails across all channels. Short form content – tweets, infographics, gifs and videos – is not only for consumers and can be well received by time-poor stakeholders as a portal into more complex material.

Stories makes content memorable and relatable. Personality – conveyed through tone or image – enhances the authenticity of the message and its relevance to the audience. Senior staff





in regulators may shy away from being ‘Instafamous’, but use of real people, their names and faces, can drive relevance and impact. Stories resonate more than facts – a water company working to fix a burst is fact, but a picture and story of the engineer who is working hard on Saturday night to restore supplies gets more response.

These are challenges for regulators more comfortable with the language of licences and codes. Social media opens up a new range of demand-side tools for regulators to connect with consumers directly and access to influencers who may be more powerful than regulators and the companies they regulate. To utilize these tools, regulators need to emulate the creative language of brands, incorporating campaign planning, storytelling, visual communication and personality. A creative approach to expressing regulatory complexity can help relate decisions back to consumers’ experience, making regulation more relevant and accessible.

To achieve this, there is a need for new collaborations within regulators, among communications, legal and economics teams. At Ofwat, our communications team works alongside economists to plan campaigns, using our ‘Taste, Snack, Feast’ model, which enables the audience to access content most suited to their levels of interest and expertise. In our recent campaign, promoting our price review methodology, the main headlines were explained via ‘Taste’ – mere morsels of content, presented graphically. The opportunity to ‘Snack’ on more detail came via videos and short summaries online, while the most engaged audiences were able to ‘Feast’ on the full repertoire of our methodology documentation. Crucially, ‘Taste, Snack, Feast’ is not an exercise in editing, but rather a portal into different expressions of a single narrative.

The number and variety of channels provide a repertoire of choice for regulatory interventions. These range from a nudging tweet to a multi-channel campaign, produced in-house, with real time metrics allowing us to adjust and adapt our approach according to reach and response. When we see and hear companies reusing our hashtags and straplines we know we are changing the lexicon for the sector in a way that will filter through to customers.

We plan Ofwat’s social media from an editorial perspective, taking our cue from a journalistic, rather than regulatory approach. This allows us to utilize a range of styles across planned campaigns, ranging from #greatplacetowork to #ofwatconsults. Members of our senior team have their own social media accounts, giving us a range of regulatory voices,

including the authority of @OfwatChair and other, more informal reflections on daily life at Ofwat.

We follow the social media channels of each of the companies we regulate and what we see can support or belie the formal regulatory responses we receive. Social media listening contributes to market intelligence, shedding light on what consumers are talking about and how they feel about it. Twitter, YouTube, Facebook and Instagram can expand regulators’ networks in new and unexpected directions, providing exposure to fresh ideas and the potential and power of influencers. Here the language of emojis prevails; a language that regulators need to hear and understand.

This type of communication is not secondary to regulatory activity, but a tool to be used to drive customers’ engagement in competitive or monopoly markets. Creativity, personality and regulatory communication can work together to make the complex accessible and the technical relevant. YouTube will have more influence on the demand side than the Financial Times. For regulators, this is no longer a set of trends to be observed from afar, but part of what economic regulation is and needs to be.

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What's law got to do with it?

Bridget Hutter highlights the critical role of environmental law in regulation

In the 20th century, environmental law represented one of the most important regulatory regimes in modern societies but there have been changes in our understandings of the effects of human activities on our environment and how we see and frame problems. The environmental challenges of the 21st century raise profound questions about how suited the law is to manage the complex problems that confront us. These include questions about the law's compatibility with the complex of environmental strategies that have emerged in response to contemporary understandings of risk; and the ability of law to manage transnational risks, and to embrace uncertainty and change.

Risk management approaches have been augmented by alternative flexible and decentred resilience strategies. They have proven attractive for a variety of reasons. For example, they are premised on uncertainty and in the environmental area this is especially important given the uncertainties associated with climate change. Resilience strategies should be adaptable, flexible and open to modification in the event of unexpected change; they tend to be bottom up rather than top down and this resonates with calls for greater democratization of decision making processes. There is also the hope that they might foster greater equality, not just of participation in decision making but also more equal outcomes. Bringing inequalities into the discussion of risk, resilience and environmental law is important. So too is subjecting some of the claims about resilience to scrutiny.

This is a multi-disciplinary area with varying genealogies and meanings attaching to the concept of resilience. It has also become a fast moving and highly topical area. It is important to critically interrogate how able resilience approaches are to effect equitable solutions to environmental risks. There are challenges to the notion that resilience is more democratic, egalitarian and bottom-up than other strategies. It is a matter of social decision making and value priorities whether adaptation and resilience strategies seek to maintain or change the system. There may be real vested interests in maintaining the current system and hence its existing inequalities and power relations; the alternative would demand a radical transformation of existing social and economic institutions and practices.

The spectacular rise in the popularity of resilience has not made it a replacement for risk approaches. The two strategies are in some respects complementary. Resilience helps to temper the high expectations risk strategies can generate. Resilience approaches try to facilitate systems which can absorb

disruption and respond quickly, since they are premised on the belief that zero tolerance of risk is unachievable so we should plan for continuity and recovery.

Law has a role to play as part of a broader governance system which can work across national boundaries and embrace actors beyond the state. The most appropriate role for law partly depends upon features of the particular legal system. Some legal systems already have features that encourage resilience, but there can nevertheless be obstacles, notably around issues of implementation and enforcement. Elsewhere there may be little respect for the rule of law. This is not just a matter of legal tools and frameworks but of the social and political systems which constitute the legal system and within which legal systems operate.

Research is vital and contributions from different social science disciplines give a broad ranging view of the role of environmental law. We can also learn from experiments in environmental governance, some of which accommodate differences and give voice to more diverse groups, for example, in China and Latin America. This can give us a greater understanding of where the law, and risk and resilience strategies can best work together to protect our environment and promote greater equality.

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This article is based on Bridget M. Hutter's edited book *Risk, resilience, inequality and environmental law* (Edward Elgar Publishing, July 2017).

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Running out of capacity?

Eva Heims and **Martin Lodge** suggest that recent experiences in air traffic management offer general lessons for customer engagement in regulated organizations

The call for more and better customer engagement has become a standard theme in contemporary UK economic regulation. Regulators increasingly ask regulated companies to enhance their customer engagement processes and thereby improve public services. Especially when regulated monopolies are concerned, this seems to be a sensible approach. How exactly such engagement processes are supposed to work, however, often remains somewhat ambiguous, and significant variations in practices have emerged across sectors and parts of the United Kingdom (Heims and Lodge, 2016; Darcy et al., 2016). This piece reflects on one example of customer engagement in a regulated monopoly, that of the UK's air traffic management service provider, NATS, and suggests that demands for ever more and 'better' customer engagement processes need to consider carefully the challenges that customer engagement brings.

Building on earlier research, **carr** was asked by NATS to conduct independent research into its customer engagement processes that relate to its 'en route' services. Its 'en route' business is a regulated monopoly that deals with all air traffic control services to aircraft flying to, from and over the UK and over the northeast Atlantic. NATS is a public-private partnership in that the government owns 49 per cent plus the golden share, whereas airlines and the university pension fund own 42 per cent, LHR airports 4 per cent and NATS staff 4 per cent. Its 'en route' services are funded on a flight basis by the users or 'customers' of this business, namely the airlines.

The central question of this study was how 'customers' perceived the success or otherwise of NATS' customer engagement processes. The particular focus of this research was on NATS customer engagement in the Service and Investment Plan (SIP), a bi-annual process, in which NATS engages with its customers over its business plan as part of its licence conditions. The SIP discusses progress and considers current and future levels of service. The SIP typically involves an initial multilateral meeting, bilateral meetings on demand of a particular customer and, when deemed necessary, a final multilateral meeting. The responsible economic regulator, the CAA, approves the SIP document. The underlying idea of customer engagement was to encourage NATS to 'test' customer responses when developing its business.

The findings of this study allow us to better understand the specifics of customer engagement at NATS. They also allow us to develop general insights into the challenges of using

customer engagement processes as a regulatory strategy. These challenges relate in particular to concerns about the overall agreement on the objectives of customer engagement processes, the capacity and motivation of different participants, the type of information to support actual engagement and the type of responsiveness by the regulated organisation to such processes.

Evaluating processes of engagement, such as the SIP, is an inherently difficult task as outputs and outcomes are often difficult to observe or disentangle. We consider the performance of a customer engagement along three dimensions: procedure and substance, capacity, and responsiveness.

The SIP is, in the view of the participants (i.e. mainly airlines but also airports), an example of an advanced and leading customer engagement process in the air-space management sector internationally. Participants were similarly positive about NATS' general approach towards dealing with its 'customers', whether this was in the SIP process, other multilateral working groups and committees, or bilateral business relationships. Nevertheless, there were also areas of concern, disagreement and criticism.

On the procedural and substantive aspects of customer engagement, disagreement existed about the purpose of the SIP customer engagement process. For NATS, customer engagement in the context of the SIP was about providing updates and explaining decisions. For others, the SIP should go much further – including a more interactive discussion of different options and robust exchanges over calculations. Others, in turn, suggested that the engagement process could fulfil both such visions: during 'normal' times, the SIP process could be largely about updating and informing; once, however, key objectives and plans had to be amended, then engagement should extend to a broader discussion of different options and associated costs.

This disagreement about the ultimate purpose of customer engagement was particularly evident in the evaluation of the information supplied to customers by NATS which supplied timely information to all participants. However, this information was widely regarded as so complex that it stood in the way of extensive engagement across different customers, i.e. airlines and airports. A propensity by NATS to change project names also hindered the ability to assess and compare performance over time. In other words, the concern was not so much about the quality of the provided material but rather about its 'digestibility': the too detailed information and inconsistent programme labels. The documentation was therefore regarded as standing in the way of high level discussions about over-time performance. Furthermore, while NATS prided itself on its maximum transparency, for example, by including all documentation in a restricted web-portal that was accessible to all participants, there were also concerns about asymmetric attention. In particular, concern was expressed that bilateral meetings were utilized to 'divide and rule' among participants.

The capacity dimension highlighted the limitations of engagement processes when they cover multiple areas of specialisms. The SIP documentation with 80 odd pages of slides, ranged from operational to finance information. This, in turn, required customers to be capable of devoting resources to accompany this process, in terms of time and knowledge. While customers and NATS were all highly motivated to engage, the capacity to do so was somewhat more mixed. Apart from the major (national) airlines, attendance was limited, and even among these, it was only the national flag carrier, British Airways, that regularly attended with more than one participant. The question of how much capacity such customer engagement processes require also relates to NATS and its capability in shaping its business processes around

engagement processes rather than customer engagement performances being shaped by priorities set in internal NATS processes.

Finally, the responsiveness dimension relates to the perception of participants as to what extent customer engagement encourages information input and processes. Responsiveness is therefore not understood here as immediately responding to any demand, but in terms of justifying options in a satisfactory manner. Customers here were somewhat divided between those who regarded the exercise as 'window dressing' and those who were broadly satisfied by demanding more transparency in the way in which NATS had selectively responded (or not) to input during the process.

In sum, the SIP raises important issues about customer engagement processes in general. Firstly, it highlights the critical nature of having a shared understanding of the fundamental purpose of the engagement process. Secondly, it emphasizes the importance of providing the right level of consistent high level information, backed up by detailed information, that allows customers to engage in an informed way rather than be 'dumbfounded by minutiae' (as one participant admitted). Thirdly, it also highlights the capacity limitations of participants; it was widely agreed that if all European air traffic management operators engaged as widely as NATS, then no airline could engage with all of these processes in any extensive way. This raises also the issue about who counts as a 'customer'. The SIP process was nearly exclusively about the immediate (paying) customers, namely airlines, but also increasingly involved airports.

Customer engagement is the name of the game in contemporary economic regulation. However, rather than simply advocating 'more', one should carefully consider the exact setting of particular engagement processes, focus on information

requirements to support active engagement by 'customers', however defined, and consider the resource limitations of those parties that are supposed to be engaged. The central question, therefore, is about designing processes that reduce capacity demands on participants. If customer engagement is to be chosen as a viable regulatory strategy that can improve public services and incentivize behaviour of regulated monopolies, these issues need to be taken into account. Without addressing them, the whole interest in customer engagement in economic regulation risks becoming 'last week's salad' rather quickly.

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carr news

We were greatly saddened to learn about the unexpected and sudden death of our designer Harald Müller. Since taking over this role in 2014, Harald introduced a new and distinctive design to this magazine. Although he never actually visited **carr**, he was very much part of our community.

We welcome Jana Rauthenstrauch who has joined us as new designer.

Over the summer, **carr** conducted commissioned research for the Statistics Authority, the official statistics regulator, and for NATS, the main UK provider of air traffic control.

We also have welcomed Mauricio Dusage Laguna from CIDE in Mexico as part of our joint Newton Fellowship programme grant and Bruno Cunha from IPEA in Brazil as visitors.

carr discussion paper

Algorithmic regulation

Leighton Andrews, Bilel Benbouzid, Jeremy Brice, Lee A. Bygrave, David Demortain, Alex Griffiths, Martin Lodge, Andrea Mennicken, Karen Yeung, **carr** Discussion Paper 85.

carr publications

Comparing blunders in government
Will Jennings, Martin Lodge and Matt Ryan, *European Journal of Political Research*, doi: 10.1111/1475-6765.12230

Customer engagement in UK water regulation: towards a collaborative regulatory state?

Eva Heims and Martin Lodge, *Policy & Politics*, doi.org/10.1332/030557317X15046029080815

Editorial – Symposium: accounting and actorhood

Michael Power (2017), *Accounting, Organizations and Society* 59: 1–2.

Editorial – Themed section on financial accounting as social and organizational practice: exploring the work of financial accounting

Michael Power with Joni Young and Keith Robson (2017), *Accounting, Organizations and Society* 56: 35–7.

Regulatory crisis: negotiating the consequences of risk, disasters and crises

Bridget Hutter and Sally Lloyd-Bostock (2017), Cambridge: Cambridge University Press.

Risk resilience, inequality and environmental law

Edited by Bridget Hutter (2017), Cheltenham: Edward Elgar, July 2017

Wisdom of the patients: predicting the quality of care using aggregate patient feedback

Alex Griffiths and Meghan Leaver, *BMJ Quality & Safety*, doi:10.1136/bmjqs-2017-006847

carr seat

Regulation of logistics infrastructures in Brazil – introduction to carr/RAND Europe report

Christian van Stolk and Martin Lodge (2017).

carr events

Over the past few months, **carr** organized a range of workshops and lectures as part of its ESRC-funded ‘Regulation in Crisis?’ seminar series. One international workshop on Regulation Inside Government returned to a theme that has been at the heart of **carr**’s research since the early 2000s. The discussion focused in particular on changes over the past two decades, involving contributions from Barbara Fredericks (Montgomery County Ethics Commission), Christopher Hood (Oxford), Steve Linick (Inspector General, US State Department) and Richard Thomas (Which?, and former UK Information Commissioner).

In addition, we hosted Cathryn Ross, chief executive of Ofwat, for a lecture on The Future of Economic Regulation in June 2017. In this talk, Cathryn highlighted the challenges facing economic regulation in the UK and also suggested that further consideration should be given to greater cross-sectoral regulation. The lecture and the podcast of the event are available on the **carr** website.

Together with King’s College London’s Centre for Technology, Ethics, Law & Society (TELOS), **carr** held an international workshop on Algorithmic Regulation. Keynote speaker was Helen Nissenbaum from New York University. Other external contributors included Leighton Andrews (Cardiff), Lee Bygrave (Oslo), Nello Cristianini (Bristol), David Demortain (Laboratoire Interdisciplinaire Sciences Innovations Sociétés), Mireille Hildebrandt (VU Brussels), and Michael Veale (UCL).

In May, **carr** hosted the formal book launch of *Regulatory Crisis: negotiating the consequences of risk, disasters and crises*. The co-authors, Bridget Hutter and Sally Lloyd-Bock, were joined by the Chief Executive Officer of the Civil Aviation Authority, Andrew Haines, to consider how a regulatory crisis can emerge from a disaster, and what we can learn about regulation by considering disasters, including the capacity of regulators to actively manage secondary regulatory crises.

As part of the international research programme QUAD (Quantification, Administrative capacity and Democracy), **carr** members presented their work at the 33rd EGOS (European Group for Organizational Studies) Colloquium, Copenhagen Business School, in July 2017. This included papers on ‘Quantifying the User in Public Sector Regulatory Reform’ (Alex Griffiths and Andrea Mennicken, co-authored with Maarten Hillebrandt, University of Bielefeld, Daphne van Kleef, Leiden University, Jacob Reilley, Helmut Schmidt University, Hamburg, from the QUAD project team), ‘Governing through Value: Public Service and the Asset Rationale’ (Andrea Mennicken, co-authored with Fabian Muniesa, QUAD project team member based at Mines ParisTech) and ‘Assembling Calculative Infrastructures’ (Andrea Mennicken, co-authored with Liisa Kurunmäki and Peter Miller, members of the QUAD project at LSE/ **carr**).

carr activities

Jeremy Brice presented a paper on ‘Resilience and Anticipation: Shifting Relationships’ at a GFS Resilience of the UK Food System Programme workshop on ‘resilience concepts and their applications’ in September 2017.

Lydie Cabane attended the French Political Science Association annual meeting in Montpellier in July 2017 and presented TransCrisis research on ‘The European Government of Crisis’ (with Martin Lodge).

Alex Griffiths met a delegation of Canadian care home regulators to discuss risk-based approaches.

Bridget Hutter attended the annual meeting of the Nordic Societal Security Program in Copenhagen in June 2017 and presented a paper on ‘From Regulatory Enforcement to Regulatory Crisis: Changing Conceptions of Regulation’ at a workshop on risk regulation at the Université Paris Dauphine in Paris in June 2017.

Martin Lodge presented the work of the TransCrisis consortium during the mid-term conference, a fellow Horizon2020 project, EMUchoices, in Rome in July 2017. He presented two papers at the annual American Political Science conference in San Francisco (30 August – 3 September), on the ‘European Management of Crisis’ (with Lydie Cabane) and on ‘Comparing Blunders in Government’ (with Will Jennings and Matt Ryan). In September, Lodge gave the keynote speech on ‘better regulation – theory and reality’ at the joint conference of the Swiss Evaluation Society and the Swiss Society for Legislation in Berne, contributed to a discussion on ‘political science and public administration’ during a workshop on ‘The Many Disciplines of Public Administration’ at the University of Potsdam, and gave a lunchtime seminar on regulatory capacity at Ofwat.

Andrea Mennicken presented a paper on the governing of failure in the NHS (co-authored with **carr** associates Liisa Kurunmäki and Peter Miller) at the universities of Leicester and Strathclyde in April and May this year. She served as panellist to the ‘Author meets Critics’ panel on Wendy Espeland and Michael Sauder’s ‘Engines of Anxiety: Academic Rankings, Reputation, and Accountability. Russell Sage, 2016’, at the 29th Annual Conference of the Society for the Advancement of Socio-Economics at the Université Claude Bernard, Lyon (29 June – 1 July). Mennicken was also an invited speaker at the conference ‘The Making of Neoliberalism: Historical and Social Science Perspectives’ of the Max Planck Institute for the Study of Societies, Cologne, Germany, 13–14 July.

During July 2017, **Mike Power** delivered the keynote address on ‘How to be a Good Constructivist’ for the Emerging Scholars Colloquium during the Critical Perspectives on Accounting Conference at the University of Laval, Quebec, Canada. He also presented a paper during the main conference on ‘The Residual Organization: memories, meals and mates’. He also presented a joint paper with Renata Stenka from Henley Business School on ‘Mediating Outrage and Accounting: the Dynamics of Moral Audit’ at the EGOS Conference at the Copenhagen Business School.

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