

ence, including some, like theology and art, to which it might seem inimical. Among these, following the pioneering work of Adam Smith, is the ways that human beings use markets to satisfy their needs and desires: economics. Reason has triumphed because it has enabled successful innovation and because, until recently, it promised progress and gave hope.

But the Enlightenment's ideas have always been contested: today's critics and defenders – such as John Gray and Tzvetan Todorov – continue an old argument. However, if the Age of Reason is indeed coming to a close, that may be less because of debates between philosophers than changes in our understanding of science. As quantum mechanics have succeeded Newtonian physics we are learning to think in terms of probabilities not certainties. It just isn't rational any more to believe in rationalist causality, at least not where human affairs are concerned. We've had to recognise too many unknown unknowns.

This essay considers how the arts might respond to the uncertainty that – whether we like it or not – is emerging as a defining characteristic of our time. It focuses on the causes and consequences of the 2008 economic collapse, but the case for recognition of the limits of reason in governing human affairs is broader. Taking a more complex view of people and their interactions is neither a retrograde step, nor a loss of confidence in reason as such. It is to situate rationality within wider human and non-human forces, to reject the simplistic scientism that dominates public culture and to look for more creative routes for the arts in an uncertain world.

THE LIMITATIONS OF RATIONALITY

On Monday 15 September 2008, a stream of jobless investment bankers emerged from Lehman Brothers' New York headquarters before a phalanx of press photographers. Clutching cardboard boxes of personal possessions, they stumbled out blinking, defiant, or merely dazed: it takes a while to adjust, when you've been a Master of the Universe.

Individual failure was the dominant story told by the mass media that autumn as the men and women whose huge personal enrichment had been tolerated because they promised general prosperity plummeted earthwards in humiliation. The venality had always been evident: it was the incompetence that was unforgivable. After Kenneth Lay (Enron) Bernard Ebbers (WorldCom) and Bernie Madoff came more names than even Robert Peston could remember. Yet even as they were pilloried in nightly news programmes, new political champions stepped forward to rescue the global economy from the edge of chaos. The problem was presented straightforwardly both in economic and management terms: restore stability to the financial system and put better people in charge. The necessary degree of state investment and regulation varied according to who was prescribing the cure but few doubted that the economic system was restorable and, by implication, controllable.

But the problem was not that imperfect people implemented economic and management theories imperfectly, though they did. It was not even that the theories being imple-

mented were themselves flawed, though they were. The real issue is about how those theories were imagined in the first place: as rational responses to a knowable, predictable and therefore governable reality.

Joseph Stiglitz's analysis of the 2008 financial crisis suggests two important conclusions in this context. First, the dominant economic theories were not just flawed, but obviously flawed in that they did not match the available data: as the Nobel laureate says 'the evidence of irrationality, and intellectual inconsistency, abounds' (Stiglitz 2009b:294). This is the divergence between what J. K. Galbraith calls approved belief and reality, although, as he remarks drily in his last book, 'it is the reality that counts' (Galbraith 2004:1). And in reality, the rationalist, scientific claims for economic theory melt away: the theories may still be correct (or relatively so), but the idea that they can be scientifically proven simply does not correspond with the evidence.

The second point emerges from the first: the unknowable and therefore uncontrollable consequences of individual actions. One of the approved but irrational beliefs that Stiglitz sees as contributing to the crisis was that of perfect markets in which perfect information, enabling perfect competition, makes regulation unnecessary (Stiglitz 2009a:333-4). But, as Galbraith says 'the combined result of the unknown cannot be known' (Galbraith 2004:35). It is extraordinary that this should need saying. The collapse was the result of the decisions, large and small, of countless actors, each considered by them not just rational but clearly in their own and their institutions' best interests. However, and despite their belief in the perfect operation of markets, people's knowledge of and control over the processes of which they were part was exceedingly slight (Stiglitz 2009b:293). The nature of the interactions between all these agents was unknowable: so were their outcomes: 'Even if every bank were, "on average," sound, they could act in a correlated way that generated risks to the economy as a whole' (Stiglitz 2009a: 333).

The banking crisis's complex technical causes are undoubtedly already being expressed as mathematical formulae. But for economists such as Stiglitz and Galbraith, the real problem is a belief that people act rationally in a system that can be understood and therefore whose operation can be predicted and – by the most skilful – controlled. That thinking is not confined to economics: it is the basis of the Age of Reason. It shapes contemporary politics and all that politics touches, including the arts and culture.

RATIONALIST MANAGEMENT

Ralph Stacey's work on management describes parallel thinking in how organisations function, including those corporations caught up in and sometimes brought down by the financial crisis. He argues that, in the late 19th century, scientific models provided an emerging class of industrial managers with a professional standing that separated them from both capital and labour. As objective specialists applying scientifically derived ideas for the

greater good they had a claim to independence and integrity. The manager's task 'was that of objectively observing the organization, formulating hypotheses about its efficient functioning and making rational decisions about that functioning' (Stacey 2010:34). Organisational failure is therefore attributable to 'ignorance, inertia or incompetence' (Stacey 1995:478) to which list, after Enron and with Galbraith, one must add fraud. As in the media's stories of the banking crisis, it is matter of individual blame not of systems nor, most tricky of all, of how people imagine them.

Stacey describes the growing influence of management theory in the past century through the complex interactions of corporations, government, business schools and consultancy firms to its present hegemonic position. But, like Stiglitz, he challenges both the evidence for the scientific basis of management theory and the belief in the predictability of actions in complex processes characterised by a high degree of uncertainty. He questions the validity of a model of organisational management based on the natural sciences where causality may be relatively straightforward. While conventional management discourse has leaders as detached overseers controlling their organisation's future through shrewd adjustments to a complicated but responsive mechanism, Stacey insists that leaders are not in control of very much at all. Rather, they are part of complex adaptive processes where reality is co-created through continual interaction between people within and beyond the organisation itself (Stacey 2010).

MANAGEMENT PUZZLES AND PROBLEMS

But not everything is uncertain; nor is the degree of uncertainty always the same. Our ability to know many things fairly reliably is one reason why, even as the financial system was tottering through the autumn of 2008, most people's lives carried on much as before: suppliers delivered goods, salaries were paid and milk bottles put on doorsteps. (People did experience anxiety, even when they were not directly affected by the crisis, and that is an important issue to be considered.)

Conventional management – performance targets, financial planning, risk assessment etc. – provides useful concepts, processes and tools for everyday working life. Most of the time, in or outside work, people are concerned with operational tasks – the business of getting things done. Operational work involves little uncertainty or disagreement: what is to be done and how to do it is generally the subject of consensus. Individual and organisational capacity to do it can be increased through education and training, including the competencies typically taught in business schools. Operational work presents challenges in the form of puzzles: i.e. difficulties to which it is agreed that a solution exists, even if it is not known (Critchley & Casey 1984). At worst, puzzles present known unknowns. Tasks may be complicated, but they are not complex. Leadership's role is limited role in this area: ensuring that people know what they need to do (the 'shared vision' so precious both in management

theory and the arts) and that they have the resources, capabilities and motivation to do it. It is at this level that ignorance, inertia and incompetence (as well as fraud) can be decisive.

But in moving from operational to strategic questions, uncertainty and disagreement may increase sharply. Organisations (and societies) face problems as well as puzzles: that is to say, they face questions to which there is not one answer but a range of possible responses. How they see those responses, indeed whether they see them at all, is governed by human factors including psychology but also values and culture – the business of art. This is the territory of unknown unknowns, where the outcomes of people's interactions are infinitely complex and where how things seem may indicate more about the viewer than themselves. If the consequences of choices made – the 'outcomes' that are the Holy Grail of current management theory – are not predictable, rationalist causality is not a helpful tool of analysis. The most urgent issues facing humanity are characterised by high uncertainty and high disagreement: climate change, security, social justice and much more. Current debates about when, how fast and how the UK should reduce its budget deficit is a salient instance (Skidelsky 2010). In the economy, the problem is not just how to restore stability, but what stability means: should it involve rethinking economic conceptions of poverty, resources, energy and infrastructure (Sachs 2009)?

Like everyone else, people leading cultural organisations are caught up in these problems, not least how to respond to the consequences of the financial crisis. There is uncertainty and disagreement not only about obvious issues, such as public spending cuts or a contracting consumer economy, but also about cultural problems including the role of artists in making meaning from this experience. The arts and cultural sector also face strategic problems of their own, for instance in the cultural effects of new technology, or how to demonstrate value in an increasingly utilitarian public discourse. The results of responses are unpredictable because they emerge from the interactions of a complex, adaptive process. The scientist-leader (detached, impartial, skilled and visionary) has little to offer in these circumstances. Indeed, the inappropriate application of such management theory produces unanticipated and perverse results, as evident in areas of the health service (Stacey 2010: 208) and the cultural sector itself (Matarasso 2007). So what are the alternatives?

LEADERSHIP IN UNCERTAINTY

Responding to uncertainty requires what Stacey calls 'extraordinary management' – processes that enable organisations to move beyond an existing shared paradigm (Stacey 1996:193). Faced with problems involving high uncertainty and high disagreement organisations need different processes than those they rely on for ordinary operational work. Leaders need to recognise both the situation and the anxiety that it naturally produces: that depends on a high degree of openness, honesty and trust (Critchley & Casey 1984). Developing this in organisations normally managed in rigid, hierarchical and rationalist models is obviously

difficult. Distant, autocratic or unreliable leaders are not easily trusted when they invite people to be open about their ideas or feelings.

Extraordinary management sees instability as a creative force. It seeks a balance between paralysing anarchy and the stability needed for operational management. This is the 'edge of chaos', a kind of controlled instability between order and disorder. Stacey describes five parameters that control this creative instability: the rate at which information circulates freely within an organisation; the degree of diversity within the group, which allows for nonconforming voices to emerge; the richness of connections between individuals, including weak links to lessen the risk of excessively self-affirming behaviours; the level of contained anxiety (just enough for it to be experienced constructively); and the degree of power differentials, which must avoid both authoritarianism and the irresponsibility that creates a power vacuum (Stacey 1996). In the face of uncertainty, disagreement and the complex problems of organisations today, extraordinary leadership finds a shifting, temporary balance between these parameters to open a space for creative responses. Reason is essential: but so are human beings' other qualities and ways of knowing. If knowledge were only rational, humanity would not have invented art.

UNCERTAINTY AND ART PRACTICE

These ideas have been developed in disciplines seemingly far removed from art practice, such as management, cognitive psychology and complexity science. But it is striking how consonant they are with the practice of successful cultural organisations, especially in the artistic process, which is characterised by high degrees of uncertainty and disagreement. The parallels are evident in research undertaken in 2008 by Anne Douglas and Chris Fremantle into how artistic practice could be a form of leadership (Douglas & Fremantle 2009). They reviewed published research, conducted interviews with artists and held a creative laboratory with a diverse group of participants. Drawing together the experiences of this wide range of artists, in a process that reflects the collaborative values they advocate, they suggest that a good artist-leader is 'a cultural animator; analytical; inclusive; collaborative; connected; organised; flexible; a revolutionary; a good negotiator; entrepreneurial; and a lover'. (Douglas & Fremantle 2007:8-9)

Three things are immediately striking about these words. First, with the exception of 'revolutionary', which may just reflect artists' occasional weakness for rhetoric, they are all far from the popular stereotypes of the Romantic genius: visionary, tortured, solitary, self-righteous etc. This approach to leadership is not self-justifying but collaborative and social.

Secondly, many of the words are relational, in the sense of positioning the artist leading through practice in a relationship with others: 'animator', 'collaborative', 'connected', 'negotiator' – even 'lover'. This kind of leadership involves being with people, working together,

responding and interacting. Though the idea of 'analysis' could reflect scientific ideas of leadership, a separation between observer and observed is not implied or necessary.

Finally, the idea of vision – whether of an organisation or some distant idealised future goal – is quite absent from this type of leadership, despite the widespread expectation that this is the most important thing that an artist brings. But visionary self-belief is not helpful in fog; it's dangerous and leads people confidently over cliffs. In fact, reading the accounts of artistic practice on which Douglas and Fremantle base this analysis, it is evident that where there is vision, it emerges through and as a result of the creative process rather than being established beforehand and worked towards.

THE ART OF UNCERTAINTY

The similarities between Stacey's edge of chaos and the artistic practices described by Douglas and Fremantle are striking. Both accept the complexity of human experience and the impossibility of predicting any but short-term results. They value creativity as a resource for opening up problems and finding better ways forward. They recognise the power of rationality but also that of feelings, group dynamics and the unconscious mind. Above all they see that what matters, in human experience, is the process. Its tangible signs – whether art works or business plans – are only as good as how they have been produced.

Management theories drawn from the corporate world and rooted in rationalist and scientific models have become influential in the British cultural sector, notably in business planning, risk management and evaluation. Undue confidence in these concepts and their capacity to deliver predictable results contributed to the near collapse of the economy, with consequences we shall live with for years to come. In the face of this evidence, it would seem unwise – irrational, even – not to examine their validity in arts management or public cultural policy. At an operational level, in managing what Galbraith bracingly but rightly calls corporate bureaucracy, these ideas and tools have value, although even here their natural capacity for expansion needs guarding against.

But in responding to the bigger problems faced by arts organisations, and the communities in which they work, more original ideas and more open processes seem indicated. In management theory, the arts may gain more from creative thinkers like Ralph Stacey than from the simple nostrums of big consultancy firms, though the demand for snake oil never seems to diminish, even in the Age of Reason. The spending cuts announced in the Coalition government's emergency budget are a major challenge for arts organisations that depend on public funding: they will also have unpredictable but far-reaching consequences for the wider cultural and creative ecology. More than ever, perhaps, the arts need confidence in their own methods and processes and their own epistemology. That is not a solution, but only puzzles have solutions. There is no easy way forward: beyond immediate, operational

concerns, our actions have consequences that are neither foreseeable nor controllable. It's an uncertain world.

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