
“Rockin’ All Over The World” : organisational improvisation lessons from the music-based practitioner

Stephen A. Leybourne*

Metropolitan College,
Boston University,
Boston, MA 02215, USA
Email: sleyb@bu.edu
*Corresponding author

Peter Cook

Human Dynamics,
London, UK
Email: peter@humdyn.co.uk

Abstract: This paper explores the relationships and interactions between organisational improvisational activity and differing modes of improvisational expertise utilised by musicians from a range of musical genres. The evolving literature on organisational improvisation has been considered, together with parallel or reinforcing lessons drawn from the orchestral, jazz, and rock musical genres. It is evident that when we consider leadership and management, that more flexible and less rigid structures are being considered in a world of networked organisational structures. Successful managers and leaders draw on improvisational decisions and interventions that are grounded in experience and prior knowledge. Indeed, a degree of creative or constructive deviance is shown to be useful in achieving in the progressive modern organisation. Improvisational organisations have to be specially competent in the management of the unknown and unknowable rather than becoming blocked by such circumstances, and this paper draws out a number of lessons from a range of musical and organisational sources can assist the management practitioner.

Keywords: organisational improvisation; creativity; improvisation; music.

Reference to this paper should be made as follows: Leybourne, S.A. and Cook, P. (2015) “Rockin’ All Over The World”: organisational improvisation lessons from the music-based practitioner’, *Int. J. Management Concepts and Philosophy*, Vol. 9, No. 1, pp.1–19.

Biographical notes: Stephen A. Leybourne is a Professor at Boston University, and holds a PhD from Cardiff University in the UK. He has published widely on organisational improvisation and its relevance in managing within turbulent organisational environments, particularly in the project domain. He is a member of the editorial boards of a number of esteemed academic journals. He also spent a major part of his youth resisting the temptation to get his hair cut and spending his money on rock concert tickets.

Peter Cook is the Managing Director of Human Dynamics and The Academy of Rock. He is a business consultant, academic, keynote speaker and author of five books on leadership and innovation, acclaimed by Professor Charles Handy and Tom Peters. He is a rock and jazz musician, having performed with Meatloaf's singer, Patti Russo and Ozzy Osbourne's guitarist, Bernie Tormé amongst others. He has appeared with his ideas on *Bloomberg TV*, *The BBC*, *USA Today* and *The Financial Times*. He has not resisted the temptation to cut his hair.

1 Introduction

It is becoming more accepted that the management of organisations is shifting away from the mechanistic rigidity of overt strategic planning, and is becoming more organic (Burns and Stalker, 1961) and reactive. Essentially this shift is being driven by the increasing turbulence of organisational environments (Leybourne, 2006b; Leybourne, 2010), and the need to resolve elements of uncertainty and ambiguity in markets and organisational ambitions (Cooke-Davies et al., 2007). More recent studies are recognising that the turbulence of markets and external environments is forcing organisations to rethink the stability of those values and purpose (McGrath, 2013; Radjou et al., 2012; Winby and Worley, 2014).

To some extent, there are also significant parallels between the environments that modern organisations are finding themselves in, and the more anarchic, undefined, and volatile situations that musicians have had to navigate to remain relevant in an evolving and uncertain marketplace with a rapidly changing capacity for the content and mode of delivery of musical product (Carlisi and Lipson, 2009; Chapman and Silber, 2008; Cook, 2006).

There have been a number of attempts to develop new theory to support changing management styles and managerial trends, and which increasingly recognise the tension between process and uncertainty in the management of the modern organisation (Hrebiniak, 2013). The emerging literature on organisational improvisation is at the centre of this discussion (Klein et al., 2015), although there are a number of other models, including the Ambidextrous Organisation (Tushman and O'Reilly III, 1996, O'Reilly III and Tushman, 2004). Ambidextrous in the organisational sense refers to the balancing of exploitation of present knowledge and practice, and exploration of the future in terms of trying new and unproven actions to identify emerging better practice (O'Reilly III and Tushman, 2004; Birkinshaw and Gibson, 2004). Improvisation is one effective way of unearthing and testing such explorational activity.

The intention in this paper is to explore the explorational and improvisational nature of modern management using examples from the perspective of musical performance, considering a continuum of musical frameworks, from orchestral performance, through to more improvisational styles generated by the jazz and rock music domains. The paper accesses a number of brief and in some ways unconventional case studies, examples and analogies, and uses those studies to draw parallels between musicianship, the exploitation of that musicianship, and the emerging management styles that are informing modern management practice. The intention is to synthesise some of the more 'abstract' ideas

used in a diverse range of musical performance to support the current shift in management thinking as we move through the second decade of the new millennium. We will then conclude and summarise the key outcomes from the paper.

2 Literature review

This review will focus on the use of elements of organisational improvisation in the management of the contemporary organisation, and will consider these elements in the context of musical metaphors. It is however useful to start with an academic assessment of the emergence of improvised work as an addition to the lexicon of management styles, and also as a phenomenon that is influencing many aspects of modern work.

It is suggested that often issues relating to complexity and ambiguity can be resolved using creative thought, an intuitive “gut feel” for what will work in a particular circumstance, and the adaptation of previously utilised routines (Leybourne, 2009; Leybourne, 2010). These are all identified as components of organisational improvisation. Additionally, bricolage, which relates to resolving issues effectively with only the resources to hand, is a meaningful skill in such circumstances (Duymedjian and Ruling, 2010).

Improvisation has been recognised ever since the mid 1800s where documentation of the activities of Mozart, Beethoven and Chopin shows that improvisation was regarded as a viable alternative to the performance of compositions as it allowed performers to play without notation (McPherson, 1994). It may be useful to start from the Latin root of improvisation, which is *improvisus*, meaning “unforeseen.” It therefore follows that unforeseen means or at least includes “unplanned” activity. There is also an assumption that within the execution of those fundamentally unplanned actions, a degree of expertise is present. Dreyfus and Dreyfus (1986), in a study into the phenomenology of expertise, developed a typology of expertise with five levels, with ‘proficient’ and ‘expert’ as the levels where they indicate that a holistic view and intuitive grasp assist in reaching advanced competency. They also suggest that experts in any subject achieve a level of proficiency whereby they develop the ability to improvise constantly, without reliance on rules, guidelines, and maxims. As Montuori (2003, p.249) stated, proficiency and expertise allows managers to improvise, as: “*they know the rules, but do not have to think about them. They have developed the ability to act spontaneously and intuitively without needing to refer to rulebooks.*” Some observers (Ericsson, 2006, p.699) have however suggested that a degree of ‘preconception’ may be involved whereby improvisation arises out of some prior thinking even if that thinking is not consciously recognised at the time. This is certainly a familiar notion in the improvisation literature, with intuition being accepted as a recognised construct.

The original definition of improvisation as: “*the degree to which conception and execution converge in time*” (Moorman and Miner, 1998b, p.698), highlights the temporal aspects of improvisational activity, although later definitions also link with the concept of bricolage, in that they emphasise the need to achieve with available resources. The inference here is that improvised work is usually executed to resolve an unforeseen issue or requirement, and time to mobilise additional resources is usually not available.

They concur with the definition of improvisation provided by Soloman, which focuses on the notion of the discovery and invention of music while playing it, without preconceived formulation, scoring or context (Soloman 1986 quoted in Burnard 2012, p.151). Burnard goes on to point out that there is no word for 'improvise' amongst classically trained Indian players. Instead they use *upaj* and *vistar* which mean 'to grow' and 'to spread out'. In some musical conventions such as Indian *raga*, Javanese *gamelan* Arabic, Turkish *maqam* and group African drumming, there is limited opportunity for spontaneity as these are examples of ritualised performance. We shall return to this theme when we examine orchestras.

Empirical research has exposed the fact that managers improvise constantly to resolve changing requirements and environmental turbulence (Leybourne, 2002; Leybourne, 2006a; Leybourne, 2006b), notwithstanding the fact that often such activity is surreptitious, given that improvisational working styles are not universally embraced in the modern organisation. This kind of 'guerrilla management activity' was recognised as long ago as 1991 when Henry Mintzberg wrote on how managers cover up intuition with more acceptable forms of management activity (Campbell, on Mintzberg, 1991). Mintzberg (1991) showed managers spending most of their time reacting to events and almost no time planning. They appear to feel their way forward, working their own agendas into the events that press upon them and discovering successful ways to operate as they proceed. Mintzberg has consistently attacked the planning approach to strategy, demonstrated that most strategies change very irregularly and shown that most companies appear to take an 'emergent' rather than a 'planned' route to developing their strategies. They 'craft' their strategies rather than 'design' them.

The improvisation literature has been evolving significantly since the mid 1990s, and following on from the early and influential work of Moorman and Miner (1998a, 1998b), specific attention has been directed at improvising generally (Cunha et al., 1999; Weick, 1979; Hatch 1999; Vera and Crossan, 2004). Since the turn of the millennium other focal points have included learning from improvisation (Chelariu et al., 2002), and improvisation within the project domain (Gallo and Gardiner, 2007; Kanter, 2002; Leybourne, 2002; Leybourne, 2006a; Leybourne, 2006b; Leybourne, 2006c, Leybourne and Sadler-Smith, 2006). More recently, (Burnard, 2012) has studied creative community practices in which individual musicians follow, create and break conventions collectively. Cunha et al. (2014) have developed a general typology for organisational improvisation, and Klein et al. (2015) have developed a typology of organisational improvisation specifically related to the project domain.

However, there is a growing diffusion of improvisational techniques within the organisational domain, as evidenced by the increasing volume of literature, together with an increasing general interest in the subject. It is now appropriate to look at this phenomenon in the context of the subject area of this paper. If we accept the three original constructs of improvisation that were identified in the earlier work of Moorman and Miner (1998a, 1998b) as being Creativity, Intuition, and Bricolage, and then add the four additional constructs from the Miner et al. (2001) paper (Adaptation; Compression; Innovation; and Learning), there is strong evidence that these elements occur regularly in many styles of music composition and performance, but with major differences across these musical genres. In some ways, in documenting this we are 'reversing' the early work which used jazz performance as a metaphor for improvisational activity within the organisation (Barrett, 1998a; Berliner, 1994; Hatch, 1998; Hatch, 1999).

3 Methodology

The data that supports this paper has been gathered over a number of years through formal and informal interviews, and also through participant observation within organisational sectors. One of the issues surrounding the data collection for this paper is that when interviewing musicians and entrepreneurs, often timing is somewhat opportunistic due to the difficulty of accessing some of the interviewees. This opportunistic model of data collection is accepted in other research domains, i.e. medicine (Duffy, 1987), third world economies (Plummer et al., 2004), and psychology (Suzuki et al., 2007), and is embraced as valid within those research domains, indicating a level of rigour which supports the outcomes of this paper.

The participant observation element of the methodology arises as a result of one of the author’s involvement in musical performance, and simultaneously in management consultancy. As a component of this activity, opportunity arises to enter into ‘data collection mode’, and interview musicians, albeit sometimes in a less than structured way. Ethnographic research, of which participant observation is a recognised component, is argued as a component of all research, with Hammersley and Atkinson (1983) suggesting that: *“we cannot study the social world without being a part of it”* (Atkinson and Hammersley, 1994, p.249). Ethnography, and participant observation specifically, is particularly suitable for exploring the nature of social phenomena, working with unstructured data and small samples, and in areas where data consists mainly of verbal explanations and descriptions (Atkinson and Hammersley, 1994). All these issues feature in this study.

There are also some issues with the type of ethnographic research explored here, notably in the fact that: *“the epistemology of participant observation rests on the principle of interaction and the ‘reciprocity of perspectives’ between social actors (original emphasis)”* (Atkinson and Hammersley, 1994, p.256). It follows that the perspective of the researcher will be paramount in the narrative of the research, which can lead to bias. Also, some criticism surrounding qualitative research stems from the unstructured manner of subsequent analysis. In order to address this criticism, the analysis of interview transcriptions is undertaken using the Huberman and Miles (1998) interactive model of data analysis. Interestingly, Agar (1986, p.12) advocates the rejection of reliability and validity in favour of: *“...an intensive personal involvement, an abandonment of traditional scientific control, an improvisational style to meet situations not of the researcher’s making, and an ability to learn from a long series of mistakes.”* This abandonment of reliability and validity does not however sit well with the need for rigour in case-based field research, and the researchers have applied a number of different ‘frames’ of thinking to the data to ensure that sufficient academic rigour is applied and addressed within the study.

4 Improvisation and organisations

As organisations are more challenged by the imperatives of surviving and emerging from recession, academics and business ‘gurus’ [sic] continue to search for new models and frameworks that can assist in business development. In rapidly changing markets concepts like continuous learning (Leybourne and Kennedy, 2015; Rao, 2013), and nimbleness and organisational agility (Nijssen and Paauwe, 2012) are ever more

important, yet organisations often struggle to convert that agility into sustainable and lasting innovation, particularly as we move away from structured innovation models and towards a more frugal and flexible framework for organisational growth and development (Radjou et al., 2012).

In such a business climate, leaders and managers must encourage employees to move away from process-led actions, and to explore and apply more unstructured and improvisational activity, ideally and ultimately in ways that lead to sustainable organisational improvement. Often this requires an unravelling of the process that has developed to ‘formalise’ innovation in larger and more mature organisations (Radjou et al., 2012). Senge (1990) refers to this as ‘unlearning’. In some cases, this comes down to a loosening of the formal processes. In other cases, organisations are re-defining previously successful frameworks; for example, 3M, who have historically been highly successful in developing new products that customers value (Gundling and Porras, 2000), and who historically have allowed ‘space’ and funding for employees to develop new ideas and products, are now revisiting and refining that process for future success (Radjou et al., 2012). Similarly, newer globally successful organisations such as Google allow for frugal innovation by allowing employees to operate on a 70/20/10 basis: they spend 70% of their time on designated work, 20% of their time on projects and innovations linked to that designated work, and 10% of their time on ‘free’ innovative activity, which often involves improvisational and unstructured work that has historically produced significant and successful products, such as Google Maps and Google Mail.

These two examples demonstrate the potential benefits and outcomes of improvised and unstructured activity in specific well-known organisations. We now move on to parallels with different musical styles. The following section explores three musical genres and their connections and contrasts with innovative management. We offer a review of management styles, as seen through three diverse forms of music: orchestras and orchestral performance, jazz bands, and rock music.

4.1 The structure – improvisation continuum – orchestras

The industrial revolution created organisations that were largely formalised around a high level of process and procedure. An analogy for such an organisation is that of an orchestra, where the score essentially ‘mimics’ documented process and procedures. Characterised by the need for order and control in the way work should be organised, managers created structures into which people were fitted in an essentially inflexible way. This ‘Scientific Management’ model, developed by Frederick Winslow Taylor, was applied to produce consistency and volume. The best-known early application of these principles was at the Ford Motor Company, where a standardised product (the Ford ‘Model T’) was produced identically for nineteen years and fifteen million repetitions. “*You can have it any colour as long as it is black*” is the alleged mantra of Henry Ford when referring to this standardisation process.

If we apply this thinking to orchestral performance, the allusion is that one person (the conductor/manager) holds the composer’s operating instructions (the score). The performer’s/staff’s role is to follow the score accurately and without deviation to ensure that each performance follows the original score as closely as possible. In this model there is little scope for artistic expression and no scope for improvisation, although due appreciation must be given for virtuosity and limited interpretation, which tends to be controlled by the conductor/manager.

This analogy has been attractive through the industrial revolution and for much of the 20th Century for a number of reasons. Firstly, it gave managers a feeling of control and certainty (Garvin, 1998) about the future, enabling them to make plans about the future based on the past. Organisations have historically preferred certainty over ambiguity. Secondly, it gave employees certainty about their role and required performance levels. Fixed job descriptions and performance management methods provide a rhythm and routine to daily life, and over time, such systems become ‘unconscious structures’ or ‘scores’ that create conformity and smooth performance fluctuations to acceptable rather than extraordinary levels. Thirdly, it gave shareholders a sense of direction and trust in the organisational strategy. Given the risk-averse nature of many shareholders and managers, it would not have historically been seen as sensible or logical for organisations to abandon planning in favour of improvisational strategic decision-making. However, given the realities of organisational life, the stability of the outcomes for such planning exercises is uncertain, notwithstanding the historic desire on the part of shareholders for order, control, and certainty, leading to profit maximisation. A more recent understanding is that acceptance of the concept of employee motivation and commitment has essentially challenged this view. Mintzberg has been considering this issue for over a quarter of a century (Mintzberg and Waters, 1985), and it is still a subject of academic debate (Arshad and Hughes, 2009; Kanter, 2002; McGrath, 2013).

The orchestra analogy is essentially about conformity, consistency, and collaboration around a set of instructions. It requires that employees follow the manager’s instructions accurately and explicitly. Group identity is more important than individual recognition in a traditional orchestra. The focus here is based on following the score and giving an accurate rendition of the composer’s original intent.

The orchestra analogy is useful within organisations when the organisational environment and product/service mix is simple and stable and where staff expectations of work and its meaning are consistent. This is however an increasingly rare organisational model in the second decade of the 21st century. It also assumes that the conductor (the CEO) has the right sheet music, is supremely good at conducting and that the orchestra members are very good at following a pre-planned score. The orchestra analogy is therefore increasingly out of step with the way that innovative organisations perform and achieve, because the CEO usually does not and cannot know everything required for establishing a top-down strategy in a world where the growth of knowledge is exponential and the half life of that knowledge is decreasing. At best they only have some of the sheet music, or, even worse, might be using an outdated score. They may also be better at playing than conducting.

There are of course exceptions to every model. There are a small number of improvising orchestras that recognise the importance of interpretation in performance. The virtuoso classical musician and jazz player Nigel Kennedy is an exemplar of someone who brings improvisation into an orchestral performance. Thus, even in a classical orchestra there is room for the improvisational virtuosity of solo performers in many classical concertos (cadenzas) regularly performed by orchestral musicians. Kennedy is unusual in so far as he crossed the boundaries between classical, jazz and rock music, facing threats at the age of 16 from his classical tutors when he was offered the chance to play with jazz violinist Stéphane Grappelli at New York’s Carnegie Hall. He refused to heed the threats and crossed the invisible line between the classics and jazz. He has subsequently played material by Jimi Hendrix and The Doors. Through one of the author’s encounters with Kennedy, he learned that to improvise at this level

required considerable structure and discipline, contrary to popular beliefs that improvisation is just ‘making things up’. There is a parallel with Tom Peters’ concept of ‘simultaneous tight and loose properties’ (Peters and Waterman, 1982) for organisations here (source: Nigel Kennedy, Personal Interview with Peter Cook, 22 November 2013).

4.2 ... and then there was jazz

Kao (1997) noted the connections between forms of improvisational jazz and leadership, pointing out that creativity is fuelled by contradictions: between discipline and freedom; convention and experiment; old and new; familiar and strange; expert and naïve; power and desire. He points out that leaders should not try to resolve contradictions but work with them. These tensions challenge creative workers and organisations, allowing those that resolve the contradictions most successfully to succeed.

However, Kao’s vision is mostly about genius level creativity – he uses Charlie Parker amongst his examples of successful freeform jazz musicians who operates at the ‘edge of chaos.’ Expertise and virtuosity is a major component of this and it points to one difficulty with the jazz analogy at work; that much organisational creativity is quite ordinary and does not always require or value genius level contributions. This is a point which one of the authors discussed with Tom Peters, who also had difficulty seeing how Kao’s ideas could be aligned with an organisation where the source of advantage came from low levels of innovation and a ‘process driven’ production environment (source: Tom Peters, Personal Interview with Peter Cook, 28 June 2006).

Universities are perhaps one of the best examples where genius level contributions operate in an organisational context, in that knowledge is created by acknowledged experts (i.e. PhDs). It is however noted that codifying this knowledge in a way that is accessible to the practitioner is problematical (Leybourne and Kennedy, 2015).

Additionally, much of the jazz analogy as it applies to improvisational work is related to working within frameworks and constraints, in order to control the scope of improvised activity (Barrett, 1998a; Barrett, 1998b; Hatch, 1998; Hatch, 1999; Vera and Crossan, 2004). This runs counter to true virtuoso performance, but also to some extent constrains exceptional performance. Indeed, it could be argued that organisations are seeking to encourage improvisational activity as a collective, rather than as an individualistic endeavour (Leybourne, 2002; Leybourne, 2006b).

However, collective or collaborative activity can be problematical. Structural optimisation in organisations is mostly vertical in centres of excellence, allowing such organisations to optimise their output in a given discipline. In extremis, this myopic focus can create consequential weaknesses when experts from different expert domains attempt to work together due to some classic reasons for resistance, such as parochial self-interest, misunderstanding and lack of trust, different assessments, and low tolerance for change (Kotter and Schlessinger, 1979).

4.3 Let there be rock

Both the orchestra and the jazz analogies offer us complementary insights into improvisation and structure in different organisational contexts. The rock music analogy is essentially about breaking away from the score and doing your own thing but within the context of the overall structure, as endless improvisation and creativity are wasteful in terms of successful innovation. However, improvisation operates within a framework

(Moorman and Miner, 1998a; Moorman and Miner, 1998b; Cunha et al., 1999), and even more ‘free form’ rock composition is to some extent constrained by musical frameworks such as the key, the tempo, the bar structure, etc.. However, unlike an orchestra, the individual is as important as the team in a rock band, although there are some star soloists. In the rock genre therefore, the performance is important, rather than conformity to a score. A successful rock band must ‘stand out from the crowd’, and differentiate itself in order to attract an audience, both live and in recordings. The relevant parallels in an organisational sense are in considering products and services in the light of ‘What lasting difference do we make?’ ‘What do our customers think of us?’ and ‘What will keep them coming back for more?’ This is the essence of organisational innovation, and the links to musical innovation are strong.

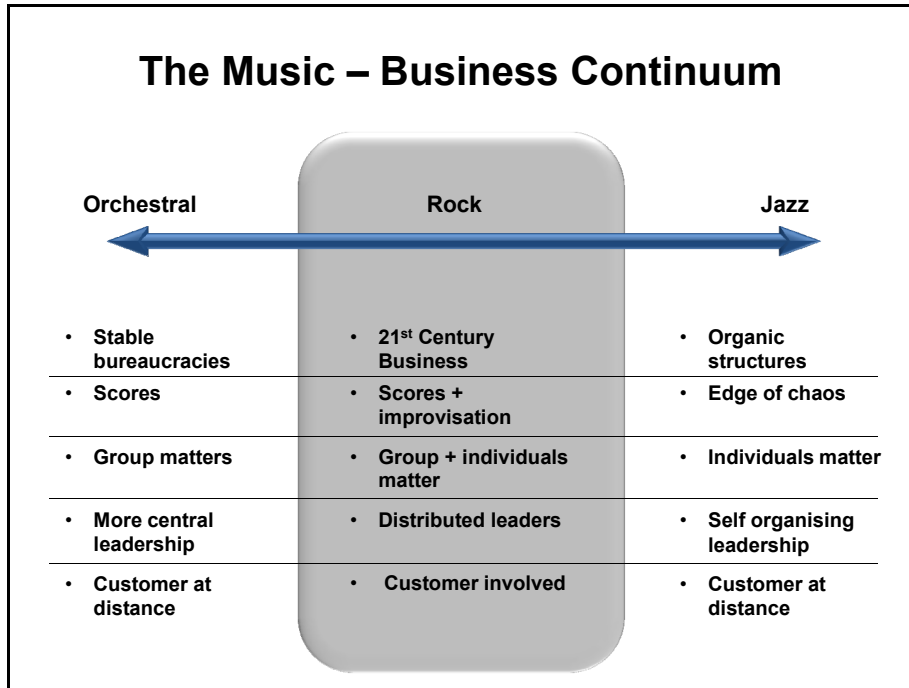
The rock music analogy is looser than the orchestra analogy, but not so chaotic as to need the genius level contributors required in the jazz analogy. It occupies the middle ground, which is where most organisations arguably are or need to be. There are four key elements that are influential here. Firstly, there is the requirement for simultaneously tight and loose connections and relationships within the organisation. Simultaneous tight and loose properties are mentioned by Peters and Waterman (1982), suggesting that this concept has been present in the organisational domain for at least three decades. Secondly, both the team and the individuals matter. This means that thirdly, leaders exist at all levels and leadership is distributed across multiple levels of the organisation. Fourthly, and finally, the customer is involved and engaged, to ensure that the organisation delivers a customer experience that lives up to expectations.

One example of this changing nature of customer expectation comes from Mauro Porcini, who is the head of Global Strategic Design at 3M; a company historically well regarded for its innovation. He suggests that: *“customers are no longer buying products – rather, they are seeking new ‘experiences’ that delight them”* (Radjou et al., 2012, p.54). Porcini uses Apple Corp as an example of a company marrying superior design with excellent engineering to deliver products like the iPad, that ‘delight’ customers.

Richard Branson (the chairman of the Virgin Group – which is a diverse collection of businesses operating under a shared ‘brand’ identity) illustrates the rock music analogy well when he pointed out that companies find it challenging to do ‘difficult’ things (source: Personal meeting 21 September 2014). Notwithstanding such comment, there is evidence that incremental improvement of existing products is not enough to satisfy customer expectations (i.e. CD Walkman –v- iPod; USB drives –v- cloud computing; chemical –v- digital photography). Interestingly, Virgin Group built its brand in the music industry, and has strong links historically to rock artistry. Rock music is certainly a simpler form of music with largely 4/4 structures and familiar verse – chorus – middle type formats, although there are exceptions, which could include the complex time signatures adopted by progressive rock artists such as Pink Floyd and Genesis, who have experimented with 7/4 and 9/4 structures in songs such as “Money”, “Apocalypse in 9/8”, as well as the simplicity of other material such as “Shine on you Crazy Diamond”, effectively written around just two chords.

Figure 1 attempts to organise these diverse musical styles in a form that assists with the application across modern organisational models and frameworks, indicating that the majority of creativity and organisational effectiveness is relatively closely aligned to the ‘rock’ model.

Figure 1 The music-business continuum (see online version for colours)



In practice of course, these divisions are blurred – there are orchestras that improvise and some jazz is very structured. Indeed, Radjou et al. suggest that: “for leaders... they need to cultivate the wisdom to know when to be like Miles Davies and improvise... and when to be like Leonard Bernstein and orchestrate...” (2012, p.186), and the obverse obviously applies at times.

Nonetheless, the broad facets of the analogy offer us important lessons on how to lead and manage organisations, and certainly at the level of this basic analysis, it would appear that elements of the Rock-based framework may offer some of the facets of business orientation that assist with managing the tensions mentioned earlier. We next look at some exemplars that help to illustrate these principles in practice.

5 Improvisation at work – exemplars

5.1 Improvisation and connection

An exemplar of the idea of structured improvisation in action is embodied in the music artist Prince. Prince uses significant elements of structure as well as improvisation to achieve a seamless performance. To achieve this level of performance, Prince leads the band using a series of codes that signal musical changes which the whole band understands. So, although musical leadership passes from member to member, Prince actually adopts the role of a conductor on occasion, to some extent contradicting the statement that the band is essentially a ‘team’ enterprise. For example, when he says ‘on the one, bass,’ the whole band stops playing except the bass player on the first beat of the

next bar. This requires extensive practice of a repertoire of some 300 songs, from which Prince will draw down some 20 or so on a given night, sometimes without prior warning. Prince’s view of improvisation is largely that of ‘prepared spontaneity’.

Prince is also a good example of what Csikszentmihalyi (1990) called the state of ‘flow’. In the context of Csikszentmihalyi’s work, flow is described as a state of complete absorption with the task at hand, where nothing else seems to matter. This is sometimes referred to musically and organisationally as being in the zone or in the groove (Burnard, 2012). Flow is typified by an absence of concerns about other needs such as time, food, ego and so on (Csikszentmihalyi, 1990).

Prince learned many of his skills from George Clinton, named alongside Sly Stone and James Brown as the three most significant contributors to funk music. Clinton’s contribution was to fuse several genres of music (Motown, Hard Rock, Psychedelia) without concern to produce what has come to be known as P-Funk or psychedelic funk. In my interview with Clinton, it transpires that much of his own approach to improvisation is about profiting from mistakes and even setting up the conditions where these can happen more regularly. He describes the recording process for “Atomic Dog” as being characterised by the accidental use of a backward tape loop and ad-libbing the words as though it was just a jamming session rather than a recording session. The first take became the final cut (source: George Clinton, Personal Interview with Peter Cook, 26 July 2014).

John Howitt has much to say on the topic. Howitt is a professional session musician, academic and teacher, who has performed with Celine Dion, Anastasia and Shirley Bassey. He suggests that mastery comes out of preparation. In business circles, people talk of the need for 10,000 hours of disciplined practice to master an art or discipline (Gladwell, 2008). Essentially, Howitt and Gladwell agree that practice and preparation are vital. As Louis Pasteur suggested in a lecture at the University of Lille in 1854, “*chance favours the prepared mind*”. Howitt points out that, in his work, those people who claim to be ‘creatives’ (his terminology) would say that they feel they would lose their creativity, or what musicians popularly describe as their ‘mojo’ if they over-prepared. Yet Howitt points out that practice gives you ease and versatility. Playing routine pieces of music repeatedly develops complete familiarity, allowing a performer to concentrate on what is needed to add that extra dimension to produce something exceptional, and managers can learn from this.

High levels of competence require personal mastery, whilst also being aware of environmental influences and turbulence. This is what Daniel Goleman calls emotional intelligence (Goleman, 1995), comprising: self-awareness; self-management; social awareness, and relationship management. These are skills that can be learned/enhanced. Howitt went on to discuss how emotional intelligence matters when improvising: suggesting that: “When performing, you still need to keep your focus both internally on the mastery of what you are doing, whilst keeping your antennae open to hear those around you. It’s living inside your own head AND paying attention to your co-performers. Good musicians and leaders do both. Bad musicians and leaders just listen to themselves” (source: Howitt, Personal Interview, 15 March 2012). In this respect, it would appear that there are strong and resilient parallels between musical virtuosity and performance, and managerial leadership.

5.2 *Jazz fusion*

Scott McGill, an improvisational musician who has worked with John Coltrane's teacher, was asked to reflect on his experience in improvisational jazz fusion. He typifies his approach as being one of seeing a music score as a playground rather than a cage. In particular he talked a lot about anticipatory skills when improvising.

McGill is influenced by the findings of K. Anders Ericsson. Ericsson discusses how the fastest and most accurate typists are the ones who can quickly anticipate the next move. I have applied his theory of Deliberate Practice ideas to my improvisation. Ericsson states that "*In sum, the superior speed of reactions by expert performers, such as typists and athletes, appears to depend primarily on cognitive representations mediating skilled anticipation rather than faster basic speed of their nervous system*" (Ericsson, 2006, p.699). He also describes how this is confirmed with typists through high-speed film. This suggests that conceptual anticipation or 'seeing the next move' is a key transferable skill.

McGill's insights were complemented by John Etheridge, virtuoso guitarist with Soft Machine and who has also collaborated with Stéphane Grappelli, John Williams and Nigel Kennedy. John added that a significant element of the original playing styles that have emerged from the greats emanated from people who were not trained. In other words, the idiosyncrasies that made players like Jeff Beck and Jimi Hendrix great were due to not being taught to play properly in the first place.

Great musicians are emotionally intelligent. When performing, whilst they often reach what Senge (1990) calls personal mastery or what Csikszentmihalyi (1990) calls 'flow', they are also acutely aware of what is going on around them. In other words, they have both internal and external mastery. Bad musicians live only inside their own heads. Etheridge recognised this condition through his own playing and through his work with other masters (source: John Etheridge, Personal Interview, 9 September 2014).

One of the authors, who is an accomplished musician, suggests that through visualising the guitar's fretboard or written music especially when he does not have an instrument to hand, He finds that he can play in a faster and more accurate manner as when he picks up an instrument, as he has already "warmed up" in his mind and anticipated all the moves and visualised and mentally envisioned the mechanics beforehand. This also helps in solo or group improvisation as the musical ideas that have been mentally envisioned can be immediately executed or can respond to ideas being played by others in the moment.

Ericsson suggests that deliberate practice requires individuals to set performance goals beyond their current level of achievement, thus leading to repeated failures until eventual mastery is achieved (Ericsson et al., 1993; Ericsson, in Lehmann and Ericsson, 1997). The concept of setting performance goals that are higher than one possesses but that are not too far from one's present abilities agrees with other pedagogical theories such as Cognitive Apprenticeships, where a master teaches a protégé using methods such as coaching, modelling and scaffolding, and Vygotsky's (1978) Zone of Proximal Development. The Zone of Proximal Development (ZPD) is defined as the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under guidance, or in collaboration with more capable peers. Ericsson also maintains that this sort of practice needs concentration and focus to be truly effective and that to continually improve and achieve expertise in a field, one should strive towards setting tasks that

thwart automaticity (Ericsson, 2006), which in the field of guitar playing could mean avoidance of ‘playing the same old licks.’ This type of work, helps the practitioner to use the mind to guide the work which leads to improvement in a number of areas in a deeper way that continual soloing to find new avenues of exploration and mere digital exercise or drilling cannot ever achieve.”

5.3 *The school of hard rocks*

In order to gain an alternative perspective on improvisation insights from a practitioner from a more dramatic musical genre, an interview was undertaken with Bernie Tormé, whose proficiency has been built within the rock domain, including experience as a guitar player for Ozzy Osbourne, Twisted Sister and Ian Gillan. Tormé offered some key principles for improvisation that could assist organisations, suggesting that: *“Improvisation is not a conscious process for me, having had considerable experience in this area. I need to go blank and start from nothing. The parallel here is that organizations need to be better able to ‘unlearn’ if they are to follow”* (Tormé, Personal Interview, 25 July 2012). Tormé goes on to suggest: *“I use pure intuition to create a more intellectual process to judge work. Many organizations are run on logic, thus they need to nurture creativity to balance their more natural skills of evaluation. I find that my improvisational skill is enhanced by switching the instrument I use. For example, I had a Sitar for a few years. It only had 4 or so songs in it for me, but I would not have had those songs without It”* (Tormé, Personal Interview, 25 July 2012).

Documentary evidence and interviews suggest that Jimi Hendrix had a playground approach to using equipment and effects that was totally alien at the time. This relates to an organisational need to live with ambiguity, working with it rather than becoming paralysed by it. This quality is also mentioned by Scott McGill and authors such as Henry (1991), Martin (1991) and Cook (1998). The playground approach even comes through in less well known genres such as garage punk rock, with Smith and Gillett (2015) suggesting that being able to improvise and embellish during performance is important.

6 Lessons for practitioners

We have been considering the views of a variety of practitioners within the various musical genres over the course of this paper and it would be useful to now offer some lessons for the organisational and managerial practitioner, based on this fusion of organisational and musical experience. It is evident that there are a number of parallels between musical improvisation across a range of genres and improvisation within an organisational context. Indeed, it appears that organisational improvisation is an essential prerequisite to ensure sustainable innovation in turbulent and changing contexts, which appear to be the ‘new normal’ within progressive organisations (McGrath and MacMillan, 2009; Weick and Sutcliffe, 2007).

To do this requires that practitioners engage with a number of issues, including learning to tolerate a degree of ‘looseness’ within the strategic planning and developmental sides of the enterprise (Gioia et al., 2012; Leybourne, 2010). This embracing of ambiguity and uncertainty is challenging for the leaders of modern organisations (Brugnach and Ingram, 2012; Birkinshaw and Gibson, 2004), but given the

turbulence of organisational environments, more agile organisations have benefited from the agility to exploit unforeseen or emerging market-based opportunities in a more improvisational manner.

Additionally, there is a tension within the modern organisation between the balancing of investment in analysis and logic with an investment in creativity; particularly if that investment is in the creation of a cadre of innovative employees working in a supportive organisational culture (Akroyd and Maguire, 2011). It could be construed that the musician improvisers interviewed above are musical, albeit constructive, deviants. There is significant academic evidence to support the hiring of constructive deviants (Applebaum et al., 2007; Galperin, 2003; Warren, 2003), who can assist in developing the organisation's capability and capacity in divergent thinking approaches, tools and support structures, and ensuring that reward systems do not punish initiative and one-off failures. This type of activity is recognised as assisting in organisational success in turbulent and opportunistic organisational environments.

Given the evidence in favour of constructive deviance (Applebaum et al., 2007; Galperin, 2003; Warren, 2003), it follows that improvisation can assist in creating interventions and actions deviate from the accepted norm, or indeed from documented organisational process, and that can therefore assist managers and leaders in navigating demanding organisational landscapes. The ideal here is to build cultures and structures that encourage intrapreneurship and speculative projects from the ground up so that improvisation becomes an organisational asset rather than a 'nice to have' add on to organisational life.

7 Conclusions

We have presented a body of evidence that links the diverse worlds of musical and organisational improvisation. In some ways, this harks back to the early development of the improvisation literature, when jazz performance was often used as an analogy for improvised interventions at in the organisational domain (Barrett, 1998a; Barrett, 1998b; Berliner, 1994; Hatch, 1998; Hatch, 1999). However, additional data and evidence has been gathered to extend this argument, and to create links with a more deviant musical style, linking with creative deviance in organisations.

It is convenient to document some of the conclusions in Table 1, which offers some implications for leaders drawing on parallel lessons from the worlds of a diverse range of musical genres, and from current management and business school thinking. It is however fair to point out that there is no 'standard' here, and this is an area that warrants considerable additional research in order to offer a robust framework for the practitioner and the progressive organisational manager.

It does however appear that we are reaching a point in the evolution of the organisation whereby the traditional strategic manager cohort of the last few decades – which has been drawn from the 'baby boomer' generation – is preparing to retire, and succession planning is identifying replacement management. As a new generation of leaders emerge, drawn from the 'generation X' and 'generation Y' demographics, new and more responsive business models are being sought that are less reliant on process, and which are more responsive to emerging markets and niche opportunities. As we emerge from the tipping point of the financial problems and the recessionary heritage of the period since late 2008, they will need to have new ideas about leading and managing

people. This will require both structure and improvisation, both control and creativity, and leadership that recognises and rewards both individual and group achievement. The leader’s role will be to design best-fit strategies that help leaders to achieve exceptional performances under conditions of inherent uncertainty and rapid change. The improvisational business models that are currently emerging can assist with managing this tension between process and control, and the creativity and improvisation that generates new opportunities for the progressive organisation.

Table 1 Lessons from music and business

<i>Lessons from music</i>	<i>Parallel business lessons</i>
Great musicians are emotionally intelligent. When performing, whilst they often reach what Senge (1990) calls personal mastery or what Csikszentmihalyi (1990) calls ‘flow’, they are also acutely aware of what is going on around them. In other words, they have both internal and external mastery. Bad musicians live only inside their own heads.	Great leaders also have personal mastery, whilst also being able to tune in to the world around them. This is what Daniel Goleman calls emotional intelligence (Goleman, 1995), comprising: self-awareness; self-management; social awareness, and relationship management. These are skills that can be learned or enhanced.
Great musicians make complexity accessible to their audiences through the use of a number of musical devices: structure; individual role clarity; balancing teamwork/individuality and; ensuring all understand and contribute to the overall dynamics of the performance.	Great leaders make complexity compellingly clear. They do this through providing sufficient structure to enable people to be their best. They also make enough room in job design for individual talents/creativity to shine through in the context of a team performance. The exact standard for this is dependent on the type of organisation concerned.
Great musicians provide shared signals and codes to help others improvise, which utilise individual talents, without the need for central command and control.	Great leaders create capacity for self-organisation, coherent and rapid change, so that people can develop innovations that fit the strategy, without constant supervision and instruction.

References

Akroyd, C. and Maguire, W. (2011) ‘The roles of management control in a product development setting’, *Qualitative Research in Accounting & Management*, Vol. 8, No. 3, pp.212–237.

Applebaum, S., Iaconi, G.D. and Matousek, A. (2007) ‘Positive and negative deviant workplace behaviors: causes, impacts and solutions’, *Corporate Governance*, pp.586–598.

Arshad, D. and Hughes, P. (2009) ‘Examining organizational improvisation: the role of strategic reasoning and managerial factors’, *International Journal of Social and Human Factors*, Vol. 3, pp.568–574.

Agar, M. (1986) ‘*Speaking of Ethnography*’ Qualitative Research Methods Series No. 2, Sage Publications, London.

Atkinson, P. and Hammersley, M. (1994) ‘Ethnography and participant observation’, in Denzin, N.K. and Lincoln, Y.S. (Eds.): *Handbook of Qualitative Research*, Sage Publications, London, pp.248–260.

Barrett, F.J. (1998a) ‘Creativity and improvisation in jazz and organizations: implications for organizational learning’, *Organization Science*, Vol. 9, No. 5, pp.605–622.

Barrett, F.J. (1998b) ‘Managing and improvising: lessons from jazz’, *Career Development International*, Vol. 3, No. 7, pp.283–286.

- Berliner, P.F. (1994) *Thinking in Jazz: The Infinite Art of Improvisation*, University of Chicago Press, Chicago, IL.
- Birkinshaw, J. and Gibson, C.B. (2004) 'Building ambidexterity into an organization', *MIT Sloan Management Review*, Vol. 45, No. 4, pp.47–55.
- Brugnach, M. and Ingram, H. (2012) 'Ambiguity: the challenge of knowing and deciding together', *Environmental Science & Policy*, Vol. 15, No. 1, pp.60–71.
- Burnard, P. (2012) *Musical Creativities in Practice*, Oxford University Press, Oxford.
- Burns, T. and Stalker, G.M. (1961) *The Management of Innovation*, Tavistock, London.
- Campbell, A. (1991) 'Brief case: strategy and intuition – a conversation with Henry Mintzberg', *Long Range Planning*, Vol. 24, No. 2, pp.108–110.
- Carlisi, J. and Lipson, D. (2009) *Jam!: Amp your Team, Rock your Business*, Jossey-Bass Inc., San Francisco, CA.
- Chapman, L. and Silber, L. (2008) *Rock to Riches; Build your Business the Rock and Roll Way*, Capital Books, Inc., Herndon, VA.
- Chelariu, C., Johnston, W.J. and Young, L. (2002) 'Learning to improvise, improvising to learn: a process of responding to complex environments', *Journal of Business Research*, Vol. 55, No. 1, pp.141–147.
- Cole, M., John-Steiner, V., Scribner, S. and Souberman, E. (Eds) (1978) *Vygotsky, L.S., Mind in Society: The Development of Higher Psychological Processes*, Harvard University Press, Cambridge, MA.
- Cook, P. (1998) *Best Practice Creativity*, Gower, Aldershot.
- Cook, P. (2006) *Sex, Leadership and Rock'n'Roll: Leadership Lessons from the Academy of Rock*, Crown House, Carmarthen.
- Cooke-Davies, T., Cicmil, S., Crawford, L. and Richardson, K. (2007) 'We're not in Kansas anymore, Toto: mapping the strange landscape of complexity theory, and its relationship to project management', *Project Management Journal*, Vol. 38, No. 2, pp.50–61.
- Csikszentmihalyi, M. (1990) *Flow: The Psychology of Optimal Experience*, Harper and Row, New York, NY.
- Cunha, M. P.e., da Cunha, J.V. and Kamoche, K. (1999) 'Organizational improvisation: what, when, how and why?' *International Journal of Management Reviews*, Vol. 1, No. 3, pp.299–341.
- Cunha, M.P.e., Clegg, S., Rego, A. and Neves, P. (2014) 'Organizational improvisation: from the constraint of strict tempo to the power of the *Avant-Garde*', *Creativity and Innovation Management*, Vol. 23, No. 4, pp.359–373.
- Dreyfus, S. and Dreyfus, H. (1986) *Mind Over Machine*, Free Press, New York.
- Duffy, M.E. (1987) 'Methodological triangulation: a vehicle for merging quantitative and qualitative research methods', *Journal of Nursing Scholarship*, Vol. 19, No. 3, pp.130–133.
- Duymedjian, R. and Ruling, C.C. (2010) 'Towards a foundation of bricolage in organization and management theory', *Organization Studies*, Vol. 31, No. 2, pp.133–151.
- Ericsson, K.A. (2006) 'The influence of experience and deliberate practice on the development of superior expert performance', in Ericsson, K.A. et al. (Eds): *The Cambridge Handbook of Expertise and Expert Performance*, Cambridge University Press, Cambridge, UK, pp.685–705.
- Ericsson, K.A., Krampe, R.Th. and Tesch-Römer, C. (1993) 'The role of deliberate practice in the acquisition of expert performance', *Psychological Review*, Vol. 100, pp.363–406.
- Gallo, M. and Gardiner, P.D. (2007) 'Triggers to a flexible approach to project management within UK financial services', *International Journal of Project Management*, Vol. 25, No. 5, pp.446–456.
- Galperin, B.L. (2003) 'Can workplace deviance be constructive?' in Sagie, A. et al. (Eds): *Misbehavior and Dysfunctional Attitudes in Organizations*, Palgrave Macmillan, pp.154–170.

- Garvin, D.A. (1998) ‘The processes of organization and management’, *MIT Sloan Management Review*, Vol. 39, No. 4, pp.33–50.
- Gladwell, M. (2008) *Outliers: The Story of Success*, Little, Brown and Co., New York, NY.
- Gioia, D.A., Nag, R. and Corley, K.G. (2012) ‘Visionary ambiguity and strategic change: the virtue of vagueness in launching major organizational change’, *Journal of Management Enquiry*, Vol. 21, No. 4, pp.364–375.
- Goleman, D. (1995) *Emotional Intelligence: Why It Can Matter More Than IQ*, Random House, New York, NY.
- Gundling, E. and Porras, J.I. (2000) *The 3M Way to Innovation: Balancing People and Profit*, Kodansha International, Tokyo, Japan.
- Hammersley, M. and Atkinson, P. (1983) *Ethnography: Principles in Practice*, Tavistock Press, London.
- Hatch, M.J. (1998) ‘Jazz as a metaphor for organizing in the 21st century’, *Organization Science*, Vol. 9, No. 5, pp.556–557 and 565–568.
- Hatch, M.J. (1999) ‘Exploring the empty pages of organizing: how improvisational jazz helps redescribe organizational structure’, *Organization Studies*, Vol. 20, No. 1, pp.75–100.
- Henry, J. (1991) ‘Making sense of creativity’, *Creative Management*, Sage Publications, London.
- Hrebiniak, L.G. (2013) *Making Strategy Work: Leading Effective Execution and Change*, Pearson Education Inc. publishing as FT Press, Upper Saddle River, NJ.
- Huberman, A.M. and Miles, M.B. (1998) ‘Data management and analysis methods’, in Denzin, K.M. and Lincoln, Y.S. (Eds): *Collecting and Interpreting Qualitative Materials*, Sage, London, pp.179–201.
- Kanter, R.M. (2002) ‘Strategy as improvisational theatre’, *MIT Sloan Management Review*, Winter, pp.76–81.
- Kao, J. (1997) *Jamming – The Art and Discipline of Business Creativity*, Harper Business, New York.
- Klein, L., Biesenthal, C. and Dehlin, E. (2015) ‘Improvisation in project management: a praxeology’, *International Journal of Project Management*, Vol. 33, No. 2, pp.267–277.
- Kotter, J.P. and Schlesinger, L.A. (1979) ‘Choosing strategies for change’, *Harvard Business Review*, Vol. 57, pp.106–114.
- Lehman, A.C. and Ericsson, K.A. (1997) ‘Research on expert performance and deliberate practice: implications for the education of amateur musicians and music students’, *Psycomusicology*, Vol. 16, pp.40–58.
- Leybourne, S.A. (2002) *Project management and the implementation of strategic change within the UK financial services sector*, Unpublished Doctoral Dissertation, University of Wales, Cardiff Business School.
- Leybourne, S.A. (2006a) ‘Managing improvisation within change management: lessons from UK financial services’, *Service Industries Journal*, Vol. 26, No. 1, pp.73–95.
- Leybourne, S.A. (2006b) ‘Managing change by abandoning planning and embracing improvisation’, *Journal of General Management*, Vol. 31, No. 3, pp.11–29.
- Leybourne, S.A. (2006c) ‘Improvisation within the project management of strategic change: some observations from UK financial services’, *Journal of Change Management*, Vol. 6, No. 4, pp.365–381.
- Leybourne, S.A. (2009) ‘Improvisation and agile project management: a merging of two ideals?’ *International Journal of Managing Projects in Business*, Vol. 2, No. 4, pp.519–535.
- Leybourne, S.A. (2010) ‘Improvisation as a way of dealing with ambiguity and complexity’, *Graziadio Business Report*, Vol. 13, No. 3. Available online at: <http://gbr.pepperdine.edu/2010/08/improvisation-as-a-way-of-dealing-with-ambiguity-and-complexity-3/>

- Leybourne, S.A. and Kennedy, M. (2015) 'Learning to improvise, or improvising to learn: knowledge generation in project environments', *Knowledge & Process Management*. Available online at: <http://dx.doi.org/10.1002/kpm.1457>
- Leybourne, S.A. and Sadler-Smith, E. (2006) 'Going-with-your-gut: the role of intuition and improvisation in project management', *International Journal of Project Management*, Vol. 24, No. 6, pp.483–492.
- McGrath, R.G. (2013) *The End of Competitive Advantage: How to keep your Strategy Moving as Fast as your Business* Boston, Harvard Business School Publishing, MA.
- McGrath, R. and MacMillan, I. (2009) 'How to rethink your business during uncertainty', *MIT Sloan Management Review*, Vol. 50, No. 3, pp.25–30.
- McPherson, G. (1994) 'Improvisation: past, present and future', *Proceedings of the 21st World Conference of the International Society for Music Education*, Tampa, Florida, pp.154–162.
- Martin, J. (1991) 'Play, reality and creativity', *Creative Management*, Sage Publications, London.
- Miner, A.S., Bassoff, P. and Moorman, C. (2001) 'Organizational improvisation and learning: a field study', *Administrative Science Quarterly*, Vol. 46, pp.304–337.
- Mintzberg, H. and Waters, J.A. (1985) 'Of strategies, deliberate and emergent', *Strategic Management Journal*, Vol. 6, No. 3, pp.257–272.
- Moorman, C. and Miner, A.S. (1998a) 'The convergence of planning and execution: improvisation in new product development', *Journal of Marketing*, Vol. 62, No. 3, pp.1–20.
- Moorman, C. and Miner, A.S. (1998b) 'Organizational improvisation and organizational memory', *Academy of Management Review*, Vol. 23, No. 4, pp.698–723.
- Montuori, A. (2003) 'The complexity of improvisation and the improvisation of complexity: social science, art and creativity', *Human Relations*, Vol. 56, No. 2, pp.237–255.
- Nijssen, M. and Paauwe, J. (2012) 'HRM in turbulent times: how to achieve organizational agility?' *International Journal of Human Resource Management*, Vol. 23, No. 16, pp.3315–3335.
- O'Reilly, III, C.A. and Tushman, M.L. (2004) 'The ambidextrous organization', *Harvard Business Review*, Vol. 82, No. 4, pp.74–81.
- Peters, T. and Waterman, Jr. R.H. (1982) *In Search of Excellence: Lessons from America's Best Run Companies*, Harper and Row, New York, NY.
- Plummer, M., Ross, D., Wight, D., Chagalucha, J., Mshana, G., Wamoyi, J., Todd, J., Anemona, A., Moshia, F., Obasi, A. and Hayes, R. (2004) "'A Bit More Truthful": the validity of adolescent sexual behaviour data collected in rural Northern Tanzania using five methods', *Sexually Transmitted Infections*, Vol. 80, No. 2, pp.49–56.
- Radjou, N., Prabhu, J. and Ahuja, S. (2012) *Jugaad Innovation: Think frugal, Be Flexible, Generate Breakthrough Growth*, Jossey-Bass/Wiley, San Francisco, CA.
- Rao, M.S. (2013) 'Smart leadership blends hard and soft skills: ... and emphasizes the importance of continuous learning', *Human Resource Management International Digest*, Vol. 21, No. 4, pp.38–40.
- Senge, P.M. (1990) *The Fifth Discipline: The Art and Practice of the Learning Organization*, Doubleday/Currency, New York, NY.
- Smith, G.D. and Gillett, A. (2015) 'Creativities, innovation and networks in garage punk rock: a case study of the Eruptors', *Artivate: a journal of entrepreneurship in the arts*, Vol. 4, No. 1, pp.9–24.
- Suzuki, L.A., Ahluwalia, M.K., Arora, A.K. and Mattis, J.S. (2007) 'The pond you fish in determines the fish you catch: exploring strategies for qualitative data collection', *The Counseling Psychologist*, Vol. 35, No. 2, pp.295–327.
- Tushman, M.L. and O'Reilly, III, C.A. (1996) 'Ambidextrous organizations: managing evolutionary and revolutionary change', *California Management Review*, Vol. 38, No. 4, pp.8–30.

- Vera, D. and Crossan, M. (2004) ‘Theatrical improvisation: lessons for organizations’, *Organization Studies*, Vol. 25, No. 5, pp.727–749.
- Warren, D. (2003) ‘Constructive and destructive deviance in organizations’, *Academy of Management Review*, Vol. 28, pp.622–632.
- Weick, K.E. (1979) *The Social Psychology of Organizing*, 2nd ed., Addison-Wesley Publishing Company, Reading, MA.
- Weick, K.E. and Sutcliffe, K. M. (2007) *Managing the Unexpected: Resilient Performance in an Age of Uncertainty*, Jossey-Bass, San Francisco.
- Winby, S. and Worley, C.G. (2014) ‘Management processes for agility, speed, and innovation’, *Organizational Dynamics*, Vol. 43, pp.225–234.