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Theatrical Improvisation: Lessons for Organizations

Dusya Vera and Mary Crossan

Abstract

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Mary Crossan University of Western Ontario, Canada This article uses the improvisational theatre metaphor to examine the performance implications of improvisational processes in firms. We recognize similarities and differences between the concepts of performance and success in both theatre and organizations, and extract three main lessons from improvisational theatre that can be applied to organizational improvisation. In the first lesson, we start by recognizing the equivocal and unpredictable nature of improvisation. The second lesson emphasizes that good improvisational theatre arises because its main focus, in contrast to the focus of firms, is more on the process of improvising and less on the outcomes of improvisation. Lastly, in the third lesson, we look at the theatre techniques of 'agreement', 'awareness', 'use of ready-mades', and 'collaboration', and translate them into concepts that are relevant for organizations in developing an improvisational capability.

Keywords: theatre metaphor, improvisational theatre, organizational improvisation, performance, creativity, spontaneity

In the past decade, improvisation has gained recognition as a strategic competence that supports 21st-century firms' requirements for change, adaptability, responsiveness to the environment, loose boundaries, and minimal hierarchy (Hatch 1998). Weick (2001b) describes improvisation as a just-in-time strategy and asserts that 'the new-found urgency in organizational studies to understand improvisation and learning is symptomatic of growing societal concerns about how to cope with discontinuity, multiple commitments, interruptions, and transient purposes that dissolve without warning' (Weick 1998b: 551). In addition, Brown and Eisenhardt (1998) include improvisation in their 'competing-on-the-edge' model of strategy. They assert that, in any firm and industry for which change is the critical strategic challenge, 'improvisation is what enables managers to continuously and creatively adjust to change and to consistently move products and services out the door' (Brown and Eisenhardt 1998: 33).

While managers' interest in improvisation has been increasing (as indicated by the growing number of improvisation training programs available to firms), research on this phenomenon is in its early stages of development. The body of knowledge on improvisation is still fragmented, and conceptual

Organization Studies 25(5): 727–749 ISSN 0170–8406 Copyright © 2004 SAGE Publications (London, Thousand Oaks, CA & New Delhi) frameworks and empirical studies are scarce. Research to date has focused on increasing awareness about the prominence of improvisation in business (for example, Hatch 1998; Moorman and Miner 1998a; Weick 1998b), yet no agreement has been achieved about a common conceptualization of improvisation. In the current literature, there is confusion about what improvisation is (description) and what it takes to do it well (prescription). Current debates are centered on the improvisation—performance link (for example, Cunha et al. 1999; Miner et al. 2001; Moorman and Miner 1998a), but divergent points of view exist about the benefits and dangers of improvisation in business. Consequently, there is a need for research that clearly identifies what improvisation is and how it relates to performance.

To contribute to theory on improvisation, we build on the insights from improvisational theatre in order to shed light on the performance implications of improvisation in organizational settings. There is a long tradition of research exploring the relationships between theatre and organizations, but there has been limited focus on the link between improvisational theatre and business settings. Some exceptions are Crossan et al. (1996) and Crossan (1998), who propose that, although there are similarities between traditional theatre and organizations (for example, a corporate strategy (the script), a CEO that supervises strategy implementation (the director), and employees with established functions (the actors)), firms may need to become more similar to improvisational theatre if they want to be responsive and innovative. In contrast, a great amount of improvisation research has used jazz as its foundation (for example, the 1998 *Organization Science* special issue on jazz improvisation).

In this article, we focus on the improvisational theatre metaphor because we recognize in it an important benefit for organizational theory and practice: its transparence. The value-added of theatrical improvisation over jazz improvisation is its accessibility, transferability, and universality. The theatre metaphor is transparent and accessible because the elements upon which actors improvise are the same ones available to individuals in their day-today lives. While in order to understand jazz we need specialized musical knowledge (for example, concepts such as head, chords, melody, tones, and tempo), theatre improvisation is based on speech, gestures, and movement, which are the materials of everyday interaction (Lawrence 2000). As in improvisational theatre, our everyday conversations are, in many ways, improvised. The advantage of the theatre metaphor over the jazz one is that, because its raw materials are words instead of musical notes, people in organizations may relate to it better, which contributes to the ability to learn and transfer the skill. Furthermore, while jazz is rooted in specific cultural traditions, theatre is a universal and timeless phenomenon. Theatre mirrors human society and blurs the distinction between role-play and reality (Frost and Yarrow 1990). Theatre interprets real life. As in improvisational theatre, the scenes of our lives are, to a great extent, improvised (Sawyer 2000b). Furthermore, while theatre interprets the different social systems and acts as a force within them which changes their shape, improvisation has often changed the shape of theatre and may be the force behind adaptation and evolution in all human relations (Frost and Yarrow 1990). We take advantage of the accessibility and transferability that theatre brings to the table to shed new light on the phenomenon of organizational improvisation.

The research question we seek to answer is: What can organizations learn from theatrical improvisation? We build on the special characteristics of the improvisational theatre metaphor to examine the similarities and differences between theatre performance and organizational performance. We seek to contribute to the improvisation field by studying the principles and techniques that determine successful improvisational performances in theatre and by extracting lessons that apply to the context of business. We suggest that the previous use of art metaphors as a means to understand improvisation in firms has tended to highlight the positive side of improvisation as aesthetic and innovative, but has not examined the associated challenges of successful improvisation. An important managerial implication from our use of the theatre metaphor is that it is necessary to recognize improvisation as not inherently good or bad. Thus, the critical issue for managers interested in developing skills that help their firms to become more adaptable and nimble is to understand not only what improvisation is, but what makes it work.

We begin by conceptualizing improvisational theatre and organizational improvisation. Then, we discuss three main lessons from improvisational theatre performances that apply to the performance of improvisation in organizations. Lastly, conclusions and implications are discussed.

From Improvisational Theatre to Organizational Improvisation

The concept of improvisational theatre is frequently associated with an ensemble of actors accepting suggestions from the audience and creating a scene onstage without any script. Nevertheless, the relationship between improvisation and theatre goes beyond this particular type of performance. Indeed, improvisation plays multiple roles in theatre. It is a basic rehearsal and training device, and also a tool for play writing. Frost and Yarrow suggest that acting and improvising are closely intertwined, and that improvisation is part of all theatre performances:

'Improvisation is fundamental to all drama. All performance uses the body of the actor, giving space and form to an idea, situation, character or text in the moment of creation. It does not matter that the play has been rehearsed for a month, with every move, every nuance of speech learned and practiced. In the act of performance the actor becomes an improviser. The audience laughs, and he times the next line differently. He hears the lines of his fellow performers as if for the first time, each time, and responds to them, for the first time. He keeps within the learned framework of the play; he does not make up new lines, or alter the play's outcome in any drastic way. Yet, the actor improvises; and the relationship between formal "acting" and "improvising" is so intricate that we might say that each *includes* the other. Improvisation is a part of the nature of acting, certainly. But, more importantly, acting is only one part of the creative process of improvising.' (Frost and Yarrow 1990: 1)

The presence of improvisation in all drama is consistent with the presence of improvisation in organizations. Organizational improvisation is not only about crisis circumstances in which work teams face an unplanned event and use improvisation as their last resource. Although managers tend to dislike surprises and prefer routinization and control (Weick 1998a), improvisation is more common in organizations than scholars and managers may think. Barrett explains:

'Managers often attempt to create the impression that improvisation does not happen in organizations, that tightly designed control systems minimize unnecessary idiosyncratic actions and deviations from formal plans. People in organizations are often jumping into action without clear plans, making up reasons as they proceed, discovering new routes once action is initiated, proposing multiple interpretations, navigating through discrepancies, combining disparate and incomplete materials and then discovering what their original purpose was. To pretend that improvisation is not happening in organizations is to not understand the nature of improvisation.' (Barrett 1998: 617)

Improvisation is prevalent in both theatre and organizational life. However, not all activities are improvisational. Crossan and Sorrenti (1997) distinguish transactional stimulus response behavior from improvisational behavior, and explain that when individuals transact, they may be spontaneous by going into automatic pilot and simply repeating a routine action, but this does not include the process of creation that characterizes improvisation. Yet, there is potential for improvisation even in routine behavior and researchers have proposed that actions lie on a continuum of improvisation (Moorman and Miner 1998b; Preston 1991; Sawyer 2000b; Weick 1998a). One extreme of the continuum would be a theatre representation of a Shakespearian piece (more scripted than improvised), while the other extreme of the continuum would be a presentation of improvisational games (more improvised than scripted). Similarly, people in organizations improvise to incremental degrees when they come out with an adjustment to a standard operating procedure, while radical examples of improvisation can be found when firms deal with crisis events. There is a full spectrum of improvisation between those two extremes. In the next section, we further describe improvisational theatre, and build on the theatre experience to define organizational improvisation and its dimensions.

Defining Improvisational Theatre

Shamans, clowns, and mimes might have been the first professional improvisers (Frost and Yarrow 1990); however, the most direct ancestor of modern improvisational theatre (for example, Chicago-style improvisation) is the *commedia dell' arte*, which dates to the 16th century. Actors used no formal scripts and depicted stereotypical characters defined by masks. Performances were based on planned, simple scenarios and spontaneous dialogue and action (Foreman and Poulsen 2000). The characters represented by the masks developed through interaction with other players or the audience. Actors also

had standardized routines and rehearsed pieces they could fall back on. *Commedia dell' arte* dominated the European stage for 300 years (Frost and Yarrow 1990). After that, improvisation remained a part of the rehearsal and actor training processes, but the tradition of improvised play making tended to disappear. It was not until the 20th century that Viola Spolin's (1963) and Keith Johnstone's (1979) theatre games would lead to the creation of the first professional improvisational theatres. Spolin's theatre games were designed to teach children the craft of acting. They led to the development of the renowned improvisational troupe, Second City. Johnstone's improvisation competitions were designed to attract the average person to the world of theatre by combining elements of both theatre and sports. They led to the development of the Theatresports format, which spread all over the world.

Frost and Yarrow (1990: 1) provide a general definition of improvisation that applies to the various roles of improvisation as training tool, play-writing device, or actual onstage performance: 'The skill of using bodies, space, all human resources, to generate a coherent physical expression of an idea, a situation, a character (even, perhaps, a text); to do this spontaneously, in response to the immediate stimuli of one's environment, and to do it à *l'improviste*: as though taken by surprise, without preconceptions'. Discussing improvisation more in the context of theatre games, Viola Spolin defines improvisation by describing many of its characteristics:

'Playing the game; setting out to solve a problem with no preconception as to how you will do it; permitting everything in the environment (animate or inanimate) to work for you in solving a problem; it is not the scene, it is the way to the scene; a predominate function of the intuitive; playing the game brings opportunity to learn theater to a cross-section of people; "playing it by ear"; process as opposed to result; not ad-lib or "originality" or "making it up by yourself"; a form, if understood, possible to any age group; setting object in motion between players as in a game; solving of problems together; the ability to allow the acting problem to evolve the scene; a moment in the lives of people without needing a plot or story line for the communication; an art form; transformation; brings forth details and relationships as organic whole; living process'. (Spolin 1999: 361)

Seham (2001) effectively captures the many definitions of theatre improvisation when she states that improvisation is a mixture of 'making do' and 'letting go'. The 'making do' part emphasizes that improvisation is a creative process, while the 'letting go' part communicates that improvisation is a spontaneous process. In improvisational theatre, actors free themselves from socially accepted frames of reference and assumptions of expected behavior. This is not an easy task since, as Johnstone (1979: 77) argues, 'Most children can operate in a creative way until they're eleven or twelve, when suddenly they lose their spontaneity, and produce imitations of "adult art".' Improvisational theatre is about embracing the uncertain, trusting intuition, acting before thinking, adapting to circumstances, and working as a group in a process of creation. Improvisational actors are encouraged to focus on the

process and suspend judgment of the outcome. These characteristics of improvisation in theatre are also evident in improvisational processes in organizations, as we discuss next.

Defining Organizational Improvisation

As in theatre, improvisation in organizations is frequently performed in groups and between groups. Moorman and Miner (1998a: 4) suggest that organizational improvisation is collective and that it includes 'improvisation by groups, departments, or whole organizations'. There are multiple illustrations of emergent action that exemplify the occurrence of improvisation in organizational contexts. This is the case, for example, in Honda's motorcycle strategy (Pascale 1984) and NASA's response to the Apollo XIII crisis (Rerup 2001). But improvisational actions are not restricted to one-time events. Orlikowski (1996) describes how the slippages and improvisations of the everyday work of customer support specialists adopting a new technology facilitated the slow transformation of organizational practices. Orr (1990) also portrays how photocopier technicians improvise and make use of the limited information at hand when repairing machines. Improvisation has also been discussed as playing a role in the processes of strategic decision making (Eisenhardt 1997; Eisenhardt et al. 1997), organizational learning (Barrett 1998; Crossan and Sorrenti 1997; Miner et al. 2001), product development (Kamoche and Cunha 2001; Moorman and Miner 1998a), technology adoption and technology-based change (Orlikowski 2000; Orlikowski and Hofman 1997), and strategic adaptation and renewal (Brown and Eisenhardt 1997; Crossan and Hurst 2003).

While theatre improvisation is motivated by artistic and aesthetic purposes, improvisational actions in organizations are commonly initiated by conditions of time pressure, ambiguity, and uncertainty (Crossan et al. 2004; Weick 1993, 1998b). Time pressure refers to the scarcity of time. In many instances, groups face an unanticipated situation and have no plans or routines on which to rely. Failing to respond in the moment may result in a lost opportunity or the intensification of a problem (Crossan and Sorrenti 1997). If groups are unable to negotiate more time, the urgency of the situation may stimulate an improvisational response. This was the case in the Apollo XIII crisis, in which NASA scientists had very limited time to find a solution and bring the astronauts safely to earth (Rerup 2001). A different scenario is that created by ambiguity and uncertainty, which are associated with confusion and shocks (Weick 1995b). There is lack of understanding; individuals deal with too many or too few interpretations of a situation. Even if the time to plan was available, people may instead 'act their way into clearer identities by learning from retrospective interpretations of the improvisations necessary to handle discontinuous work assignments' (Weick 2001a: 177). Honda, for example, improvised its strategy to enter the US market while trying to make sense of the motorcycle industry and the unexpected demand for 50cc bikes (Pascale 1984).

In the context of business, improvisation has been defined as 'intuition guiding action in a spontaneous way' (Crossan and Sorrenti 1997: 156); 'the conception of action as it unfolds ... drawing on available material, cognitive, affective, and social resources' (Cunha et al. 1999: 302); 'the degree to which composition and execution converge in time' (Moorman and Miner 1998b: 698); or 'the casting around for a precedent or referent that will enable someone to deal with circumstances for which no script appears to be immediately at hand' (Mangham and Pye 1991: 41). These definitions emphasize aspects of improvisation such as intuition, action, limited resources, novelty, knowledge, spontaneity, and flexibility; however, individually, they focus on only a subset of the characteristics.

While descriptive definitions, as a whole, have resulted in an extensive list of adjectives related to improvisation, it is necessary to determine the essence of improvisation in order to motivate more cumulative work in the field. Consistent with the idea of theatre improvisation as 'making do' and 'letting go', we propose that creativity and spontaneity are the fundamental dimensions of improvisation encompassing other frequently mentioned aspects such as intuition, flexibility, and the use of materials at hand. We define improvisation as the spontaneous and creative process of attempting to achieve an objective in a new way. As a spontaneous process, improvisation is extemporaneous, unpremeditated, and unplanned. As a creative process, improvisation attempts to develop something new and useful to the situation, although it does not always achieve this. Also, as in theatre improvisation, the process of creation is critical in organizational improvisation and individuals let go the desire to judge the creative output prematurely. As a type of creative process, improvisation involves 'engaging in creative acts, regardless of whether the outcomes are novel, useful, or creative' (Drazin et al. 1999: 287). Lastly, our definition also highlights our interest in improvisation that is deliberate, not accidental. Intentional improvisation in organizations can be observed, for example, in a marketing team improvising in order to bring a product to market on time and in a shop-floor team improvising a new way of doing things in order to improve productivity. In these examples, teams knowingly engage in an extemporaneous process and try to achieve an objective in a new way — new, at least, to them.

We propose that improvisation can be modeled as a latent construct (Law et al. 1998) with two dimensions: spontaneity and creativity. Conceptually, one can think of a latent construct as a higher-order abstraction underlying its dimensions, in which each dimension defines a specific domain of content (Law et al. 1998). The first dimension (spontaneity) incorporates a time orientation to the improvisation construct and is of special interest when time is a scarce resource. Spontaneous processes are not planned or anticipated, but ad-libbed and automatic (according to the *Oxford English Dictionary*). Weick (1998b: 552) suggests that 'to do things spontaneously is to become more skilled at thinking on your feet'. There is a need to respond to situations in the spur of the moment, acting before planning, reacting in the moment rather than anticipating (Aram and Walochik 1996), or composing while executing (Moorman and Miner 1998a). The second dimension (creativity)

incorporates the search for novelty and usefulness in improvisational actions, but acknowledges that a creative process does not always lead to creative outcomes. The process view of creativity focuses on how groups 'attempt to orient themselves to, and take creative action in situations or events that are complex, ambiguous, and ill-defined' (Drazin et al. 1999: 287). Improvisation has been described as a creative process (Preston 1991) in which individuals are capable of transforming the direction and flow of events (Barrett 1998).

By defining improvisation in terms of its spontaneity and creativity dimensions, we also incorporate into the construct implicit aspects of improvisation, such as flexibility and intuition, which are closely aligned with spontaneity and creativity. Flexibility is a creative-thinking skill that enables individuals and groups to explore new cognitive pathways (Amabile 1998), and is defined as 'the ability to change or react' (Thomke 1997: 105). Intuition is also a creative-thinking skill (Cummings and Oldham 1997) and is closely associated with spontaneous behavior. One type of intuition, expert intuition (Behling and Eckel 1991), is the spontaneous application of knowledge. It represents 'analyses frozen into habit and into the capacity for rapid response through recognition' (Simon 1987: 63). Another type of intuition, entrepreneurial intuition (Behling and Eckel 1991), does not rely on in-depth experience, but rather on spontaneous creativity. It enables individuals to identify gaps (differences or exceptions to patterns) and to generate creative ideas to fill those gaps (Isenberg 1994). When improvising, individuals flexibly respond to new circumstances, make exceptions to rules (Aram and Walochik 1996), and make subconscious use of their intuition to generate solutions rapidly (Crossan and Sorrenti 1997).

In summary, we have discussed improvisational processes as an intrinsic part of both theatre and organizations, and have argued that the spontaneous ('letting go') and creative ('making do') essence of theatre improvisation is also present in organizational improvisation. We turn now to an analysis of the performance implications of improvisation, both in theatre and in firms.

Improvisation: Lessons for Successful Performance

The phenomenon of improvisation has radically opposite connotations for different people. Given the strong planning paradigm in western society, many see any attempt to deviate from the plan or to go without a plan as irresponsible and dangerous. In this sense, improvisation is seen, at best, as a late or satisfactory substitute for planning. Meanwhile, when improvisation is discussed in the context of the arts and innovation, it is frequently associated with enjoyment, originality, and other positive attributes. These polarized views can be clearly observed in the strategic management field. While a group of scholars emphasize the advantages of emergent processes that diverge from detailed advance planning before implementation (for example, Mintzberg 1994; Weick 1998b), there is a strong research tradition based on the belief that a lack of advance planning actually reduces the chances of a firm's success (for example, Ansoff 1965; Cooper and

Kleinschmidt 1987; Sinha 1990). On one side, improvisation has been proposed as an effective choice, particularly in situations when a firm faces turbulence requiring action in a time frame shorter than the regular planning cycle (Crossan and Sorrenti 1997; Eisenhardt and Tabrizi 1995; Moorman and Miner 1998a). On the other side, Lewin (1998) notes that improvisational activities are frequently described as an organizational dysfunction — an unintended outcome or an organizational design failure.

Given the passionate arguments provided by both sides of this debate, we find it is critical for the field to reconcile these polarized views about the value of improvisation. To address this point, we examine in this section the relationship between improvisation in business settings and the success or failure of improvisational theatre performances. In doing this, we recognize similarities and differences between the concepts of performance and success in both theatre and organizations. We take advantage of the transparency and accessibility of the theatre metaphor and extract three main lessons from theatrical improvisation for organizations, each of them building on and advancing the previous one. In the first lesson, we start by recognizing the equivocal nature of improvisation. The second lesson emphasizes that good improvisational theatre comes because its main focus, in contrast to the focus of firms, is more on the process of improvising and less on the outcomes of improvisation. Lastly, in the third lesson, we look at theatre techniques that help actors to improvise better, and we translate them into concepts that are relevant for firms in order to develop an improvisational capability.

Lesson 1: Improvisation Is Not Inherently Positive or Negative

Though audiences may attend improvisational theatre performances expecting to obtain aesthetic satisfaction from the experience, improvisers know that this satisfaction is not guaranteed. Frost and Yarrow (1990: 2) acknowledge the unpredictable essence of improvisational theatre when they describe that precise time when the scenes take shape on stage: 'As well as being the most exciting moment, this is also the most risky: what emerges may be miraculous or messy — or a panic retreat into habit or cliché.' Johnstone also describes this feeling:

'It's weird to wake up knowing you'll be onstage in twelve hours, and that there's absolutely nothing you can do to ensure success. All day you can feel some part of your mind gathering power, and with luck there'll be no interruption to the flow, actors and audience will completely understand each other, and the high feeling lasts for days. At other times you feel a coldness in everyone's eyes, and deserts of time seem to lie ahead of you. The actors don't seem to be able to see or hear properly any more—they feel so wretched that scene after scene is about vomiting. Even if the audience are pleased by the novelty, you feel you're swindling them. After a while a pattern is established in which each performance gets better and better until the audience is like a great beast rolling over to let you tickle it. Then hubris gets you, you lose your humility, you expect to be loved, and you turn into Sisyphus. All comedians know these feelings.' (Johnstone 1979: 27–28)

Acknowledging the unpredictable nature of improvisation is not a trivial task for management researchers with contradicting views about the benefits or dangers of improvisation. Thus, the first lesson organizations can learn from improvisational theatre is that improvisation, per se, is not good or bad. Just as improvisational theatre can be funny or boring, improvisation can help a firm to solve a problem or to escalate it. Organizations need to accept improvisation for what it is: a skill and a tool that complements planning efforts, but that, because of its creative and spontaneous nature, is not necessarily tied to success, the same way planning is not necessarily associated with success. What professional actors do to be better improvisers is to learn techniques, games, and principles that help them to focus in the moment and to embrace the moment of collective creation. Viola Spolin (1999) argues that acting can be taught to anybody if the teaching process is oriented toward making the theatre techniques so intuitive that they become the students' own. Chicago-style improvisation, for example, teaches actors to use and master a number of game structures to invent characters, relationships, and situations based on audience suggestions (Seham 2001). The expertise and teamwork skills developed through this training help improvisers to become better actors. Frost and Yarrow summarize this first lesson from theatre, which emphasizes the need to understand the equivocal nature of improvisation:

'The hardest thing to learn is that failure doesn't matter. It doesn't have to be brilliant every time — it can't be. What happens is what happens; is what you have created; is what you have to work with. What matters is to listen, to watch, to add to what is happening rather than subtract from it — and to avoid the reflex of trying to make it into something you think it *ought* to be, rather than letting it become what it *can* be.' (Frost and Yarrow 1990: 2–3)

This first lesson opens an array of possibilities for organizations. Instead of single-mindedly promoting spontaneous and creative behavior or, in contrast, punishing it, firms can focus on the 'when' and 'how' of improvising. Lessons two and three build on the initial one both by looking at basic theatre principles and techniques actors use to improvise better, and by applying them to business settings.

Lesson 2: Focus More on the Process, Less on the Outcome

One fundamental principle of improvisational theatre is the focus on process creativity rather than on product creativity. This principle differentiates improvisational theatre from other forms of art. Product creativity concerns activities resulting in tangible products (for example, paintings or sculptures) that remain after the creative act is complete (Sawyer 2000a). The period of creative work may be long, and the output of this work is the creative product that critics assess. In contrast, in improvisational theatre performances, the actors' collective creative process is the creative product, and the audience not only watches the creative process as it occurs, but also takes part in the creative process. There is no separation between product and output; the

process of creating the ephemeral public performance is the actual creative output (Sawyer 2000a).

Improvisational actors are encouraged to free themselves from fear of the unknown and the uncontrolled, to suspend judgment and let go, and to avoid being blocked by taboo, habit, or shyness, or by attempts to predict the scenes. The process of improvisation involves trial and error, and discovery. Frost and Yarrow (1990: 3) describe it as 'about failing and about not minding failure. It is about trying again, and about enjoying the process without straining to get a known result. It is about creation.' In addition, Sawyer (2000a) emphasizes that improvisational theatre is a balance between problem finding and problem solving. As part of the creative process, actors find a problem for themselves, spend some time solving the problem, and find a new problem during the solving of the last one. Though the ultimate goal of an improvisation ensemble may be the satisfaction of the audience or the commercial success of the shows, actors trust these goals will be achieved through careful attention to the creative process.

Whereas we have equated improvisational theatre performance with the spontaneous experience of actors and audience creating a show together, the word 'performance' has a very different meaning in organizations. Business performance includes both financial and operational performance (Venkatraman and Ramanujam 1986). Financial performance focuses on the fulfillment of the economic goals of the firm, while operational performance is captured by indicators such as market share, new product introduction, product quality, customer satisfaction, and marketing and manufacturing effectiveness. That is, the concept of firm performance is output oriented, not process oriented. The performance of a firm is judged in terms of the accomplishment of its goals. The process of attaining the goals is considered less important than the actual fact of attaining them. Negative examples of this preference are a sales team that meets its quotas by reducing customer service and a company that meets its performance expectations through unethical means.

The emphasis on performance as an output places great pressure on improvisational processes within organizations. Improvisation is by definition spontaneous and creative; thus, it is unpredictable. When facing an unexpected opportunity or problem, individuals and groups are less likely to rely on their improvisational skills if they know they will be evaluated by the product of their actions rather than by the process of attempting to take advantage of the opportunity or to solve the problem. Improvisational processes cannot be assessed by the same standards applied to creative outcomes. While creative outcomes are evaluated in terms of their novelty and appropriateness (the aesthetics of perfection), improvisation needs to be evaluated through the aesthetics of imperfection (Weick 1995a). This different set of standards takes into special consideration the raw materials at hand and the circumstances of the person when the improvisation happened. Weick (1995a: 190) describes judgments about improvisational processes with expressions such as 'Given what she started with, this isn't bad' and 'Given the opportunities and problems that she set up for herself, this is a

clever resolution.' In other words, while the outcome view of creativity is focused on perfection, the process of improvisation makes errors and imperfection a personal signature of involvement (Weick 1995a).

The second lesson that organizations can learn from improvisational theatre is that when improvising, they need to trust and master the rules of the process, not judge the outcome prematurely. The process needs to develop before assessing if the outcome or product meets the needs of the situation. Improvisation is not about doing one right thing (output view), but about continuously doing things right (process view). The process of improvisational theatre is based on rules such as mutual cooperation, agreement, spontaneity, comedy, and the unity of group-mind (Seham 2001). Because the output (the theatre performance) is important, actors focus on enjoying the creative process and building on these techniques. Similarly, individuals in organizations improvise with an objective in mind, which is important to them; in achieving their end, they cannot judge the outcome immediately, but focus on the rules of the process and let the process and product of creation intermingle.

This lesson is relevant, for example, in firms pursuing innovation. Innovation processes undertaken by research and development or marketing units frequently involve unexpected events and ambiguous assignments (Kamoche and Cunha 2001; Moorman and Miner 1998a). In theatre, one rule that helps actors to focus on the process rather than on the outcome is 'vesanding', which involves accepting the offers of others and building on them (Crossan 1998). The discovery of the Post-It Note by 3M is an organizational example of 'yes-anding'. A company researcher discovered the product's distinctive bonding agent accidentally while trying to develop its opposite a super-strong adhesive (Fry 1987). Although the resulting adhesive was not his original target, he took it to others within 3M and asked how they thought it might be used. Despite a lack of enthusiasm for his discovery, the rules of 3M allowed employees to make errors and to explore uncharted paths in the process of creating new products. A second 3M researcher 'yes-anded' the original idea and considered the application of the 'failed' adhesive in keeping pieces of scrap paper from falling out of his church choir book (Fry 1987). By accepting the original offer and building on it, the efforts of this researcher led, eventually, to the Post-It Notes we know today. 3M's goal of realizing 25 percent of its sales from products that did not exist five years previously is supported by a rule that allows researchers to spend up to 15 percent of their time on projects of their own choosing (Fry 1987). In many firms, individuals feel their actions are limited by the necessity to guarantee results. In contrast, 3M researchers are not obsessed with the development of new products, as the company trusts them to obtain results because they are expending effort in high-interest projects.

'Yes-anding' is just one of the many techniques or rules of improvisational theatre that enable actors to focus on the in-the-moment process of creation rather than on forcing a desired result. Firms wanting to develop an improvisational capability need to teach organizational members the rules of their process; that is, to define the principles and minimal constraints within which

individuals may free their creativity and spontaneity (Crossan and Hurst 2003; Kamoche and Cunha 2001).

Lesson 3: Agree, Be Aware, Draw on Ready-Mades, and Collaborate

We look now at the theatre techniques that actors use to improvise successfully. The first step, however, is to differentiate between success in theatre and in organizations. Success and quality in improvisational theatre involve the audience's enjoyment and satisfaction, the actors' sense of accomplishment and fun, the originality of the pieces, and the appropriate use of the resources at hand. In contrast, boring or plain improvisation generates disappointment and frustration in the audience and the troupe because it is obvious, ordinary, and predictable.

We see several parallels between the performance goals of improvisation in theatre and in business. In business, customers are like the audience. Improvisational processes can affect customer satisfaction when work teams deal with customers' requirements and handle unexpected problems or unreasonable requests (Barrett 1998). Employees are like the actors in theatre. Main characters tend to have more freedom to improvise than supporting actors do, since the latter help to provide a stable context for the action of the former. Similarly in firms, there are different latitudes for improvisation depending on the level of management of the employees. Because of the need to coordinate the actions of larger groups of people, the work of middle managers and firstline employees is often more constrained than that of top managers. In any case, individuals at any level in the firm may value the capability to take initiatives, and, consequently, the freedom to improvise when dealing with unanticipated events can influence employees' morale, commitment, selfconfidence, and satisfaction with their jobs (Barrett 1998). In addition to the satisfaction of the audience and the actors, improvisational theatre is about creating novel pieces. As we suggested in our example of the 3M researchers, improvisational processes can have an effect on the timing and originality of product or service innovations (Bastien and Hostager 1998; Edvardsson et al. 1995; Eisenhardt and Tabrizi 1995). Lastly, in improvisational theatre, actors make use of the resources at hand, such as space, time, and material objects in the scene. Similarly, improvisation can affect productivity by affecting the cost and timing of service and production operations (Moorman and Miner 1998a). Building on the similarities between the goals of theatre and of firms, we examine how the theatre principles of 'agree', 'be aware', 'draw on readymades', and 'collaborate' (Frost and Yarrow 1990; Johnstone 1979, 1999; Spolin 1999) can positively impact on organizational outcomes.

From Agreement to an Experimental Culture

The only unbreakable rule in improvisational theatre is that of agreement (Seham 2001). Agreement requires each improviser to accept, support, and

enhance the ideas expressed by the other performers on stage without denying a fellow player's reality (Seham 2001). Johnstone (1979: 99) argues that 'good improvisers seem telepathic; everything looks prearranged. This is because they accept all offers made.' In contrast, Johnstone finds that blocking the ideas of others is a form of aggression. Also, anything odd, which might be perceived as a mistake, should be justified and incorporated into the scene (Lawrence 2000); otherwise, the action would be interrupted and the piece would lose its internal consistency. Good actors do not judge contributions as mistakes, and they offer constructive responses to mishaps rather than destructive ones. They make the most of whatever is in front of them and move the action forward. The principle of agreement enables actors to feel safe taking risks and to stretch a little further than they have before (Crossan 1998).

Firms can develop an improvisational capability by incorporating the notion of agreement as a value of their organizational cultures. In this kind of culture, organizational members know they can take risks when coming out with something new because their improvisational efforts will be supported by others. As in theatre, successful improvisation in business needs a culture that is experimental and tolerant of some errors. A high level of experimentation represents a culture that promotes action as opposed to reflection as a way to understand and deal with reality (Cunha et al. 1999) and that defines boundaries within which experimentation can occur (Crossan et al. 2004). For Markides, these boundaries are the 'who-what-which' choices that leaders need to communicate, because 'only the establishment of clear parameters makes possible the granting of autonomy without fear of losing control' (Mintzberg and Markides 2000: 41).

An experimental culture not only promotes the use of improvisation skills by motivating individuals to risk the 'four Cs' (the desire to be competent, comfortable, consistent, and confident) (Claxton 1984; Crossan and Sorrenti 1997), but also provides them with the resources (for example, time, people, and money) that enable improvisational efforts to be successful. If not in the short term, several iterations of improvisation are likely to lead to positive outcomes in the medium and long term. For example, firms pursuing innovation accept the more than 90 percent failure rate as the price to be paid for the 10 percent that succeed and the learning associated with the failures (Craig and Hart 1992). They know that creative processes, like improvisation, are fraught with errors and are likely to yield unintended consequences. Thus, they provide individuals with the resources to support novel initiatives. When improvisation happens, an experimental culture promotes and supports competent mistakes — mistakes that come from novel ideas and not from flawed execution (Cunha et al. 1999). In contrast, if improvisation happens in a culture that is not experimental, it is likely to be blocked or aborted instead of supported, and mistakes coming from improvisation are likely to be punished instead of accepted and built upon.

From Awareness to Real-Time Information and Communication

A basic technique of improvisational theatre urges actors to 'be attentive to each other' (Johnstone 1979; Spolin 1999). When developing a common story in the moment, a lack of listening and communication leads to contradictory actions, conflict, and frustration of both the audience and the actors. Stories develop incrementally, as each actor adds something to the scene through statements and movements (Lawrence 2000). This requires individuals to give their full concentration and attention to the moment, rather than being preoccupied by what happened before or what could happen later (Crossan et al. 1996). Frost and Yarrow discuss the role of awareness and alertness in improvising:

'Because improvisation locates its effectiveness precisely in the moment of interchange between one word/action and the next, between one actor and his or her partner(s), and between actors and audience, it necessarily demands an active condition of all those who figure in the "receiver" role at any given instant.' (Frost and Yarrow 1990: 44–45)

Whereas in improvisational theatre the information or ideas exist within the group, businesses afford individuals the opportunity to draw on ideas and information beyond the immediate group. Thus, in order to perform quality improvisation, organizational members need to be attentive to their context at several levels (for example, the group, the firm, and the industry). The emphasis improvisational actors put on attentiveness and awareness is translated in organizations into the need for firms to have access to real-time information and communication. Real-time information is information about what is happening 'now', and can be formal and informal, internal and external (Brown and Eisenhardt 1998). When real-time information is available, communication is fluid and information flows are wide-ranging and focused both on operating information and on information coming from the environment (Brown and Eisenhardt 1998; Moorman and Miner 1998a).

An application of the theatre technique of awareness can be observed in Eisenhardt's (1997) studies about speed in strategic decision making. She proposes that executives who attend to real-time information develop their intuition, and that aided by intuition they can react quickly and accurately to the changing environment. Real-time information and communication facilitate the improvisation process by replacing the coordinating role of a plan and permitting groups to learn about the consequences of their actions as they improvise (Bastien and Hostager 1992; Crossan et al. 2004; Moorman and Miner 1998a). This immediate feedback is very useful, for example when improvising responses to customer requests. In contrast, when work teams improvise and real-time information and communication is not available, improvisational responses are likely to be uncoordinated and incoherent.

From Ready-Mades to Memory and Expertise

Improvisation does not mean that anything goes; improvisation always occurs within a structure and all improvisers draw on ready-mades (for example,

short motifs or clichés) as they create their novel performance (Sawyer 2000a). Actors build their improvisational skills through exercises and lessons learned from the successes and failures obtained in previous performances. As part of their training, actors learn to recognize intuitively what works and what does not work. The memory of the improvisational troupe, as a whole, stores information about scenes created in the past that actors can recombine in present improvisations. For example, groups such as Second City have planned sets that they know work, around which they build their spontaneous sets (Crossan 1998). In addition, when improvising, actors build on their individual knowledge and expertise in diverse fields. Good improvisers need context-specific knowledge in areas as diverse as politics, history, geography, religion, and music. They continuously expand their set of competences in order to take on a variety of roles (Crossan 1998). Players do not know the suggestions they will receive from the audience or from other actors; thus, the more expertise they develop in diverse fields of knowledge, the more options they will have when accepting a new role they have not played before.

Firms can learn from theatre by drawing on ready-mades while improvising. In business, ready-mades are translated into the notion of organizational memory: 'stored information from an organization's history that can be brought to bear on present decisions' (Walsh and Rivera 1991: 61). When individual and group knowledge and experiences are institutionalized, they are stored in the firm's systems, structure, strategy, culture, rules, and procedures (Crossan et al. 1999). In addition, the improvisers' general inventory of context-specific knowledge can be translated into the notion of expertise, which refers to domain-relevant and task-related skills that depend on innate cognitive abilities, innate perceptual skills, experience, and formal and informal education (Amabile 1996).

Memory impedes improvisation when individuals simply replicate past solutions. However, when improvisation is occurring, memory improves the quality of improvisational processes (Moorman and Miner 1998b). Because improvisation is commonly a response to a novel situation, it frequently arises from the creative recombination of previously successful routines (Moorman and Miner 1998a). Greater memory allows individuals to gain retrospective access to a greater range of resources upon which to improvise (Crossan et al. 2004; Moorman and Miner 1998b). A successful example of the use of ready-mades in organizations is the Honda case, in which managers improvised a new strategy to introduce 50cc bikes into the US market by recombining Honda's rich repertoire of marketing, sales, finance, and technical routines (Pascale 1984).

As in theatre, domain-relevant expertise also plays a positive role in improvisational processes in organizations. When discussing creative processes, Amabile (1996: 95) explains, 'If the domain-relevant skills are already sufficiently rich to afford an ample set of possible pathways to explore during task engagement, the reactivation of this already-stored set of information and algorithms may be almost instantaneous, occupying little real time.' High levels of expertise are associated with highly developed intuition. Experts no longer have to think consciously about action; they are able to recognize

patterns in a new situation, recombine their experiences, and know, spontaneously, what to do (Crossan et al. 1999). One example of the role of expertise is the Mann Gulch disaster (Weick 1993), in which it was the novel combination of previous knowledge that enabled one firefighter to improvise an escape and save his life.

From Collaboration to Teamwork

Theatre is an artistic group relationship demanding the talents and energy of many people (Spolin 1999). The success of improvisational theatre performances depends on healthy and close group relationships, because scenes evolve from the interdependent work of the improvisers. The performance that emerges is a truly collaborative creation, which cannot be understood by simply analyzing the members of the group individually (Sawyer 1999). Improvisational troupes have a structure of rules that are established principles of team conduct. For example, improvisational theatre has a radically egalitarian ethic: there is no group leader (Sawyer 1999). Actors learn to 'rotate leadership' and to 'share responsibility', which means that they take the lead at different times, depending on the needs of the situation, and that every member of the group is responsible for every other (Crossan et al. 1996). Tight interactions between actors lead to dialogs and scenes that flow naturally. Good improvisation is about negotiation among team members, setting each other up for success, and trusting and respecting others while enacting the ongoing scene (Johnstone 1979; Spolin 1999).

Healthy and close group relationships are not necessarily easy to develop in organizations, since competition, power, and status are often important factors affecting team dynamics. However, the principle of collaboration in improvisational theatre has important implications for cooperation and teamwork in work teams and, in particular, in self-managing teams, that is, teams that can self-regulate their behavior on relatively whole tasks (Cohen and Ledford 1994). Teamwork is important for organizational improvisation because what one person does is determined by what all others are doing. Collective improvisation is more than the sum of individual improvisations; it is the result of close interaction among members of a group. One classic example of the principle of collaboration is the Apollo XIII crisis (Rerup 2001). Collective improvisation by NASA engineers and the control room created interdependence among team members. The successful achievement of the goal depended on the participation of all improvisers. In contrast, the Mann Gulch disaster (Weick 1993) is an example in which one firefighter was able to improvise a solution to save his own life, even though the other firefighters in the team rejected his idea and died as a result. In this case, lack of trust and respectful interaction among team members led to dysfunctional group behaviors, a failed attempt at collective improvisation, and tragic performance outcomes.

Conclusions and Implications

We seek to contribute to management theory in three ways. First, by describing improvisation as an intrinsic part of theatre and organizations, we argue against negative preconceptions that position improvisation as an antithesis to strategic planning and as a process that needs to be abolished from organizational life. As discussed in this article, improvisation is not a process we can avoid; it is part of our life and the life of organizations.

Second, we offer a conceptualization of organizational improvisation that also argues against idealized views of improvisation, frequently influenced by art metaphors that have positioned improvisation as a magic cure for firms lacking innovation and adaptiveness. Our examination of improvisational theatre performances has enabled us to differentiate between the need to describe what improvisation is (a spontaneous and creative process) and the need to prescribe what it takes to do it well (factors such as domain-relevant expertise and close teamwork). As in theatre, improvisation in business is not necessarily linked to success or failure. Improvisation is a spontaneous process of creation; thus, its outcomes are unpredictable. Rather than trying to predict the outcomes of improvisation, it is necessary to learn the principles that help it to work.

Lastly, we have taken advantage of the accessibility and universality of the theatre metaphor to extract specific lessons from improvisational theatre that can help firms create a context supporting the improvisations of individuals and groups. These lessons suggest that improvisation can help or hurt organizational outcomes depending on certain factors. As in theatre, when firms are not obsessed with judging outcomes but focus on supporting processes, when they develop an experimental culture, when they make real-time information accessible to all, when they draw on past experiences and expertise, and when they create an environment of teamwork and trust, improvisation is likely to be successful. We encourage researchers to shift the discussion from overestimating or underestimating the role of improvisation in firms to detecting other factors associated with its success or failure (for example, leadership and self-efficacy).

This article also offers important managerial insights. First, as mentioned earlier, one advantage of theatrical improvisation over jazz improvisation is the transferability of the skill. Although spontaneous and creative behavior is sometimes related to personality, theatre improvisation shows that people can learn this skill through exercises and games. Thus, there are mechanisms to enhance firms' adaptability and responsiveness. Second, this article argues that it is the responsibility of managers to influence the success of improvisation by managing contextual factors nurturing improvisational processes.

A logical next step in this research agenda on the performance implications of improvisation is the operationalization and testing of the set of lessons we extracted from theatre. Efforts to measure improvisation and its effects are strongly needed to sharpen current theories. Researchers interested in quantitative work may find helpful our conceptualization of improvisation as

a multidimensional construct encompassing spontaneity and creativity. In addition, through efforts to operationalize the factors that enhance improvisation, their intangible characteristics will gain clarity. For example, by testing the role of culture and teamwork, we could learn more about what it takes to 'yes-and' and rotate leadership in organizational settings. Lastly, future research could build on theatrical improvisation, and the Theatresports format (Johnstone 1979) in particular, to examine how improvisation helps firms to compete with each other. As in theatre, firms may gain an advantage in the marketplace based on their ability to improvise better.

In conclusion, theatre improvisation holds significant promise for business. We have argued that its principal value-added over the more familiar jazz metaphor is its greater transparency, which translates into improved accessibility, transferability, and universality. Theatrical improvisation suggests that, if it is managed well, improvisation can lead to better performance. Furthermore, individuals and groups can develop the skills to manage improvisation better. In this regard, improvisation is not only a theory or a metaphor, but also a technique that enables firms to manage in more turbulent environments.

References

Amabile, Teresa M.

1996 *Creativity in context*. Boulder, CO: Westview Press.

Amabile, Teresa M.

1998 'How to kill creativity'. *Harvard Business Review* 76/5: 76–87.

Ansoff, H. Igor

1965 Corporate strategy: An analytic approach to business policy for growth and expansion.

New York: McGraw Hill.

Aram, John D., and Krista Walochik 1996 'Improvisation and the Spanish manager'. *International Studies of Management and Organization* 26/4: 73–89.

Barrett, Frank

1998 'Creativity and improvisation in jazz and organizations: Implications for organizational learning'.

Organization Science 9/5: 543–555.

Bastien, David T., and Todd J. Hostager 1992 'Cooperation as communicative accomplishment: A symbolic interaction analysis of an improvised jazz concert'. Communication Studies 43: 92–104. Bastien, David T., and Todd J. Hostager 1998 'Jazz as a process of organizational innovation'. *Communication Research* 15/5: 582–602.

Behling, Orlando, and Norman Eckel 1991 'Making sense out of intuition'. Academy of Management Executive 5/1: 46–54.

Brown, Shona L., and
Kathleen M. Eisenhardt
1997 'The art of continuous change:
Linking complexity theory and
time-paced evolution in relentlessly
shifting organizations'.

Administrative Science Quarterly
42/1: 1–34.

Brown, Shona L., and
Kathleen M. Eisenhardt

1998 Competing on the edge: Strategy as
structured chaos. Boston, MA:
Harvard Business School Press.

Claxton, Guy

1984 Live and learn: An introduction to the psychology of growth and change in everyday life. London: Harper and Row.

Cohen, Susan G., and Gerald E. Ledford Jr 1994 'The effectiveness of self-managing teams: A quasi-experiment'. *Human Relations* 47/1: 13–43. Cooper, Robert, and Elko Kleinschmidt 1987 'New products: What separates winners from losers'. *Journal of Product Innovation Management* 4: 169–184.

Craig, Angie, and Susan Hart 1992 'Where to now in new product development research?' European Journal of Marketing 26/11: 1–50.

Crossan, Mary

1998 'Improvisation in action'. Organization Science 9/5: 593–599.

Crossan, Mary, and David Hurst
2003 'Strategic renewal as improvisation:
Reconciling the tension between
exploration and exploitation'.
Working paper. University of
Western Ontario, Richard Ivey
Business School.

Crossan, Mary, and Marc Sorrenti 1997 'Making sense of improvisation' in Advances in strategic management, Vol. 14. J. Walsh and A. Huff (eds), 155–180. Greenwich, CT: JAI Press.

Crossan, Mary, Miguel Cunha, Joao Cunha, and Dusya Vera 2004 'Time and organizational improvisation'. Academy of Management Review, forthcoming.

Crossan, Mary, Henry Lane, and Roderick White

1999 'An organizational learning framework: From intuition to institution'. *Academy of Management Review* 24/3: 522–538.

Crossan, Mary, Henry Lane,
Roderick White, and Leo Klus
1996 'The improvising organization:
Where planning meets opportunity'.

Organizational Dynamics 24/4:
20–35.

Cummings, Ann, and Greg Oldham 1997 'Enhancing creativity: Managing work contexts for the high potential employee'. *California Management Review* 40/1: 22–38. Cunha, Miguel, Joao Cunha, and Ken Kamoche

1999 'Organizational improvisation: What, when, how, and why'. International Journal of Management 1/3: 299–341.

Drazin, Robert, Mary Ann Glynn, and Robert Kazanjian

1999 'Multilevel theorizing about creativity in organizations:
A sensemaking perspective'.

Academy of Management Review 24/2: 286–307.

Edvardsson, Bo, Lars Haglund, and Jan Mattsson

1995 'Analysis, planning, improvisation, and control in the development of new services'. *International Journal of Service Industrial Management* 6/2: 24–36.

Eisenhardt, Kathleen M.

1997 'Strategic decision making as improvisation' in *Strategic decisions*. V. Papadakis and P. Barwise (eds), 251–257. Norwell, MA: Kluwer.

Eisenhardt, Kathleen M., and Benham N. Tabrizi

1995 'Accelerating adaptive processes: Product innovation in the global computer industry'. *Administrative Science Quarterly* 40/1: 84–110.

Eisenhardt, Kathleen M., Jean L. Kahwajy, and L. J. Bourgeois III

1997 'Conflict and strategic choice'. California Management Review 39/2: 42–62.

Foreman, Kathleen, and John Poulsen
2000 'Transforming traditions:
Commedia dell'arte and masQuirx
(contemporary mask performance)'.

Canadian Theatre Review 104:
93–97.

Frost, Anthony, and Ralph Yarrow 1990 *Improvisation in drama*. New York: St. Martin's Press.

Fry, Art

1987 'The Post-It Note:
An intrapreneurial success'.

SAM Advanced Management
Journal 52: 4–9.

Hatch, Mary Jo

1998 'Jazz' as a metaphor for organizing in the 21st century'. *Organization Science* 9/5: 556–557.

Isenberg, Daniel

1994 'How senior managers think'. *Harvard Business Review* 62/6:
80–91.

Johnstone, Keith

1979 Impro: Improvisation and the theatre. New York: Theatre Arts Books.

Johnstone, Keith

1999 Impro for storytellers:
Theatresports and the art of making things happen. New York: Faber and Faber.

Kamoche, Ken, and Miguel Cunha 2001 'Minimal structures: From jazz improvisation to product innovation'. *Organization Studies* 22/5: 733–764.

Law, Kenneth, Chi-Sum Wong, and William Mobley

1998 'Toward a taxonomy of multidimensional constructs'.

Academy of Management Review 23/4: 741–755.

Lawrence, Katherine A.

2000 'Playing by the rules: A role for improvisation in groups'. Working paper. University of Michigan Business School.

Lewin, Arie Y.

1998 'Jazz improvisation as a metaphor for organization theory'.

Organization Science 9/5: 539.

Mangham, Iain L., and Annie Pye 1991 *The doing of managing*. Cambridge, MA: Basil Blackwell.

Miner, Anne, Paula Bassoff, and Christine Moorman

2001 'Organizational improvisation and learning: A field study'.

Administrative Science Quarterly 46: 304–337.

Mintzberg, Henry

1994 The rise and fall of strategic planning. New York: Free Press.

Mintzberg, Henry, and
Constantinos Markides
2000 'View from the top: Henry
Mintzberg on strategy and
management'. Academy of
Management Executive 14/3:
31–42.

Moorman, Christine, and Anne Miner 1998a 'The convergence of planning and execution: Improvisation in new product development'. *Journal of Marketing* 62/3: 1–20.

Moorman, Christine, and Anne Miner 1998b 'Organizational improvisation and organizational memory'. *Academy* of Management Review 23/4: 698–724.

Orlikowski, Wanda J.

1996 'Improvising organizational transformation over time: A situated change perspective'. *Information Systems Research* 7: 63–92.

Orlikowski, Wanda J.

2000 'Using technology and constituting structures: A practice lens for studying technology in organizations'. *Organization Science* 11/4: 404–428.

Orlikowski, Wanda J., and

J. Debra Hofman

1997 'An improvisational model of change management: The case of groupware technologies'. *Sloan Management Review*, winter: 11–21.

Orr, Julian E.

1990 'Sharing knowledge, celebrating identity: Community memory in a service culture' in *Collective remembering: Memory in society*. D. S. Middleton and D. Edwards (eds), 169–189. London: Sage.

Pascale, Richard T.

1984 'Perspectives on strategy: The real story behind Honda's success'.

California Management Review 26/3: 47–72.

Preston, A.

1991 'Improvising order' in *Organization* analysis and development.
I. L. Mangham (ed.), 81–102.
New York: Wiley.

Rerup, Claus

2001 "Houston, we have a problem":
Anticipation and improvisation as sources of organizational resilience'. Comportamiento Organizacional e Gestao 7/1: 27–44.

Sawyer, Keith

1999 'The emergence of creativity'. *Philosophical Psychology* 12/4: 447–469.

Sawyer, Keith

2000a 'Improvisation and the creative process: Dewey, Collingwood, and the aesthetics of spontaneity'.

Journal of Aesthetics and Art Criticism 58/2: 149–161.

Sawyer, Keith

2000b 'Improvisational cultures:
Collaborative emergence and creativity in improvisation'. *Mind, Culture and Activity* 7/2: 180–185.

Seham, Amy

2001 Whose improv is it anyway? Beyond Second City. Jackson: University Press of Mississippi.

Simon, Herbert

1987 'Making management decisions: The role of intuition and emotion'. Academy of Management Executive 1/1: 57–64.

Sinha, Deepak

1990 'The contribution of formal planning to decisions'. *Strategic Management Journal* 11: 479–491.

Spolin, Viola

1963 Improvisation for the theatre. Evanston, IL: Northwestern University Press.

Spolin, Viola

1999 Improvisation for the theatre:
A handbook of teaching and
directing techniques. Evanston,
IL: Northwestern University Press.

Thomke, Stefan

1997 'The role of flexibility in the development of new products: An empirical study'. *Research Policy* 26: 105–119.

Venkatraman, N., and Vasu Ramanujam 1986 'Measurement of business performance in strategy research: A comparison of approaches'. Academy of Management Review 11/4: 801–814.

Walsh, James P., and Gerardo Rivera 1991 'Organizational memory'. *Academy* of Management Review 16/1: 57-91

Weick, Karl E.

1993 'The collapse of sensemaking in organizations: The Mann Gulch disaster'. *Administrative Science Quarterly* 38/4: 628–652.

Weick, Karl E.

1995a 'Creativity and the aesthetics of imperfection' in *Creative action in organizations: Ivory tower visions and real world voices.* C. Ford and D. Giogia (eds), 187–192. Thousand Oaks, CA: Sage Publications.

Weick, Karl E.

1995b Sensemaking in organizations. Thousand Oaks, CA: Sage Publications.

Weick, Karl E.

1998a 'The attitude of wisdom:
Ambivalence as the optimal
compromise' in Organizational
wisdom and executive courage.
S. Srivastva and D. Cooperrider
(eds), 40–64. San Francisco,
CA: New Lexington Press.

Weick, Karl E.

1998b 'Improvisation as a mindset for organizational analysis'.

Organization Science 9/5: 543–555.

Weick, Karl E.

2001a *Making sense of the organization*. Malden, MA: Blackwell.

Weick, Karl E.

2001b 'Substitutes for strategy' in *Making* sense of the organization, 345–355. Malden, MA: Blackwell.

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