

IMPROV ED: CHANGING THOUGHTS ABOUT LEARNING

David Scott Ross

Department of Integrated Studies in Education

McGill University

Montreal, Canada

May, 2010

A thesis submitted to McGill University

in partial fulfillment of the requirements of the degree of

Doctor of Philosophy

© David Ross 2010

TABLE OF CONTENTS

Abstract	5
Résumé	6
Acknowledgements	8
Chapter I: Introduction	10
<i>Autobiographical Background</i>	11
<i>Standardization</i>	13
<i>Mis-education</i>	13
<i>Setting the Stage</i>	16
Chapter II: Philosophical and Anthropological Contexts	19
<i>Philosophical Grounds</i>	19
<i>Kairos</i>	21
<i>Phronesis</i>	22
<i>Pure time - Dureé</i>	25
<i>Improvisation and Twentieth-Century Philosophy of Science</i>	27
<i>Anthropological Contexts</i>	29
<i>Improvisation as a Model for Cultural Change</i>	31
<i>Anthropological Perspectives on Time</i>	33
<i>The Performative Turn</i>	38
<i>“Communitas”</i>	39
<i>Art and Performance Pedagogy</i>	42
Chapter III: The Process	44
<i>Creativity</i>	44
<i>Definitions for Creativity</i>	46
<i>Historical Understandings of Creativity</i>	47
<i>The Importance of the Imagination</i>	50
<i>Creativity in the Classroom</i>	55
<i>Play</i>	57
<i>How Serious is Play?</i>	59
<i>Play in Cognition</i>	61
<i>Negation</i>	63
<i>Metacognition</i>	64
<i>Play in Education</i>	65
<i>The Developmental Significance of Play</i>	68
<i>The Role of Play in the Work of Piaget</i>	68
<i>Vygotsky on Play</i>	70
<i>Cognitive Benefits</i>	71
<i>Semiotic Play</i>	72
<i>Life-long play and Moral Understandings</i>	73

<i>Improvisation</i>	76
<i>Definitions for Improvisation</i>	77
<i>Improvisation and Form</i>	79
<i>The Potential in Gaps</i>	82
<i>Autopoiesis – The Ongoing Creation of Self</i>	84
<i>Relation</i>	86
<i>Risk</i>	89
 Chapter IV: Improvisation in the Arts and Beyond	91
<i>African Drumming</i>	91
<i>Sociocultural Dimensions of West African Drumming</i>	92
<i>Improvisation in West African Ritual</i>	93
<i>Improvisation as a Way of Life</i>	94
<i>Improvisation on the Mbira</i>	96
<i>Participatory Structures in African Drumming and Jazz</i>	97
<i>Jazz</i>	100
<i>Improvisation in Western Classical Music</i>	101
<i>A Brief History of Jazz</i>	105
<i>Definitions</i>	109
<i>Features of Jazz</i>	111
<i>Bebop as a Model for Classroom Interaction</i>	117
<i>Teaching Jazz</i>	119
<i>Theatre</i>	122
<i>Theatre Theories and Methods of Directing</i>	123
<i>Theatre Improv</i>	127
<i>Improv Theatre Practice - Transformation and Self-knowledge</i>	129
<i>Educational Ties</i>	134
<i>Knowledge Management</i>	136
<i>Organizational Analysis</i>	137
<i>Jazz Organization</i>	138
<i>Minimal Information Design</i>	142
<i>Complementary Theoretical Perspectives</i>	143
 Chapter V: Educational Theories	145
<i>Learning Theories</i>	146
<i>Features of Constructivist Pedagogy</i>	146
<i>Constructivist Theories</i>	149
<i>Cognitive Development and Collaboration</i>	150
<i>Improvisation as “Learning by Doing”</i>	155
<i>“The Aims of Education”</i>	158
<i>Improvisation and the “Post-modern Curriculum”</i>	160
<i>Collaborative Learning and Situated Cognition</i>	161
<i>Legitimate Peripheral Participation</i>	162
<i>Mindfulness – A Mindset for Improvisational Learning</i>	168

<i>Aesthetic Theories</i>	174
<i>Perspectives on Art</i>	175
<i>Dewey on Aesthetics</i>	176
<i>Gadamer on Aesthetics</i>	178
<i>Eisner on Aesthetics</i>	179
<i>Democratic Theories</i>	186
<i>Jazz as a Site for Democratic Action</i>	187
<i>Freedom</i>	189
<i>Arendtian Philosophy</i>	193
<i>Improvisation as Emancipatory Praxis: “Theatre of the Oppressed”</i>	195
<i>Dialogue</i>	198
<i>Jazz and Language</i>	199
<i>Indeterminacy and the Asking of Questions</i>	202
 Chapter VI: Process Drama and the Enactment of Improvisation in the Classroom	206
<i>Process Drama</i>	207
<i>Process Drama and SLA</i>	212
<i>An Approach to Improvisation-Based Curricula</i> ...	215
<i>Features of an Improvisation-based Praxis</i>	216
<i>Applied Improvisation – Possible Problems and Correctives</i>	219
<i>Conclusion</i>	223
<i>A Reconceptualization of Roles</i>	229
<i>Changes in the Role of the Teacher</i>	230
<i>Changes in the Role of the Student</i>	230
<i>Changes in the Role of the Class</i>	231
<i>Suggestions for Future Research</i>	231
<i>Final Remarks</i>	233
 References	235

LIST OF TABLES

Table 1. Zack’s Hierarchy of Jazz Styles in Organizational Science	114
--	-----

Abstract

Improvisation has long been regarded an integral element of artistic work, but has received less attention for ways it may inform education and learning. This dissertation explores understandings central to improvisation, interrogates how they are embodied in music (Western classical music, jazz and African drumming) and theatrical practices, and uses them to problematize values in curricular design and modes of classroom instruction. Improvisation is presented as a means of confronting indeterminacy and negotiating change, concepts that are discussed first in philosophical and anthropological contexts. These theoretical frameworks serve to foreground notions of performance and agency, particularly as they are actualized in creativity and play. Jazz (as well as its adoption in Knowledge Management) and Process Drama are offered as practices that utilize open-ended, interactive structures to highlight creative collaboration. These artistic forms of engagement are shown to integrate features central to cognitive and social development, and should therefore be regarded as fundamental elements of educational praxis. It is argued that improvisation-based curricula display the following features: they foster learner creativity and aesthetic sensitivity, promote democratic interaction, and validate student subjectivities. These dynamics, which foreground dialogic encounter, are considered to be of particular importance in language arts. The applied use of improvisation in the classroom is shown to complement leading theories and pedagogical approaches in education, resonating strongly with situated cognition, constructivism and the works of Vygotsky, Dewey, and Lave and Wenger. Improvisation is proposed as a generative and transformative alternative to the reproductive and impersonal nature of standardized curricula.

Résumé

L'improvisation a été longtemps considérée un élément intégral de travail artistique, mais a suscité moins d'attention vis à vis les manières dont elle peut informer l'éducation et l'apprentissage. Cette dissertation explore la compréhension centrale à l'improvisation, interroge comment elle est incorporée dans la musique (musique classique, jazz occidentale et musique africaine au tambour) et dans les pratiques théâtrales, et emploie cette compréhension afin de problématiser des valeurs dans la conception du modèle curriculaire et dans les modes de l'instruction dans la salle de classe. L'improvisation est présentée afin de confronter l'indétermination et négocier du changement, ce sont des concepts qui sont discutés d'abord dans des contextes philosophiques et anthropologiques. Ces cadres théoriques servent accentuer les notions de l'exécution et du sujet créatifs qui s'actualise dans le jeu. Le jazz (aussi bien que son adoption dans la Gestion de la Connaissance) et le Drame de Processus sont offerts comme pratiques qui utilisent les structures ouvertes et interactives pour accentuer la collaboration créatrice. Ces formes artistiques d'engagement ont démontrés l'intégration des dispositifs centraux au développement cognitif et social, et devraient donc être considérées en tant qu'éléments fondamentaux de praxis éducatif. On a postulé que les programmes d'études bases sur improvisation montrent les dispositifs suivants: ils stimulent la créativité d'étudiant et la sensibilité esthétique, encourage l'interaction démocratique, et valident les subjectivités d'étudiant. Cette dynamique qui accentue le dialogue, est considérée d'importance particulière dans les arts de langue. L'utilisation de l'improvisation dans la salle de classe est complémentaire aux approches pédagogiques dans l'éducation, résonnant fortement avec la connaissance située, le constructivisme et les travaux de

Vygotsky, Dewey, et Lave et Wenger. On propose l'improvisation comme alternative générative et transformative à la nature reproductrice et impersonnelle des programmes d'études normalisés.

Acknowledgements

Thanks first to my academic guides in this exploration. I was privileged with a “dream team” of a committee, nurtured through this process by individuals of rare talent, with complementary skills that made their collaboration as a group even more effective. So, to Dr. Bronwen Low, Dr. Anthony Paré and Dr. Mela Sarker, individually and collectively, I sincerely thank you for your close reading and incisive critiques, as well as your support, interest and involvement. Thanks, too, to Dr. Teresa Strong-Wilson for her input on earlier drafts. I might have written a dissertation without you all, but it wouldn’t have been this one, and it would not have been near as good.

I’d like to thank other professors that kept my interest in education aflame: Dr. Bill Pinar, for his profound understanding of curricular studies and his interest in helping me make sense of it, Dr. William E. Doll, for his insatiable curiosity, gentle prodding, and everlasting optimism, and Dr. Denise Egéa-Kuehne, for urging me to deliver a paper on improvisation at an education conference. Again, this dissertation bears your imprints as well.

Finally, my nearest and dearest. Family and close friends were subjected to much of this book in half-baked form during the course of its creation. Their tolerance, indefatigability, and the good humor at my cryptic and random tangents have helped this work come into being. I would like to dedicate this first off to my parents, who, with mingled concern and curiosity, trusted I was mumbling about something ultimately worthwhile. I have come to understand that the indeterminacy that younger spirits rejoice in can be far less pleasurable to their parents – mine have navigated chaotic waters with me most admirably, and I am glad to have reached this momentary resting point with

them still on board. My wife Anamaria has also been a pillar of support, lashing herself to the mast with me and managing to steer at the same time. Thank you, Anamaria. We made it. To my family in Romania, Lumi and Tamara, the distance has not diminished your presence. Thank you for buoying us up, spiritually and materially.

Lastly, a word of thanks to two little boys – Ben (who is now a wise seven) and Max (who was born just as I was beginning this doctoral program) – your creativity and spirit of play permeates each of these pages.

ImprovEd: Changing Thoughts on Learning

Chapter I: Introduction

Intelligence is not a measure of how much we know how to do, but of how we behave when we don't know what to do. It has to do with our ability to think up questions and then to find ways to get useful answers. (*Teach Your Own*, by John Holt, 2003, p. 232)

In this work I will explore the use of improvisation, or “improv,” as an approach for fostering engagement in learning environments. Whereas the term “improvisation” is often used in a pejorative sense outside of musical or theatrical contexts, my goal is to show how the principles that guide improvisational practices are central to a holistic view of educational praxis, and how these principles promote an understanding of interactive processes which complements and augments content-based forms of pedagogical delivery.

Improvisation is defined in a variety of contradictory ways even within the fields in which it is practiced. In this dissertation I will: (a) problematize forms of participation and engagement afforded by pre-scripted curricular objectives, and, (by way of contrast), (b) detail the means by which improvisation-based structures heighten engagement, invite distinctive forms of cognitive, aesthetic and democratic participation, and grant greater access to student subjectivities. My research has been guided by the following questions: How do interdisciplinary perspectives on improvisation help us reframe issues such as collaboration, knowledge construction, and democratic participation? What alternative forms of engagement grow out of a consideration of improvisation as transformative process? What implications do improvisation-based forms of classroom interaction have

for assessment? How might classes be restructured to best integrate these understandings?

Autobiographical Background

These questions emerge out of previous interests in both my education-centered and artistic activities. The two experiences that contextualize this work most are: (1) my twenty-year occupation teaching English as a Second/Foreign Language (ESL/EFL), and (2) my largely untutored study of music. This work is intimately informed by my many years learning, playing, and teaching in these areas. I would like to briefly touch upon some of my departure points in linking these concerns to the current work.

How does one teach conversation? This is one of the questions that initially sparked my interest in improvisation, a question I often had reason to reflect upon as an English teacher in Japan. I believed that my undergraduate degree in linguistics would make me a more desirable candidate, but, in fact, Americans were being hired at that time primarily because they met one criterion: they spoke native English. Before meeting me, my students had already studied an average of six years of English in public school, and came to my class with both well-developed vocabularies and detailed understandings of English grammar. What they lacked was experience in responding verbally in real time, and I was to provide opportunities that unlocked the various elements they had memorized. As the teaching methods they had been exposed to in public school largely involved rote learning based on literary translation, the majority of students felt more comfortable repeating scripted dialogues than creating their own. As a result, they would often import phrases and sections whole, favoring grammatically correct forms over expressive ones. How was I to wean these students off their textbooks and help them feel

confident leaping into the unknown? How much of conversation can one script? This dissertation is informed by my struggles with this learning process and seeks to provide a coherent framework for the balancing act between language reproduction and unscripted, “free” conversation. My subsequent teaching experiences have emphasized the dialogic and collective aspects of all learning in light of this fundamental indeterminacy and its inherent risk.

A second strand that unifies this dissertation grows out of my efforts to learn music, an activity I have enjoyed for the last thirty years. Lacking in natural talent and largely unable to read musical notation, I have opted instead to learn by creating ear training exercises based upon structures and relations derived from jazz music theory. As a self-trained musician, I have held my efforts and music to standards that are not directly tied to any tradition, playing a great number of instruments with the goal of deeper understanding, not virtuosity. My explorations have led me through non-Western music systems, and the difficulties I have had in playing or composing in these styles (African, Indian, Indonesian) have raised questions of authenticity – What are the ethics of cultural adoption, decontextualization and deformation? How do structural constraints limit one to idiomatic forms of expression? More to the point, how much do you have to know to improvise? This is perhaps the central question of this dissertation: how might freedom in deciding and negotiating constraints increase learning, sensitivity and expressivity? The title for this dissertation reflects my belief that part of the answer lies in the creation of opportunities for learners to collaboratively explore their own subjectivities through improvisation – that education will thereby, in some sense, be improved.

Standardization

Before beginning my investigation of possibilities in improvisation-based curricula, I would like to situate the view of learning I am recommending by contrasting it with educational practices I find prevalent in the current U.S. public education system. In this work I will refer to it as the “standard” curriculum. “Standard” is defined in the *Oxford English Dictionary* (2009) as “12. (n). A definite level of excellence, attainment, wealth, or the like, or a definite degree of any quality, viewed as a prescribed object of endeavor or as the measure of what is adequate for some purpose.” It is unfortunate perhaps that this definition allows for both excellence and the merely adequate. The term “standardize” carries the sense “1. (v). To bring to a standard or uniform size, strength, form of construction, proportion of ingredients, or the like” (2009). I find that these senses do not describe learning in a satisfactory manner – excellence is not a matter of uniform strength, and we are mistaken if we simplistically believe knowledge to be reducible to quantities. More importantly, the use of the term “standard” suggests that these curricula are standardizing, that their enactment homogenizes student behavior and funnels responses to a desired, reproducible set of norms.

Mis-Education

Educational institutions, in which the understandings of self are justified by or to society, face the daunting task of relating the complexities of disciplinary thought in meaningful wholes across spectra of learning dispositions and subjectivities. This task is not only formidable but, when forced to conform to regimented standards of development, may well be unachievable. It is not the purpose of this paper to make light

of the sincere attempts of many well-intentioned educators to better the lot of their students. Instead, my aim in presenting the faulty (and admittedly stereotyped) version of current practices that follows is to underscore the areas in which I see these practices failing our students' interactive and expressive needs. I am not claiming that we need forsake criteria for assessment; rather, it is that some of our fundamental cognitive goals and aesthetic sensibilities are not easily defined or pigeonholed. These areas are more difficult to integrate into standardized "scope and sequence" models with pre-determined objectives, yet it is the indeterminacy that characterizes these areas that grants them their greatest vitality.

Many of the conclusions I draw about improvisation contrast sharply with the trends I find gathering momentum in public schools. My experiences teaching ESL in both elementary school secondary school, and university coincide with the current state of education described by Maxine Greene, in which:

teachers and administrators are helped to see themselves as functionaries in an instrumental system geared to turning out products, some (but not all) of which will meet standards of quality control. They still find schools infused with a management orientation, acceding to market measures; and they (seeing no alternatives) are wont to narrow and technicize the area of their concerns. (Greene, 1988, p. 13)

These market-driven expectations translate into a similar framing of student growth as a series of incremental steps toward definable goals mapped out in advance, severed from the actual needs and abilities of any "real" student.

Classroom behavior, individual experience and personality are considered of secondary importance, if at all, to the sequential logic of the pre-formed curriculum and its subsequent implementation. As Greene writes: "The dominant watchwords remain 'effectiveness,' 'proficiency,' 'efficiency,' and an ill-defined, one-dimensional

‘excellence’” (p. 12). Their subjective experiences marginalized, their intellectual and emotional responses valued insofar as they complement the set curriculum, “students are urged to attend to what is ‘given’ in the outside world – whether in the form of ‘high technology’ or the information presumably required for what is called ‘cultural literacy’” (p. 7). Representing knowledge to students in this fashion fosters “unreflective consumerism,” “a preoccupation with *having* more than *being*,” an orientation toward the material constraints of their lives as a “more an objective ‘reality,’ impervious to individual interpretation” (p. 7). Aesthetic sensibilities are similarly presented as a property of sets of facts and competencies about art:

Exploration in the domains of the arts is seldom allowed to disrupt or defamiliarize what is taken for granted as “natural” and “normal.” Instead, the arts are either linked entirely to the life of the senses or the emotions, or they are subsumed under rubrics like “literacy.” (p. 13)

Education reified as the reproduction of the “tried and true” desensitizes students to alternative forms of understanding, and minimizes opportunities for students to respond critically to diverse perspectives. Instead, students are compelled to provide answers that can be easily mapped out on computer bubble-sheets.

In *Time and the Soul* (2003), Jacob Needleman describes the loss of an unreflective stance toward the world:

In fact, almost everything that we call “progress” is actually measured by the degree to which it enables us to conduct ourselves without the need to bring thought into conscious relationship with moving or feeling. We measure progress by the automaticity by which we are enabled to conduct our lives. (Needleman, 2003, p. 140)

Dewey sees these conditions, where “growth is regarded as *having* an end, instead of *being* an end” (Dewey, 1966, p. 50, italics in original), as constituting mis-education, a problem that may be attributed to three causes:

first, failure to take account of the instinctive or native powers of the young; secondly, failure to develop initiative in coping with novel situations; thirdly, an undue emphasis upon drill and other devices which secure automatic skill at the expense of personal perception. (Dewey, 1966, p. 50)

Fully elaborated, technocratically determined goals and objectives defining the end-state of individual learning run counter to the innate capabilities of the child and conspire to arrest continued growth. “Standard” education values definable products at the expense of process, and is thereby unable to make life-long learning meaningful.

The present work positions itself in this straitened academic context, seeking more open-ended, indeterminate spaces for student engagement and discovery. It problematizes the implicit claims made by a curricular design that does not allow learners to actively direct their learning, and questions the value of a system that mutes dissent and discourages alternative paths to understanding. It is my contention that a curriculum incorporating improvisation validates the lived experiences of the participants, thereby countering some of the disempowering practices and beliefs sketched above.

Setting the stage

Chapters two and three of this dissertation offer frames for understanding temporal notions of social, cultural and individual change. The multiple perspectives I adopt – philosophical, anthropological, and psychological views of creativity and play – provide background contexts in which learning is embedded, and offer insight into the processes that characterize improvisation. Each of these views suggests that improvisation is a fundamental mode of interaction, one that describes human adaptability, innovation and sense-making when bringing our understandings into the future. Many of the cognitive abilities called upon when improvising are also engaged in

the exercise of our imaginations, especially in semiotic play. By directing attention to the creative aspects of our common thought processes, and looking at how these may be structured by balancing unscripted gaps with enabling constraints, improvisation is shown as a curricular frame that can enhance some of our most basic intellectual capacities.

In chapter four, I analyze improvisational practices as they occur in the arts – African drumming, jazz, and theatre – particularly as these arts organize improvisational skills in order to pass them on to future practitioners. Jazz and theatre in particular are central to this thesis' reformulation of classroom learning and engagement. Jazz uses under-determined structures as a vehicle for individual expression and group interaction, and as such, is a rich analogy for classroom collaboration. It acts as the guiding metaphor for this dissertation, one that not only exemplifies the theoretical principles presented here in a vital and dynamic art form, but also provides a framework for practical application in curriculum development. Process Drama, an alternative approach already represented in educational practice and literature, grounds understandings common to jazz in a method which practitioners may integrate with pre-existing curricular goals. I revisit this approach in the conclusion as one generative model for re-structuring classroom participation. Jazz, as a metaphor for adaptive, innovative behavior, has also been enthusiastically adopted by knowledge management theorists (Barrett, 1998; Weick, 1998; Zack, 2000), whose analyses have brought to light parallels between improvisation and organizational change that hold great promise for classroom interaction.

These first chapters set the stage for a discussion of educational theories in chapter five. These suggest that the dialogic environments fostered and co-created

through improvisation are compatible with a range of learning theories, and are most clearly evident in constructivist and situated cognition approaches. In particular, I focus upon the works of Dewey (1897, 1966, 1971, 1990, 2005, 2008), Whitehead (1929), Doll (1993, 2007), and Langer (1989, 1997), for insight into the processual nature of learning as a dynamic mode of interaction, exchange and transformation. Next, I look at the implications an improvisation-based approach has for two forms of understanding, aesthetic and democratic. First, I highlight the reflective, expressive, and deliberative processes in the arts, especially as they help us understand the learner's *autopoiesis*, or self-creation. I then move from the transformation of the individual to the political. The dynamic engagement implicit in democratic negotiation, and central to improvisation is of particular significance when framing an equitable approach to dialogic language use and second language learning in the classroom. The final chapter of this dissertation turns most specifically to classroom practices, suggesting some of what ImprovEd might look like at work. First, I describe how the perspectives on teaching and learning are given methodological form in Process Drama, which I present as a flexible method for structuring improvisation in the classroom, one that allows learners to creatively engage with the content in order to explore social and conceptual possibilities. Finally, I suggest features that could broadly characterize improvisation in educational contexts, concluding with a list of qualitative differences such an approach holds for participants and classroom dynamics.

Chapter II: Philosophical and Anthropological Contexts

Improvisation has long been seen as a means of confronting indeterminacy and negotiating change. In the first section of this chapter, I discuss ways in which philosophical and scientific thought has problematized our most basic understandings of time, change, and commonsense knowledge, and sought to adequately account for and respect the quotidian. The contextualized knowledge we regularly make use of is embedded into experience so thoroughly that it may be inexplicable as a logical set of rules. In the second section, I turn to concordant anthropological views, which present enactment in culture in similar terms, as improvisational performance of values and beliefs that are not often explicitly stated. I address the following questions: What understandings does a perspective of cultural change as improvisation afford? How might we reconceptualize the relations between agents, social structures and traditions?

Philosophical Grounds

Time is invention or it is nothing at all. (Bergson, 2005, p. 282)

The act of improvisation, as well as the rules and conventions players agree to when improvising, are difficult to explain in a steady state view of the world as presented by Parmenides. The philosophical bases for these forms of interaction problematize the functional utility and aesthetic dimensions of conceptual frameworks that postulate immutable objects or states of affairs. The practice of improvisation resonates more with Heraclitus' notion about the impossibility of stepping in the same river twice, as both river and person are constantly renewed. There are no twices. This section questions how improvisation, and the possibilities it offers as a mode of learning, can be situated in relation to our deeply held understandings of time.

I briefly present some of the philosophical positions on time that undergird this dissertation, with the primary focus upon two Greek perspectives: Isocrates's notion of *kairos*, or timeliness (Noel, 1999; Sipiora, 2002; Smith, J.E., 2002; Tsang, 2007), and Aristotle's notion of *phronesis*, or pragmatic knowledge (Stern, P., 1997; Eisner, 2002a; Cardwell, 2006). These two sources elaborate views of knowledge use and contextual understandings that contrast with linear and syllogistic types of reason, and emphasize ties between thought and contingency that resonate powerfully with improvisation. I continue by exploring Henri Bergson's (2005/1907) reflections on pure time, or *durée*, which he distinguishes from common understandings of time, from time that has been spatialized, extended and subdivided. As opposed to an interpretation of the world that is rendered quantitative, Bergson focuses instead upon our intuitive understanding of quality: "Pure duration might well be nothing but a succession of qualitative changes ... it would be pure heterogeneity" (2001, p. 104). Bergson's understanding of creativity as the force behind evolution flows from this conception of time as "duration," a view that is compatible with the creative growth and exploration central to improvisation. Accordingly, improvisation-based curricula offer a means to a more aware, direct apprehension of time, one that may deepen our understanding of becoming, change, and growth. I close with a look at the radical shift in scientific formulations of time that marked the beginning of the twentieth century, as this revolution, of which relativity may be seen as paradigmatic, presented an entirely new view of time and its relation to space. The theoretical centrality of indeterminacy in current scientific views is analogous to the emergent, processual nature of improvisation I offer.

Kairos

Improvisation involves more than an explication of subject matter, more than an analytical description of the subject's logical sequencing of constituent parts. We can clarify one of the key features of improvisation, its contextual embeddedness, by referring to two Greek terms for time, *chronos* and *kairos*. The Greeks saw these essentially different concepts of temporal progression as mutually interdependent. Smith (2002) describes *chronos* as "the fundamental conception of time as measure, the *quantity* of duration, the length of periodicity, the age of an object or artifact, and the rate of acceleration of bodies, whether on the earth or in the firmament beyond" (p. 47, italics in original). *Chronos* is the uniform time that was later assumed in Newtonian physics, the steady ticking of God's watch. The complementary view of time, *kairos*, "points to a *qualitative* character of time"; this is the perception that "something appropriately happens that cannot happen just at 'any time,' but only at *that* time, to a time that marks an opportunity which may not recur" (p. 47, italics in original). Smith (2002) suggests that: the *chronos* aspect [by itself] does not suffice for understanding either specifically historical interpretations or those processes of nature and human experience where the *chronos* aspect reaches certain *critical points* at which a qualitative character begins to emerge, and when the junctures of opportunity call for human ingenuity in apprehending when the time is "right" (p. 48, italics in original). Within an educational context, *kairos* is what educators like to call the "teachable moment," for it entails an awareness of an event's "significance and purpose and to the idea that there are constellations of events pregnant with a possibility (or possibilities) not to be met with at other times and under different circumstances" (p. 48). This begs the question: what else happens in school

besides “teachable moments”? Answer: the inexorable delivery of pre-scripted curricula (or disciplinary action resulting from deviations from the script).

Phillip Sipiora (2002) traces the usage of *kairos* from the Iliad to Hesiod’s *Works and Days*, in which it took on the sense of “‘due measure’ or ‘proper proportion’” (p. 2). Sipiora provides numerous examples to support the claim that “*kairos* was the cornerstone of rhetoric in the Golden Age of Greece” (p. 3). Isocrates (436-338 BC), a preeminent rhetorician in Attic Greece and contemporary of Plato, opposed the Sophist’s portrayal of rhetoric as a means for personal gain, and emphasized instead the need for expressive and conceptual clarity. His expanded notion of *kairos* conceived of rhetoric as appropriate action – mastery was not only a set of skills, but the ability to determine which skills to effectively employ at a given time (Tsang, 2007, p. 687). The Romans continued to embed an awareness of *kairos* in a rhetorical pedagogy that fostered the art of speaking extemporaneously. In the *Institutio Oratoria*, published at the end of the first century A.D. and called “a landmark in the history of Roman education,” (Gwynn, 1926, p. 242), the rhetorician Quintilian wrote: “But the richest fruit of all our study, and the most ample recompense for the extent of our labor, is the faculty of speaking extempore” (Murphy, 1987, p. 154), a skill one needed to cultivate, because “promptitude in speaking, which depends on activity of thought, can be retained only by exercise” (p. 154). The practice of verbal improvisation signals a “shift to discernment” (Noel, 1999, p. 280), or a “matching of actions to particular contexts” (p. 282), a concept that Aristotle develops in his work on *phronesis*.

Phronesis

Phronesis involves the wisdom to recognize and utilize knowledge appropriate to the unfolding context in which it is employed. This practical wisdom is to be distinguished from Aristotle's four other virtues of thought: *episteme* (true or certain knowledge), *techne* (technical expertise), *sophia* (theoretical wisdom) and *nous* ("the grasping of the unhypothetical beginning point") (Cardwell, 2006, p. 9). *Phronesis* was Aristotle's way of explaining common reasoning, what Cardwell describes as "embodied, reflective judgment arrived at through dialogue to link knowledge, virtue and reason" (p. 14). Clearly, not all thoughts and actions are formulated syllogistically; the individual is neither driven solely by logical, abstract truths nor by force of habit, for neither of these understandings of the world takes into account specific details and contexts. Our thought is often more closely tied to demands of the indeterminate present. As Eliot Eisner puts it:

Practical reasoning is deliberative, it takes into account local circumstances, it weighs tradeoffs, it is riddled with uncertainties, it depends upon judgment, profits from wisdom, addresses particulars, it deals with contingencies, is iterative and shifts aims in process when necessary. (Eisner, 2002a, p. 375)

Eisner sees *phronesis* as a fundamental aspect of aesthetic consciousness. I will look at this more closely later; for the moment it is worth noting that Eisner is not solely interested in the creation of works of art *per se*, but is concerned with artistry more generally, in teaching (and here I would add that these are basic sensitivities we hope to foster in students.) He writes: "Teaching profits from – no, requires at its best – artistry. Artistry requires sensibility, imagination, technique, and the ability to make judgments about the feel and significance of the particular" (p. 382).

It is this qualitative awareness of knowledge as tied to a particular context that marks *phronesis* as distinct from other forms of knowledge that allow for greater

abstraction. For Aristotle, the attention to the circumstances in which such knowledge was embedded carried ethical implications:

Phronesis is a kind of morally pervaded practical wisdom. It is acquired by a phronimos, a practically wise person, through experience. But experience takes time. Phronesis could not be taught like geometry. It did not submit to didactic procedures. (Eisner, 2002a, p. 381)

This form of knowledge was not simply declarative; it was seen as a constitutive element in the social encounter, one embedded in the social context and shaped by its unfolding. This raises an important question: “If phronesis cannot be taught explicitly, how is it secured? A part of the answer is through deliberation with others” (p. 382). Social constructivist theories, drawing upon Vygotsky’s work, may be said to derive from this same understanding, and it is the ground for the situated cognition perspectives I later introduce, especially in the apprenticeship relationships described by Lave and Wenger (1991).

Cardwell (2006) offers a description of phronesis that resonates with the dynamics I will argue are central to group improvisation: “experiential knowledge, developed through habitual practice over time, lodged in individual character and used to determine intentional action” (p. 28). Phronesis is a praxis that students may become more skillful in deploying, one gained through the conscious attempt to engage with the complex particulars, conceptual and moral, that characterize the negotiation and learning of practical knowledge.

I argue that improvisation is this very practice. If students perceive the contents of textbooks as concretized paths they must duly follow, they are likely to become less sensitive to the positionality of the authors and thereby less capable of seeing alternative perspectives. Critical thinking skills are obviously at odds with this kind of blind faith in

abstracted bits of knowledge; students must instead be helped to develop “the capacity for making sound judgments in varying circumstances, [and] must be keenly aware of that which is particular, contingent and fluctuating” (Stern, 1997). That is, they must recognize the central role interpretation plays in the construction and reification of knowledge, an understanding that is implicit in improvisation.

Pure Time - Dureé

Another philosopher whose thoughts on time inform this work is Henri Bergson, particularly as these ideas are set forth in his book *Creative Evolution*, first published in 1907. The emphasis that education places on quantifiable outcomes is profoundly at odds with self-knowledge and the direct, intuitive forms of apprehension that Bergson describes in terms of *dureé*, time that has not been spatially conceptualized (Roy, 2005). A direct apprehension of Time, as Bergson conceives of it, is problematic for learning theories that do not allow students to sense the flow of their learning in processual, developmental terms. This form of understanding requires a qualitatively different perspective. He writes:

In order to advance with the moving reality, you must replace yourself within it. Install yourself within change, and you will grasp itself and the successive states in which *it might* at any instant be immobilized. (Bergson, 2005, p. 253-254, italics in original)

The organic, evolutionary processes that direct life must be understood as a part of a greater unity, a worldview for which the “*theory of knowledge and theory of life* seem to us inseparable” (Bergson, 2005, p. xxii, italics in original). This is a perspective that Gregory Bateson (1979) also embraced, using the term the “pattern that connects,” a

relation that he saw as existing between the conscious and particulate aspects of the world.

Pete A.Y. Gunter, in the introduction to *Creative Evolution*, offers a summary of Bergson's philosophical agenda that captures the essential nature of improvisational practice: "evolution is, literally, creative: making itself almost experimentally on diverging branches, purposive insofar as it has a direction (toward greater flexibility, spontaneity, awareness), [and] purposeless in that its goals are not pre-established and have to be achieved in transit" (Gunter, in Bergson, 2005, p. xi). The task of Bergson's text is, he writes, "to introduce a real, dynamic temporality into the study of life" (in Bergson, 2005, p. ix).

Bergson was developing his philosophical notion of *durée* precisely at the time Einstein's theories of relativity were revolutionizing not only physics but commonsensical understandings of space and time as well. The idea that perception was relative to the observer in even these most fundamental terms was a serious blow to positivistic theories of knowledge, and precipitated a completely new reformulation of scientific suppositions previously considered axiomatic. Bergson (2005) saw an understanding of *durée* as concordant with these developments in science, stating, "*modern science must be defined pre-eminently by its aspiration to take time as an independent variable*" (p. 277, italics in original). As I show below, improvisation-based curricula reflect more recent notions of interdependence – time does not act simply as the backdrop for the content delivered in classrooms, but is one of the primary elements that constitutes its significance. I suggest that, in addition to the curricular frames of scope and sequence, we recognize the importance of *durée*.

Improvisation and Twentieth-Century Philosophy of Science

The dynamics inherent in improvisation resonate with conceptual frameworks and principles in current models of science. These views are commonplace across disciplines, and constitute a shift from the definition of isolatable “things” to a focus on relationships and interactions.

Steven Goldman (2004), a philosopher of science, technology and society, identifies six themes that are central to the scientific developments in the twentieth century: (1) relationships are increasingly perceived to be the ultimate reality, with natural phenomena seen as systems; (2) dynamism - accepting change as normal and not trying to reduce it to stasis, with a concomitant focus on non-equilibrium systems, which reveal nature to be self-organizing; (3) information as a feature of reality; (4) the emergence of complexity out of simplicity; (5) the recognition of subjectivity and objectivity as co-defining; and (6) science was increasingly seen as cross-disciplinary and collaborative ventures.

While artists and musicians were quick to adopt and interpret the alternative worldviews offered by science in the twentieth century, educational practice has by and large maintained a more conservative stance. The forms of engagement implicit in the improvisatory approach I am commending parallel the scientific moves mentioned above. Improvisation (1) foregrounds relationship, as it is integrally grounded in the context from which it grows; (2) improvisation eschews the security of stasis for flux, in which emergent phenomena are shaped and organized; (3) it is constructed via the dialogic exchange of information; (4) it yields high degrees of complexity derived from minimal, simple constraints; (5) it recognizes the interdependent mutability of both performer and

content; and (6) improvisation involves a collective exploration of borders and conventional assumptions.

Philosopher Stephen Toulmin (1990) describes four changes in mind that signaled the shift to Modernity in the Enlightenment, each of which has had far-reaching effects in our orientation toward knowledge and education. He writes:

[F]or Descartes and his successors, timely questions were no concern of philosophy: instead their concern was to bring to light permanent structures underlying all the changeable phenomena of Nature (...) These four changes of mind – from the oral to written, local to general, particular to universal, timely to timeless – were distinct; but, taken in a historical context, they had much in common, and their joint outcome exceeded what any of them would have produced by itself. All of them reflected a historical shift from *practical* philosophy ... to a *theoretical* conception of philosophy (Toulmin, 1990, p. 34, italics in original)

Recent work in cognitive science reflects the impact these shifts have had in the study of the human mind. Varela, Thompson and Rosch (1999) seek to bridge the Cartesian gap between cognition and embodiment by drawing upon Buddhist philosophy, which sees reflection as a basic aspect of experience. The theory of enactivism they articulate offers a holistic understanding of embodied cognition, one that is “not the representation of a pre-given world by a pre-given mind but is rather the enactment of a world and a mind on the basis of a history of the variety of actions that being in the world performs” (p. 9). Such a view shares much common ground with constructivism and situated cognition, and will be discussed at length in educational contexts. The enactive perspective regards commonsense knowledge, or *phronesis*, as “difficult, perhaps impossible, to package into explicit, propositional knowledge,” a form of understanding which seem to be more a matter of “knowing how” rather than “knowing that” (p. 148). We gain this knowledge by reflecting upon accumulated experience instead of referring

to abstract rules. Varela, Thompson and Rosch claim that in order to account for such commonsense knowledge, “we must invert the representationist attitude by treating context-dependent know-how not as a residual artifact that can be progressively eliminated by the discovery of more sophisticated rules but as, in fact, the very essence of *creative cognition*” (p. 148, italics in original).

The aim of this dissertation is to explore the dynamics of “context-dependent know-how,” especially as it problematizes learning. The shifts described by Toulmin above are of particular significance in educational contexts, as they have contributed to imbalances that insufficiently contextualize learning in student experience and limit practical problem solving. Improvisation may be seen as a collaborative framework that addresses these imbalances. One of the ways I hope to make this clear is by showing how improvisatory practices draw our attention to pre-Modernist understandings: the oral, local, particular and timely. The following section investigates culture as a context in which these understandings and forms of collaboration are embedded.

Anthropological Contexts

[H]umans do not, through their creative inventions, transform the world from without, but rather – belonging within it – play their part in the world’s creative transformation of itself. (Ingold, 2007, p. 53, italics in original)

An anthropological perspective on improvisation foregrounds the interconnectedness between individual minds and the world they collectively create, an orientation toward living eloquently articulated by Mary Catherine Bateson (1990, 1994, 2009). In this section, I look at the work of two theorists, Johannes Fabian (1983, 1990) and Walter T. Ong (1969, 2000/1988), whose works caution against the distancing effects

of anthropological scholarship that does not account for different orientations to time. I conclude with a look at what has been termed the *performative turn* in anthropology, which provides an expanded understanding of performance, one that reconceptualizes cultural activities previously considered as the creation of products in terms of the social significance of their performative elements. This is an emergent, processual view of culture that sees change resulting from the socially embedded performance of agency. Tim Ingold's claim (2007) that improvisation is a fundamental activity in cultural transformation offers a useful and comprehensible frame for reconceptualizing education.

Current anthropological perspectives on change are deeply at odds with the replication of fossilized knowledge in schools. This section enlarges the scope of my argument by looking at the institution of the school, teachers and students as socioculturally embedded. I will be considering the ways in which improvisation acts as a frame for transformation across these levels – cultural, institutional, social and for the individual. Situating the school within the larger context of cultural flux highlights the degree to which many methods of transmission adopted by schools—in an attempt to consolidate, distill, and streamline pre-determined fields of knowledge—fail to make use of the natural dynamism of social systems. Conservatism in schools often offers exposure to the “tried and true.” In this, it favors a finalized, limited view of knowledge over the process of trying. The more comprehensively criteria are offered, the more completely classroom activities may be scripted in advance. The paradox inherent in this is that the further in advance outcomes are predicated, the further removed they are from the lived experiences of students – and correspondingly removed from student comprehension. I claim that academic activity that does not acknowledge transformation is incompatible

with more collaborative forms of cultural creativity. As such, curricula that do not engage students in activities that problematize change limit possibilities for student growth and do not provide ample opportunity for the generation of new knowledge.

Improvisation as a Model for Cultural Change

Jerome Bruner's claim (1993) that "Improvisation is a cultural imperative" has been reflected in recent anthropological literature, which takes up improvisation as a theme. Recognizing that culture is both the reproduction of beliefs and practices, as well as the transformative performance of those structures, anthropologists have turned to improvisation as a model for cultural change. *Creativity and Cultural Improvisation*, edited by Tim Ingold and Elizabeth Hallam (2007), collects perspectives on tensions and opportunities involved in cultural adaptation and change. In the introduction, Ingold sums up the role of a socially embedded agent in dynamic terms that are comparable to that of a student:

far from being a strategic planner, aloof from the material world upon which its designs are inscribed, the mind is in practice a hotbed of tactical and relational improvisation. As it mingles with the world, the mind's creativity is inseparable from that of the total matrix of relations in which it is embedded and into which it extends, and whose unfolding is constitutive of the process of social life (Ingold & Hallam, 2007, p. 9)

While conservative forces in cultures seek to simplify and perpetuate given structures (often, it may be noted, to maintain power asymmetries), cultures are slowly transformed due to the complexity of relations and practices. Ingold uses an apt musical metaphor: "No repeating system in the living world can be perfect, and it is precisely because imperfections in the system call for continual correction that all repetition involves improvisation. That is why life is rhythmic rather than metronomic." (Ingold,

2007, p. 11, check source). Or, as Mark Twain is said to have put it, “History doesn’t repeat itself, but it rhymes.” Life is an emerging experience of variation and diversity. When cultural agents demand exact replication, they fail to recognize the implications this has for the vitality and viability of tolerance within their society. Anthropologist Mary Catherine Bateson believes these concerns may be addressed by re-framing learning, especially as it occurs outside settings considered educational. Bateson regards awareness of the improvisational nature of cultural change as not simply a matter of artistic appreciation, but as a mark of cultural integrity. Improvisation and imagination are necessary for coping with environmental change. She writes: “the rise of fundamentalism within any tradition is always a symptom of the unwillingness to try to sustain joint performances across disparate codes – or to put it differently, to live in ambiguity, a life that requires constant learning” (1994, p. 13). Education should help learners become more aware of the ways in which we confront change and encourage versatility, as they are “strengthened to meet uncertainty if they claim a history of improvisation and a habit of reflection” (p. 6). Echoing her father’s interests in play, Bateson reaches a conclusion that I will later elaborate upon: “living and learning are everywhere to be found on an improvisational base” (p. 9). This description of the generative and aesthetic dynamics of cultural creativity applies equally well to the classroom learning I present here: “life as improvisatory art, about the ways we combine familiar and unfamiliar components in response to new situations, following an underlying grammar and an evolving aesthetic” (Bateson, M. C., 1990, p. 3). This perspective entails an active, self-conscious use of the imagination, one that distinguishes cultural reproduction from creative cultural responses to multiplicity, indeterminacy and

ambiguity. As Hastrup (2007) notes: “imagination ... provides the link between action and history... [it] also makes the creative agent perceive that intention and consequence are not one and the same” (in Ingold & Hallam, p. 204). This increased experience of agency is one of the many facets of improvisatory practice, with obvious benefits for learners.

Anthropological perspectives on Time

An understanding of cultural change in improvisational terms entails a re-conceptualization of cultural acts and artifacts, one that sees the creation and consumption of cultural products as an ongoing interpretative process. The works of Walter S. Ong (1969, 2000) and Johannes Fabian (1983, 1990) help problematize cultural difference in ways that enrich a theoretical base for improvisation in the classroom. I first present Ong’s characterization of oral and literate cultures as a means to explore alternative forms of engagement. Here I emphasize the skills and social orientation of members in oral cultures as a ground for the dialogic immediacy of improvisational forms explained later. Next I look at Fabian’s understanding of time, and the ways in which anthropological practices (and, by extension, many forms of curricular implementation) alienate the participants they purportedly seek to represent. These views lead to a discussion of cultural participation as performance, a theoretical move that has been termed the “performative turn.”

Anthropology grapples with satisfactory forms of representation for the Other. The role Time plays in ethnographic representation has not always been considered by anthropologists to be problematic, however. Malinowski’s *Ethnographer* aimed to

represent the natives' own points of view, but was to analyze the culture in terms that were analyzable by the outsider, but these, however, were significantly beyond the own participant's ken:

The integration of all the details observed, the achievement of a sociological synthesis of all the various, relevant symptoms, is the task of the Ethnographer...the Ethnographer has to *construct* the picture of the big institution, very much as the physicist constructs his theory from the experimental data, which always have been within reach of everybody, but needed a consistent interpretation. (Malinowski, 2002/1922, p. 64)

The role of the ethnographer and the objectivity of participant observation have since come into question. The study of such abstracted cultural "facts" have yielded to understanding of "acts," which unfold in time.

One of the areas where representation in anthropology has been problematic is in the encounter between oral cultures and literary cultures. These ideas have been most carefully explored by Walter S. Ong, who traces the perceptual and cognitive structures of the peoples in non-literate cultures in his remarkable book, *Orality and Literacy* (2000). True oral cultures do not have a system of writing; as a result, their means of transmitting culture are in many ways diametrically opposed to the forms adopted by literary cultures. Ong has shown, however, that this marks only the most obvious of differences. His analysis probes deeper, into the cognitive processing of time and the resultant shapes language takes in these different settings. Of relevance to the present work is his characterization of sound – its transience and the ramifications this has for cultural exchange and collaboration. Improvisation, which foregrounds embodied interaction, maintains its connection to oral traditions.

For preliterate cultures, language has power, as does all sound, which signifies a presence. In "World as View and World as Event," Ong (1969) argues that, "the

dynamism inherent in all sound tends to be assimilated to the dynamism of the human being, an unpredictable and potentially dangerous dynamism because a human being is a free, unpredictable agent” (p. 638). He contrasts this way of being in the world with the disembodied capacities of written language, noting that a visual bias is deeply embedded metaphorically into our modern modes of thought. On the worldview of the preliterate peoples, he writes:

Their "world" is not so markedly something spread out before the eyes as a "view" but rather something dynamic and relatively unpredictable, an event-world rather than an object-world, highly personal, overtly polemic, fostering sound-oriented, traditionalist structures less interiorized and solipsistic than those of technologized man. (Ong, 1969, p. 634)

Ong suggests we question the degree to which our preponderance of visually based conceptions preempts our perceiving of the world differently. He argues that the cognitive skills concomitant with literacy have rendered the aural world as experienced by preliterate cultures to be incomprehensible, and that we are further limiting our experience by relying so heavily upon a single sense.

Ong seeks “to move from the concept of world sense to the concept of world-as-presence” (p. 646). In espousing the adoption of improvisational activities in the classroom, I am also placing a strong emphasis on verbal dialogue and negotiation. These forms of engagement, and the concomitant practice of oral skills, may in part redress an imbalance perpetuated in schools, a visual bias marked by the shift from orality to literacy.

Our society does not easily fall into either category of the oral/literate dichotomy. The predominance of oral forms in arts, such as “freestyling” in hip-hop culture, and those made possible by multi-media in the form of podcasts, are evidence of what Tricia

Rose (1994), following Ong (2000), calls "post-literate orality," or what Belgrad (1998, p. 193) calls "secondary orality." This "possibility of asserting the values of an oral culture within a culture already conditioned by writing" (Borgo, 2002, p. 179) offers new means of expressive and communicative forms of encounter that help to create a common, dialogic "now" for participants. Improvisation-based curricula build upon the interactive elements in these growing forms of media.

The notion of an oral/literate divide raises important questions about mutual intelligibility and (the impossibility of) common frames of reference. Ethnographers have distanced the peoples they have studied in another sense – they have, by considering cultures in developmental terms, removed them from their own lived time in favor of an abstracted notion of progress, one that, not surprisingly (as these views supported their own cultural standing), posits Western culture as the most advanced. This assumption, writes Johannes Fabian in his groundbreaking text *Time and the Other* (1983), has gone unquestioned since anthropology was recognized as a discipline, and was given greater explanatory force by Darwin's work (note Ong's use of the term "pre-literate"). An alternative understanding Fabian discusses is "coevalness," which connotes "a common, active 'occupation,' or sharing, of time" (p. 31). Simultaneity, especially in reflexive ethnography, cannot be assumed, because "for human communication to occur, coevalness has to be *created*. Communication is ultimately about shared Time" (p. 30-31, *italics in original*). Anthropology, however, more commonly reflects a "denial of coevalness ... a persistent and systematic tendency to place the referent(s) of anthropology in Time other than the present of the producer of anthropological discourse." (p. 31). Fabian's work in anthropology has much of the same flavor as

Bergson's work in philosophy. Both are sensitive to the constant (one is inclined to say omnipresent) influence of time as a feature shaping our perceptions and discourses.

Indeed, one way of considering coevalness may be as shared *durée*, the co-creation of a common time frame in which true dialogue is embedded.

The distancing effect Ong and Fabian describe may be seen as analogous to the temporal disparity caused by the use of pre-scripted materials, which comprise the chief means of transmitting and organizing school culture. Instead of denying coevalness, and perpetuating a learning culture in which students are distanced from both the texts and each others' attempts to interpret these materials, the collaborative, context-dependent process that constitutes improvisation frames participants as co-creators, and may foster engagement in which top-down, hegemonic class dynamics are minimized.

These anthropological perspectives question whether there is a practical limit to which dynamic flux can be captured in language, adequately expressed as a lexicon of static descriptors or operationalized as a series of rules. While analyses necessarily make use of more or less invariable terms for representing change, we must recognize their inability to capture the contingent aspects of enactive performance. Ingold and Hallam confront this elusiveness directly, stating, "Our claim is not just that life is unscripted, but more fundamentally, that it is unscriptable. Or to put it another way, it cannot be fully codified as the output of any system of rules and representations" (Ingold & Hallam, 2007, p. 12). Schools that disregard the context of student learning are therefore unable to impart knowledge, only information. Learning as presented in curricula that eschew interpretive dynamics in the negotiation of knowledge comes at a heavy price, as the absence of dialogue serves to reinforce power imbalances, thought that has been explored

by Paulo Freire (1993/1970). Improvisation-based curricula create a context for this negotiation by seeing knowledge as enacted in performance.

The Performative Turn

“If in post-structuralist thought ‘performance’ mounts a challenge to the hegemony of ‘text’, then improvised performance represents the epitome of that capacity.” (Frost & Yarrow, 2007, p. 194)

The previous section discussed the ways in which anthropology has problematized the representation of cultural activity and resultant products in time. Here I look at the ways in which performance has been theorized, as these understandings indirectly offer a possible critique of classroom behavior and interaction. The following section elaborates upon theories that take performance as a central dynamic in art, business and education and discusses the ways they are further characterized in improvisation. This provides the context for a look at the ways in which the elements I consider central to jazz are forged in performance.

“Performance” is a term that moves across a number of fields, and is considered of vital significance in each of the areas it has been adopted: in the arts, it is closely allied to the representation of piece and artist; in business, it connotes ability and effectiveness; in education, it betokens student achievement and potential for development. In common parlance, performance defines a key feature of a product, such as how a car performs on the road. The diverse uses of the term have led theorists to question the applicability of the concept of performance in different disciplines. According to Dwight Conquergood (1989), the *performative turn*, or theoretical analysis of culture as enactment, impacts upon our epistemology in a more basic sense, as “a counterpoint to logical positivism” (p.

83), a positivism embodied in fixed concepts and artifacts. Crease (1994) speaks of the bias inherent in such a positivistic view, one that echoes Ong's distinctions between oral and literate cultures:

According to an ancient philosophical tradition, the origin of meaning lies in obedience to order, rules, intelligibility, categories. In the grip of this deep seated ontological prejudice, we are led away from the primacy of performance to value the text, representation, notation over performance, and the actual performance can appear to be incidental and ornamental to the work itself; one may speak of the 'apparent superfluity of performance.' (Crease, 1994, p. 183-184)

Communitas

For anthropologist Victor Turner, performance is anything but superfluous. His work on ritual has been seen as a pivotal move that initiated a shift in anthropology towards analysis of performative aspects. The notion of individual agency creatively negotiating cultural change underlies Turner's concept of humankind as "*homo performans*, humanity as performer, a culture-inventing, social-performing, self-making and self-transforming creature" (Conquergood, 1991, p. 187). Turner saw collective performance as a means by which "a group or community seeks to portray, understand, and then act on itself. Essentially, public reflexivity takes the form of a performance" (Turner, 1979, p. 465). In *The Anthropology of Performance*, Turner (1986) describes this form of group reflection and engagement as "normative communitas," in which "individuals come together and devise rules for themselves" (p. 44).

Edith Turner (2004), Turner's wife and colleague, defines communitas as "a relational quality of full, unmediated communication, even communion, between people of definite and determinate identity, which arises spontaneously in all kinds of groups,

situations, and circumstances” (p. 97). The dynamics that characterize *communitas* she offers in the following description could equally well apply to improvisation:

Communitas liberates individuals from conformity to general norms. It is the fount and origin of the gift of togetherness, and thus of the gifts of organization, and therefore of all structures of social behavior, and at the same time it is the critique of structure that is overly law-bound. (p. 98)

Improvisation-based forms of engagement similarly welcome a diversity of participants into play that reinvents itself as it unfolds. As with *communitas*, the collaborative nature of improvisation “does not involve a withdrawal from multiplicity but eliminates divisiveness and realizes nonduality. *Communitas* strains toward universalism and openness” (p. 98). This view emphasizes relation and dialogue, on the insider perspectives one gains by being a co-participant.

The performative turn signals a shift from analytic frameworks that sever objectified facts from the fluid contexts that give them their meaning. “From structure, stasis, and stable pattern, ethnographers have turned their attention towards dynamic process, change, contingency, improvisation, performance, and struggle” (Conquergood, 1992, p. 83). Such generative, constructive views of performance reflect “the decentering lessons of ethnography” (p. 81), resulting in what Clifford Geertz (1988) describes as “the decline of faith in brute fact, set procedures, and unsituated knowledge” (p. 131). Performance as an interpretive frame reaffirms the co-creation of social encounters, and alters the method of the anthropologist, which may now be seen as an effort “to do ethnography *with*, not *of*” (Fabian, 1990, p. 43, italics in original). Theorizing encounters as joint performance may act as a corrective to alternative theories that implicitly support the objectification and colonization of participants.

Improvisation is an explanatory frame for understanding the indeterminacy basic to the unfolding of individual and cultural identities. Links between anthropology and improvisation have been critically made by, somewhat surprisingly, organization science theorists. In their article “Is Ethnography Jazz?” (2003), Humphreys, Brown and Hatch discuss ethnographers’ engagement as “a dual quest for self-identity and empathy that is improvised in ways resembling the musical ‘conversation’ between performing jazz musicians” (p. 5). Jazz improvisation offers insight into the way in which the use of a language is a means to creating an identity, of entering and contributing to a tradition. While part of my argument considers the improvisational nature of conversation and its applicability to Second Language Acquisition (SLA) contexts, improvisation offers a means of understanding the construction and representation of identity in many contexts. One such field is cultural studies, in which explorations of the interpretive role of the ethnographer may reveal less obvious facets to multiculturalism. Humphreys, Brown and Hatch (2003) speak of the fundamental importance of understanding ethnographic work as “a series of performance-conversations in which the identity of the ethnographer and the *other* are improvisationally co-authored via conversation” (p. 16, italics in original), a view in harmony with Fabian’s notion of coevalness. These theorists note that, while an improvisation-based perspective offers unique learning opportunities, the evaluation of such a process is complex. Assessment criteria must also be flexible, for “ephemerality implies that what is to be considered plausible, coherent, or realistic is relative and will change with developments in the field or with changes in, or of, those who are engaged in the process” (p. 18). As a social endeavor, assessment may, in fact, be based upon the ways in which those engaged are positively affected.

Similarly, if assessment is based on the quality of engagement, musical performances may be evaluated in terms of their ritual effectiveness. Small (1995), drawing upon the work of Charles Keil, argues that music should not be judged in isolation from the context in which it is performed. Performances signify an expressive pact between performer and listener, a form of fluid interaction that is better considered as a verb (“musiking”) than as a noun. Small offers criteria for evaluating performances that diverge from the forms of evaluation adopted in schools, in that they are essentially qualitative and social in nature: “Any performance should be judged on its success in affirming, exploring and celebrating those relationships which those taking part feel to be ideal” (Small, 1995). This approach implies a very different understanding of creativity as well, locating much of the dynamism in group interaction and the quality of participatory response. Instead of seeing music as a collection of cultural products, Small sees it as a dynamic site for *communitas*: “all musical events must ultimately be judged on their ritual efficacy, on the subtlety and comprehensiveness with which they empower those taking part to affirm, to explore and to celebrate their concepts of relationships” (Small, 1995). I see *communitas* as intimately tied to the collaborative perspectives discussed later, in the form of the situated learning and democratic participation that characterizes social engagement in improvisation.

Art and performance pedagogy

Art, as a form of expression common to all cultures, presents another means of ongoing revelation, in which new possibilities of the medium, the culture, and the artist are continually revealed. This sense of self-discovery pervades many forms of art,

rendering them not as individuated products as much as fluid performances. Ingold (1986) says of the ritual magic designs of Tamil Nadu called *kampi kolam*, that they “embod[y] the process of thinking rather than detached thought, a consciousness rather than a conception, life itself rather than a way of living” (p. 182). This perspective on art is well represented in Charles Garoian’s (1999) work on performance pedagogy, which brings out the educational, aesthetic, and political dimensions of work grounded in this understanding:

Contrary to pedagogies that distinguish and establish subjectivity in a dominant ethnocentric position, performance art pedagogy resists cultural conformity and domination by creating discourses and practices that are multicentric, participatory, indeterminate, interdisciplinary, reflexive, and intercultural. In doing so, performance art pedagogy is the praxis of postmodern theory. (Garoian, 1999, p. 10)

These shifts in anthropological perspectives, on cultural representation and its expression in music and art, indicate the degree to which performance has become an important frame for understanding the dynamic nature of these fields and their unfolding in time. This view of culture as performance underlies my view of improvisation as a means for understanding the social interaction in classroom learning. In chapter four, I discuss West African cultures for insight on the relationship between improvisatory drumming and ritual, with a specific focus on the dynamics common to both these musical and social understandings and the ways in which they foster participation. Cultures do not simply reproduce the forms that are granted ritual power; they participate in them in novel ways that shape the ritual according to specific contingencies and idiosyncrasies presented by the immediate context in which they are enacted. My discussion of improvisation springs from this assumption, namely that indeterminacy is a necessary condition for creativity, a point I pursue in the following section.

Chapter III: The Process

Improvisation is a transaction between participants, a process wherein knowledge is tinkered with, refined, and opened to possibility. The dynamic nature of ideas is perhaps nowhere more evident than in creative play. This chapter looks at the fluid qualities of cognition and social interaction in creative work and imaginative play and contrasts these forms of engagement with curricula that reproduce static ideas. I present improvisation as a useful frame for understanding transformative and developmental processes in learning and education.

Creativity

“Why, sometimes I’ve believed as many as six impossible things before breakfast.”— Lewis Carroll, *Alice’s Adventures in Wonderland & Through the Looking Glass*, (1981, p. 157)

Improvisation is essentially creative, a playing with the constraints offered by the immediate context to bring forth works that are novel and of aesthetic worth. Creativity itself, however, is a concept that has had various meanings over time, and these changing formulations represent shifts in notions of individual inspiration, potential and agency. These notions not only govern how we define creativity, but where we look for examples. Creativity studies have shifted focus over the past sixty years, and research has raised questions that remain highly contested: Is creativity an exceptional ability or is it a fundamental (and perhaps even defining) aspect of human cognition? What distinguishes superlative examples of creativity? Does “genius” differ in terms of intellectual quantity or quality? Is creativity a process or an inherent quality of a product? Can creativity be

fostered? If so, how? What environments are most conducive to creative action? Is creativity the province of an individual or is it the emergent quality of group interaction? How should these findings be integrated into curricula?

I will consider these issues in three main contexts, by looking at (1) the ways in which creativity has been problematized and the most influential theoretical models that have been derived; (2) aspects of creativity as evidenced by practitioners in the arts, especially as found in improvisation; and (3) ways that these dynamics may be enhanced in educational settings.

First I look at ways in which creativity has been framed, with a particular focus upon understandings that grow out of the Enlightenment, and then sketch out some of the lines of thought that direct expectations for creative thought in the classroom. Using these historical perspectives as reference points, I then trace a shift in focus in creativity studies, from analysis of the works of genius and individual forms of creativity to collaborative forms, seeking a robust model for class interaction. R. Keith Sawyer's work (1997, 2006), in which creativity is regarded as collective and emergent, supports claims that classroom engagement is amenable to approaches utilizing group improvisation. Sawyer (2000, 2001) argues for a shift in creativity research, one that accounts for the socially negotiated exchanges that characterize process creativity instead of the product creativity models prevalent in the literature. I then turn to the work of Greene (1995, 2001) and Madison (1988) to foreground the importance of the imagination in learning. This leads to a discussion of a key element in creativity enhancement in the classroom, the utilization of constraints to spur student learning. This framework for understanding creativity, elaborated upon by Stokes (2006, 2007), suggests that teachers can effectively

promote creativity by defining a minimum of judiciously selected constraints to provoke novel thought. Improvisation in many ways epitomizes the creative act, and an explication of creativity reveals many of the dynamics central to a study of improv.

Definitions for creativity

Creativity evades easy definition. As such, research findings are difficult to frame, highly contested and often considered inconclusive. Creativity enhancement techniques are likewise eyed with suspicion. I believe this is largely a result of a preponderance of attention directed to what has been termed “product creativity,” in which an end product is evaluated for its combination of novelty and usefulness. This perspective contrasts sharply with the evaluative concerns of “process creativity,” in which the forms of engagement, steps (and, of equal importance, missteps), negotiations and other means of interaction, and contextual adaptations are all formative elements in the creation of the piece. This broader and more inclusive focus places a greater value on the unfolding cognitive, aesthetic and expressive choices made as creators move a piece towards its realization – in the mixture of pigments on a palette, the pregnant pause in a telling of a story, in a held high note that catalyzes a rhythm section. In collaborative efforts, an appreciation for the work as “work in progress” reflects the complexity of the exchanges that incrementally determine the outcome. Improvisation problematizes a simple dichotomy between product and process, as it conflates the two – the working out is the work. The linguistic equivalent is the gerund, such as “singing,” which may act as both noun and verb. Improvisation lays bare the fluid, exploratory nature of creation, in which greater coherence and significance is sought for in each subsequent step.

Historical understandings of creativity

Creativity has long been thought of as divinely inspired, or as Plato believed in his use of the term *enthousiasmos*, as “divine madness” (Sawyer, 2006, p. 16). The Enlightenment view of individual creativity presented a sense of responsibility to the Muse:

The adjective ‘creative’, according to the Oxford English Dictionary, only entered conventional English usage in the seventeenth century. It did so alongside the development of particular conceptions of personhood which emphasized not only the idea of individual difference or ‘individuation’, but also a moral obligation to express that difference, and thus to ‘work on’ the self to realize individual distinctiveness (Hirsch & MacDonald, 2007, p. 185)

This period saw a shift from creativity understood as a mimetic ability, in which one faithfully re-presented the divine, natural world, to a humanist understanding of the individual as inventor, with creation as a mark of personal identity (Hirsch & MacDonald, 2007, Pennycook, 2007). These newer frames are those we generally use to map contemporary understandings:

the debates through the eighteenth century nevertheless eventually came to four fundamental acceptable distinctions, which were to become the bedrock of our present-day ideas about creativity: (a) Genius was divorced from the supernatural; (b) genius, although exceptional, was potential in every individual; (c) talent and genius were to be distinguished from one another; and (d) their potential and exercise depended on the political atmosphere at the time. (Albert & Runco, 1999, p. 22)

Albert and Runco link these definitions for creativity with the polarization of intellect and feeling, a conflict that divorced creative expression and led to the stereotypes of “the overly rational scientist and the artist as the misunderstood genius” (p. 23). Evolutionary theory has contributed to the idea of creativity as an adaptive form of problem solving that benefits individuals, helping them to survive (p. 24). This may explain some of the values guiding creativity research, measurement and enhancement in the 1950s, as

innovation was linked with political domination during the Cold War. J.P. Guilford's presidential address to the American Psychological Association in 1950 simultaneously acted as a major impetus for research on creativity and reinforced the Cold War imperative for technological supremacy symbolized by the Sputnik launch. Creativity was seen as a means for assuring military (and thereby political and cultural) domination. Building upon the psychometric approach initiated by Guilford in his Structures of Intellect model (1959, 1986, 1988), E. Paul Torrance (1974) continued Guilford's psychometric approach, developing what has remained the standard measure of creativity in use since, the Torrance Tests of Creative Thinking.

Current creativity researchers largely agree upon a working definition for creativity with the following two features: "Creativity is the ability to produce work that is both novel (i.e., original, unexpected) and appropriate (i.e., useful, adaptive concerning task constraints)" (Sternberg & Lubart, 1999, p. 3). This definition has been problematized in much current research, calling into question other aspects that we may regard as equally pertinent. Richard E. Mayer (1999) summarizes these:

- (a) is creativity a property of *people*, *products*, or *processes*?
- (b) is creativity a *personal* or *social* phenomenon?
- (c) is creativity *common* or *rare*?
- (d) is creativity *domain-general* or *domain-specific*?
- (e) is creativity *quantitative* or *qualitative*? (Mayer, 1999, p. 450-451)

The theoretical framework and pedagogical approach utilizing improvisation I am proposing sees these dichotomies as overly reductive. In this work, I hope to demonstrate how improvisation respects the complexity of these elements: it is process and product; it involves personal and social transformation; it is common but each instance is unique; and it is a general feature of thought but tied to the specific context in which it unfolds. I

believe that the pursuit of quantitative results divorced from qualitative change makes little sense in terms of learning.

The complexities of everyday creativity are much taken-for-granted, a social process Foucault summed up in a discussion with Noam Chomsky: “General or collective phenomena ... those which by definition can’t be “attributed,” are normally devalued” (Chomsky & Foucault, 2006, p. 16). I turn now to two creativity researchers, Mihalyi Csikszentmihalyi and R. Keith Sawyer, who present frameworks for understanding creativity in social terms. These analyses demonstrate how the recognition, interpretation, and validation of creative work is spread across complex social networks, which may reach differing conclusions as to the value of a given piece.

Csikszentmihalyi (1999) considers creativity in terms of the way works gain recognition and have impact in the domain, or branch of knowledge or form of artistic endeavor, and the field, that social network of gatekeepers that designates a work as creative, by promoting it in a museum, etc. Csikszentmihalyi (1996) has also written much on an energetic and focused psychological state of integration, one he has termed “flow.” In *Group Creativity: Music, Theatre, Collaboration*, R. Keith Sawyer (2003), borrowing Csikszentmihalyi’s term, considers the interlocking co-creation that constitutes much social interaction as instances of “group flow,” improvisation being a prime example. Sawyer covers the various ways certain aspects of creativity cannot be divorced from the contexts in which they are expressed, but must be analyzed as emergent properties that constitute “totalities.” He uses improvisation as a paradigm, arguing that creativity research must also take into account indeterminate elements of performance to re-envision creativity as a process. Sawyer claims that research has

inordinately focused upon “product creativity,” and neglected the processual elements that are evident in the creation and performance of works. This focus not only skews perspectives towards a comparative ranking of works, but also conceals the intangible elements of creative acts, such as collective interaction, effects that are later effaced when the work is completed. A product view of creativity is thus ill-suited for an evaluation of improvisational interaction, in that the evaluative criteria do not account for the emergent nature of the piece performed. Critique in improvisation is seen as an integral part of the creation of a work, a feedback loop by which ongoing negotiation determines and modifies how the work is conceived and constructed. This is of perhaps even greater import when describing collaborative efforts, where the real-time dialogic interaction of performers is a fundamental constitutive element of the final product. Sawyer argues that this bias similarly minimizes the function and value of the social exchanges that comprise group performances; as a result, creativity is often considered removed from a social context, and regarded primarily in terms of individual contributions. A similar oversight may be said to pertain to standard pedagogical models, wherein student interaction is passed over for those classroom objectives that can easily be operationalized to yield higher test scores for individuals.

The importance of the imagination

Paul Cezanne said once that our eyes can see the front of a painting, while imagination curves to the other side. (Greene, 2001, p. 74)

Improvisation is creative thought in action, an exploration of possibilities that are brought into being through their enactment. In this section, I consider the importance of the imagination not only in artistic contexts, but also as the basis for creative thought.

Imagination, the ability to free the mind from immediate stimuli, is a characteristic of human cognition that underlies innovations in thought and culture. Dewey (2005) saw it as the bedrock of conscious experience, in that “the experience enacted is human and conscious only as that which is given here and now is extended by meanings and values drawn from what is absent in fact and present only imaginatively” (p. 276). Dewey (1990) emphasized the role of the imagination, which he considered “the medium in which the child lives” (p. 61) as a fundamental element of cognition, an aspect neglected in commonplace connotations. The use of the imagination seems to be used more commonly with realms of “fantasy” than as a constant feature of thought. Dewey marks this distinction in constructivist terms: “Imagination is not a matter of impossible subject-matter, but a constructive way of dealing with any subject-matter under the influence of a pervading idea” (p. 144). In *Art as Experience*, Dewey (2005) presents the imagination as the key function by which we coherently integrate experience: “Imagination is the only gateway through which these meanings can find their way into a present; or rather ... the conscious adjustment of the new and old *is* imagination” (p. 283). While the imagination may play a role in all perception, the way in which imagination is framed shapes curricular expectations. This is expressed in part as to how fully objectives are defined, which in turn determines the amount of creative input and participation granted the learner. The implications of this view are elaborated in the constructivist perspectives I discuss in chapter five.

Cognitive psychologist and educator Jerome Bruner writes of the value of considering literature an indispensable component of curricula, as the use of imagination in understanding (fictional) narrative is a basic element of human cognition. He believes

that “the object of understanding human events is to sense the alternativeness of human possibility” (Bruner, 1986, p. 53), and regards the ability to suspend belief and continue a search for additional options as a fundamental aspect of creative problem solving. Bruner argues that this ability to imaginatively explore alternatives bridges the study of science and literature, in that:

the humanities have as their implicit agenda the cultivation of hypotheses, the art of hypothesis generating. It is in hypothesis generating (rather than hypothesis falsification) that one creates multiple perspectives and possible worlds to match the requirements of those perspectives. (Bruner, 1986, p. 52)

In *The Process of Education* (1975/1960), Bruner details the “spiral curriculum” which lays out a means of revisiting content to ensure individual comprehension. He writes of the importance of curiosity and surprise in terms that would favorably commend an improvisatory approach:

Curiosity is almost a prototype of the intrinsic motive. Our attention is attracted to something that is unclear, unfinished, or uncertain. We sustain our attention until the matter in hand becomes clear, finished, or certain. The achievement of clarity or merely the search for it is what satisfies. (Bruner, 1975, p. 114)

Rather than ingrain truths that have become habitual, Bruner suggests that teachers provoke learners into questioning the ideas they have taken for granted: “[Surprise] provides a window on presupposition: surprise is a response to violated presupposition” (Bruner, 1986, p. 46). Surprise not only engages our critical thinking; it brings us to attention, helping us bring these faculties to bear upon the problem. Bruner writes, “Let input violate expectancy, and the system is put on alert” (p. 46). This quality and degree of attention is necessary if we are to avoid “‘functional fixedness’ [in which] a problem solver is, in effect, using corrective information exclusively for the evaluation of one single hypothesis that happens to be wrong” (Bruner, 1975, p. 52). A heightened state of

curiosity, one that is marked by a continued openness to surprise, is not only an asset in diligent thought, it is often a necessity: “It is often the case that novelty must be introduced in order that the enterprise be continued” (p. 59). Schools rarely provide opportunities for the exploration of topics in environments that are driven by curiosity. Indeed, much of schooling ignores curiosity as a motivating factor, as an engine to which critical thinking skills may be yoked and provide additional momentum and steerage. As Bruner notes: “what the school imposes often fails to enlist the natural energies that sustain spontaneous learning – curiosity, a desire for competence, aspiration to emulate a model, and a deep-sensed commitment to the web of social reciprocity” (p. 127).

We do not only imagine the narratives offered by others – our own self-images and life stories are created in the same manner. G.B. Madison (1988), writing about the centrality of the imagination, says that:

it is through imagination, the realm of pure possibility that we freely make ourselves to be who or what we are, that we creatively and imaginatively become who we are, whole in the process preserving the freedom and possibility to be yet otherwise than what we have become and merely are. (Madison, 1988, p. 191)

Maxine Greene has been an outspoken advocate of the arts, particularly as they nurture our powers of imagination, which she considers of primary importance if we are to create a more humane, equitable world. She writes that imagination “makes possible the creation of “as-if” perspectives, perspectives that can be opened metaphorically and, oftentimes, through the exercise of empathy. Without the release of imagination, human beings may be trapped in literalism, in blind factuality” (Greene, 2001, p. 65). We must, she says, be open to the open-ended nature of art, which offers endless interpretive possibilities, as a means for deepening our appreciation of multiple perspectives. If, as Greene notes, imagination is a means of “decentering ourselves, of breaking out of the

confinements of privatism and self-regard” (Greene, 1995, p. 31), then it may be a necessary attribute for conscious democratic action. She holds that “imagination is what, above all, makes empathy possible” (p. 3). If this is true, education that does not foster imaginative abilities may constitute a disability, as a “lack of imagination results in an incapacity to create or even participate in what might be called community” (p. 37).

Improvisation as praxis offers a counterbalance to curricula that fail to provoke student interest. Maxine Greene sees the revitalization of content tied to an acceptance and embrace of indeterminacy: “We are interested in breakthroughs and new beginnings, in the kind of wide-awakeness that allows for wonder and unease and questioning and the pursuit of what is not yet” (Greene, 2001, p. 44). In her pursuit for educational renewal, Greene addresses the political and aesthetic indifference that is perpetuated by the reproduction of inert knowledge. She argues instead for education that, first and foremost, encourages the imaginative envisioning of a just society. Curricular spaces must be created for the enactment and negotiation of these views, spaces in which learners can claim these understandings as their own. She writes: “transformation occurs when people break with what they simply assume or take for granted as given and unchangeable” (p. 65). Ideally, the school is that place of transformation, a forum for learners to collectively explore, discuss, and realize their aspirations in a supportive environment.

We must not, however, be blind to the risks involved in unleashing the potentials of the imagination. Greene recognizes “the undeniable fact that imagination is not always benevolent” (Greene, 2001, p. 123). By its very nature, the imagination partially, sometimes wholly, detaches itself from the immediate context to explore. Greene

continues: “the role of imagination is not to resolve, not to point the way, not to improve. It is to awaken, to disclose the ordinarily unseen, unheard, and unexpected” (Greene, 1995, p. 28). While Greene seems here to be arguing for a privileged status for our imagination, our imaginative abilities are in fact regularly put to use to resolve, point the way and improve, as is found in creative problem solving. Her insistence that our imaginations need not necessarily be put to positive ends, gives us cause to look carefully at how the imagination is cultivated in practice. The nurturing of the imagination must take place in an environment of respect, supportive yet critical, qualities that would characterize a vibrant and creative classroom. Two dynamics that could promote such an environment are the posing of authentic questions and the optimal setting of constraints to guide creative exploration.

Creativity in the classroom

While creativity is widely espoused as a vital element of education, many forms of teaching conspire to minimize creative thought in the classroom. Predetermined schedules effectively channel student inquiry and response, promoting the convergent behavior dictated by texts. Starko (2001), following Brandt’s work on authentic learning (1993), discusses ways in which the forms problems may take may either enhance or discourage creativity in the classroom. Inauthentic problems posed by the teacher assert the authority of the instructor and relegate the individual perspectives of students to secondary status. This is not the case for an authentic problem, however, which “(a) does not have a predetermined answer, (b) is personally relevant to the investigator, and (c) can be explored through the methodologies of one or more disciplines” (Starko, 2001, p. 19-20). The formulation of the problem shapes not only the form the answer will take,

but the process by which possible solutions are explored and relevant skills are engaged as well. Although many classroom problems activate memory and analytic reasoning, fewer activities challenge learners to practice problem-finding skills. Stokes (2007) summarizes the research on psychological dispositions that may result from training that emphasizes convergent behaviors in excess: “Detrimental effects of successful low-variability solutions on novel ones have been investigated under the rubrics ‘functional fixedness’, ‘fixation’, ‘mental set’ and ‘path-of-least-resistance’” (p. 107). She believes these effects may be prevented by encouraging creative thought through the introduction of appropriate constraints that guide the work. Stokes traces this approach to the work of Newell and Simon (1972) on problem solving, which relates the structuring of problems according to the initial states, goal states and operators. Creative responses, such as a painting, differ from the completion of a jigsaw puzzle in some fundamental ways:

any problem requiring a novel response (i.e., a novelty problem) has three characteristics: (1) it is ill-structured or incompletely specified, (2) its solution requires the strategic selection of paired constraints, and (3) these constraints structure the problem space to preclude search among reliable, expected responses, and promote search among risky, surprising, ones. (Stokes, 2007, p. 108)

The paired constraints referred to above, between subject and task, prompt (a) the rejection of commonplace solutions (in Gardner, 1993) and (b) the replacement of these with more divergent alternatives (in Boden, 1994) (Stokes, 2007, p. 111). Creativity in this account does not occur *ex nihilo*, but is the modification of an existing model, or mental representation. Teachers must recognize the critical role constraints play in stimulating (or quashing) learners’ creative impulses; in this regard, constraints link the students’ existing knowledge and the possibilities open for exploration. Stokes expresses this in terms of problem solving: “Creativity (of the generative, influential kind) depends

on an expert selecting paired subject and task constraints to restructure an existing problem space and realize a novel goal” (Stokes, 2007, p. 112). Skill in the selection of constraints, and an understanding of their inherent generative capacities, demands a cultivated sensitivity in teacher and student alike. These constraints encourage learners to interact creatively, prompting, but not over-determining and thereby limiting, their responses. As a model for improvisation in educational contexts, the incomplete specifications of problems may be information gaps created by the teacher, gaps in which students are invited to exercise their resourcefulness and critical thinking skills, and the goal criteria are the curricular goals the class is meant to explore.

The determination of constraints, then, plays a decisive role when designing curricula using improvisation. These may be determined beforehand and considered as set rules of play, or they may be modified as the improvisation unfolds, according to the pedagogical possibilities that are revealed. The teacher will necessarily exercise discretion as the situation warrants, deciding upon the degree to which learners would benefit from this form of redirection. The mutability of constraints and rules marks a key distinction between imaginative play and game play, the importance of which I discuss in the next section.

Play

[I]n every condition of humanity it is precisely play, and play alone, that makes man complete - (Friederich Schiller, 1980, p. 79)

Improvisation is marked by a spirit of play, an aspect of learning that has been increasingly marginalized in standard education. In this section, I explore various notions

of play, both its philosophical and pedagogical articulations, to derive a set of propositions in order to critique assumptions about classroom behavior. In particular, I present imaginative play as one of the core features of our cognitive abilities, especially as it concerns our notions of freedom, our metacognitive abilities and facility at symbolic signification. I argue that any curriculum that does not take these aspects of play into account is impoverished as a result.

I begin by drawing upon the theoretical works of Huizinga (1964), Gadamer (1986, 1989), and Sutton-Smith (2001), which grant play a distinct epistemological status, views which are complemented by the work of Gregory Bateson (2000, 2002), who describes the conceptual mechanisms by which play may be integrated in a comprehensible framework for learning. Bateson's work reveals the complexity of cognitive framing in the enactment of play, and offers a view of play as a means of achieving meta-cognitive understanding, one that may be enhanced in learning environments. Play figures largely in the cognitive development theories of both Piaget (1955, 1962, 1997), and Vygotsky (1978, 2002). I discuss improvisation in light of the claims these two thinkers made about social interaction and cognitive development. I then consider some broader frames for understanding play, drawing upon the work of Paglieri (2003, 2005), who argues that play is of vital importance in promoting ethical awareness, and the work of Göncü and Perone (2005), who hold that the dynamics of play are evident in many forms of adult expression as well, particularly in the case of improvisation. These authors conclude that play necessarily deserves a greater prominence in theories of life-long learning. Taken collectively, these theories strongly

suggest that play, and by implication, improvisation, are fundamental states of cognitive dynamism that fuel creative growth.

How serious is play?

In *Dionysius Reborn: Play and the Aesthetic Dimension in Modern Philosophical and Scientific Discourse* (1989), Mihai Spariosu traces the concern Western philosophers have had for play, beginning with Greek thought. The game metaphor of God as player and human as plaything was employed by Homer, and later used by Heraclitus (p. 29). Spariosu also considers Plato the key force behind “the transformation of mimesis-play into mimesis-imitation, by separating it from immediate power and violent emotion and subordinating it to the rational, mediated, and nonviolent pleasure of philosophical contemplation” (Spariosu, 1989, p. 19). This tension – between play as the free expression of creative (and potentially destructive) energy on the one hand, and the ordered, rule governed exploration of ideas and possibilities in game playing on the other – continues to render discussions of the pedagogical value of play complex.

Huizinga makes the claim in *Homo Ludens* (1964) that play is a fundamental frame for cultural activity, one he first contextualizes within the larger frame of nature. Play is not only a universal element of culture; it is a pervasive aspect of life. Indeed, as animals play, and play “cannot be reduced to any other mental category” (p. 3), it links human rationality to the irrational. Huizinga’s treatise ranges across the multifold ways in which play is elaborated in the trials and contests of cultural activities as diverse as poetry and war.

Much of Huizinga's understanding of play overlaps with that posed by Hans-Georg Gadamer, who made it a central component in the aesthetic means of apprehending the world he presented in *Truth and Method* (1975). Huizinga (1964) states "play is non-seriousness," seeking to distinguish the fundamental nature of the activity from an attitude one might adopt in the playing: "play is not serious" (p. 5), for, in fact, much play is played in earnest. Play is non-serious in this sense in that it is severed from necessity, that it is voluntary and signifies a degree of freedom of the players. Gadamer, however, believes "play itself contains its own, even sacred, seriousness" (p. 102). According to this view, players must necessarily play with seriousness, for play is not simply diversion, but contains acts of consequence. This is to say that players invest themselves in their play, and often believe they have a stake in its outcome. What is at stake may be regarded as limits to their individual freedom. According to Gadamer, "freedom is not without danger. Rather, the game itself is a risk for the player. One can play only with serious possibilities" (Gadamer, 1989, p. 106). In free play, this degree of involvement extends to the negotiation of the forms of interaction permissible within the play space. Gadamer continues: "the purpose of the game is not really solving the task, but ordering and shaping the movement of the game itself" (p. 107). In this way, open-ended play engages metacognition in a way that is qualitatively different from games with predetermined rules, a point I pursue below.

Play is one of the hallmarks of improvisation, which may be one of the chief ways in which it may be differentiated from more convergent types of problem solving. Curricular goals that are "convergent" offer a very narrow range of acceptable responses that are readily labeled right or wrong. Imaginative play, on the other hand, may be

described as “generative,” a term that describes a feature of questions, ideas or discursive frameworks that not only allows for diverse responses, but multiplies the number of alternative, even conflicting, interpretations. Many improvisations represent the artists’ willingness to push materials beyond the forms with which they have previously been associated or constrained, to create new rules for new games. Improvisation-based curricula make use of open-ended structures to provoke creative exploration, and invite students to pursue divergent paths to understanding.

Play in Cognition

The vital importance of play, as it occurs in improvisation, becomes clearer when contrasted with Pavlovian and behaviorist stimulus-response (S-R) models. While these models are able to describe the automatism of reflexive links, such as hunger and phobic behavior, they are currently out of favor amongst most education theorists, as S-R models are considered inadequate to account for higher-level cognition. By way of contrast, I look to Gregory Bateson’s groundbreaking study of play (2000/1955), for it reveals one of the fundamental characteristics I will claim makes improvisation so central a concern to education, namely, metacognition.

Bateson’s work on play is of fundamental importance in linguistics and semiotics, for it distinguishes ways in which both animal and human behavior use play to signify. Bateson looked at play in animals and considered their behavior in terms of the logical statements they implied. In stimulus-response models, the stimulus is directly linked to the response of the organism and results in a reflex action, which could be said to be the stimulus’ “meaning.” Bateson observed that dogs signal play in a more complex way,

introducing a form of negation - a dog will indicate its desire to play by co-opting a form of behavior (biting) and follow it with another sign (lowering itself on its front paws and wagging its tail) that qualify the bite (“that was not a *real* bite”). This results in a logical paradox; the bite is simultaneously the sign of aggression, but the context signifies that it not be taken seriously. Extrapolating from this example, Bateson builds a framework for understanding learning. The three levels he considers are of different logical types, and they reflect ways in which differing contextualizations highlight different relationships. Level 0 (or “primary process”) is denotative, the level of facticity, of involuntary mood-signs; Level I (or “secondary process”) is contrastive, the level at which difference allows for distinctions between foreground and background. It is only at Level II (or “deutero-learning”) that the frame itself comes under scrutiny, the level at which we consider paradigms, or the context of contexts. An example will help to clarify these levels: I smell the glass of milk I am about to drink, and realize that it is sour. At level 0, this smell acts as a trigger, and I refuse it. At Level I, I smell the other container in the refrigerator to see if it is also spoiled (it isn’t, and both containers have the same expiration date). At level II, I take the learning of Level I, in which I discovered the milk soured because I left it out too long – and change my behavior accordingly.

Bateson considers the differences of logical typing in a psychoanalytic context, contrasting the primary process of the unconscious with the secondary process of the ego, and the metacognitive skills employed in play: "In primary process, map and territory are equated; in secondary process, they can be discriminated. In play, they are both equated and discriminated" (Bateson, 2000, p. 185). It is through play that this binary relationship

is transcended, where the rules that help us determine sameness and difference are opened up by paradox. We are set free to discover.

Negation

It is worthwhile to look more closely at the cognitive processes involved. In the last section, I discussed the central importance of creativity and the role of the imagination in conceiving of what isn't – spatially, temporally, or conceptually. Negation opens brute existence to possibility – it is the springboard of imagination, and as such develops the capacity for metacognition. Negation allows for the awareness of time (things could have been/may be other than they are now) and other forms of abstraction, i.e. representation and notions of category. Kenneth Burke, building upon Bergson's chapter "The Idea of Nothing" in *Creative Evolution*, discusses the peculiarity of this aspect of human cognition in *Language as Symbolic Action* (1968):

[T]here are no negatives in nature, where everything is what it is and as it is. To look for negatives in nature would be as absurd as though you were to go around hunting for the square root of minus-one. The negative is a function peculiar to symbol systems. (p. 9)

The dog's ability to indicate negation is representative of these higher cognitive faculties. For play theorist Brian Sutton-Smith, this move of Burke's implies that "play might be the earliest form of the negative, prior to the existence of the negative in language" (Sutton-Smith, 2001, p. 22). These speculations reflect the profound importance play may have for cognitive development.

Similarly, the gaps that we create in the curriculum are not devoid of significance, but are rather realms of possibility, areas where students' minds can move freely. The *Tao Te Ching* conveys the generative aspect of emptiness in a series of simple images:

Thirty spokes share one hub.
 Adapt the nothing therein to the purpose in hand,
 and you will have the use of the cart.
 Knead clay in order to make a vessel.
 Adapt the nothing therein to the purpose in hand,
 and you will have the use of the vessel.
 Cut out doors and windows in order to make a room.
 Adapt the nothing therein to the purpose in hand,
 and you will have the use of the room.
 Thus what we gain is Something,
 yet it is by virtue of Nothing that this can be put to use. (Lau, 1963)

I do not believe it is possible to actively and creatively engage learners' minds simply by providing them with information, however detailed. Opportunities must be created wherein learners relate to gaps in their knowledge, through questioning, discussion, and imagination. This negotiation, in which learners identify gaps and pose strategies for exploring them, has another significant benefit, in that it fosters metacognitive skills.

Metacognition

A more common name for Bateson's term "deutero-learning" is metacognition, or thinking about thinking. This form of cognition allows us to compare and contrast across time, applying elements from memory to different contexts, as well as holding up imagined alternatives for potential fit. Metacognition is an awareness of constancy amidst flux; as such it plays into our own self-representation. In this context, Vygotsky's distinguished "soznanie" or consciousness, from "osoznanie" or conscious awareness (Georghiades, 2004, p. 373). As Bruner notes: "If there is any way of adjusting to change, it must include, as we have noted, the development of a metalanguage and 'metaskills' for dealing with continuity in change" (Bruner, 1975, p. 35). In responding to the environment, we are engaged in a feedback loop that involves monitoring, self-appraisal,

judgment and action. From this it may be seen that “being critical is sine qua non for metacognition” (Georghiades, 2004, p. 371).

As described above, improvisational activity simultaneously reflects a respect for the players, participants and the context of their engagement. It is an activity that is marked by higher level cognitive functioning such as represented by Bateson’s Level II learning. By encouraging creative play, improvisation-based curricula promote metacognitive skills as well: “If intelligence means selecting and shaping environments, it is creativity” (Ochse, 1990, p. 104). In improvisational settings, the coherence or structure is collaboratively determined, within which rules are manipulated. This environment shapes the transformations of these rules, as well as the creation of new ones. This is in part a communicative act, as an entirely random context would not be viable or interpretable. Artists, however, whose expressive goals often gain impact by subverting commonplace assumptions, accept conventions so that they may also break them. As Bruner notes “The production of creative surprise demands a masterful control of the medium” (Bruner, 1976, p. 642). Ideally, teachers inspire learners at this level. In order to do so, they must be sensitive to the learners’ engagement with the unknown, fostering and directing their students’ curiosity by revealing the myriad interpretive possibilities yet unexplored. As both teachers and learners, we are prepared for surprise if we are able to see the possibilities for different modes of inquiry in our studies. This is a fundamental perspective to take if we are to encourage learners to generate knowledge beyond the known.

Play in Education

Despite its many benefits, play is generally considered to be of secondary worth in elementary education. Literacy and numeracy have taken on their primary values as means to apprehending further knowledge, a shift that now occurs as early as kindergarten, or even earlier. These skills, when taught as rule-governed symbolic systems that yield correct and convergent responses, are amenable to exact replication and easily assessed. These determined aspects contrast sharply with imaginative free play.

The emphasis on product also shapes what types of play are considered productive. As a result, play is increasingly regulated in its manifestations at school. According to Blackford (2004), the physical structure of the playground is organized more for effective monitoring of student behavior than to encourage playful interaction, a situation she likens to the workings of control Foucault describes for the panopticon in *Discipline & Punish: The Birth of the Prison* (1975). As well intentioned as this organization may seem, such constant surveillance circumscribes and inhibits the play it aims to foster.

James P. Carse (1986) describes two orientations towards living life as play: as finite games or infinite games. The finite player seeks to bring about a pre-determined end, namely winning, and this defined state encourages the evaluation of every intermediary step – is it the most effective course of action? While finite players play to win, infinite players play in order to perpetuate play. Carse draws provocative conclusions from this division, amongst them the attainment of titles and the ability to speak with one's true voice.

Carse states that “Finite players play within boundaries; infinite players play with boundaries” (p.10). An essential characteristic of our humanness is our ability to step outside of the limited world of denotation, into the open-ended, ambiguous and idiosyncratic world of connotation. It is a step along the path of our own becoming, where our being is the object of our own play. Education reveals not only who we are but also who we can be.

Echoing Bruner, Carse uses surprise to distinguish *training* from *education*: “To be prepared against surprise is to be *trained*. To be prepared for surprise is to be *educated*” (p. 19, italics in original). This view of education emphasizes an orientation toward the future that embraces indeterminacy by conceiving of readiness in as open-ended, improvisatory enactment. The purpose of education is not to finalize learning but to perpetuate discovery.

The achievement of pre-scripted goals concretizes the player’s past: “surprise in finite play is the triumph of the past over the future” (p. 17). Whereas finite players are pleasantly surprised that their plans have come to fruition as they had intended, infinite players seek indeterminate positions that open up new possibilities:

Surprise in infinite play is the triumph of the future over the past. Since infinite players do not regard the past as having an outcome, they have no way of knowing what has begun there. With each surprise, the past reveals a new beginning in itself. Inasmuch as the future is always surprising, the past is always changing. (p. 18)

Infinite play allows for a past to be open to continual re-interpretation. It is, in fact, this act of re-interpreting the present to become a lived present instead of the result of predetermined rules. Pedagogy disposed to fostering personal transformation would promote the fluidity of student subjectivities, creating opportunities for re-invention.

Education discovers an increasing richness in the past, because it sees what is unfinished there. Training regards the past as finished and the future as to be finished. Education leads toward a continuing self-discovery; training leads to a final self-definition.

Training repeats a completed past in the future. Education continues an unfinished past into the future. (p. 18-19)

In setting these grounds for education, Carse draws our attention to the generative fluidity of the past, towards our existential condition of incompleteness and becoming.

The developmental significance of play

Both Piaget and Vygotsky recognized the developmental significance of play, theorizing on the distinctive features of play as a learning context. I will briefly summarize their perspectives before relating these to improvisation. As will become evident, Piaget's views regarding play are more problematic than Vygotsky's learning theories, which are more in harmony with the dynamics of improvisation.

The role of play in the work of Piaget

In his formulation of development as successive stages, Piaget posited a shift from symbolic play toward play organized around the formal application of well-defined rules. He believed this shift occurs around the age of 7. Until the child is able to engage in rule-governed play, Piaget argued, his egocentrism precludes true sociality. The condition for this sociality is what Piaget termed "moral realism," the recognition that the rules to games apply equally to all players. Paglieri sees this analysis as disregarding the normative nature of imaginative play, saying "norms and normative dynamics are crucial at every stage of play development (including symbolic play), rather than being a mere matter of presence or absence of rules" (Paglieri, 2005, p. 154).

At the beginning of *The Moral Judgment of the Child*, Piaget provides the following, problematic definition of morality: “All morality consists in a system of rules, and the essence of all morality is to be sought for in the respect which the individual acquires for these rules” (1997, p. 13). Piaget saw play as a frame in which children’s moral values developed. For Spariosu, Piaget’s analysis of play disregards much of the cognitive growth that it affords:

Piaget’s conclusion is invariably the same: whereas play consolidates by repetition the infant’s newly acquired skills, it never has an active part in the acquisition of these skills, and therefore has a secondary role in the process of cognition itself. Both play and imitation have to be distinguished from intelligence. (Spariosu, 1989, p. 193-194)

In “Piaget, Play and Cognition Revisited”, Sutton-Smith poses three main objections to Piaget’s model:

1) that despite their apparent equipotentiality in his theory of intelligence, Piaget had contrived an asymmetry or imbalance between the contributions to be made to cognition by imitation and play – imitation was the star performer and play was its aborted partner; 2) that this inequality was brought about by Piaget’s focus on directed or rational or convergent, rather than undirected or imaginative or divergent cognitive operations; 3) that it was also a result of presupposing play to be a predominantly infantile state of development, a not uncommon assumption in the work ethic ideology of Western culture. (Sutton-Smith, 1983, p. 230)

Each of these values – the overwhelmingly positive role accorded imitation in learning, the predominance of convergent responses, and the presupposition that imaginative play is supplanted by other formal cognitive skills – has had considerable force in shaping educational environments. Sawyer notes that Piaget’s brief reference to sociodramatic play in *Play, Dreams, and Imitation in Childhood* (1962) is concerned with the ways in which children take on complementary roles, a process he called collective symbolism. Piaget only briefly discussed how these social acts could be incorporated within the assimilation/accommodation framework he had adopted for understanding physical

reality, and the observations he did make referred solely to games that were rule-governed (Sawyer, 1997, p. 9).

Piaget's analysis led him to conclude that symbolic play, instead of being participation in a social game, was "merely egocentric thought in its pure state" (Piaget, 1962, p. 166). He calls upon a distinction made by animal psychologist Buytendijk (1934), in which play is regarded as either "pathic" play, or play for sympathetic understanding, and "gnostic" play, or play for objective knowledge (Piaget, 1962, p. 159). Play regarded as an egotistic pursuit of subjectivity would have little of the co-creative, negotiation-based aspects that are considered central to the current work. Educational praxes derived from these principles will be less likely to promote the development of a broad spectrum of social and cognitive skills through play, and may thereby inhibit other forms of growth, issues I take up in chapter 5. As a result, Piaget's analysis is not particularly well suited to studies on improvisation.

Vygotsky on play

Whereas Piaget presents play as of little intrinsic merit outside of its value in the attainment of formal conceptual structures, play is a keystone in Vygotsky's work. Vygotsky argued that, in subordinating her immediate desires to the rules of the game, a child exercises her greatest degree of self-control (2002). Not only does play represent "the highest level of preschool development" (2002), but it contextualizes a child's verbal, social and cognitive accomplishments: "a child's greatest achievements are possible in play, achievements that tomorrow will become her basic level of real action and morality" (Vygotsky, 1978, p. 99-100). Vygotsky concluded that not only does play "[contain] all developmental tendencies in a condensed form," but it creates the "zone of

proximal development” (or ZPD, used to describe the gap between learners’ actual development with their potential for learning when assisted) (2002). As a site for the performance and negotiation of role-appropriate behavior, play creates a zone in which “a child always behaves beyond his average age” (1978, p. 102), one “structured by expectations and conventions derived from adult society” (Sawyer, 1997, p. 12).

Accordingly, a primary goal of teachers may be described as the integration of play with social goals in the generation of ZPDs. Sociocultural perspectives, such as those presented by Matusov and Hayes (2000), articulate development as transformation in participation. According to this view, development is represented by the transformation in modes of participation and in changes in relationship; it “involves negotiation of individual’s contribution to the activity” (p. 222).

Cognitive Benefits

Vygotsky is unequivocal about the importance that play has in our cognitive development. In *Mind and Society* (1978), he discusses the freedom made evident in play. As opposed to the Stimulus-Response model we looked at earlier, play is marked by a release from compulsion. He writes: “In play, things lose their motivating force. The child sees one thing but acts differently in relation to what he sees. Thus, a situation is reached in which the child begins to act independently of what he sees” (p. 96). This degree of indeterminacy allows for polysemy, and the generation of multiple interpretations. “To a certain extent meaning is freed from the object with which it was directly fused before” (Vygotsky, 2002). This profoundly reframes views of how knowledge is constructed. We come to know not simply by responding in more complex

ways to what is revealed before us, but by seeing beyond what is given to what may be signified. This claim, as a corollary to Burke's and Bateson's theoretical frames for play described above, has far-reaching implications for education.

If we are to make use of a Vygotskian framework in pedagogical design, it is fundamentally important to recognize "the necessity for an imaginary situation" (Vygotsky, 2002). As I will demonstrate, improvisational frameworks provide students with dynamic, minimally defined contexts in which they co-create and negotiate zones of proximal development. This view holds that performance drives competence in an ongoing dialectic: "Children play games without knowing the rules; this is, in fact, how they come to know the rules" (Holzman, 1997, p. 74). The rules explored here may be the most basic ways we have of making meaning.

Semiotic play

Vygotsky, Burke and Bateson show how imaginative play exemplifies the cognitive levels of abstraction required to first negate an object or gesture and suppose an alternative value. Play of this nature can be said to loosen the bond between signifier and signified. This is precisely the claim made by theorists regarding improvisation. As Frost and Yarrow (2007) write "the sign ceases to *denote* and becomes the possibility of infinite *connotation*: it opens out to the play of significance" (p. 83-84, italics in original).

Corbett (1995), citing Kristeva, links this essential semiotic freedom to improvisation:

Perhaps, then, improvisation is an act that should be read, as Julia Kristeva suggests *all* acts of signification must, as "the trial of meaning ... the subject on trial, in process, *en process*" (216). As she explains: "All functions which suppose a *frontier* ... and the transgression of that frontier (the sudden appearance of new signifying chains), are relevant to any account of signifying *practice*, where

practice is taken as meaning the acceptance of a symbolic law together with the transgression of that law for the purposes of renovating it.” (217). I can think of no better description of improvisation. (p. 232, italics in original)

In the following characterization, Corbett describes learning environments that collaborative improvisation may help to foster: “A compromise between order and disorder, improvisation is a negotiation between codes and their pleasurable dismantling” (p. 237). While pleasure may not be essential to learning, I would reckon it an important asset. A playful improvisation-based approach, one that values delight and engagement, could well result in an increase in student motivation.

Life-long play and moral understandings

My conclusions are based on the assumption that play and creative activity are life-long forms of engagement, and that the cognitive and social skills central to improvisation draw upon and enhance these commonplace ways of living. The protean nature of play, both in freer, fantasy-based contexts and in formalized, rule-based games, is evident in nearly all spheres of human activity. There is, however, an emphasis upon less formal characteristics in the field of developmental psychology, such that it “does not recognize adult pretend play as a legitimate area of research and thus does not have a model of how children’s pretense transforms itself into its adult versions” (Göncü & Perone, 2005, p. 137). This attenuated definition for play in adult behavior obscures the view of play as an ever-present potentiality of thought. They continue:

In the free, spontaneous, social, imaginative, fun, and improvisational world of play, what was initially intuitive and considered personal becomes symbolic and dialogic. This process simultaneously leads to the construction of knowledge and awareness about self and its relationship to community. (Göncü & Perone, 2005, p. 145)

Paglieri (2005) considers play, if we are to admit symbolic play and formalized games, to be equally prevalent in adult behavior as in children. His conclusion is that there is a simplification of social behavior, or an “involution” as he puts it, resulting from the way play is framed: “children show a strong inclination *to play with the rules*” while “adults seem much more prone to play by the rules” (Paglieri, 2005, p. 159, italics in original). According to Piaget, children transition from games based upon pretense to games with rules at about age 7. He considered this development necessary in the progression from egocentric activity to higher levels of social integration. Piaget made the following claims regarding the function and viability of symbolic play that Paglieri holds to be untenable (as do I):

symbolic play is destined to decline after a certain age, to finally disappear in adulthood; the conviction that true sociality in symbolic play is nearly impossible, due to the egocentric character of playful assimilation; ... the assumption that different stages in children’s play ... mirror the cognitive development of the child, but they do not directly ‘cause’ or ‘serve for’ such development; the juxtaposition of symbolic play and games with rules as separate steps in play development, with a strong divide (both cognitive and social) between the two of them. (Paglieri, 2005, p. 151)

While Paglieri highlights the values in the differing perspectives and skills involved in these orientations: “playing with the rules exalts, among others, *creativity, divergent thinking, and assumption of personal responsibility*. On the other hand, playing by the rules enhance *mastery, technical expertise, and appreciation of strategic subtleties*” (p. 162, italics in original), he considers the codifications of play in adult play to forsake the aspects of moral negotiation that are intrinsic to playing with the rules. While adult forms of play provide contexts for players to exhibit mastery, they contrast sharply with:

the features that make a good player in social pretence (e.g., imagination, diplomacy, theatrical talent, lack of inhibitions) differ significantly from those

needed to be proficient in games with rules (e.g., competitive attitude, concentration, strategic genius, ability to read and anticipate the opponent's moves). (Paglieri, 2005, p. 162)

It is my view that improvisational settings, which are based upon shared trust, negotiation and co-creation, reaffirm the moral elements of play.

Play contexts, and even more so, educational contexts, which over-emphasize competitive interaction weaken the supportive sense of *communitas* vital to social coherence. A degree of identification in the form of empathy may be necessary for participants to see themselves as active members of a community. Improvisation-based curricula may foster such identification. The forms of negotiation offered by imaginative play present opportunities for mutual understanding, opportunities that are lessened by mechanical adherence to rules. If, as Paglieri asserts, "rule negotiation in social pretence is a very basic necessity for children to progress from solitary symbolic play to shared make-believe" (Paglieri, 2005, p. 162), then activities involving rule negotiation should necessarily play an important role in students' moral education. Alternatively, environments that discourage free play are unable to nurture social forms of understanding that are the basis of further moral development. Paglieri considers the negative effects of a disregard for this vital function:

[B]y utterly relinquishing the habit of creating, modifying, and negotiating on their own the rules of their games, they are in danger of losing a valuable part of what social play has to offer – namely, direct experience of normative invention and moral freedom. (Paglieri, 2005, p. 164)

Imaginative play, therefore, is beneficial in that it allows children to: (a) integrate emotional events as expressed in pretend play; (b) disengage signifier from signified in make-believe, and thereby achieve higher levels of abstraction; (c) test out hypotheses in solving problems and act these out socially; (d) exercise their autonomy in the

construction and negotiation of rules; and (e) make moral decisions within the play-spaces they have created.

Although make-believe is primarily associated with child's play, it might be detrimental to adopt such a limiting view. Göncü and Perone's (2005) claim in their article "Pretend Play as a Life-span Activity" that "adults' participation in the illusory world of Improv has the same psychological origins as children's participation in pretend play" (p. 141), might be said to describe the reading of fictional literature equally well as improv. Improvisation, however, is not just playing with ideas – it is playing with others, and as such it affords a unique viewpoint for considering both conceptual and social change. In the following section I integrate the ideas I have discussed so far – the social, cultural, and cognitive aspects of creativity, imagination and play - and look at the distinct ways in which improvisational dynamics are conducive to learning in both children and adults.

Improvisation

Willy Wonka: Improvisation is a parlour trick. Anyone can do it. You, little girl. Say something. Anything.

Violet: Chewing gum.

Willy Wonka: Chewing gum is really gross, Chewing gum I hate the most. See? Exactly the same. (*Charlie and the Chocolate Factory*, 2005)

A philosophy of improvisation? What could seem less plausible ... ? (Crease, 1994, p. 181)

I now move onto the general characteristics of improvisation, commonalities that are to be found in the various forms of expression that are further elaborated in the sections that follow. Improvisation is found to display the following features: it is

context-dependent, emergent, indeterminate, dialogic, and collaborative; these characteristic elements, present in varying degrees in all forms of improvisation, contrast sharply with standardized models for classroom instruction that ordain pre-determined objectives. In improvisatory performances, the collective negotiation of indeterminacy and enactment of freedom often foster an awareness of mutual responsibility. As a result, group improvisation is marked by a sense of interdependency and care. These characteristic elements of improvisation suggest possibilities for more collaborative and engaged classroom environments, spaces in which learning is constructed as creative, interactive, and expressive.

Definitions for improvisation

Improvisation is such a commonplace, intangible activity that it might seem ill suited to theoretical attention. A number of practitioners have sought to overturn the negative connotations noted earlier and shift the focus from associations emphasizing the deficiencies of the product to those highlighting the generative, emancipatory possibilities of the process, but for a culture that prizes products and commodifies packaged knowledge, this is difficult. Improvisation is distinctive because product and process are co-extensive, unfolding simultaneously. The formal structures that precede the improvisation – such as rules, idiomatic and traditional conventions – invite creative transgression as much as they constrain, and push performers to challenge their limits. As Confucius said: “The superior man is not bound and restricted by rules, but liberated by them” (Burrow, 2002). This liberation is to be found not in the mindless adherence to

such rules, but through the skillful negotiation of minds cultivated to appreciate social interdependence.

Negative connotations associated with improvisation (such as “making do,” etc.) ignore the experiential learning and intense preparation improvisers, such as jazz players, bring to their craft. These include multiple perspectives on the music, (concerns which may include theoretical or technical complexities, politics of representation, possibilities for collaborative organization, etc.), factors that are opposed, interwoven and cross-referenced for expressive ends in performance. Improvisers consider unscripted territory as areas open to exploration, creative spaces for active interpretation. Improvisation, in this regard, is distinct from problem solving in that it incorporates an aesthetic perspective closely allied to free play, where direction is guided by expressive goals instead of primarily in terms of logical conclusions. As a form that seeks to extend the range of possibilities, improvisation has much in common with Carse’s infinite game, a process that delights in its own perpetuation. Improvisers learn from play, and see their learning as new perspectives from which to ask new questions. Not only do they expect change, but they see it as an opportunity to re-create themselves. McBurney describes this mindset nicely: “This preparedness leads to a ‘read[iness] to be surprised’” (Murray, 2003, cited in Frost & Yarrow, 2007, p. 87). Improvisers skirt finality in their play; convergent responses are recognized as provisional, open to further modification and re-interpretation. Improvisation is a state of provocation – it is based upon the intention of the practitioners to go beyond the familiar, the comfortable, to reappraise the known in terms of the possible. Many forces, social and individual, conspire to lead us in well-worn paths: habit, ritual, language, as well as our own predispositions, all reinforced by

routines and schedules adopted by others. The improviser eschews the security of a pre-scripted course for one more contingent and risky, an engagement that requires a dynamic, flexible response. Performers exercise their aesthetic sensibilities in selecting among the multiplicity of possible alternatives they have generated, or those that are within the idiomatic constraints of their art.

Improvisation and form

A common connotation for improvisation is one of thoughtlessness. This may be in part due to the resultant forms that improvisatory arts take, forms that often question the rules that govern more carefully edited works. My aim in this section is to problematize the notion that improvised works are chaotic, or result in formlessness. Rather, they are emergent, and offers a developing context within which constraints adopted are stretched, tested and re-created for aesthetic ends, so that previously understood material may be reconceptualized to achieve new forms of expression. This situation fits the definition of romantic poetry attributed to the German poet Novalis (1772-1801, aka Friedrich von Hardenberg): “to make the familiar strange, and the strange familiar” (Novalis, 2009). Despite the negative connotations commonly associated with improvisation, this is not done haphazardly, but with a purpose and sensitivity that has been refined and informed by intensive study and practice. The improvisational approach revels in the dynamic tension between the known and unknown, and, closer to the heart of the matter, of the permeability of these categories. The known offers inexhaustible possibilities for re-combination and re-interpretation, of becoming unknown. As noted in the earlier discussion on creativity, one way of framing these possibilities may be in terms of generative constraints.

Idiomatic improvisation is not a matter of absolute freedom; they are “constrained by interpretative rules as much as they are freed by variables” (Cochrane, 2000, p. 140). Those unfamiliar with improvisation are less aware of the constraints that have been adopted and are less sensitive to the ways in which they have been creatively manipulated. This is particularly true of free improvisation, which consciously avoids idiomatic structures. As a result these works may seem chaotic, but, as Borgo notes, free improvisation is better understood as a collective, emergent exploration of structure: “it is not formless music making but form-making music” (Borgo, 2002, p. 167). Crease looks at the *poesis*, or creation, that takes place during performance, and contrasts technical execution with the determination of the laws that are enacted:

Performance is thus not merely a praxis – an application of some skill or technique – but a *poesis*; a bringing forth of a phenomenon in the world, which is to say, something with the ability to appear in different ways in different circumstances but exhibiting some lawlike behavior. (Crease, 1994, p. 182-183)

This dynamic, in which players “enter the game of its structuring” (Frost & Yarrow, 2007, p. 88), is embodied in the social interactions as much as conceptual reformulations. Players that enter into the game may thereby undergo *autopoeisis*, or self-creation, potentially reconceiving their sense of self and relations with others. This point will be picked up again in the discussion on art and aesthetic sensibility in chapter 5.

Improvisation embraces indeterminacy in order to fully engage in “an aesthetic which seeks to reconcile an apparent contradiction: how to bring spontaneity and restraint into balance” (Soules, 2000). Musician Ann Farber, noting the craft and dedication players bring to the music, describes the way such expressive goals may be achieved:

Our aim is to play together with the greatest possible freedom – which, far from meaning without constraint, actually means to play together with sufficient skill and communication to be able to select proper constraints *in the course of the*

piece, rather than being dependent upon precisely chosen ones. (quoted in Belgrad, 1997, p. 2, italics in original)

Improvisation is most often compared to pre-composed music, it would seem, to cite the shortcomings of music composed on the spot, especially in terms of structural complexity. Improvisers do not contest this, as much as they point out the different intentions and skills involved in these different modes of music creation. The immediacy of improvisation invites response tempered by risk, sensitivity and commitment, “performance where the distinction between means and ends collapses: action is thus *irrevocable or irreversible*” (Kanellopoulos, 2007, p. 103, italics in original).

Pianist Bill Evans, in the liner notes to Miles Davis’s seminal recording *Kind of Blue*, compares jazz to Japanese calligraphy, an art that similarly demands a complete presence of mind:

The resulting pictures lack the complex composition and textures of ordinary painting, but it is said that those who see well find something captured that escapes explanation. This conviction that direct deed is the most meaningful reflections, I believe, has prompted the evolution of the extremely severe and unique disciplines of the jazz or improvising musician. (Evans, 1959)

By contrast, composed music allows for the careful consideration and editing of materials, deliberations that could take hours, days, or years to complete satisfactorily. Again, these approaches should not be seen in opposition to one another, simply directed toward different ends. Improvisers argue that certain aspects of musical performance cannot be realized through the reproduction of notated music. According to Edwin Prévost, “the primary objective of free improvisation is ‘the practice of human inquiry and the unmediated experience of human relations’” (Prévost, 1995, p. 108). These dynamics are present to a certain extent in all forms of improvisation.

The potential in gaps

In the preceding section, I discussed Vygotsky's argument for play as a process for generating and negotiating meaning. The co-construction of meaning in dialogic forms of interaction results in the creation of communities based upon shared symbols and experiences, however contested they may be. The structures adopted for improvisation are necessarily under-determined, to allow spaces in which participants can freely explore possibilities inherent in the material. The creative constraints I discussed earlier may be considered as prompts, or guides for improvising within the gaps available. Prompts may have different degrees of specification, and those that are minimally defined may provide the widest ranges of interpretation, re-created as the work unfolds in time.

Gaps are the complement of constraints; both must jointly be considered as guides for curricular discovery. If, as this analysis suggests, learning through improvisation is a transformation in which learners change with the work they are co-creating, the selection of constraints and gaps is of importance, for these define in some respects not only the territory but the aspects of the self to be explored. Gaps act as provocation, negative spaces which students are invited to imaginatively fill, contextualizing their creative thoughts within or in relation to a tradition or curriculum.

As a challenge to more coercive forms of instruction, gaps create the possibility for broad democratic interaction. Once freed from the positivistic yoke of the need for a single correct answer, students are more likely to feel inclined to see their contributions as valid components in the collective learning process. For Frost and Yarrow, gaps are vital for group participation: "The gap, which is in many ways a crucial signal of the

improvisatory attitude (What next? Where next? Who next? Why?), is used as a means of treating the audience democratically, inviting them to become co-creators” (Frost & Yarrow, 2007, p. 102). Improvisation offers a framework for democratic interaction in the classroom, a topic I take up further in a later section.

Performances may be roughly mapped on a spectrum measuring the degree of improvisation present. This breadth of the spectrum would be partially derived from the adherence to a written score, including the interpretive decisions made by classical musicians during performance. As music notation is unable to specify every tonal, timbral and temporal characteristic to be played (which would likely render it unreadable), performers must determine these in the course of performance. In jazz performances, players are afforded greater freedom according to genre. In Free Jazz, for example, players participate in a form that specifies very little, other than the unusual sanction *against* idiomatic contributions. This attempt to maximize players’ freedom conforms to this analysis of improvisation by Smith and Dean (1997): "Improvisation is only fully exploited if it permits the breaking, remoulding and rebreaking of such ‘parameters,’ and indeed only if the possibility exists of reformulating the parameters on each occasion" (p. 41). Improvisation may thus be regarded as interrogative, a means of questioning the limitations of rules: does the application of the rule yield the desired results? Is breaking the rule more effective? Can the rule be modified or reframed as a new rule to achieve aesthetic goals? Simply put, what does the rule do?

Jared Burrow, looking at jazz improvisation from a Confucian perspective, sees the breaking of tradition as a tradition, a tradition that continually transcends itself. In this

way, one maintains one foot within the tradition while the other steps beyond to expand its breadth. He writes:

On another level of complexity, the tradition paradoxically demands that each musician cultivate personal expression, originality, and innovation as the highest possible musical values while at the same time placing musical constraints upon the player. In other words, the tradition demands adherence to certain rules, yet also demands that, as the improviser's ability develops to a higher and higher level, the rules must be broken when necessary to achieve artistic goals. (Burrow, 2002)

Current schooling practices do not account for this regenerative quality. The notion that internal forces, such as the dynamic interplay of students, in which the curriculum is deconstructed and re-created, is in opposition to a paradigm in which learning goals are decided outside the classroom, as in the standard issue of texts. The view of improvisation as regenerative praxis challenges teachers and administrators to support learning that grows out of this dynamic, unpredictable view of tradition.

Autopoiesis – the ongoing creation of Self

Trombonist and composer George E. Lewis (2004), writing on two differing perspectives on improvisation, the Afrological and Eurological, distinguishes the two by their view on personal narrative. Afrological improvisation, he holds, is marked by its organic referencing and growing out of a tradition or narrative; Eurological improvisation, with its emphasis on individuality, has sought instead what Borgo calls the “autonomy of the aesthetic object” (Borgo, 2002, p. 171). This is exemplified by John Cage's aleatoric music, in which random events trigger sonic events. This perspective contrasts sharply with the African experience, as I will show later in my discussion of West African drumming. Afrological improvisation, as Lewis (2004) points out, is intimately aware of its history, and seeks to create dialogic contexts that deepen,

question, transform, and extend understandings of that history. The music, as Heelan points out, is a guide to understanding possible relations to one's self. He writes:

[F]or every good performer, the role of the score undergoes a transformation when it ceases to be a theory and becomes instead a mnemonic, then the artist's scorebook becomes a set of "places" or *topoi*, the function of which is to remind the artist of the suites and sequences to be performed. As such it is a local, personal, contextual, historical, technological, and artistic guide, it [is] an open or endless set of memory cues, it is no longer a universal theoretical perspective. (Heelan, 1988, p. 522)

Improvisational forms are vehicles for exploring and transforming the self, prescribing minimal constraints as means for significant action. The choices made during improvisation are not simple manipulations of rules, but offer possibilities of self-creation, what Frost and Yarrow regard as "the identification of key moments in which to intervene in your own story, not to let it be told by others" (Frost & Yarrow, 2007, p. 217). Violinist Stephen Nachmanovitch (1990) sees rules as opportunities: "improvisation is not breaking with forms and limitations just to be 'free,' but using them as the very means of transcending ourselves" (p. 84). This orientation implies a creative non-attachment to a self that is ephemeral, dynamic, and ever open to transformation. A healthy regard for risk and responsibility marks this creative project: "The more radical modes of improvisation both accept the consequences of the disintegration of the existential self and attempt to use them positively" (Frost & Yarrow, 2007, p. 18-19). Frost and Yarrow consider this philosophical dimension to be a constitutive aspect of improvisation in all of its guises:

Like other improvisation games dependent on a rapid response, it liberates the player from any one habitual mode and moves him towards becoming a kaleidoscope of available choices. Important for actors, of course, but equally so for actors as people, because it produces an extension of the range of existential choice, which is the most serious and far-reaching effect of the play element in culture. (Frost & Yarrow, 2007, p. 154)

If, as Crease maintains, performance is poesis, the bringing into being of something new, then the resulting construction of identity that occurs in improvisation may be considered as autopoiesis, the transformation of self. Borgo sums up this perspective in profoundly simple terms: “Ultimately, learning is not a matter of what one knows, but who one becomes” (Borgo, 2007, p. 62).

Relation

The co-constructive nature of improvisation foregrounds relation as a governing focus, whether in explorations of relations between players, of the unfolding work to tradition, or of players to the audience. Sensitivity and awareness to the ways in which these relations develop requires active listening in performance. Mark Bradlyn (1991) states that improvisation “succeeds as music only to the extent that listening achieves equal status with playing” (“Figure Ground and Field, Gesture and Texture: a gestalt strategy for group improvisation”, p. 15, cited in Borgo, 2002, p. 176). This deep listening carries with it a responsibility to others, evidenced in the empathy and care improvisers often claim as integral to their work. Improvisers *must* lend one another mutual support; failure to do so, thereby leaving an actor stranded, is “the First Cardinal Sin in improvisation” (Frost & Yarrow, 2007, p. 142). Ideally, players recognize their contributions in relation to the whole and act for the collective good. Kanellopoulos (2007) discusses the need for forgiveness in this regard, of “letting things go, weighing possibilities and problems *without allowing judgment to become an impediment of action*” (p. 113, italics in original). By this view, players take joint responsibility, maintaining, in the final analysis, a critical stance in relation to the piece, not to one

another. The creative, transgressive, and often agonistic nature of improvisation encounters is tempered by a collective sense of responsibility, one that grounds and gives force to the participants' contributions.

True jazz is an art of individual within and against this group. Each true jazz moment (as distinct from the uninspired commercial performance) springs from a contest in which each artist challenges all the rest; each solo flight, or improvisation, represents (like the successive canvasses of a painter) a definition of his identity; as individual, as member of the collectivity and as a link in the chain of tradition. (Ellison, 1972, p. 234)

Ralph Ellison's eloquent and cogent analysis of jazz serves to highlight the multilayered forms of dialogue that characterize improvisational practices. These challenges he refers to are a key feature of a praxis that simultaneously prompts participants to seek novel solutions beyond their comfort zones and supports these resultant explorations.

Provocation here takes place in a context of collective responsibility. Social responsibility, according to Prévost (1995, p. 108), is not a subsidiary effect of free improvisation, but its central concern; participation in improvisation is built upon a commitment to "the practice of human inquiry and the unmediated experience of human relations" (cited in Kanellopoulos, 2007, p. 111).

In this environment of mutual care, emphasis shifts from the acquisition of techniques to the application of such techniques to actualize expressive, communicative and transformative goals. Instead of individual gain, such an "improvisation ethic seeks (or should seek) to transcend skill-based hierarchies" (Kanellopoulos, 2007, p. 106). Fixing such a hierarchy would reduce the variability and flexibility of the group. Group improvisers try to contribute in ways that relate and respond to multiple contexts. As Frost and Yarrow point out:

There is no fixed hierarchy in improvisation work, except in the sense that everything has to do with the enriching of performance: whether this is seen as individual realization of action, expression and response; as a communal act of composition; as something shared with an audience; or as a celebration of the full resources of individual being and the ways they can be combined to create new patterns of significance. (Frost & Yarrow, 2007, p. 183)

Group improvisation, then, relies upon a commitment to share collective responsibility for a project that will be reflectively evaluated as it unfolds, and the strength of this interaction is determined by the receptivity participants express through their attentiveness and presence. This situation is given all the more urgency due to the irrevocability of each player's actions within the performative context (Kanellopoulos, 2007, p. 110). Temporal exigencies force improvisers to re-evaluate their priorities, and communicative and supportive abilities, such as active listening (having “big ears”), are given pre-eminence.

Improvisation is most often associated with creative work in music and the arts. Daniel Belgrad (1998) argues that this has only recently become a pervasive element of American aesthetics. In *The Culture of Spontaneity: Improvisation and the Arts in Postwar America*, Belgrad draws from examples across the arts in the mid-twentieth century to paint a picture of spontaneity as the aesthetic ethos of American society. He cites the rejection of corporate liberalism as the common impetus linking improvisatory practices in abstract expressionist painting, beat poetry, and bebop. Artists, writers, and musicians were responding to the tension inherent in a cultural ethos that both embraced the totalizing effects of mass consumption and bureaucratic planning with the identity politics of the individual and of subcultures: “Corporate liberalism embraced an ontology and epistemology of objectivity, which was the basis of its advanced technological mastery of nature. Against this, spontaneity posed intersubjectivity, in which “reality”

was understood to emerge through a conversational dynamic” (Belgrad, 1998, p. 5). The growing interest in spontaneous modes of artistic expression is also discussed in Huxley and Witts’ selection of artist reflections collected in *The Twentieth-Century Performance Reader* (1996). This collection of writings emphasizes:

late twentieth-century approach to the process; one that emphasizes uncertainty. The earlier attempts by artists in various disciplines to impose an order, an adherence to rules through method, have been replaced by a recognition that it is precisely the lack of rules, the lack of order that demands a new type of rigor, a new search for truth and honesty. (p. 5)

Improvisation was at the heart of an aesthetic stance grounded in egalitarian forms of engagement, in modes of representation based upon democratic values that were not tied to the marketplace. While there was a respect for the community of practitioners and adherents, their freedom and creativity would not be limited by societal prescriptions – for these artists rewriting the rules to the game *was* (a part of) the game. I discuss more of Belgrad’s observations regarding improvisation and literature below. Here it is worth noting that these “totalizing effects” are characteristic of standardized curricula.

Risk

Despite the many benefits of improvisational practice, participation is not easy, especially for those who have not done so formally. This is due in large part to the risk one takes in grappling with its indeterminate processes. Students (and teachers) unfamiliar with structured improvisation may experience stage fright. While I concede that this may make the introduction of improvisation-based activities more difficult, I believe it is vital for all participants to recognize the sterility of the (current) alternative. Teachers might wish to lessen inhibitions by inspiring their students with biographies of

artists, inventors, and other thinkers whose works achieved greatness because of the risks they took, the expectations they contravened. It is imperative that learners recognize that becoming otherwise entails risk yet offers possibilities, a point borne out by evolution. If, as Louis Pasteur (1854) has stated, “In the fields of observation chance favors only the prepared mind,” then creativity favors the mind that takes chances.

The nurturing of a positive regard for risk is one of the necessary skills of the teacher. This is only possible when students feel empowered, when they feel they are being listened to and taken seriously. The risk involved should be taking creative chances, not as potential exposure to ridicule and censure. In order to achieve this, students must be made aware of the roles they play in co-creating a supportive classroom environment.

Implicit in my argument for the adoption of an improvisation-based approach in our education system is a deep trust that students will, when offered chances to explore in an environment of mutual respect, respond in kind to their peers, embracing the challenge to collaboratively, through the auspices of the school, make the world their own. This point is expressed well by theatre director Jacques Copeau in 1916:

Somewhere along the line of improvised play, playful improvisation, and improvised drama, real drama, new and fresh, will appear before us. And these children, whose teachers we think we are, will, without doubt, be ours one day (quoted in Rudlin, 1986, p. 44)

In the following chapter, I look at playful improvisation in West African music, jazz, and theatre, seeking elements in these practices that problematize and subsequently enhance curricular understandings.

Chapter IV: Improvisation in the Arts and Beyond

Improvisation is most regularly associated with artistic practices, which form the principal subject of this chapter. Improvising musicians and improv actors make use of deliberately indeterminate structures to guide and generate creative work, and draw inspiration from the dynamic (and potentially risky) contexts in which the works are created. Before detailing the ways in which I believe jazz improvisation offers a vital model for classroom engagement, I discuss jazz's cultural roots in the musical traditions of West Africa. I then look at jazz, theatre, and an elaboration of jazz as a metaphor for knowledge management to see how these represent alternative perspectives on learning and agency, particularly as they help reframe educational praxes.

African Drumming

Music-making in Africa is above all an occasion for the demonstration of character (Chernoff, 1979, p. 151)

As this short ethnographic section makes clear, the practice of improvisation is multidimensional, with implications beyond artistic exploration, in that it epitomizes social forms of engagement foregrounding communication and tolerance. This is perhaps most evident in the music of West Africa, where the values underlying musical creation and the mores undergirding social interaction derive from a negotiated sense of collective selfhood. Two seminal studies, John Miller Chernoff's *African Rhythm and African Sensibility* (1979) and Margaret Drewals's *Yoruba Ritual: Performers, Play, Agency* (1992), present complementary perspectives on social performance as improvisation, as forms of cultural politics in which identity is created through the fluid negotiation of

individual agency in social practices. These views are of import for this thesis in that: a) they represent how improvisation may exemplify vital cultural understandings of self, extending beyond the immediate performance context; and b) they form the substantive base for jazz, both historically and epistemologically. I then draw on Paul Berliner's work on Zimbabwean music for mbira, or thumb piano, to elaborate on continuities in both African music and jazz contexts. I close this section with an ethnomusicological analysis by Thomas Brothers (1994) that discusses the common structural elements between Ewe drumming and jazz that help promote participation.

Sociocultural dimensions of West African Drumming

The following section offers West African perspectives on music as social act, as a site for identity politics and a framework for critical participation. Chernoff's (1979) description of drumming situates learning and playing in increasingly broad social relationships, from the close relationship he shared with his teacher, to the interaction of the ensemble, to the connection between musicians and dancers, to the forms of social participation embodied in these forms of engagement. The observations he makes offer an attractive analogy for dialogic participation in educational settings. In terms that resonate strongly with Drewal's (1992) account of West African ritual, Chernoff (1979) sums up the organic interdependency of these modalities:

Criticism is presented every moment: it is part of the context and part of the art. In an African context, criticism is seen and offered as an act of participation and a gesture of support to help the artistic effort achieve its communal purpose, and to systematize the criticism would destroy the integrity of the event. Criticism in Africa is a measure of people's concerns that the quality of their art is intimately connected with the quality of their lives. Africans use music and other arts to articulate and objectify their philosophical and moral systems, systems which they

do not abstract but which they build into the music-making situation itself, systems which we can understand if we make an effort. (p. 36-37)

Music, as a physiological and mental mode of synchronization, is a means for a community to come together and know itself as a community. Perhaps the most distinctive element of African music is its complex polyrhythmic interplay. What is surprising about this (to Western ears) is that “the rhythm that might be considered the main beat of the music is not emphasized” (p. 48). This requires that African music is understood by listening to it in relation to an additional, unheard rhythm, one that all of the parts are in dialogue with. This becomes a central principle, one that has great implication for collaboration in improvisatory practice: “Rhythmic dialogues are reciprocal, and in a way that might seem paradoxical to a Westerner, a good drummer restrains himself from emphasizing his rhythm *in order that he may be heard better*” (p. 60, italics in original).

By highlighting interdependent action, improvisation in African music provides a vehicle for the enactment of democratic principles; it is a moral activity that “functions dynamically to create a contest of values where criticism is translated into social action” (p. 143). Improvisation, as a form of active engagement with the social context and the constitutive relations that comprise the musical event, holds a much greater significance than indicated by the limited, pejorative understandings mentioned earlier. The degree to which these views are integrated in the West African perspective may be more clearly understood when improvisation is seen as an element of ritual.

Improvisation in West African ritual

Margaret Drewal has worked in Nigeria with the Yoruba for over a decade. Her book offers detailed accounts of Yoruban ritual, and focuses on the ways in which identity is constructed through improvisation. She presents improvisation as a basis for a world-view that recognizes reality as uncertain: “Indeterminacy is implicit in Yoruba transformational processes of play and improvisation as modes of operation; it is anthropomorphized as the trickster deity *Eshu*, whom scholars have fondly called the principle of unpredictability” (Drewal, 1992, p. xix). Players are motivated to embrace uncertainty for “indeterminacy is the very condition of the possibility of free play and is what empowers the players” (p. 16). It is this spirit of play that frames participation and allows for personal transformation:

Whether improvisation is a performative strategy in ritual, it places ritual squarely within the domain of play. It is indeed the playing, the improvising, that engages people, drawing them into the action, constructing their relationships, thereby generating multiple and simultaneous discourses always surging between harmony/disharmony, order/disorder, integration/opposition, and so on. (Drewal, 1992, p. 7-8)

The roles and identities of participants are similarly re-created as new relationships are explored, as new forms of organization emerge in the enactment of ritual: “Participatory spectacle does not set up fixed unequal power relationships between the gazer and the object of the gaze; rather, the participatory nature of Yoruba spectacle itself means that subject and object positions are continually in flux during performance” (p. 15). This dynamic is evident in the interdependence of the drummers and dancers as described by Chernoff above.

Improvisation as a way of life

The improvisational bases that constitute participation in West Africa, as both Chernoff and Drewal are careful to point out, have none of the pejorative, “making do” connotations described earlier. Indeed, these values are antithetical to the art and the spirit that speaks through it.

Ultimately, precise and impressive control of improvisational style distinguishes excellence in African musical idioms, and the worst mistake in such a context is not participatory restraint but random expression. In African music, expression is subordinated to a respect for formal relationships, and technique is subordinated to communicative clarity. (Chernoff, 1979, p. 122)

Similarly, Drewal’s view of play echoes Gadamer: “What play is *not* for Yoruba is unserious, frivolous and impotent” (Drewal, 1992, p. 15, italics in original). Players are invested participants in the aesthetic and democratic social negotiations that constitute their culture. It is play, but play in which players are deeply invested, play as an orientation toward social relations that makes interaction in daily life comprehensible.

The following quotes underscore the degree to which these elements – musical participation, social identity and practice, ritual, learning, and the understanding of the culture’s unfolding tradition in time – are intertwined:

The development of musical awareness in Africa constitutes a process of education; music’s explicit purpose, in the various ways it might be defined by Africans, is, essentially, socialization. An individual learns the potentials and limitations of participation in a communal context dramatically arranged for the engagement, display, and critical examination of fundamental cultural values. These values form part of an elaborate set of generative themes which pattern the experience of everyday life and the institutionalization of customs. (Chernoff, 1979, p. 154)

Transformational, or generative, processes are embedded in African performance practices through acts of re-presentation, or repetition with critical differences. Thus, ritual performance necessarily involves relations between the past and individual agents’ interpretations, inscriptions, and revisions of that past in present theory and practice. (Drewal, 1992, p. xiii)

Before moving on to additional research on African music and its links to jazz, I wish to conclude this section with a final quote from Chernoff, one which highlights the fluidity engendered by these ritualized forms of engagement:

To maintain their poise in their social encounters, Africans bring the same flexibility which characterizes their participation in musical contexts: they expect dialogue, they anticipate movement, and most significantly, they stay very much open to influence. (Chernoff, 1979, p. 158)

These are, I would argue, characteristics we should regard as high priority in the creation of learning environments.

Improvisation on the mbira

Paul Berliner, whose work on jazz I will draw upon heavily in the following chapter, has provided a study of mbira (or thumb piano) in Zimbabwe that has much in common with the improvisational practices described above. For our purposes here, I would like to look at his characterization of musical performance and the role it plays in the transmission of skills and understanding to students of the mbira. (All of the following quotes are based upon an mbira seminar presented by Paul Berliner at Cornell University, in 2008). Berliner, noting the interactive context for learning the mbira, characterizes mbira playing as enactive, stating, “performance is a medium for cultural knowledge.” In lieu of artifacts that might otherwise assist learners, live performances act as aural scores that are memorized as they are produced. As a result, underlying forms are deduced from the convergences of variants. Emphasis is placed on learning, rather than on teaching, and instruction progresses according to the student’s initiative. Of particular import is the development of the student’s listening skills, and these skills are challenged and exercised by the cyclical form. Repetitions also provide learners with various points

of entry. The pedagogical approach grows out of the musical form, which favors participation and offers multiple opportunities for exploration and mastery.

The inexhaustibility of musical possibilities open to performers is expressed in the adage “No-one knows how to play the mbira.” This statement takes on a much richer significance if one considers the way inexpert production is regarded. Players that err in performance, incapably rendering a given melody, may also be thought to be generatively creating variations; these may become incorporated if they are found aesthetically pleasing. “Musical saves” in the heat of performance mark a discrepancy between the musician’s intention and the subsequent realization, but these serve to generate possibilities in variants. These become integrated into the music, both as it unfolds and as a part of the individual and communal repertory or knowledge base.

Participatory structures in African drumming and jazz

As a link joining African musical practice to jazz improvisation, Thomas Brothers (1994) presents an analysis of cyclical form that shows how their structural similarities foster participation. Eschewing previous analyses which differentiate rhythmic improvisation as derived from African antecedents from European-derived harmonic and melodic improvisation in jazz contexts, Brothers has suggested a model that bridges the two: “Instead of a mysterious fusion of two colliding traditions, one tradition is viewed as having been transformed through assimilation of prominent features from another” (p. 480). Both Ewe Drumming music and jazz are cyclical in nature - these features are the means by which solo players play off of the expected cycle. The key to Brothers’ model is the distinction he makes between fixed, set elements in the cycle and the variable

components. In both of these forms of music, “the main interest lies in the interaction between the variable players and the fixed players” (p. 483).

The fixed cyclic temporal structure provides regular openings in which players may enter. The polyrhythmic, architectonic structuring of parts also yields a high degree of complexity through minimal means. By entering at different times in the cycle, individual parts, although simple in and of themselves, may gain new meanings in the larger context of the piece, creating new relations that call forth responses from other players.

It is of vital importance to recognize the awareness that both lead players and ensemble players have in this regard – each member contributes to grant greater coherence to the total performance. Players recognize that the more clearly the other parts are heard, the more expressive their parts will be.

The lead drummer is the focus and not the basis of the music: the quality of his improvisations depends on their ability to highlight the other drums; similarly, without the other rhythms, the improvisations of a great drummer would be meaningless. In short, a drummer uses repetition to reveal the depth of the musical structure. (Chernoff, 1979, p. 112)

Both lead and ensemble parts emerge in the context of the rhythmic cycle. This is as true of the functional roles for the members of the African drum ensemble as it is of the harmonic cycles common to jazz. “The fixed group has the two main attributes of being both fundamental and cyclical; the variable group (in this case the soloist) is supplemental to the fixed group in the sense that, while not cyclic itself, it is understood in terms of the cycle” (Brothers, 1994, p. 488). Brothers presents jazz as using pitch and tonality to further explore the tension between individual voice and cycle: pitch is used to articulate temporal relationships (p. 491). Solos may reinforce the chordal structure of a

tune, cut across it, create ambiguity, or shift orientations to the harmonic cycle that may vary every beat.

For our purposes here, the interesting point to note is that Brothers' model shows both African music and African American music to be more integrally linked, both drawing upon a common generative source, answering as it were the same question - What musical structures maximize freedom in collaborative contexts? His reconciliation between Ewe drumming and jazz allows us to "appreciate unity of aesthetic purpose within a stylistically diverse tradition" (p. 501).

More importantly, improvisatory engagement provides a reliable context that allows players and listeners to relate new information to the conceptual structure that gives it meaning and expressive force. This implies sensitivity and awareness on the part of the listener as well as player: "For the practice to be effective, the listener must be able to identify the fundamental harmony from which the soloist is departing" (p. 498). These elements mark areas central to my concerns - the relationship between predetermined curricular forms and novel contributions of participants, and more fundamentally, the ability to identify interpretive stances. I see the fixed variables as analogous to the constraints that are agreed upon during the unfolding of the work. I propose that an overt distinction between fixed and variable structures creates spaces for students to explore permutations, propose hypothetical solutions that are more divergent from those generally accepted, and use counterfactuals as springboards for thought experiments.

If, as these accounts of African experience suggest, there is an intimate link between the experiences of the player and the form his or her music takes, then we may find that the freedom of the player (learners) may be enhanced by providing more

supportive and open-ended structures. This is a useful frame for interpreting jazz, which I offer as a vital and viable model that acts as my paradigm for classroom interaction.

Jazz

In 1968, I ran into [jazz saxophonist] Steve Lacy on the street in Rome. I took out my pocket tape recorder and asked him to describe in fifteen seconds the difference between composition and improvisation. He answered: 'In fifteen seconds the difference between composition and improvisation is that in composition you have all the time you want to decide what to say in fifteen seconds, while in improvisation you have fifteen seconds.' His answer lasted exactly fifteen seconds and is still the best formulation of the question I know. (Bailey, 1992, quoting Frederic Rzewski, p. 141)

I come now to jazz, the first of the two forms of improvisation that ground the theoretical perspectives I have explored so far in a dynamic art form of subtlety, complexity, and expressive depth. Jazz shows how these different elements interact synergistically to create a unique form of communication. Jazz is not the only musical form that utilizes improvisation – it is in fact a common feature of many 'folk' and popular musics. I first address the question as to why the Western classical tradition has effectively ceased to value improvisation, a change caused in part by the popularization of sheet music, and then contrast this mode of transmission with learning opportunities presented by the jazz community. I then present a short history of jazz, necessarily brief, highlighting its inclusive nature and stylistic diversity. In order to explicate the concerns of the learner, I look next at the aspiring musician's path towards entry into the jazz community and musical mastery. This path has been charted in greatest detail by Paul Berliner (1994) in his seminal text *Thinking in Jazz: The Infinite Art of Improvisation*, a study that offers important ways of understanding how players learn to improvise. One guide for constructing curricula is to be found in Derek Bailey's book *Improvisation*

(1992), in which he makes the useful distinction between idiomatic forms of improvisation (those with defining stylistic constraints) and non-idiomatic forms (works in which players seek to free themselves from such pre-determined constraints). I argue that the structural features of bebop are most amenable to classroom praxis. As an idiom, bebop is characterized by the repetition of structural elements that both frame and impel the exploration of aspects inherent in the content. Finally, I look at ways in which jazz itself has been transmitted in current practices. Bill Dobbins (1980) and Roger Mantie (2008) problematize jazz instruction and describe the possible pitfalls teachers face in presenting the indeterminate and expressive dynamics of improvisation as a method in schools.

Improvisation in Western classical music

Ernest T. Ferand (1961), in what is perhaps the most in-depth ethnographical account of improvisation, makes the following claim:

There is scarcely a single field in music that has remained unaffected by improvisation, scarcely a musical technique or form of composition that did not originate in improvisatory performance or was not essentially influenced by it. The whole history of the development of [Western art] music is accompanied by manifestations of the drive to improvise. (Ferand, 1961, p. 5)

A comprehensive list of improvisational musics would indeed be extensive – consider the genres we are intimately familiar with on public radio: the blues, jazz, jam bands, rap, bluegrass, to name a few. If we broaden our listening to take in ethnic musics, we find improvisation to be an integral feature of the music of India, Spanish flamenco, Jewish Klezmer, of Balkan, Persian and Brazilian styles. Improvisation was an important component of Western classical music, as well, and we may be surprised to hear that

several of the great composers (Bach, Mozart and Beethoven) were more highly regarded for their abilities to extemporize on a tune, perhaps, than for their compositions.

The causes for the decline in improvisation, however, have not been widely documented, and it is worth considering possible reasons for the move away from improvisation in classical music before looking at jazz.

Robin Moore's provocative paper "The Decline of Improvisation in Western Art Music: An Interpretation of Change" (1992) traces the practice of improvisation from the early eighteenth century, noting in turn the diminishing patronage of courts and break-up of improvising communities of musicians, the rise of music conservatories for the middle-class in the early nineteenth century, and the impact of mass produced printed music for aspiring bourgeois consumption. These social transitions resulted in:

the disappearance of original social contexts for art music; the lack of exposure in daily life to classical music on the part of modern performers; the experimentalist nature of much contemporary composition; interest in historically accurate performance practice; and reverence for art music; all seem to be significant factors contributing to the decline of improvisation. (Moore, 1992, p. 80)

The courtly culture that nourished improvisation provided environments in which musicians lived and performed together, in which they developed a common language, one with conventions the players adopted for their improvisations. Moore sees improvisation growing organically out of a community of practice, as a shared form of communication. He uses the metaphor of language to express this social coherence: "In an important sense, improvisation is *not* free. It is only an effective means of expression when incorporating a vocabulary, whether cognitively or intuitively understood, common to a group of individuals" (p. 64, italics in original). Performance expertise was passed down through participation in the community, often through families, and this communal

involvement became unsustainable when cut off from court life. The availability of published music reflects, as Moore notes, a shift from music as process to product: “No longer confined to a particular cultural context or group, art music became an aristocratically-derived commodity, a product which anyone could “consume” if they cared to expend the time and money” (p. 69). The codification processes of conservatory instruction and the notation requirements for the publication of sheet music hastened the demise of an art increasingly removed from the original context in which it was performed. When Beethoven came to Vienna for music lessons in 1787, Mozart is said to have assessed him by his ability to improvise (Gould & Keaton, 2000, p. 143). The skill with which Beethoven accomplished this task, and by which Mozart recognized his prodigious talent, was to become increasingly marginalized in Western musical practice until the advent of jazz. Composers now notated the virtuosic flights of fancy and creative interpretations to be displayed in performance in advance.

The natural adeptness we demonstrate in freely improvising so many of the activities in our daily lives is, Stockdale (2004) contends, “seemingly suppressed through the conventions of music training” (p. 112). This learned disability, it would appear, is a direct result of an over-dependence upon sheet music and the limitations such a notation system brings, not only in the form of prescribed musical responses, but in forms of social interaction as well. Kanellopoulos (2007) marks some of these implications:

Analytic notation does not just represent sounds: it constitutes a means of advancing authority over sound, prioritizing structure over expressive nuances, detachment over reciprocity, individuality over collectivity, parametric thinking over wholeness of musical experience. Musical practices, canon formation, embodiment and representation of (gendered) hegemonic forms of cultural production are all intimately linked. (Kanellopoulos, 2007, p. 116)

Improvisatory practices are a means of destabilizing hegemonic structures. David Borgo, in an article entitled “Negotiating Freedom: Values and Practices in Contemporary Improvised Music” notes that improvised musics “challenge the implied hierarchy of composer-performer-listener” (Borgo, 2002, p. 169), replacing concerns with fidelity to a score with active, authentic experiences of co-creation. Whereas the score acts to define possible forms of interaction in contemporary classical music, in jazz, roles are conflated and distributed amongst each of the individual participants in the group, resulting in a wider range of interactional, and resulting interpretive, possibilities.

The decline of improvisation in Western classical music epitomizes a number of key features I shall elaborate later in an exploration of contemporary education practices. As we have seen, such improvisation was made possible in an aesthetically engaged community that participated as through a common language; the performance practices of this community became increasingly distanced from the aesthetic sensibilities of those creating the music; the adoption and reliance upon printed material further deepened the schism between the language as a dynamic, living form of discourse and technicized reproduction. Similarly, contemporary schooling is typified, I claim, by the segregation of cognitive and expressive abilities from the interactive and communicative contexts which nourish these abilities. As I hope to demonstrate, curricula that over-emphasize the transmission of scripted materials do not sufficiently nurture creative and dialogic skills, an oversight which may be addressed by adopting more open-ended, improvisation-based forms of interaction. Jazz offers a model for such interaction.

Although improvisation is found in many of the arts, I have selected jazz as a paradigm for modeling classroom interaction. Many factors make jazz an obvious choice:

jazz is a generative form of music that reflects upon and synthesizes past understandings for creative and aesthetic ends; it has a rich tradition of individual and group expression; it is a vital enactment of democratic ideals and tensions; it encourages and tolerates radically divergent forms of personal interpretation; and it has offered many disenfranchised members of society a means of representation and cultural critique. One of the most distinctive and widely heralded characteristics of jazz is its democratic regard for individual voice, an aspect organically tied to the dialogic framework in which pieces of music unfold. Composer Gunther Schuller, who coined the term “Third Stream” to refer to music that synthesizes classical music and jazz, contrasts the different value placed on personal interpretation in these genres: “Whereas we are interested in the *Eroica* and only secondarily in someone’s performance of it, in jazz the relationship is reversed” (Schuller, 1968, p. x). Jazz foregrounds communication; as a result, attention is thereby centered on relation and context, on performances as emergent wholes that could not be predicated by a description of initial conditions. I elaborate upon these points below, noting the ways in which these perspectives problematize and clarify educational goals, and highlighting the points most salient to the construction of a usable model for classroom praxis. I begin with an overview of jazz history.

A brief history of jazz

As a site for personal expression, creative innovation, race politics, and cultural permeability, the impact of jazz on American society can hardly be overestimated. It is imbued with the yearnings of the African-Americans whose desire for dignity and equality became embodied in a form of both dissent and solidarity, as a model for social critique and an exploration of democratic practices. The history of jazz reflects the

nation's social and political climate, communicating the plight of disenfranchised people through an art that draws musically and psychologically upon the blues. It is a story of the appropriation and commodification of Black culture, even while the basic human rights of Blacks were disregarded, in a volatile mix of veneration and discrimination. Jazz history features White swing artists who denied the sources of their inspiration, and others who feared appearing on stage with the Black musicians they loved. Jazz music shifted from being the most popular American music between the two World Wars, one that commanded dance floors across the country, to a cerebral music that continues to expand the tonal, timbral and rhythmic materials from which it is created. Hot, Cool, American and Pan-global, intensely individual and equally collaborative, jazz encompasses a panoply of contradictions. Therein, perhaps, lies its greatest strength.

The sources of jazz are equally diverse, and highly contested. While its origins in New Orleans are well documented, recent analyses continue to weave together the many strands of musical cultures that contributed to its birth. The simplified history speaks of the collision of European tonal materials with the African rhythms brought by slaves, but this, as with so much of jazz historiography, is contested. For my present purposes, I will be looking less at the origins of jazz than at some of the distinguishing features of its development, focusing specifically on the ways in which ensemble playing has sought to balance individual agency with group collaboration. A key means to achieving these aesthetic and collaborative goals has been found in improvisation.

Improvisation has been a defining feature of jazz since the beginning of the twentieth century. Variation, whether by horn players in the long funeral marches or by piano players entertaining customers at brothels, became the musical means by which

these players could stamp their individuality on a piece, recreating the music according to their own conceptions. The solo improvisations of the first great trumpet players, Buddy Bolden and Louis Armstrong, became increasingly integrated into the ensembles, resulting in the improvisational counterpoint of Dixieland or Classic Jazz. This music was highly interactive and dynamic, and its syncopated energy spurred on dancers and solo players alike. Jazz musicians began migrating north in the late teens, seeking opportunities in New York and Chicago. The uninhibited attitudes of dancers, fueled by the post-war fervor and expansive sense of freedom, led to jazz being labeled as morally degenerate, and the Jazz Age was marked by a degree of carefree indulgence that conservatives claimed was corrupting youth. These critiques were often blatantly racist, re-casting African-Americans as impassioned savages. The Twenties saw audiences attracted to bands with outstanding soloists such as Armstrong. As jazz moved into the dance halls, larger orchestras formed to create larger sounds, which resulted in more scripted part-writing to back the soloists. The bandleaders of the swing bands achieved great acclaim, but the members were given fewer opportunities to improvise. Duke Ellington's bands presented an exception to this trend – Ellington is said to have composed each part specifically for the player who was to play it, not for the trumpet but the trumpeter, hiring and utilizing musicians who brought distinctive voices to the music. The Thirties saw the shift from improvisational interplay to refinement in arranging. The lingering effects of the Depression made large bands increasingly difficult to support and transport – the popularity of swing brought it to every corner of the nation, but the end of the Thirties and the ensuing Forties were to see a rise in small combo playing.

The swing bands were marketed for mass consumption. They were still almost entirely segregated, and the efforts of bandleaders to perform with bands of mixed races were simply disallowed and met with violent outcries. African-Americans continued to face double standards, valued as soldiers and spat upon as civilians. Many of the swing bands that prospered were White, a dynamic that contributed to the disenfranchisement felt by the Blacks who claimed jazz as their own cultural heritage.

Bebop, the musical innovation of the late Forties, had its roots in the clubs catering to the musicians dissatisfied with the expressive limitations that characterized ensemble playing in the swing bands. The most famous of these, Minton's in New York City, hosted after-hours improv sessions with many of the players that were to lead the bebop scene, amongst them Charlie Parker, Dizzy Gillespie and Thelonious Monk. These players brought jazz to a new pinnacle of cognitive complexity, which evidenced itself in unprecedented instrumental virtuosity. Not only did they greatly expand the tonal resources possible by increasing the range of idiomatically acceptable dissonances, but they also created improvisations with these new materials at remarkable speeds. Ensemble playing achieved a degree of freedom and interplay that exceeded all that had come before, as the accompanying rhythm section moved from the more simplistic time-keeping role it had previously played to an expressive role on par with the soloists.

Jazz players would continue to explore looser structural constraints, prescribing fewer guidelines for performance, specifying fewer constraints in the decades that followed. These forms of expression came to be known as "Free Jazz," in which individual players were no longer restricted by pre-determined harmonic structures, but responded instead to the immediate, emergent gestures of the collective dynamics of

group interplay. Free jazz players radically reconceived of jazz performance, consciously ignoring many of the boundaries and characteristics associated with earlier forms.

Definitions

Despite the apparent continuity in this historical account, however, the use of the name “jazz” for a musical style has been widely contested since its use in the early 1900s. Players such as Thelonious Monk and Ornette Coleman, whose work is now not only considered part of the standard repertoire but as main tributaries of modern jazz, were not initially recognized as playing jazz, due to their radical interpretations of the medium. Many styles have been labeled jazz, and theoreticians argue for differing degrees of conservatism or inclusiveness due to their varying agendas. Gridley, Maxham and Hoff (1989), look at some of these definitions for jazz and conclude that one possible means of creating a taxonomy for jazz is to consider “family resemblances” following Wittgenstein, who wrote, “the strength of the thread does not reside in the fact that some one fibre runs through its whole length, but in the overlapping of many fibres” (Wittgenstein, 1953, p. 32a). This view holds that the term “jazz” may be used to describe a diverse array of musical styles. Certain features, such as swing, syncopation or improvisation, may be more or less present in any given performance, but the inclusion or exclusion of any one feature is not sufficient to deny membership to the class of performances named “jazz.” Denotation is interpretive and becomes a matter of degree - “perhaps jazz is not an all-or-none event, but is instead a continuum, a dimension: jazzness” (Gridley, Maxham & Hoff, 1989, p. 527). This may be one reason why jazz is so capable of incorporating stylistic elements from other traditions; if “jazz” is, as players

are wont to say, an attitude, a great degree of latitude is allowed in the integration of divergent personal background in performance. For all its stylistic permeability, however, the practices that are most common in jazz are sufficiently well represented to utilize as a curricular frame and critique.

Improvisation is generally considered one of the defining characteristics of jazz. The popular tunes selected for improvisation from the period spanning the 1930s-1960s became known as standards, but they were thought of as vehicles for personal expression, as formative, not normative. Because of the variability between the different interpretations of a given jazz tune, jazz standards are not considered definitive expressions of works, but rather, “instructions for creating performances” (Young & Matheson, 2000, p. 126). Players selectively emphasized other features, such as swing and call and response, to expand the harmonic structures and melodies of these tunes, reinterpreting the constraints that defined the idiom.

Judicious play with and within musical conventions marks the improvisational approaches of jazz players as well as African drummers. Scott Saul (2003) discusses the directions jazz took coming out of bebop as “reconciling liberation and discipline, self expression and collective achievement” (p. xiv). Jazz has long borne connotations of licentiousness and moral unrestraint, especially in critiques distorted by the racism of the first part of the 1900s. The fervor for jazz that marked the 1920s, and the demand for its driving beat behind an increasingly inter-racial dancing many considered scandalous, contributed to the notion that improvisation was a wild, primitive form of expression. Players have struggled to overcome these negative stereotypes, asserting that jazz

demands an intellectual flexibility and social sensitivity, as much as emotional and visceral force. In contrast to these misbegotten essentialist ideas of jazz,

the freedom of the civil rights movement and hard bop did not revolve around the desire to tap into a set of unbridled urges and give them free rein – what some parts of the counter-culture later adopted as their freedom ethic, and what has haunted jazz writing as the myth of absolute improvisation. (Saul, 2003, p. 16)

Bebop jazz players sought instead to emphasize the personal mastery that jazz demands as a discipline of rigorous study, unworthy of connotations of “individual license and whimsical choice” (p. 12) and showing through the sheer virtuosity and collaborative synchronicity of their art that “their freedom was not the freedom of the libertine” (p. 16).

Much of the dynamism in jazz grows out of the vitality with which players assert themselves, in their embrace of the jazz form as a means of self-representation. In improvisational art, the work acts as signifier to signify (amongst other things) the artist. In this way, through the act of self-representation, the artist is able to create herself, autopoiesis aesthetically elevated to the status of performance. African-American culture has embraced this form of expression, and it is a central dynamic to other forms of verbal arts, in literature, music and poetry. Henry Louis Gates, Jr. elaborates this point in his text on literary criticism titled *The Signifying Monkey* (1989). Jazz, as with West African drumming practices that it grew out of, offers a rich site for players to locate themselves within a tradition that creates the social through the dialogic concord of individual voices.

Features of jazz

The following section looks more closely at the distinctive generative contexts and improvisational processes in jazz. These practices organically flow from the cognitive orientations discussed earlier: re-creations of cultural traditions, play and

imagination as enactments of metacognition, self-representation in performance, and divergent thought in individual and group creativity. The synthesis of these elements in jazz makes it a provocative frame for other dynamic forms of communicative engagement.

Two theorists who have clearly articulated jazz practice from both sociological and musicological perspectives are Derek Bailey and Paul Berliner. Free jazz guitarist Derek Bailey presents an insider perspective, one that complements Berliner's ethnomusicological work on African musical practices discussed above. I shall use their work, as well as the reflections of practicing musicians such as George E. Lewis and educator Bill Dobbins, to highlight aspects of jazz that offer a means of reconceptualizing classroom practice.

In *Improvisation* (1992), Bailey presents a wide range of views by practicing musicians to dispel the unfortunate notion that improvisation is often regarded as “a musical conjuring trick, a doubtful expedient, or even a vulgar habit” (Bailey, 1992, p. ix). These negative connotations associated with improvised music may be attributed in part to the values imparted by modern recording techniques, which produce music that is minutely scrutinized and edited. Wynton Marsalis speaks of how current recording practice, in which players individually add recording tracks to the mix, is counter to the jazz aesthetic:

You can't play jazz music that way. In order for you to play jazz you got to listen to them. The music forces you at all times to address what other people are thinking and for you to interact with them with empathy and to deal with the process of working things out. And, uh ... that's how our music really could teach what the meaning of American democracy is. (Wynton Marsalis, in *Ken Burns Jazz*, 2004, Episode 10, 1:22.36)

I look at democratic processes in improvisation in chapter 5. For now it is sufficient to notice that the use of intermediary media may render certain types of social contact problematic, and thereby place ways of understanding beyond participants' reach, as we saw in the differing oral and literate forms of understanding described by Ong. The recording process thus acts to distance players from the dynamic negotiation at the heart of improvisation as an art. Classical music practices may similarly hamper players by over-valoring reproductive fidelity over creative interpretation. Bailey claims that strict classical training is not conducive to the learning and practice of improvisation because:

the biggest handicap inflicted by that training is the instilling of a deeply reverential attitude towards the creation of music, an attitude which unquestioningly accepts the physical and hierarchical separation of playing and creating. From this stems the view of improvisation as a frivolous or even a sacrilegious activity. (Bailey, 1992, p. 67)

Rather than appeal to any formal aesthetic criteria for validation, Bailey argues that improvisation fulfills the natural creative and expressive needs of the performing musician in that it “invites complete involvement, to a degree otherwise unobtainable, in the act of music-making” (p. 142).

Bailey makes the useful distinction between idiomatic and non-idiomatic forms. While the creative works Bailey terms “non-idiomatic” may in fact be said to constitute an idiom by way of the idiomatic features they avoid, this division is helpful in that it directs attention to the stylistic and structural elements reproduced in improvisatory practice. Idiomatic improvisation may be described as creating within a set of constraints. Evaluation is partially based upon the degree of fidelity in which these stylistic elements are reproduced. Concern for accuracy of reproduction, however, may limit self-expression. Bailey writes:

the learning method in any idiomatic improvisation does have obvious dangers. It is clear that the three stages – choosing a master, absorbing his skills through practical imitation, developing an individual style and attitude from that foundation – have a tendency, very often, to be reduced to two stages with the hardest step, the last one, omitted. (Bailey, 1992, p. 53)

If learners are not given ample opportunity or take sufficient time to make the stylistic features their own, they will be unable to coherently move beyond reproduction to creative synthesis and invention. That is, they will be limited to reproducing within the conventions prescribed by their training, becoming, to recall Carse's distinction, trained as opposed to educated.

Bailey notes the conflicted feelings some improvisers have about their craft, seeing improvisation as “something without preparation and without consideration, a completely ad hoc activity, frivolous and inconsequential, lacking in design and method,” while simultaneously holding that “there is no musical activity which requires greater skill and devotion, preparation, training and commitment” (Bailey, 1992, p. xii). The art of improvisation does indeed involve the mastery of a wide range of skills. In addition to individually achievable goals, such as instrumental virtuosity or the mastery of idiomatic styles and techniques, many improvising musicians consider group dynamics as criteria. These skills are based as much on the ability to listen (or have “big ears”) as it is to play. While they aspire to greater communicative versatility and ideational fluency, an ability to hear the performance as a whole allows players to modulate their contributions. Organizational science theorist Frank J. Barrett notes: “Usually we think that great performances create attentive listeners. This notion suggests a reversal: attentive listening enables exceptional performance” (Barrett, 1998, p. 617). The ability to listen is a fundamental skill in negotiating uncertainty in a coherent manner.

Zack, (2000), writing on organization science, considers a four-part division for improvisation in jazz, a spectrum that mirrors the increased freedom players exhibit in their creative manipulation of musical materials during *improvisation*, a term he uses to describe the least constraint-bound pole. He writes:

Interpretation is a matter of closely recreating a composition. *Embellishment* is the stuff of structured jazz-improvisation within a set of strong rules. *Variation* is the stuff of bebop-extending the notion of harmonic structure and the rules for picking good notes. *Improvisation*, then, would refer to the maximal innovation that comes from improvising the entire composition spontaneously: its premise, its harmonic structure, its tonal language, and the actual sounds played. (Zack, 2000, emphasis added)

The graph below integrates Zack's analysis with stages of improvisational freedom laid out by jazz saxophonist Lee Konitz (1985), and maps out spectra for evaluating dynamics in group orchestration and collaboration.

Music Genre	Extent of Improv.	Konitz's Stages	Organizing metaphor	Communicative Metaphor	Dynamics
Classical	Minimal to none	Interpretation	Functional hierarchy	Formal; structured; predefined; linear	Rigid
Traditional jazz/swing	Constrained within strong structure	Embellishment	Job shop/ process platform	Predictable but flexible scripts; adjacency pairs	Flexible
Bebop	Extensive; harmony and basic tune structure can be modified	Variation	Network	Complex, but structured conversation	Organic
Post bop	Maximal; content and structure emerge	Improvisation	Functional Anarchy	Emergent, spontaneous, mutually constructed conversation	Chaotic

Table 1: Zack's Hierarchy of Jazz Styles in Organizational Science ©Michael Zack (1998)

Konitz's ten-stage teaching sequence begins with the melody played as notated, and each subsequent stage adds increasingly sophisticated embellishments, creating variations that are more loosely tied to the original. At stage 9, the point where the connection is very subtle, he teaches the creation of an entirely new melody over the harmonic changes. Konitz leaves the final stage entirely un-notated, marking it simply as "an act of (pure) inspiration" (Konitz, 1985).

Improvisation then, as Bailey points out, is not a matter of kind, but of degree. Zack presents a theoretical framework that may be adapted for improvisatory activities in the classroom, as a guide for teachers interested in increasing student participation. This view sees improvisation as a range of possibilities, in which constraints are increasingly simplified and students are encouraged to freely explore more divergent possibilities in class content.

How do jazz players build a foundation from which to explore the expressive possibilities of their art? For many players, apprenticeship is informally conceived of, an amalgam of influences that signify entrance into the jazz community. Berliner describes the types of activities that musicians, both novice and professional, engage in when "hangin' out," and the passion with which they often obsessively pursue mastery. A sample list would include: listening to recordings together, analyzing harmonic structures, attending performances, and playing together. Learning may take place in structured environments or in jam sessions in hotel rooms. All of this is geared to, and actualized in, performance: "In the final analysis, it is performance that reinforces the musician's grasp on a new piece" (Berliner, 1994, p. 82).

Pianist and renowned music teacher Barry Harris speaks of versatility in these terms: “The more ways you have of thinking about music, the more things you have to play in your solos” (quoted in Berliner, p. 146). Berliner’s text examines many of these “ways of thinking” in great detail, from the building of a jazz vocabulary to the situated learning that takes place after hours. He considers these as a mosaic of interlocking perspectives and skills:

Jazz activities blend the composer’s imaginative exploration of musical ideas with the performer’s mastery of musical instruments, the theorist’s penchant for analysis with the historian’s curiosity about the development of musical tradition, the educator’s concern for making musical language accessible to the non-specialist with the concern all share with “passing it on.” (Berliner, 1994, p. 485)

The sense of improvisation as “anything goes,” then, reflects neither the view of the practitioners of the field, nor that of discerning participants. If we, as educators, accept that the dynamic interpretation and reconstruction of materials which characterizes improvisation contributes to our curricular objectives, what elements can we then adapt?

Bebop as a model for classroom interaction

While the forms of engagement in jazz may each present possibilities for classroom interaction, I find bebop to be the most plausible and challenging for an educational setting. As I will show later in my discussion of theatre improvisation, and especially in the pedagogical form of Process Drama, classrooms offer fertile sites for improvisation that reference structuralizing elements while providing freedom for collective exploration and reconstruction. Bebop drew upon the existing repertoire of jazz standards, bringing to them an enhanced language for their interpretation. It is this continuity with the tradition that makes bebop more readily applicable to educational

needs and settings than a model derived from less structured forms of free jazz and less interactive forms of improvisation in swing.

Bebop improvisation is structured around harmonic cycles that are reiterated and reinterpreted. The most commonly used tunes, or “standards” are often common tunes from popular music. The melodic contours and way these are aligned with the tunes’ harmonic underpinning are some of the many features improvisers can explore during the course of their improvisations. The palette of resources improvisers choose from in creating their solos is very large – they may alter rhythmic accent, subdivision and placement of the beat, augment or diminish the length of phrases; they can alter timbres, or play instruments in unconventional fashions; they can alter the harmonies so that they vary in dissonance; or they can quote other tunes, reinterpreting the tradition by emphasizing elements of other styles or players. This is only a partial list, and many of these features are combined in performance, choices growing out of the interplay between players. I will look at some additional conventions that help structure interaction between players.

Call and response

Call and response is perhaps the most typical form of interaction in jazz, with what is widely considered a historical basis in calls between preacher and congregation. Call and response may take place in phrases of any length; when structured to grant each soloist four bars in which to respond, it is called “trading fours.” This interactive structure invites players to interpret and critique the preceding idea, weaving the synthesis of ideas within the unfolding piece, spurring on further response.

Head-improv-head

Most bebop tunes are built upon 32-bar cycles, built up of four 8-bar phrases. The standard form for jazz tunes is the presentation of the tune (or “head”) as an ensemble, a move to a section where individuals act primarily as soloists, and then a return to the tune played ensemble. This structure, then, acts much like a theme and variations, with the theme recapitulated. The reiterated, spiral structure not only allows each player a chance to solo, but the opportunity to musically comment upon the soloists that went before. The structural redundancy heightens interaction and allows for greater cross-referencing and complexity.

Ostinato

In some musical settings, the accompanying (“comping”) instruments create a texture of repeated figures, a background that allows the soloist to more fully explore a given harmony or rhythmic frame. The steadiness of the accompanying pattern serves as a contrast that foregrounds the soloist, and allows players to focus upon subtler nuances of the groove. Groove is a subjective understanding of rhythmic patterning, a feeling of swing and flow of interacting parts. Interestingly, Zbikowski, following Monson’s analysis of the jazz rhythm section (1996), moves beyond these physical responses to consider the groove as “knowledge shared between musicians” (Zbikowski, 2004, p. 272).

These basic participatory structures may be of use in organizing student response in the classroom. Designating time frames may help learners shift more easily between the moments when they act as soloists or as accompanists (however these are construed).

Teaching jazz

Jazz has had a long history of oral transmission, in the jam sessions where younger musicians apprentice themselves to more seasoned players. In more recent times, however, jazz has followed in the tradition of Western classical music, moving from communities of practice to the conservatories. Academic environments in which jazz skills are imparted offer learners many opportunities for gaining expertise; they have been criticized, however, for their over-emphasis on technique and overly pat definitions of style (Dobbins, 1980). It is useful for us to look at ways in which the transmission of improvisatory skills has been institutionalized within the field before extrapolating beyond jazz traditions to other educational settings.

High school big bands provide beginning players with an entry into ensemble playing. Roger Mantie (2008), an educator who sees in jazz “improvisatory musical practices that encourage inter-active provisionality, and that suspend summative judgments in a perpetual quest that seeks potentialities,” notes that these ends are not met in big band contexts for three reasons:

One, it runs contrary to the history of the jazz tradition, which is primarily small-group based. Two, methods of instruction have become based on European models, which can be inappropriate and ineffective for the teaching of certain aspects of jazz that do not conform to notation, such as groove or “feel.” Three, improvisation plays a less prominent role in Big Band music than it does in small ensembles. (Mantie, 2008)

Rather than draw their repertoire from the more open-ended standard tunes used as vehicles for personal expression and interpretation, big bands instead tend to favor “usually commercial arrangements, which leave little room for either individual or group improvisation (they sometimes include fully notated “improvised” solos) and leave the conductor firmly in charge of everything that takes place” (Walser, quoted in Mantie, 2008).

Bill Dobbins, a veteran jazz pianist, arranger and educator, links his critique of current conservatory practice with the “definitive” reproduction of classical works:

Today, however, the most creative aspects of Baroque music have been eliminated through strict adherence to various “complete” editions that have been prepared by well-meaning musicologists. Thus, the greater part of a contemporary Baroque interpreter’s creative work has been removed. (Dobbins, 1980, p. 40)

Dobbins is concerned with imparting the understandings of jazz to students, not simply the technical skills. He considers the following concepts to be integral:

1. instrumental sound as an expressive extension of the musician’s personality.
2. reliance on aural transmission of musical information.
3. its tendency toward inclusion and assimilation rather than exclusion and elitism.
4. rhythm as a physical rather than an abstract element. (Dobbins, 1980, p. 40-41)

Each implies a pedagogical frame for engagement enacted in classroom practice. The resulting understandings form a praxis, the aesthetic quality expressed in the performance of the material. The performance of understanding is considered the final goal: “the process and discipline of improvisation provides the sole access to the advanced stages of musical development” (p. 37).

Dobbins sees the cultivation of improvisational skills as a means to foster critical self-awareness. Music training must be multi-modal, balancing aural, visual and kinetic skills: “It should be taught through an approach that integrates ear training, sight-reading, instrumental and vocal technique, and theory into a unified and complete understanding of music as a language” (p. 41). The questions Dobbins poses are equally as vital in non-musical contexts:

What are our real motivations in musically educating our children? Do we wish to educate them so that they can dutifully perform for our own entertainment in the concert hall or on the football field? Or do we wish to educate them so that they can enrich themselves through musical self-expression and communication? If we choose the latter, then improvisation is an essential tool for initiating the process of discovering and developing music within oneself. Nothing is more important

for the future of music than the recognition, cultivation, and love of that process. (Dobbins, 1980, p. 41)

These are core concerns that this work seeks to address. As the critiques of big band instruction indicate, pedagogy that limits opportunities to improvise and offers in its stead a superficial application of jazz stylings subverts the expressive, aesthetic, and emancipatory goals of the medium. In adopting improvisation as a model for classroom engagement, we need to be wary of such partial gestures. Jazz is not, however, the only art that offers possibilities for the classroom. Before discussing educational practice directly, I turn now to another important strand of improvisational practice, the theatre.

Theatre

The dynamic of the personality is drama. (Vygotsky, cited in Moran & John-Steiner, 2003)

The brain itself is used as the repertoire. (Charles on improv theatre, 2003, p. 79)

My exploration turns now towards another familiar expression of improvisation, the theatre, as an area rich in theories claiming improvisation as a method for achieving emancipation. This liberation takes place in many different contexts - political, psychological, and educational – as well as in the achievement of aesthetic goals. I first present a synopsis of theatre theories as articulated by some of the leading theatre director/theorists of the nineteenth and twentieth centuries, theories which problematized the connection between actor and character, calling into question both identity and identification. Each of these theorists – Stanislavski, Brecht, Grotowski and Brook – envisioned the theatre as a site for experimentation and transformation. Following Mitter (1995), I consider the implications these notions of self have for improvisation, and

question whether these goals for self-actualization and expression have analogous functions in academic classroom practices. These general considerations of dramatic action provide the context for the exigencies particular to theatre improv. The key source for my analysis is Frost and Yarrow's brilliant work *Improvisation in Drama* (2007), which presents a variety of theoretical perspectives supporting a powerful model for classroom interaction:

everything has to do with the enriching of performance: whether this is seen as individual realization of action, expression and response; as a communal act of composition; as something shared with an audience; or as a celebration of the full resources of individual being and the ways they can be combined to create new patterns of significance. (p. 183)

Improvisation as educational practice has had an interesting history. The improvisational forms of Viola Spolin's work (1999) trace a direct line from the democratic goals of progressive educators of the 1920s to the comedy improv of Chicago. Keith Johnstone (1987) expands upon many of her pedagogical techniques, and offers additional approaches designed to counteract the inhibiting form of education he felt he had been exposed to. These theoretical issues set the ground for the applied form of theatre I will be advocating as a vehicle for classroom improvisation in my discussion of Process Drama in chapter 6.

Theatre theories and methods of directing

The original Greek meaning for *drama* was "act" or "action", and this conception indicates the way in which *theatre* and *theory*, which both spring from the common Greek root *thea* ("sight"), are grounded (Partridge, 1966, p. 710). The theatre, a representation of the world "as if," may be seen as the enaction of an idea to be viewed,

as a collective working through of a hypothesis. Theatre is a space where acts may be socially scrutinized and evaluated for their emotional resonance, creative force, and moral intelligibility. Theorists have blurred the lines separating theatre performance and the performative acts that constitute daily life, providing detailed analyses of how “life is but a stage.” Improvisational theatre, in which actors spontaneously respond to the unfolding of the play and audience, blurs these forms of performance yet further.

The Russian theater director Constantin Sergeyevich Stanislavski was perhaps Western theatre’s first great theatre practitioner. In 1906, he began to articulate a system that provided “units and objectives” and a “through line” which allowed the actor to more fully inhabit the role of the character (Stanislavski, 1989/1936). This could not, he felt, be accomplished by a superficial aping of behavior. Rather, the actor was able to enter the character to the extent that he or she could authentically live that character’s life offstage, grounding acted behavior in naturalistic motivation and emotions. The actor was to become the character, bringing to bear as many elements of psychological motivation lying beyond the script as possible in order to give the character depth. Consequently, the actor was forced to interpret and personalize, not simply reproduce the stage directions. As Mitter (1995) notes, “Stage art for Stanislavsky is not mimesis, it is metamorphosis. The aim is not merely to convince but to create. The subject is not life but its transcendence” (p. 10). The actor’s goal was the representation of an idealized character, one that naturalistically matched the playwright’s intentions.

Bertolt Brecht opposed this form of theatre on the grounds that it asked the audience to uncritically accept the moralizing precepts of the play, reinforcing a disempowered, apolitical stance that he saw as endemic to society at large. Instead, he

proposed a theatre of alienation which aimed at fostering critical consciousness through theatrical devices which forced the audience to dissociate actor and character. The audience is not to see the play as natural, as this form of engagement dulls the critical sensibilities of the spectator: “When something seems ‘the most obvious thing in the world’; it means that any attempt to understand the world has been given up” (Brecht, 1957, p. 725). In particular, naturalistic theatre may have sufficient force to emotionally sway viewers into accepting dramatic representations as actual, instead of artifice. Brecht saw this (as did Boal) as a form of coercion that disempowered the viewers.

As Brecht notes, “Alienating [the actors] helps to make them remarkable to us” (Brecht, 1996, p. 103). The audience was not to let their preoccupation with the character, even in the most “natural” acts, allow them to forget the actor: “Once the idea of total transformation is abandoned the actor speaks his part not as if he were improvising it himself but like a quotation” (p. 101). The alienation effect (or “A-effect”) was a move to jolt the spectator into an awareness of the agency that is concomitant with interpretation, thereby empowering them: “What is ‘natural’ must have the force of what is startling. This is the only way to expose the laws of cause and effect. People’s activity must be simultaneously be so and be capable of being different” (Brecht, 1957, p. 725). This awareness is, according to Brecht, the function of art: “A critical attitude on the audience’s part is a thoroughly artistic one” (Brecht, cited in Huxley & Witts, 1996, p. 103). The gap between the character as scripted and the reality of the actor’s representation is here regarded as a prompt for critical engagement.

These acting methods, whether aimed at more closely aligning actor emotion and intention with the character’s or further dissociating the two, involved diverse forms of

training. For actors, these offered different routes toward understandings of self, understandings that they experimented with in the communal setting of the theatrical troupe and embodied in performance. Jerzy Grotowski, in his book *Towards a Poor Theatre* (1968), shifts the emphasis from theatre as external presentation to theatre as emancipatory practice. This moves the theatre from the stage to the lived improvisations of daily life, an open-endedness Grotowski saw in spiritual terms. Of his troupe, he wrote:

we presume that each of the participants feels obliged to train creatively and try to form his own variation inseparable from himself, his own reorientation open to risks and search. For what we here call ‘the method’ is the very opposite of any sort of prescription. (Grotowski, *Towards a Poor Theatre*, VIII, cited in Huxley & Witts, 1996, p. 192)

In lieu of a given method, Grotowski’s troupe lived communally and practiced an austere lifestyle, in which actors could integrate the ascetic training they hoped would grant them the greatest interpretive freedom. A life lived theatrically (and then performed) would be authentic, not because of the truth conditions implicit in the script but in the tangible contact between actor and audience. Such a theatre would present idealized performances, but be “a theatre ‘rich in flaws’” (cited in Charles, 2003, p. 61), growing organically out of the context in which it is renewed in performance.

Peter Brook argued for the constant vitality of the play, seeing the text as a structure that the actor explores through discussion but tests in performance, a view that echoes the jazz theorists discussed earlier. According to Mitter, “Even the actor’s insight is theoretical, only to be *confirmed* in improvisation” (Mitter, 1995, p. 29, italics in original). Yet these confirmations are in no way conclusive; a Living Theatre offers

inexhaustible possibilities for interpretation, some better, some worse. It is instead the search that grants theatre its vitality.

In a living theatre, we would each day approach the rehearsal putting yesterday's discoveries to the test, ready to believe that the true play has once again escaped us. But the Deadly Theatre approaches the classics from the viewpoint that somewhere, someone has found out and defined how the play should be done. (Brook, in Huxley & Witts, 1996, p. 116)

Brook's method involved the deconstruction of the text to explore the relationships between actors, often reducing rehearsals to grunts and gestures so that nothing could be taken for granted in the performance. These exercises served to raise the actors' awareness to the complexity of the expressive possibilities at their disposal.

These different approaches explored theatre as a way of knowing and performance as a vehicle for transformation. These practices did not only seek to represent a dramatic work as a finished product, but make the actors *present* – to both the audience and themselves – in the dynamic interpretation of their roles. Actor and audience engaged in the shared process of self-discovery.

Theatre improv

The mutability of the performance, its generative properties and its ability to put discoveries to the test – these qualities define improvisation. I turn now to David Alfred Charles's dissertation on theatre improv, spanning Greek theatre to the present day, in which he “seeks to unapologetically recognize, evaluate, and celebrate improvisation on its own terms” (Charles, 2003, p. 3). Charles holds that improvisation, which “encompasses and embraces immediacy, presence and presentness, creativity, specificity, non-repeatability and impermanency” cannot be evaluated according to the standards

applied to art products: “consistency, universality and predictability (in many ways, qualities that seek permanence and timelessness)” (p. 83). As noted earlier in a musical context, composition (understood as the freedom in time to edit work for future performance) and improvisation place different demands upon players and have differing goals. The features specific to improvisatory practice, Charles notes, make evident distinct political and aesthetic possibilities. The collaborative relationship between the players and the audience, and the uniquely shared, historical context in which the improvisation unfolds, both serve to unite participants. In this way, it achieves a degree of solidarity not afforded by conventional theatre. Charles writes:

Whereas conventional theatre tends to present theatre *for* or *on behalf* of an audience, improvisational theatre generally plays with or is generated from those in attendance [I]t elevates the language and lives of the artistically dispossessed to the level of art. (Charles, 2003, p. 137)

Improvisational theatre not only offers participants a context in which to engage in a common experience but acts as:

a model of collaborative creativity available to all, elevating the inherent dynamics of the here and now, esteeming the prosaic wisdom of its participants through including them earnestly as artistic partners, inviting structural malleability so as to afford a posture of inclusivity, openness and relatively unfettered discourse, while pursuing a playfully transgressive breach of controlling boundaries, systems and norms (p. 327)

Frost and Yarrow speak similarly of the liberating nature of improvisation, as:

work which allows us a freer sense of (*meaning for*) *self*; offer ways of ‘unblocking’, both in the personal and psychological sense, and in the social, political sense; move towards an awareness that *self is a capacity for generating a plurality of meaning*; and establish this as a directable *voluntary* operation through which self ceases to be merely the passive receptacle of deterministic influences and opinions and becomes a *productive agent*. (Frost & Yarrow, 2007, p. 203-204, italics in original)

These transformative elements need not be limited to improvisation on the stage; when considered as a state of consciousness implicit in enacted performance, this awareness characterizes such dynamic learning as “the extension of knowledge of the self, and with the deploying of its resources in action” (p. 204). The fluidity granted to the subject matter is intertwined with the fluidity with which learners regards themselves.

This, however, is not always considered desirable. Improvisation not only has risks for the performers, whose success is not guaranteed by a winning script – it has also been seen as a risky business by authorities, both secular and sacred, fearing impromptu and unsanctioned critique. Tied as it is to the immediate contexts of performance, improvisation has long been a site for political action, and, as a result, censorship. In England, the Theatres Act of 1843 required scripts to be approved by the Lord Chamberlain prior to their performance, a situation that forced improvisational theatre underground until 1968 (Charles, 2003, p. 309). This form of censorship had a long life in jazz as well – the Library of Congress has only allowed improvised music recordings to be registered since 1972 (Borgo, 2002, p. 180).

Improv theatre practice - transformation and self-knowledge

Improvising actors, much like their jazz counterparts, recognize the discipline involved in the mastery of their craft, a discipline that frees them to perform beyond themselves. I turn now to practices that incorporate the theatrical understandings discussed above to improvisation as an end in itself.

One of the most renowned teachers of improvisation, especially as it pertains to education, is Viola Spolin. Spolin was trained by Neva L. Boyd, who was, like Dewey,

closely affiliated with Jane Addams' Hull House in Chicago in the 1920s. Boyd helped direct the educational and artistic activities of this settlement house, and Spolin's work with her directly influenced her own teaching. Spolin worked as a teacher and drama supervisor on the Chicago WPA (Works Progress Administration) Recreational Project, where she initiated a communicative, improvisational approach that helped non-English-speaking immigrants, both children and adults, express themselves through drama (Frost & Yarrow, 2007, p. 50-51). This was a very progressive form of ESL instruction for the time, one very much in harmony with the social goals of the New Deal period.

Given these liberal socio-political goals, it is not surprising that Spolin foregrounded the enactment of democratic principles in her teaching approach. She states directly that "the heart of improvisation is transformation" (Spolin, 1999, p. 39). As with Boal's work, improvisation is not a diversion, or a warm-up for future performance, but a means to self-discovery and social change. The experience of improvisation is seen as having intrinsic merit as a vehicle for personal development. Frost and Yarrow (2007) summarize this performance stance: the player "is not so much a character of the play, as the subject of the play. His skill may amaze us, but what moves us is the actor's gift of himself" (p. 86). Free jazz drummer Bob Hubbard sums up this distinction nicely: "People don't want to hear what I play, they want to know what I hear" (Bob Hubbard, personal correspondence).

Spolin's method, which utilized improvisational games to explore issues of social reform, reconceived the status of the teacher as director. Instead of the teacher acting as authority, however, her role was transformed into that of "sidecoach" in improvisatory encounters structured as games. Spolin describes this complementary role: "Side

coaching is a guide, a directive, a support, a catalyst, a higher view, an inner voice, an extended hand, you might say, given during the playing of a game to help you stay on focus” (Spolin, 2001, p. 7). Whereas classroom teaching has tended to correlate student learning with the skill of teachers, in this approach participants are collectively responsible for the outcome: “players are not *taught* by the sidecoach, so much as everyone *learns through experience*” (Charles, 2003, p. 201). The sidecoach functions as a supportive teacher might, with the aim of “maximiz[ing] the potential of players’ ideas rather than introduce the coach’s” (p. 203). She accomplishes this by preventing the unfolding improvisation from becoming monologic, and working toward “the perpetuation of an enabling process rather than the creation of a particular product” (p. 202). The chief method for perpetuating dialogue in improvisation has been to cultivate a receptive, generative mindset, commonly referred to as “Yes, and ...”

“Yes, and ...” has been titled the cardinal rule in improvisation (p. 248). This may be regarded as a receptive, generative orientation toward the other players and the unfolding of the work. In it, an actor affirms the contributions of his or her collaborators, and responds in a way that elaborates upon their offering. Göncü and Perone (2005), seeing the same dynamic in “turnabout” in children’s dialogues, recognize the positive aspects to this practice:

acknowledging the partner’s intention and adding a new expectancy to it expands the dialogue. It contributes to the construction of an ensemble, an environment of support and acceptance in which the group works through and discovers creative ways of making sense of experiences of affective significance. (Göncü & Perone, 2005, p. 143)

The opposite of “Yes, and ...” is known as “blocking.” Here, a move undermines the creative intentions of the previous player. Blocking often occurs unintentionally – much

like good listening, the ability to be open to other's offers and respond supportively is a skill that requires practice. Nachmanovitch differentiates the critical skills involved using the terms *constructive* and *obstructive judgment*:

Constructive judgment moves right along with the time of creation as a continuous feedback, a kind of parallel track of consciousness that facilitates the action. *Obstructive judgment* runs, as it were, perpendicular to the line of action, interposing itself before creation (writer's block) or after creation (rejection or indifference). The trick for the creative person is to be able to tell the difference between the two kinds of judgment and cultivate constructive judgment. (Nachmanovitch, 1990, p. 134, italics added)

It is important for improvising students to be sensitive to the ways their actions impede or increase flow, skills which are necessary for teachers taking on the role of Spolin's sidecoach as well. I believe a primary goal of education is the enhancement of these sensitivities in the students themselves. As increasingly skilled players, learners come to recognize how their contributions embody critical stances which reinforce or counter the moves that preceded them. If, as some dramatists claim, "humans are too skilled in suppressing action" (Baker-Sennett & Matusov, 1997, p. 199), learners may benefit from curricular activities that invites their collaboration and agency. A mutually supportive environment that simultaneously fosters constructive judgment is likely to be productive and intrinsically rewarding.

Another director who has furthered the practice of theatre improvisation is Keith Johnstone. Johnstone writes of his negative educational experiences in *Improv for Storytellers* (1999), tracing how his use of improv deliberately counters many of the practices he despised in school. Johnstone began Theatresports in Calgary, Alberta in the 1970s, a competitive format which invited the audience to openly vote for the

improvisational performances they liked, one that has since become a standard feature of comedy improv.

The exercises that Johnstone (1999) uses are aimed at helping performers become less inhibited, freeing their imaginations, trusting their intuitions and making them more spontaneous. His directions reveal the transformative power he is hoping to tap into: “Unless you are willing to be changed you might as well be working alone!” (p. 57). And again: “Instead of telling actors that they must be good listeners (which is confusing), we should say, ‘Be altered by what’s said’”(p. 59). While this appeal has profound significance for learners, this may not be easily achieved, as many education practices have made learners fearful of making mistakes. Students may respond to “tilts,” the indeterminate and shifting ground they are building on, by seeking safer terrain. Johnstone sees blocking, and situations in which “frightened improvisers keep restoring the balance for fear that something may happen” (p. 89), as efforts to stay in control. This may result in “‘cancelling’: the unfortunate gravitational tendency of actors – and writers – towards closure in scenes, canceling out the energies they have liberated and failing to move the narrative forward” (Frost & Yarrow, 2007, p. 170).

It is fundamental for the group to create an environment of trust and tolerance. In class the teacher models the supportive respect for mistakes that students will bring to their own improvisations. Johnstone, as teacher, writes, “Assuming responsibility for the students’ failures makes me seem very confident. Soon even shy students will volunteer, knowing that they won’t be humiliated, and the class begins to resemble a good party rather than anything academic” (Johnstone, 1999, p. 60). Students come to understand that failure is an integral part of the game, and are thereby liberated from the need to

impress others with their originality. In an exchange that strongly echoes the Asian perspectives on creativity discussed earlier, Johnstone prioritizes clarity over originality:

The obvious choice is the one you would have made if you hadn't been taught to be "clever," or "artistic". Your obviousness may seem worthless to you, but your obviousness is not mine, and it expresses your true self, whereas "being original" conceals your true self by something that previously defined as original.'

'But what if I really am original?'

'[Of] course you're original, and the more obvious an idea seems to you, the more clearly it will express your uniqueness, but if you try to be creative, you'll be forever dredging up the same fashionable stupidities.' (Johnstone, 1999, p. 88)

Johnstone's remarks here concern "gagging," or independently going for the cheap laugh instead of responding in a way that is more conscious of the collective performance. As with African and Asian perspectives of creativity, social integration is granted a high priority. Johnstone recognizes the high priority that improvisers place upon interdependence and collective responsibility, stating, "The improviser has to understand that his first skill lies in releasing his partner's imagination" (p. 93). Mutual encouragement, coupled with the receptivity and trust in one's own abilities to respond authentically, allow the group to more fully explore potentials in the material.

I believe that the adoption of the "Yes, and..." principle can effectively nurture classroom cultures built upon trust and respect, especially if guided by teachers who see student engagement as inherently creative and provide them with opportunities to express themselves accordingly. As improvisational play often challenges the rules that constitute it, this ground level commitment supports the class in its most inspired flights of discovery.

Educational Ties

Dramaturgical analyses overlap and extend the performative approaches discussed earlier. The notion that improvisation is ubiquitous in social interaction suggests that students will be at least partially familiar with the process; they may, however, as Johnstone point out, take performance for granted and only treat exaggerated performance as “dramatic.” The pretense that guides improvisation in the classroom need not seek extremes of emotion or poignancy. Indeed, the pedagogical value of theatrical improvisation as I envision it is more likely to grow out of the lived experiences of the learners and their mutual efforts at communicating them. The desire to portray events dramatically should therefore be distinguished from seeing them as intrinsically dramatic.

While standardization in schools rewards convergent responses, dramatic exploration supports a multiplicity of interpretations as each learner plays a part in the unfolding creation. In this emergent understanding, “students engage not in ‘the pursuit of truths,’ but in collaborative fictions – perpetually making and remaking worldviews and their tenuous positions within them” (Pineau, 1994, p. 10). Frost and Yarrow detail the variety of cognitive processes players are engaged in when they are improvising:

the performance means on one level involving them in choices from which the play evolves, and on another level making them both discover and generate the ‘subtext’ or underlying motivation for each character or event. They are involved in an *existential* (how to find the resources in their own experience), *psychological* (how to motivate) and *semiological* (how to present in words and actions) commitment to the development of character and incident. (Frost & Yarrow, 2007, p. 214)

These modes of exploration offer a wide range of possibilities for classroom interaction, enriching content and highlighting its complexity.

In the preceding chapters, I have looked at improvisation in cognitive, artistic and expressive forms. I continue my discussion of uses of the theatre in educational contexts

by drawing on a specific approach, Process Drama, in chapter 5. I turn now to a more pragmatic application, one that represents an area of potential economic risk, improvisation as a model for organizational change in knowledge management.

Knowledge Management

If there are no mistakes it's a mistake. (Barrett, 1998, p. 610)

Before embarking on a more detailed account of the relation between improvisation and educational theories, I would like to shift focus to fields that have found the jazz metaphor to be theoretically fertile: organizational science and knowledge management. My purpose here is two-fold: to (a) present positions which clarify commonalities between jazz and other forms of coordinated, social organization; and (b) offer these as sources of insight and potential frameworks for group interaction in the classroom.

Jazz improvisation has become a prevalent metaphor for adaptation and innovation in organizational science and structures many conceptual frameworks in knowledge management. Much of the theorizing in this area (Barrett, 1998; Weick, 1998; Zack, 2000; Crossan, Vieira da Cunha, Pina e Cunha & Dusya, 2002) validates jazz practices as effective principles for dealing with change in learning organizations and is analogous with those I have transferred to educational settings. Each of these elaborations upon the jazz metaphor offers provocative articulations of ways of maximizing useful variability in organizations. Whereas business models for education may be criticized as overly utilitarian, the adoption of principles of improvisation suggests beneficial ways to flexibly integrate change in the construction of knowledge in the classroom.

Knowledge management researchers (such as Weick, 1998; Zack, 2000; and Barrett, 1998) have adopted improvisation, primarily as enacted in jazz, as a theoretical frame for understanding an organization's adaptive viability and flexibility when faced with external change. The dynamics of group interaction in organizations described by these practitioners are analogous to many dynamics found in classrooms. These mappings, common to theatre as well as jazz, are worth considering at length, as they provide alternative formulations for learning expectations, forms of engagement and role. Knowledge management, which is primarily concerned with organizational versatility in commercial spheres, affords an oblique perspective on classroom interaction. This view suggests how classes may be re-structured to meet with external change, not in the market but toward the introduction of new curricular knowledge.

Another reason for the careful consideration of improvisation as elaborated in these terms is more practical. If one of the purposes of education is to prepare students for future participation in the economic life of their societies, an intimate, working familiarity with the principles of improvisation may be a fundamental determinant of success within these organizational contexts, influencing the participants' ability to gain access to systems knowledge, adopt appropriate lead or support roles, and thereby collaborate effectively. Regarding the process of knowledge creation as an integral element in classroom practice can best foster these understandings.

Organizational Analysis

Jazz interaction, with the premium it places upon fluid, negotiated response to indeterminate change, has become increasingly regarded as a productive model, one

equally applicable to high-risk contexts. Karl E. Weicks' paper of 1998, titled *Introductory Essay: Improvisation as a Mindset for Organizational Analysis*, mapped out correspondences between the flux of innovating organizations and jazz improv that have become seminal in the field. Weick offers a list of characteristics that not only describes groups capable of improvisation, but also marks the attributes teachers might wish to foster in their students.

1. Willingness to forego planning and rehearsing in favor of acting in real time;
 2. Well developed understanding of internal resources and materials that are at hand;
 3. Proficient without blueprints and diagnosis;
 4. Able to identify or agree on minimal structures for embellishing;
 5. Open to reassembly of and departures from routines;
 6. Rich and meaningful set of themes, fragments, or phrases on which to draw for ongoing lines of action;
 7. Predisposed to recognize partial relevance of previous experience to present novelty;
 8. High confidence in skill to deal with non-routine events;
 9. Presence of associates similarly committed to and competent at impromptu making [do];
 10. Skillful at paying attention to performance of others and building on it in order to keep the interaction going and set up interesting possibilities for one another;
 11. Able to maintain the pace and tempo at which others are extemporizing;
 12. Focused on coordination here and now and not distracted by memories or anticipation;
 13. Preference for and comfort with process rather than structure, which makes it easier to work on ongoing development, restructuring, and realization of outcomes, and easier to postpone the question, what will it have amounted to?
- (Weick, 1998, p. 552)

These guidelines suggest that synchronization and spontaneity can be fostered simultaneously, through the under-specification of roles. Coordination is achieved by directing attention to the present in an environment based on mutual trust and confidence, where participants feel free to rely upon their individual expertise.

Jazz organization

Not all of the observations concerning improvisation have been entirely theoretical, however, and I turn now to the work of Frank J. Barrett (1998), who has interpreted these parallels with jazz in the form of organizational guidelines that may help inform classroom interaction. Barrett, building upon Weick, develops a set of procedures that would foster interdependence and increase collective competence in organizations.

Barrett brings a deep understanding of jazz interactions to his discussion of innovation and its role in the knowledge management practices in organizations. A pianist of note in highly regarded jazz bands, Barrett maps out seven different aspects of interaction in jazz improvisation and reflects on the benefits each would have for a learning organization, specifically focusing on the ways in which these more risky endeavors may lead to increased viability and resiliency. Organizations must effectively deal with uncertainty and possible structural ambiguity; these imply flexible methods of dealing with consensus, of regarding mistakes and of creating alternative forms of communication. Barrett uses this model for extrapolating concepts useful for managing people and the diffusion of knowledge in other learning environments to create what has become a seminal paper in knowledge management.

Barrett's first hand experience playing jazz and negotiating ambiguity in performance bore fruit in his effective transfer of these fundamental concepts to the realm of knowledge management. His paper is a concise exposition on the significance these forms of engagement have in learning organizations and the implications they have for participation. Barrett offers perspectives that could greatly enhance student understandings. A brief look at some of these principles will be sufficient for indicating how radical a reconceptualization of school practice they might bring.

1. Boost the processing of information during and after actions are implemented.
2. Cultivate provocative competence: Create expansive promises and incremental disruptions as occasions for stretching out into unfamiliar territory.
3. Ensure that everyone has a chance to solo from time to time.
4. Cultivate comping behaviors
5. Create organizational designs that produce redundant information
6. Create organizational climates that value errors as a source for learning
7. Cultivate serious play: too much control inhibits flow. (Barrett, 1998, p. 618-619)

The most highly valued quality of jazz playing might well be the immediacy of the improvisation, the degree to which the phrases played were not premeditated. There is a paradox involved, because in an effort to master their respective instruments many jazz players devote most of their waking hours to perfecting their technique and deepening their understanding. What then do they practice? Barrett calls their goal the attainment of “provocative competence,” an ability to respond to the changing environment that players learn by purposively disrupting previous forms of practice so that they don’t become habitual. In an academic context, these disruptions could be seen as counter-productive; repetition allows for lower level processes to be subsumed and lead to higher levels of mastery. Yet, in another light, these interruptions initiate a state of mindfulness and attention that is lost once learnings become reflexes. The unpredictable nature of improvisatory engagement demands of players that they are deliberate.

Barrett finds in jazz a provocative and exciting injunction for reconceiving management, for recognizing what Ted Gioia has called elsewhere the “aesthetics of imperfection,” to embrace “errors as a source of learning” (Gioia, 1988, p. 53). This means of understanding is regularly present in jazz; players push themselves to play things they have never tried before and these do not always come out as they intended. As revision is not an option in performance, high forms of art in jazz requires that these mistakes be incorporated in as musical a manner as possible. These stretch the players’

abilities to resolve difficulties using unanticipated strategies. Mistakes offer opportunities for players to sharpen problem-solving skills and expand their aesthetic horizons.

How simple and elegant a change, yet how complete a reversal for school practices! In the press to introduce new information, errors rarely seem to be investigated for any generative content; they are simply eliminated to make way for the solution. Mistakes are implicit questions that offer great potential for learning if more fully brought into play and integrated in classroom practice.

The ability to incorporate error has wide-reaching implications for personal interaction as well as for the exploration of information in learning. The greater tolerance the organization has for error, the more fluid the constituent members may be. The ability to recognize mistakes as a site for development and consequent willingness to expose the system to potential error are values that ground Barrett's other positive appropriations from the jazz model. I will briefly comment on another of these in light of their potential value in an educational context.

Barrett (1998) uses the distinction between soloist and accompanist roles in the performance of jazz tunes to reflect on the fluidity of leadership roles in organizations. He notes that the practice of "taking turns soloing and supporting" (p. 617) allows for a dynamic, egalitarian context for allowing others to excel. Both roles demand of players that they are attuned to the performances of other players. The regular rotation of soloist and accompaniment roles in the classroom would give students greater opportunities for supportive listening, allowing for a wider range of perspectives to inform the exploration of content. Such structural and dialogic goals would help soften the hierarchical format of

most classrooms, in which the teacher is accorded a privileged position and student subjectivities are often selectively screened as to their relevance to prescribed content.

In short, Barrett's organizational model draws upon jazz practice to highlight idealized forms of interaction that relate equally well to schooling contexts. Barrett is clear on one point that we should be equally wary of as educators – improvisation is a risky business, the products of such processes are not always as successful as results explored in other fashions. Indeed, this may be a chief criticism leveled at the proposed adoption of such a model in education, that it is unreliable as a means for imparting reliable forms of knowledge. Yet the process seems to have social and cognitive values that may very well exceed the importance we have placed upon the technical knowledge around which so much schooling revolves.

Minimal information design

System design is concerned with the way information is organized and the flow modulated so as to increase access and performance amongst participants. Carroll and Rosson (2005) argue that information is most effectively appropriated when it is integrated with some guiding activity. This causes users to bring their experiences to bear on the immediate context: "Presenting information in the context of an appropriate activity leverages antecedent knowledge and task-oriented motivations" (p. 2). Their notion of "minimal information design" has some interesting parallels with the improvisational frame I am suggesting: when users/students are given a minimal set of variables, they contextualize information according to their own needs, a process that maximizes active engagement in creative problem solving. This encourages a dynamic

approach to expanding research beyond the initial knowledge base of the participants – here, too, information is anchored to user activity: “users are encouraged to ‘read to do’ on their own, to analyze, hypothesize, and improvise on their own, and to locate further resources on their own” (p. 3). As Barrett notes, “modest structures value ambiguity of meaning over clarity, preserve indeterminacy and paradox over excessive disclosure” (Barrett, 1998, p. 611). Minimalist materials encourage learners to fill in the gaps, and shift the focus of instructional design to learning as process.

Complementary theoretical perspectives

I would like to briefly mention a number of theorists who further elaborate on the jazz metaphor for negotiating change, as these provide additional insight into possible frames for classroom praxis. Crossan, Vieira da Cunha, Pina e Cunha, and Dusya (2002) discuss the dimensions of time pressure and uncertainty, contrasting flexibility during *event time* (responses to emergent situations) and *even time* (scheduled time). This is the same distinction made earlier, between *kairos* and *chronos*. Chelariu, Johnston and Young (2002) focus upon the ways in which organizational learning is integrated into the improvisational process, and ways in which this learning may be later accessed. Kamoche, Pina e Cunha, and da Cunha (2000) look at the relation of improvisation to feedback loops and the introduction of problems. These views see improvisation as a viable, productive modality, particularly in systems that develop strong communicative networks, thus widening the experiential base of the organization.

Knowledge management takes improvisation as a model for reorganizing groups so that information is active and enactive: leadership becomes shared and fluid, the

networked system adapts as new information becomes available, and new leadership structures are adopted according to resulting contingencies. The practical observations made by these theorists, such as the generative possibilities of mistakes, provocative competence, and rotating leadership, may be of similar value in classrooms. I move now from this oblique contribution to educational practice to the ways in which an improvisational approach may help to reframe and reinterpret issues central to education and curricular theorizing.

Chapter V: Educational Theories

Education, therefore, is a process of living and not a preparation for future living. (John Dewey, cited in Bruner, 1969, p. 113)

This chapter looks at educational theory to see how the perspectives I have discussed square with highly regarded theories on developmental psychology and pedagogical practice. Improvisation as a way of knowing finds validation in the tenets of constructivism, a point I clarify by corroborating principles of improvisation with research on constructivism by Windschitl (2002). Constructivist theory, however, appears in many guises, and I continue with a look at Piaget's dynamic conception of the interplay of accommodation and assimilation (1955, 1980) and Vygotsky's "zone of proximal development" (1974, 1979), both of which structure the intellect in terms of existing constraints and the internalization and creation of new structures to express growing capacities. I then trace complementary educational theories that have addressed the processual nature of learning in the works of Dewey, Whitehead, Doll, and Bruner. I then turn to situated cognition as a form of analysis that articulates the role context plays in knowledge construction (Lave and Wenger, 1991), as well as socio-cultural theories (Rogoff, 1995; Baker-Sennett & Matusov, 1997; Wertsch, 1998; Matusov, 1996) that clarify the role of intersubjectivity in collaborative learning. I end my discussion of educational practices with a word of caution – what aspects of learning do we compromise if the processual dynamics evident in improvisation are given short shrift? Finally, I move from educational theories to explore two qualitative aspects of learning that I see as essential: learning as a pursuit shaped by aesthetic sensibilities (Dewey, 2005; Eisner, 2002a, 2002b), and learning as the articulation and dialogic negotiation of

possibilities central to democratic participation (Aronowitz & Giroux, 1985; Boal, 1985, 1992, 1998, 2005, 2006), particularly as they find expression in the philosophy of Hannah Arendt (Arendt, 1958, 1978, 2006; Greene, 1988, 1995, 2001).

Learning Theories

Features of constructivist pedagogy

Earlier I discussed creativity, looking at ways in which improvisation might foster some of our basic expressive needs. It is necessary, however, to orient these views to a more fundamental educational tenet underpinning these arguments, that of constructivism. The core understanding of constructivism, in which learners actively re-shape and reconstitute knowledge in the internalization process, is a commonplace belief amongst educational theorists, most unequivocally in the interpretive, ‘soft’ sciences and increasingly in mathematics and the ‘hard’ sciences. The spectrum of analyses that pertain to constructivism is rather broad, and the lines distinguishing varying interpretations are highly contested - constructivism may be regarded as a basic perceptual principle, an unavoidable fact of subjectivity, or as a variable feature of instructional design.

Mark Windshitl presents, in a comprehensive literature review of constructivism (2002), a number of implications for constructivist teachers that help clarify possible connections with improvisational practice. I begin by indicating the parallels between the features typical of constructivist classrooms and the commonalities they share with the aspects of improvisation discussed above. Clearly, there are any number of possible forms of interaction that achieve these aims; my objective here is to show the close

accordance they have with the indeterminate, contextually-informed frame found in improvisational activities.

- *Teachers elicit students' ideas and experiences in relation to key topics, then fashion learning situations that help students elaborate on or restructure their current knowledge.* As we have noted, in improvisatory settings the individual subjectivities of the players constitute a fundamental element of the material, as collaborative interaction reflects individual backgrounds and offers a context for their creative reformulation.
- *Students are given frequent opportunities to engage in complex, meaningful, problem-based activities.* Improvisation is similarly concerned with the procedural negotiation of how the work is to unfold, its complexity in part a result of its status as both process and product. Players achieve individual and group expressive goals through a communicative interplay that, as in the case of idiomatically constrained forms of music, may be analyzed as problem solving, or better, as problem finding.
- *Teachers provide students with a variety of information resources as well as the tools (technological and conceptual) necessary to mediate learning.* This point marks an important difference between these conceptual structures, one that might cause practitioners to take an unfavorable view of improvisation. In much of improvisatory performance, the information resources referred to here are the given subjectivities of the performers, their backgrounds, the strategies and materials they have already learned. Variety is an emergent quality of the players' exploration of possibilities as they unfold. In pedagogical settings, it is expected that the teacher will facilitate this exploration, acting as a catalyst as the situation warrants. Improvisation-based curricula are not

theoretically opposed to resource-rich content, they merely recognize that improvisation acts a useful frame for their enaction and integration.

- *Students work collaboratively and are given support to engage in task-oriented dialogue with one another.* This, as we have seen, may be considered the bedrock of group improvisation, and underscores the dialogic nature of learning.
- *Teachers make their own thinking processes explicit to learners and encourage students to do the same through dialogue, writing, drawings, or other representations.* The “leader” of an improvisation leads by modeling possible means of interpreting the material, leading by example and presenting further points of departure. Teacher involvement in this role heightens student awareness of the content of the work as open to interpretation, and highlights the social, interactive nature of the learning process. The teacher may also participate in the improvisation, as in the case of Process Drama (see below).
- *Students are routinely asked to apply knowledge in diverse and authentic contexts, to explain ideas, interpret texts, predict phenomena, and construct arguments based on evidence, rather than to focus exclusively on the acquisition of predetermined “right answers.”* As a form that rejoices in creativity and divergent thinking, improvisation is less concerned with efforts to prove than with efforts to provoke, to offer interpretations that engage, challenge, and question.
- *Teachers encourage students’ reflective and autonomous thinking in conjunction with the conditions listed above.* The indeterminate nature of improvisational activities promotes reflective and autonomous thinking. Players’ moves are not scripted in

advance, each must consider the flow of the group, determine his/her own course of action, and act accordingly.

- *Teachers employ a variety of assessment strategies to understand how students' ideas are evolving and to give feedback on the processes as well as the products of their thinking.* Feedback is, as in the case of the jazz combo, embedded in the discursive flow that constitutes the work; it is a constant shaping of expressive responses and strategies that reflect the multiple perspectives of the players involved. This continuous critique acts as a form of assessment, one that may be elaborated upon after the piece has been completed (Windshitl, 2002, p. 137).

Constructivist theories

In the following section, I will draw parallels between improvisation and diverse social interactionist theories that inform educational practice. Within constructivism, educational thought has clustered around the work of two main theorists, Piaget and Vygotsky. These are often seen as opposites, despite their many similarities. I present a brief account of these theories before contrasting them.

Constructivism, as a theory for articulating the relational, dynamic nature that characterizes cognition in context, has found expression in many different forms. Dewey, whose educational model was based upon transaction, adheres to constructivist precepts when he states: “the only significant method is the method of the mind as it reaches out and assimilates” (Dewey, 1990, p. 187). Piaget makes his constructivist orientation explicit, stating that: “an epistemology conforming to the data of psychogenesis could be neither empiricist nor preformationist [that is, one that internalized a pre-structured

world], but could consist only of a constructivism” (Piaget, 1980, p. 23). This position may perhaps be summed up in his statement in *The Construction of Reality in the Child* (1955) that “intelligence organizes the world by organizing itself” (Gruber & Vonèche, 1995, p. 275). McGee (2005) distinguishes Piaget’s “individual-based” constructivism from Vygotsky’s “social constructivism” in these terms: “one in which children interact with objects in the world, rather than within social contexts” (p. 31/21).

Cognitive development and collaboration

As noted earlier, Piaget’s work was less concerned with social interactions than with the cognitive structures that marked stages of development, a focus on what Bruner describes as “theories that had very little room for the enabling role of culture in mental development” (Bruner, 1996, p. xiii). According to Piaget, the progressive complexity of the learner’s mathematical understanding parallels the increasing coherent understanding she has of social diversity. In the course of her cognitive growth, the learner develops the mental resources to resolve contradictions in multiple perspectives (a form of disequilibrium Piaget termed the “socio-cognitive conflict”). Lois Holzman (1997) argues that the common dynamic here is the growing awareness and subsequent search for ways to eliminate contradiction. This perspective, she believes, has deleterious consequences for it makes a “philosophical presupposition that identifies logic with thinking and relegates contradiction to a mental error” (p. 29). Similarly, while they agree that the resolution of contradiction represents intellectual development, Matusov and Hayes (2000) see this formulation as a denial of learning that occurs without the cooperation of equal partners. They claim that such encounters do not allow for development; as a result, according to Piaget’s theory, “until cooperation occurs allowing the child to access

another perspective, the social world does not affect the structure of child's actions but rather constrains them" (p. 217). Vygotsky, whose social constructivist views saw such inequalities as generative forces of development, was critical of Piaget in this regard, and argued against theories in which "maturation is viewed as a precondition of learning but never the result of it" (cited in John-Steiner & Mahn, 1996, p. 198)

In contrast to the constructivist model Piaget proposed, which has been seen as the 'child as scientist' (Feldman & Benjamin, 2006, p. 322), Vygotsky (1982) presented a model which granted fundamental importance to social context. "The central fact about our psychology is the fact of mediation," he writes (p. 166). Vygotsky's description of the organic interdependence of the cultural and psychological planes forms the basis for the study of situated cognition, and resonates well with my previously stated goals for the pedagogical uses of improvisation. In an oft-quoted passage, he states:

Any function in the child's cultural development appears twice, or on two planes. First it appears on the social plane, and then on the psychological plane. First it appears between people as an interpsychological category, and then within the child as an intrapsychological category. (Vygotsky, 1981b, p. 163)

Linguistic and cultural tools are synthesized by learners, created from the materials they are exposed to and subjected to ongoing refinement, both in their internal representations and through their enactive expression. There is a dynamic interdependency between both internal and external, a flux that involves the co-creation of mind and material culture.

Roper and Davis (2000) see Vygotsky's approach as "a dialectical unity of opposites where none reduces to any of the others but each undergoes change within the conditions of interlocking environment, species, socio-cultural history and individual development" (p. 226). According to this view of development, minds change in harmony with the contents that they bring into play. Knowledge is not inert, "the process of internalization

is transformative rather than transmissive” (John-Steiner & Mahn, 1996, p. 194).

Forgoing this dynamic understanding, schools often present knowledge as unified disciplines – as series of definable, and even optimal, scopes and sequences, irregardless of the diverse subjectivities of students present.

In Schools for Growth: Radical Alternatives to Current Educational Models (1997), Lois Holzman says that knowledge has been over-identified with learning, a bias that has caused theorists to inadequately take into account development. Vygotsky (1978) had hypothesized “the unity but not the identity of learning processes and internal developmental processes. It presupposes that the one is converted into the other” (p. 90-91). Holzman, utilizing Vygotskian theory, constructs a model that favors development through active engagement with and within complex environments over the fact-driven, overdetermined curricular model common today. Her framing of education derives from a social constructivist perspective in which “learning and development, as social-cultural, relational activities, are inseparable; they are a unity in which learning is connected to and leads (dialectically, not linearly) to development” (Holzman, 1997, p. 15). Holzman considers the communication of parents with their infants, in which parents actively expose their children to words and phrases far in advance of the child’s current level of ability. By relating to children in terms of their developmental possibilities, parents create an environment that focuses attention on interaction and engagement, on the enaction of knowledge.

Holzman makes a strong case for “performatory ZPDs,” educational opportunities that are grounded in activity. In order for an activity to promote development, it must allow learners to explore their capabilities, and as a result their identities, through

performance. Holzman argues that the importance of Vygotsky's work derives from his understanding of how socio-cultural creation flows from the imagination in performance. Vygotsky identified "our capacity to relate to ourselves and others as *other than, and in advance of, our development*" (p. 63, italics in original). In order to conceive of the world and see their own possibilities as learners as otherwise, we must engage our creative imaginations. This recalls the role of the negative in play. Holzman writes: "Performance, understood as developmental, is creating who you are by being who you are not. Development, understood as relational activity, involves a continuous creating of stages (ZPDs) on which one performs 'oneself' through incorporating 'the other'" (p. 73). Performance transforms participants, environment and the symbolic tools we use for mediation.

Holzman's observation (1997, p. 73) that "it is only by playing the game that they eventually learn the rules" echoes many of the points raised earlier in my discussion of play. From this, she concludes that education must reflect the fact that creating "a total environment in which very young children are related to by themselves and others (a relational activity) as communicative social beings is *how they get to be so*" (p. 63, italics in original). This focus on the immediate contexts of student interaction requires a different perspective on curricular activities, a view that attends more to individual forms of understanding and their expression as social dynamics and less on the abstracted sequencing of content.

Matusov and Hayes (2000) argue that, despite their differences, the theoretical frameworks proposed by Piaget and Vygotsky were both based upon the same set of problematic assumptions, those exemplified by the scientific methods employed in the

first quarter of the 20th century. They claim both theoretical approaches present (advanced) development as: (a) universalist; (b) decontextual; (c) ethnocentric; and (d) adultocentric (Matusov & Hayes, 2000, p. 216). In dialogical opposition to the unidirectionality implicit in both Piaget's and Vygotsky's views, toward "the scientific logic for Piaget, and the Western "high" culture for Vygotsky" (p. 216), Matusov and Hayes suggest a sociocultural perspective that bridges the individual and social nature of participation, one in which "development involves transformation of the individual's participation in a sociocultural activity rather than a change in the structure of the individual's action (like in Piaget's theory) or individual's growing mastery of tool, sign, and speech use (like in Vygotsky's theory)" (p. 222). Such a dialogic model for interaction "address[es] the issues of multiplicity of developmental directionality and its socially constructive, relational, negotiable, and emergent character" (p. 216) and "tends toward dynamism, heterogeneity, and conflict among voices" (Wertsch, 1998, p. 115).

Constructivist understandings agree on the interdependence and complementarity of the learner and the environment, seeing each as dynamic, active and changing. These learning theories are most likely to be effective if integrated with pedagogies that support possibilities for change within the individual by actively encouraging co-creation of the learning environment. I suggest that an improvisation-based framework allows the classroom to be a site for transformation through participation. I find improvisation to be more amenable to a Vygotskian analysis than a Piagetian one, inasmuch as it is a social process, one which foregrounds the collaborative and cultural contexts of learning. Vygotsky's "zone of proximal development" (ZPD) not only distinguishes differential

potentials in an individual's solo and assisted learning, but also offers a point of entry for the teachers, one that implies a contextualized, intentional stance to engagement.

Improvisation as “learning by doing”

John Dewey presented a consistent, ecologically minded philosophical perspective that linked cognition with agency. He argued that mind is to be understood as a verb rather than a noun, and shared with Whitehead the view that the unfolding of nature and the development of the mind are both best seen as in constant flux: “Actual thinking is a process ... it is in continual change as long as a person thinks” (Dewey, 1971, p. 72). Dewey sought to explain the mind as a relation between a creative life force and that which it produces. “The internal and necessary connection between the actual process of thinking and its intellectual product is overlooked.” (p. 79). Development in Deweyan terms is without an end, and where education can (and should) provide aims, it is counter to the natural growth of the individual to prescribe ends: “the aim of education is to enable individuals to continue their education – or that the object and reward of learning is continued capacity for growth” (Dewey, 1966, p. 100).

Dewey's experimental school was modeled on the laboratory, a place where the occupations of the day were practiced as a pragmatic means to extrapolate and explore their underlying principles. The following description makes clear the way in which Dewey's Laboratory School simultaneously explored content across disciplines while developing facility in authentic skills derived from a wide range of vocations, wedding conceptual growth with the integration of school with the social life of the community:

The point of an occupation-oriented curriculum is not to prepare students to become weavers, cooks, or carpenters. Rather, it is to show them how weaving,

cooking, and carpentry (or any other useful craft) *requires the constant interplay of ideas and their embodiment in action.* (Jackson, 1998, p. 170, emphasis added)

This “hands on” approach, which Dewey called “learning by doing,” was a move to rid the curriculum of knowledge Whitehead called “inert,” subsequently granting priority to individual experience (Dewey, 1990, p. 187). This thought is echoed in the words of philosopher Mary Midgley (1991), who writes, “If thinking is our professional concern, then wisdom and wonder are our business: information storage, though often useful, is just an incidental convenience” (p. 253). Information has a greater potential to inspire wisdom and wonder when integrated in rich contexts of lived experience.

Dewey was equally critical of curricula removed from practice, both because it reduces the complexity of the content under exploration and obviates the need for students to make use of the knowledge gleaned. He writes:

overzeal to select material and appliances ... forbid[s] a chance for mistakes to occur, restricts initiative, reduces judgment to a minimum, and compels the use of methods which are so remote from the complex situations of life that the power gained is of little availability. (Dewey, 1966, p. 197)

The presentation of study materials which have been analytically decomposed into their constituent parts, while rendering the material conducive to rapid assimilation and assessment, may thus have ill effects on the learner, sacrificing higher level thinking skills for brute memorization. Dewey believed that:

The notion that a pupil operating with such material will somehow absorb the intelligence that went originally to its shaping is fallacious. Only by starting with the crude material and subjecting it to purposeful handling will he gain the intelligence embodied in finished material. (Dewey, 1966, p. 197-198)

This “purposeful handling” is the core of improvisation, in which knowledge is the unfolding of the dynamic interplay between co-creators, as possibilities are revealed, enacted and performed. Intelligence signifies a purposeful relation to the situation in

which it is evoked. The value of learned materials may be gauged according to how satisfactorily they guide present action. Dewey's description of natural mental dispositions applies equally well to the resources required for improvisation:

Now, keeping in mind these fourfold interests, - the interest in conversation, or communication; in inquiry, or finding out things; in making things, or construction; and in artistic expression – we may say that they are the natural resources, the uninvested capital, upon the exercise of which depends the active growth of the child. (Dewey, 1990, p. 47-48)

Dewey connects learning with organic development. Proper education must therefore help minds achieve fulfillment by providing environments that do not inhibit their natural growth. This puts a premium on learning contexts that are provocative and complex, as they generate creative responses, for: “diversity of stimulation means novelty, and novelty means challenge to thought” (Dewey, 1966, p. 85). Education provides opportunities for learners to incorporate and extend the novel meanings they have generated. Dewey recognizes the processual nature of learning, stating, “education is a constant reorganizing or reconstructing of experience. ... the direct transformation of the quality of experience” (p. 76). This transformation is grounded in the transactional contingencies of the present, and the more dynamic this engagement is, the more potential it has to integrate other learning for the learner. Dewey writes:

A mind that is adequately sensitive to the needs and occasions of the present actuality will have the liveliest of motives for interest in the background of the present, and will never have to hunt for a way back because it will never have lost connection (Dewey, 1966, p. 76).

In order for learners to avail themselves of the possibilities inherent in the encounter with the material, they must above all be receptive to change. While the aims of general learning may be marked out in advance, the actual details will only come clear as the activity progresses. As a result, curricular planning should not consist of pre-determined

ends, but as aims that respond to change as situations demand. Dewey clarifies this distinction:

An aim must, then, be *flexible*; it must be capable of alteration to meet circumstances. An end established externally to the process of action is always rigid. Being inserted or imposed from without, it is not supposed to have a working relationship to the concrete conditions of the situation. What happens is the course of action neither confirms, refutes, nor alters it. Such an end can only be insisted upon. (Dewey, 1966, p. 104-105, italics in original)

Such ends may be considered coercive if they preclude student responsibility for and involvement in learning. Pre-determined ends inhibit some of the fundamental ways in which learners make sense of the material. As Dewey notes, the mind does not actualize its potential through the exposure to perfected curricular texts; rather, it is the individual's organization of the material that engages his or her intelligence. The danger of education that does not offer diversity sufficient to stimulate the intelligences of students is that it may render them "functionally stupid" (Bruner, 1975, p. 136). This may result from what Alfred North Whitehead terms "too-good teaching" which seeks to ingrain "static ideas" (cited in Godine, 1954, p. 60).

The Aims of Education

Whitehead's (1929) critique of the educational problems of his day resonates with Dewey's 'pragmatic' approach. Whitehead argued against the stockpiling of "barren knowledge" (p. 41), and emphasized the importance of reflective knowledge, which has value according to its practical utility and application. His work *The Aims of Education* (1929) is a polemic against the transmission of static ideas and an articulation of the fundamentally processual nature of learning. Whitehead organized education into three cyclical stages, contrasting more freely associative learning (which he termed *romantic*),

with a more analytic phase (one of *precision*), followed lastly by the stage of *generalization*. It is important to note here the value Whitehead places upon the agency of the learner:

the dominant note of education at its beginning and at its end is freedom, but that there is an intermediate stage of discipline with freedom in subordination: Furthermore, that there is not one unique threefold cycle of freedom, discipline, and freedom; but that all mental development is composed of such cycles, and of cycles of such cycles. (Whitehead, 1929, p. 40)

Whitehead forcefully denounces less dynamic forms of learning, arguing for the pragmatic application of ideas in complete sympathy with Dewey, stating that, “ideas which are not utilized are positively harmful” (p. 15). Whitehead harshly condemns the teaching of such “inert” knowledge, appealing instead to the immediacy of experience: “The understanding which we want is an understanding of an insistent present. The only use of a knowledge of the past is to equip us for the present.” (p. 14) This is, in essence, the most basic understanding of improvisation.

Whitehead’s scientific and mathematical background gave him insight into the generative possibilities available through the recombination and reclassification of members of small sets, and joy in the process of discovery of these principles. He recommends a pedagogical approach that has much in common with Carroll and Rosson’s (2005) minimalist framework for information systems design: “Let the main ideas which are introduced into a child’s education be few and important, and let them be thrown into every combination possible” (Whitehead, 1929, p. 14). In order to create an environment in which students can exercise their freedom and sharpen their mental acuity, curricula must be sufficiently under-determined to allow for the experimental recombination of elements.

Whitehead believed that student intelligence would be compromised by teaching practices that promoted the accumulation of inert knowledge. Instead, he favored, as did Dewey, the practical application of knowledge, through activities that fostered the ability to see potential variations and tie them to deep understandings. If, as he claims, “the really useful training yields a comprehension of a few general principles with a thorough grounding in the way they apply to a variety of concrete detail” (p. 37), then curricular aims must be reconceived to allow for such experiential learning.

This represents a crucial point – differentiating the more open-ended ways in which we seek curricular goals from our expectations for objectives, which are more carefully delineated requirements to be met. As an exploration of content-derived possibilities, improvisation involves the search for multiple paths provided by gaps in our definitions, gaps that render final goal states partially indeterminate as well. During improvisation, the immediate context of study available to the student suggests directions that may be pursued and subsequently elaborated in greater detail. This integration of unfettered thought with the contingencies at hand may contribute to the creation of a “culture of inquiry.” Whitehead contrasts such transformative thought with the stifling effects of the elicitation of prescribed forms of knowledge:

That knowledge which adds greatness to character is knowledge so handled as to transform every phase of immediate experience. It is in respect to the activity of knowledge that an over-vigorous discipline in education is so harmful. The habit of active thought, with freshness, can only be generated by adequate freedom. Undiscriminating discipline defeats its own objects by dulling the mind. (Whitehead, 1929, p. 41)

Improvisation and the “post-modern curriculum”

Curriculum theorist William Doll, Jr. has integrated the processual perspectives of Whitehead and Dewey with insights from complexity theory to characterize what he calls the “post-modern curriculum.” In “Keeping Knowledge Alive” (2007), Doll sees education faced with the following challenge: “how can we be certain, precise, definite, logical in a universe which we now realize is by its nature, by its reality, always in creative process, thus being uncertain, imprecise, indefinite, and non-logical?” The transformative pedagogy he proposes, with its emphasis on self-organizing processes, is in harmony with the improvisational frame I am suggesting. Doll (1993) views learning in dynamic terms, marking the import of context and engagement: “Curriculum in a post-modern frame is not a package; it is a process – dialogic and transformative, based on the inter- or transactions peculiar to local situations” (p. 140). This has implications for curricular assessment. Drawing upon what he terms Dewey’s “experiential epistemology” (p. 140), Doll subordinates specificity in learning objectives for depth of learning experience, stating that “an essential criterion in the examination of a post-modern curriculum is the *richness of its quality*, not the precision with which its goals are stated or met” (p. 148, italics in original). This “richness of quality” is, as Dewey would have it, in authenticity as lived experience: “Relate the school to life, and all studies are of necessity correlated” (Dewey, 1990, p. 91). If, as I have argued, improvisation is a primary mode of cognitive and cultural change, it offers a framework for interaction that helps correlate the school with activities beyond its walls.

Collaborative learning and situated cognition

Improvisation as a praxis is, perhaps, the exemplar *ne plus ultra* of situated cognition. In a seminal paper titled “Situated Cognition and the Culture of Learning,” Brown, Collins and Duguid (1989), compare learning to enculturation. The term “culture” is often used to describe educational practices, in stock phrases such as “creating a learning culture” or a “culture of inquiry.” This metaphor helps to direct attention to the anthropologically derived analyses presented earlier, and supports a coherent framework relating situated cognition with improvisation and performance. As noted when discussing jazz and improv theatre in chapter 4, much learning in improvisational settings is embodied in the interactive performance, occurring while ‘hanging out’ with a community of practitioners. Players are presented with the models of their peers and mentors, actively responding to and exploring modes of expression and practice, negotiating and integrating materials in the immediate context. I will now look at the commonalities between the dynamics in jazz present in improvisation-based curricula and a view of learning through apprenticeship described by Lave and Wenger (1991), which they have termed “legitimate peripheral participation.”

Legitimate peripheral participation

I have thus far shown how closely aligned an improvisational approach is with the main features of constructivism. I would like now to focus on the collaborative, interactive aspects of improvisation, drawing upon the work of Vygotsky, especially as it is elaborated in social cognition contexts. My starting point here is Lave and Wenger’s (1991) notion of legitimate peripheral participation (LPP), as it offers a model of learning that has much in common with the apprenticeship roles that often occur in jazz. These

overlap with Berliner's description of "hanging out" discussed earlier, and present an alternative to direct instruction.

Apprenticeships allow learners to develop their understandings and hone their skills alongside actual practitioners; it is this praxial aspect that most clearly accords with the "learning by doing" of improvisation. Lave and Wenger (1991) address this directly, stating, "Learning itself is an improvised practice: a learning curriculum unfolds in opportunities for engagement in practice. It is not specified as a set of dictates for proper practice" (p. 93). Knowledge making is fundamentally social, an activity which takes place in a community of practice, and, as such, reflects not simply a relationship between learners and abstract rules, but relationships between participants. William F. Hanks, in his foreword for this text, sees Lave and Wenger as granting "a constitutive role in learning for improvisation, actual cases of interaction, and emergent processes which cannot be reduced to generalized structures" (Hanks, in Lave & Wenger, 1991, p. 16). Context-specific problems emerge during practice, and the learner is welcomed as a co-participant in the search for solutions that reflect the complexity of the issue at hand. The relationship of the learner to the whole suffers from knowledge solely imparted as systems of rules or representations. Such formulations do not necessarily distort the content of study, but they are of limited use, and are subject to change: "Preexisting structures may vaguely determine thought, learning, or action, but only in an underspecified, highly schematic way. And the structures may be significantly reconfigured in the local context of action" (p. 17-18). Apprentices achieve mastery by flexibly coordinating their actions within the participatory framework structured by the activity, modeling their behavior on their master's. In this model, there is little need to

explicitly specify the rules that govern action if these are sufficiently contextualized: “it would be this common ability to co-participate that would provide the matrix for learning, not the commonality of symbolic or referential structures” (p. 21-22). This perspective, says Hanks, views learning as active engagement in a social practice; learning is “a way of being in the social world, not a way of coming to know about it” (p. 24). The interconnectedness of these constitutive elements – “the relational interdependency of agent and world, activity, meaning, cognition, learning and knowing” (p. 50) – unified Dewey’s pedagogical aims as well. Instead of knowledge resulting from the intentional instruction of abstract representations, Lave and Wenger see these interdependent elements as forming a context that is co-created, one in which apprentices move centripetally from the periphery to take on more central roles. New responsibilities, which have been modeled by more experienced practitioners, provide the learner with opportunities to exercise their skills; it is “access to practice as resource for learning, rather than to instruction” (p. 85). This perspective is in accord with Vygotsky’s social constructivism. Learners engage their zones of proximal development through active participation, and the amount of participation accorded each learner may partially determine their progress. In this view, participation is not a secondary by-product of learning, but of primary significance: “engaging in practice, rather than being its object, may well be a *condition* for the effectiveness of learning” (Lave & Wenger, 1991, p. 93, *italics in original*). According to this view, development takes place in social environments that flexibly accommodate and promote changes in agency, rather than those that impose change upon objectified learners that have been artificially dissociated from the very social practices they seek mastery in.

As a fundamentally social event, learning necessarily takes part in a much larger context than that allotted by simple teacher-student models. One aspect of learning that often gets short shrift in the classroom is the learning that occurs between students, in the ways that peers model alternative ways of thinking and suggest diverse paths of inquiry. A view of learning that stresses the individual appropriation of curricular content marginalizes the social learning that typifies apprenticeship, where “apprentices learn mostly in relation with other apprentices” (p. 93). Instruction that minimizes student interaction may limit learning. Conversely, the creation of environments in which students may actively share and mentor their peers provides the social benefits typical of apprenticeships. Lave and Wenger note that, “where the circulation of knowledge among peers and near-peers is possible, it spreads exceedingly rapidly and effectively” (p. 93). Classroom learning that does not encourage participation between peers is hampered in this regard, limited to more unidirectional forms of interaction. As such, it fails to attain the relational complexity available in apprenticeship contexts. Improvisation, which brings these relations into increasingly wider circles of play, may minimize many of these shortcomings.

Furthermore, pedagogical contexts that do not promote dynamic forms of interaction and exchange may limit understandings of self, in that they inadequately relate the learning of the individual to the learning of the whole. As Lave and Wenger point out, “Learning thus implies becoming a different person with respect to the possibilities enabled by these systems of relations. To ignore this aspect of learning is to overlook the fact that learning involves the construction of identities” (p. 53). As legitimate peripheral participants, learners engage in a practice that conflates their

learning with their sense of identity (p. 115). Learning is structured by the activity, which directs practice, instead of the power asymmetries between teacher and student more common to the reproduction of abstracted forms of knowledge. Involvement in the process becomes the central concern, of greater value than an increase in de-contextualized knowledge. Lave and Wenger mark this important difference: “in shaping the relation of masters to apprentices, the issue of conferring legitimacy is more important than the issue of providing teaching” (p. 92). Participants are encouraged to see the validity of their contributions, regardless of their level of skill, in the larger context of the work at hand. This perspective promotes a higher degree of integration between participants and the traditions to which they belong. Lave and Wenger emphasize the importance of this connection, stating, “In a theory of practice, cognition and communication in, and with, the social world are situated in the historical development of ongoing activity” (p. 51).

The apprenticeship model contrasts sharply with the more impersonal standard schooling in which development has been mapped out primarily as a function of age. In public schools, the notion of legitimacy seems to be entirely absent; in its place is legal compulsion. Students engage in activities that do not produce rejuvenated forms of social relations, but grades. Instead of recognizing legitimacy, schools try to naturalize the quantification of learning by teaching only those materials that are testable, abstracting it from the lived experiences of the students. Lave and Wenger offer a powerful critique of this educational practice: “The commoditization of learning engenders a fundamental contradiction between the use and exchange values of the outcome of learning, which manifests itself in conflicts between learning to know and learning to display knowledge

for evaluation” (Lave & Wenger, 1991, p. 112). This system achieves circularity when teachers “teach to the test”; in this arrangement, “Test taking then becomes a new parasitic practice, the goal of which is to increase the exchange value of learning independently of it[s] use value” (p. 112).

Lave and Wenger make a useful distinction between a learning curriculum and a teaching curriculum, highlighting the central concern for the learner in constructivist learning:

A learning curriculum consists of situated opportunities (thus including exemplars of various sorts often thought of as “goals”) for the improvisational development of new practice (Lave, 1989). A learning curriculum is a field of learning resources in everyday practice *viewed from the perspectives of the learners*. When a teaching curriculum supplies - and thereby limits - structuring resources for learning, the meaning of what is learned (and control of access to it, both in its peripheral forms and its subsequently more complex and intensified, though possibly more fragmented, forms) is mediated through an instructor’s participation, by an external view of what knowing is about. (Lave & Wenger, 1991, p. 97, italics in original)

Lave’s work is derived in part from her research in West Africa. Perhaps, given the characteristics we have already noted in regard to West African drumming, we should not be surprised that she finds there “a relatively benign, relatively egalitarian, and nonexploitive character to apprenticeship” (p. 64). As noted previously, apprenticeship is more deeply rooted in a relational understanding between participants, a sense of communal purpose that extends beyond the immediate social bonds between masters and learners, but also encompasses the cultural tradition it is an expression of. Lave and Wenger describes this in terms that resonate well with the experience of jazz players: “A community of practice is an intrinsic condition for the existence of knowledge, not least because it provides the interpretive support necessary for making sense of its heritage” (p. 98). Finally, Lave and Wenger situate the apprentice’s learning in a temporal

understanding which values knowledge according to its potential for renewal, specifically, as an improviser would have it, in its application to the present: “The generality of any form of knowledge always lies in the power to renegotiate the meaning of the past and future in constructing the meaning of present circumstances” (p. 34).

Improvisation may be understood as a means of negotiating a bridge between the immediate contexts of the learners and participation in an imagined community of practice. Focus is shifted from the coherence of the material to the potentials of the learners. One of the ways these potentials have been discussed is in terms of the quality of engagement learners find in the process, of their mindfulness.

Mindfulness – a mindset for improvisational learning

In her book *Mindfulness* (1989), Ellen J. Langer, a professor in the Psychology Department at Harvard University, proposes that a mindful state of being is characterized by the:

1. creation of new categories;
2. openness to new information; and
3. awareness of more than one perspective.

In addition, she links the following focuses, which I will include as tied to the previous aspects:

4. control over context; and
5. process before outcome. (Langer, 1989, p. 62, *passim*)

This analytical mapping, which she elaborates in *The Power of Mindful Learning* (1997), clearly resembles the dynamic features of improvisational activities. In this text, Langer suggests knowledge framed conditionally encourages more flexible responses. Instead of

presenting hard and cold facts in “an absolute form (“This is a ...”),” teachers introduced students to a set of objects in the conditional form (“This could be a ...”) (p. 19). This may be seen as the same move as the “as-if” used in theatre, inviting interpretation, flexible thinking and attendance to the present context. This position mirrors the theoretical foundation Augusto Boal ascribes to *The Aesthetics of the Oppressed* (2006):

The Subjunctive Method is the reinstatement of doubt as the seed of certainties. It is the comparison, discovery and counterposition of possibilities, not of a single certainty set against another, which we have in reserve. It is the construction of diverse models of future action for a particular given situation, enabling their evaluation and study. (Boal, 2006, p. 40)

Improvisation, as we have seen, is an anti-positivistic stance, one that invites the creative engagement of participants prompted to exercise their freedom. Instead of the recitation of an inventory of unarguable facts, this approach to teaching “sets the stage for doubt and an awareness of how different situations may call for subtle differences in what we bring to them” (Langer, 1989, p. 16). Whereas much instruction has the effect of black-boxing classroom content, teaching with conditionals opens the information up to interpretation, and consequently fosters dialogue, curiosity and critical thinking. As we have seen, these dynamics grow out of an awareness of the indeterminacy and inexhaustible possibilities inherent in the material. Rather than insisting upon reproducibility as evidence of ownership of learning, educators must recognize that:

uncertainty creates the freedom to discover meaning. If there are meaningful choices, there is uncertainty. If there is no choice, there is no uncertainty and no opportunity for control. ... uncertainty and the experience of personal control are inseparable. (Langer, 1989, p. 130)

The meaningful integration of knowledge negotiated in class is not likely to occur if packaged as information that is viewed uncritically and subsequently memorized. When student curiosity is not aroused, and students are not motivated to explore or play with the

ideas, they are learning mindlessly, with detrimental consequences: “Without any reason to open up the package, there is little chance that the information will lead to any conceptual insights or even be rethought in a new context. We can think of such encapsulated information as overlearned” (p. 71). Langer sees this form of overlearning as resulting from a belief system that rests upon expert authority to define right answers. In such a system, in which learning is reproductive transference: “intelligence is the speed with which persons go from point A to point B” (p. 122). This is a view of intelligence that, metaphorically speaking, considers a person as well-traveled according to how many postcards they own.

Langer’s conception of mindfulness asks teachers to look at some of their basic assumptions in a new light. One such shift might be in the way we view forgetfulness. Instead of expecting students to respond promptly to predetermined answers, we might choose to be more tolerant of their forgetfulness: “forgetting provokes mindfulness. Memorizing keeps us in the past; forgetting forces us into the present” (Langer, 1997, p. 89). This position continues to place a high value on memory, of course, but asks us to look at the immediate possibilities created by gaps in knowledge, to question alternatives. Langer’s focus is on the attitudes that help learners remain attentive and inquisitive, as these dispositions lead to the generation of new knowledge. She writes: *“From a mindful perspective, one’s response to a particular situation is not an attempt to make the best choice from among available options but to create options”* (p. 113, italics in original). Langer concludes that these attitudes are necessary if we are to collectively increase our store of knowledge and deepen our understanding, for “[i]f we mindlessly practice these skills, we are not likely to surpass our teachers” (p. 14).

Mindfulness cannot be fostered by forms of instruction that disallow ambiguity, that pressure teachers to overlook differences in experience among students, that deny the conflict of multiple perspectives. Langer provocatively reframes the notion of “disability,” which she sees as including multiperspectival social awareness. She notes: “The widespread failure to recognize the insights that can be found in all different perspectives may itself constitute a disability” (p. 139). This potential difficulty is one that must be addressed in schools. I believe that the dynamic forms of interaction that are brought into play in improvisation very effectively reframe curricular practices to meet these challenges.

Before I turn to aesthetic theories, I would like to summarize some of the moves I have made so far, explicitly linking them to the educational perspectives presented above.

A defining characteristic of human cognition is the degree to which we are able to remove ourselves from immediate responses to stimuli and thus abstract information from the environment. One means by which we liberate ourselves from the stimulus is by creating or utilizing negation. As Gregory Bateson noted in his analysis of the significance of play in dogs, this fundamental form of cognition is one that humans share with more intelligent animals. (Possession of this ability may in fact be how we class them as more intelligent). Burke discusses the relationship of negativity to symbolic systems, a point Vygotsky elaborates in his own analysis of play, which effectively severs the signifier from the signified. This frees the signifier from the previously determined bonds that had held it and, more significantly for this work, opens it up to the collective, ongoing interpretation and negotiation that constitutes play. The scope of possible interpretations is motivated by players’ curiosity and fueled by their

imaginings, which create contexts in which the signifiers could be otherwise, and through dramatic performance, in which these alternatives are actualized. The joint performance derives from an awareness of possibilities of “is” and “is not,” (as in Vygotsky’s example of the stick used as a hobby-horse), a metacognitive function by which players exercise the ability to selectively consider the signifier according to context and desired use.

The creation of art is in many ways tied to an ongoing play with signifiers and the desire to expand upon their range of possible interpretations. This recalls Carse’s notion of the infinite game, a game that rejoices in its own perpetuation. In the unscripted improvisation that guides imaginative play, players may make choices that have this generative function – they continue to morph the play space to explore alternatives, pushing the limits of the assumptions that have hitherto been settled upon. In doing so, they create zones of proximal development, pressing each other to respond to the altered conditions that have been created. The construction of ZPDs has a moral component as well – in order to continue collaborative play, players must not break the imaginary web that holds them together, an event that would occur if they disregarded each other’s forms of participation. The times when players do not seem to collaborate to maintain the pretense that facilitates play is when a portion of the players seek finality, or more simply, to win. Imaginative play is more commonly characterized by supportive attitudes that further collaboration. These social contexts enact knowledge and shift the qualitative focus of the interaction to the exploration of participant interpretation. In apprenticeship-like contexts, the emphasis on “learning by doing” creates a framework for increased participation and mastery.

These dynamics may hold as well for all aspects of improvisation. If so, they are similarly evident in the cultural improvisation noted earlier, and are thereby a feature of life-long play. These elements of improvisation – the qualitative and aesthetic choices that make play enjoyable, the democratizing function of valuing full participation, the use of the immediate context as a springboard for the creation of imaginative contexts, the engagement that encourages phronesis as a means of knowing, the moral implications of interdependence, and the utilization of critical thinking skills in the purposeful yet mutable creative flux of play – all have an immense potential for fostering learning. In their efforts to enhance and systematize learning by foregrounding the reproduction of quantifiable bits of information, curricular policies have made assessment a primary goal of education instead of a correlative. One result of this is a mistrust (or ignorance) of aspects of development that are not represented quantitatively, with a corresponding misapprehension for activities that cannot be likewise assessed. The need to simplify curricular materials in order to ensure ease of assessment has led, in my opinion, to an increase in “inert” knowledge and mindlessness. Removing abstracted and technicized parcels of knowledge from the situated practices from which they are derived reduces the complexity and purposefulness of classroom activities. It similarly marginalizes the social web of relations which could otherwise nurture these practices. This subverts the intentions of educators to foster the positive aspects of learning listed above, those implicit in improvisational engagement. Such a reproductive view denies learners the opportunity to exercise their natural creativity and is in opposition to many of the claims derived from constructivist principles.

The utilization of improvisational structures does not solve these problems, but helps to create a context where exploration may take place. I turn now to two qualitative aspects of engagement, the aesthetic and political, to trace the nature of improvisation in other areas equally resistant to quantification.

Aesthetic Theory

One scientific theory can nullify another, but the truths of works of art sustain each other. It is art which seems to justify hope in a metaphysical liberalism. (Eugene Ionesco, 1963, p. 93)

A focus of this work has been on the ways in which improvisation acts as frame for self-exploration, in which assumptions concerning the materials that comprise the form – whether musical, theatrical, or conversation – are actively questioned. Here I look at perspectives in aesthetics and art education for insight into art production, assessment and pedagogy to clarify how elements of improvisation may be seen as an example of *autopoiesis*, or self-creation. I begin with a survey of a range of philosophical positions on art before turning to a more detailed account of Dewey's *Art and Education* (1966, 2005) and the work of Hans-Georg Gadamer (1986, 1989). These views describe the unique ontological status of art as an integral form of experience. According to Eliot Eisner (2002b), art offers a way of knowing that complements and enhances the other ways fostered by school curricula. Fundamental to Eisner's understanding of art is Dewey's notion of being "flexibly purposive," which concisely encapsulates the spirit of improvisation. I then question why these concerns have been marginalized, drawing upon the work of curriculum theorists Liora Bresler (2005) and Maxine Greene (1995). Finally, I draw upon the work of Thomas Docherty, who draws these themes together in a

fascinating book titled *Aesthetic Democracy* (2006), in which he links potentiality in art to democratic representation. Docherty makes the bald yet compelling assertion that “democracy is impossible in a policy that degrades the arts” (p. xiv). Improvisation, which is distinguished by the democratic practices that characterize interactions between participants, is an art form that foregrounds agency through aesthetic negotiation.

Perspectives on art

Philosophers and art theorists alike have questioned a duality obtaining between subject and object, seeing instead the creation of art as the creation of the self:

Bergson, in *Time and Free Will* (2001/1913), considered the relation to be emblematic of individual freedom, stating: “we are free when our acts spring from our whole personality, when they express it, when they have that indefinable resemblance to it which one sometimes finds between the artist and his work.” (p. 172)

Vygotsky found in art a means of unifying the self: “Art systematizes a very special sphere in the psyche of social man – his emotions” (Vygotsky, 1925).

Dewey regarded art as a means for growth, saying, “All communication is like art. (Dewey, 1966, p. 6) and “all communication (and hence all genuine social life) is educative. To be a recipient of a communication is to have an enlarged and changed experience” (p. 5).

Gadamer sought an ontological basis: “the work of art has its true being in the fact that it becomes an experience that changes the person who experiences it” (Gadamer, 1989, p. 103)

Foucault was concerned with the orientation of the self towards its own self-creation: “Why should a painter work if he is not transformed by his own painting?”

(Foucault, 1997, p. 131)

Sartre saw art as a condition of human freedom:

[T]he creative act aims at a total renewal of the world. Each painting, each book, is a recovery of the totality of being. Each of them presents this totality to the freedom of the spectator. For this is quite the final goal of art; to recover this world by giving it to be seen as it is, but as if it had its source in human freedom. (Sartre, 1988, p. 63)

Docherty made aesthetics the ground for democratic action and critical engagement:

[C]riticism should not be prescribed by dogma, or by the Self or by the subject. If criticism is to respond adequately to its object, then the critic must be prepared to be changed by that object, to allow herself or himself to become other in the face of the object; and thus to place the object at the source or origin of a new and changed subjectivity. The word that we give to this is *aesthetics*. (Docherty, 2006, p. 3, italics in original)

Isobel Armstrong, in opposition to anti-aesthetic positions that reduce art to instrumental functions, has considered the vital connection aesthetics has with play:

Play, that fundamental activity, is cognate with aesthetic production ... I understand play... as a form of knowledge itself. Interactive, sensuous, epistemologically charged, play has to do with both the cognitive and the cultural. (Armstrong, 2000, p. 37)

Dewey on aesthetics

Dewey’s philosophical project provides a coherent framework for understanding the growth of individuals, both in cognitive and social contexts, in terms of their expressive and experiential possibilities. His aesthetic views are of a piece with his theories of learning, thought processes, and the organic transactions with the environment that constitute experience. These views are most clearly articulated in *Art and Experience*

(2005), a work that is regarded as seminal in the literature. Considering the importance in which he holds aesthetics, it is surprising perhaps that this central pillar of his theoretical framework should have been written after his other work. As is evident in the title, Dewey's aim is once more to elucidate the distinctive, yet elusive, features of experience.

The key feature that marks aesthetic awareness is its integrity, its complex and multidimensional interweaving of perceptions, reflections and perspectives into a unity of experience. This is a whole in which each component qualifies and expands upon the others. Dewey writes:

In art as experience, actuality and possibility or ideality, the new and the old, objective material and personal response, the individual and the universal, surface and depth, sense and meaning, are integrated in an experience in which they are all transfigured from the significance that belongs to them isolated in reflection. (p. 309)

While any of these features are analyzable in isolation, such dissection compromises the expressive integrity of the work. It is precisely because art offers such a complete sense of unity that it is to be valued and fostered. Dewey sees aesthetic understanding as the ground for all coherent thought, not only in the arts but science as well. He speaks of the common features that structure these modes of thought: "no intellectual activity is an integral event (is *an* experience), ... insofar as it is esthetic ... [unless] it possesses internal integration and fulfillment reached through ordered and organized movement" (p. 40, italics in original). As he makes clear, this integration has a dynamic, processual quality to it, and entails a certain degree of risk. Whereas a perfect fit between past and present simply results in recurrence, aesthetic thought involves "a venture into the unknown, for as it assimilates the present to the past it also brings about some reconstruction of that past" (p. 284). This distinguishes reproduction from development,

and highlights the dynamic engagement Dewey considered vital to all forms of growth.

Art acts to “concentrate and enlarge an immediate experience” (p. 285).

For these reasons, Dewey concludes that, “art is the most direct and complete manifestation of experience *as experience*” (p. 309, italics in original). This raises a question: In lieu of the skill-based criteria that define current curricular goals, is it possible to provide learners with classroom experiences that conform to these high standards?

Gadamer on aesthetics

Hans-Georg Gadamer’s position on aesthetics is informed by his views on play, which I presented in chapter 3. Robert Bernasconi, in the introduction to *The Relevance of the Beautiful and Other Essays* (Gadamer, 1986), claims that Gadamer’s notion of art is “sustained not by abstraction but by reference to a form of experience” (p. xv), a perspective he shared with Dewey. Both of these philosophers considered art to be a natural form of expression, a basic element of our biological makeup. Gadamer (1989) says that, as with the play of nature, “*man too plays. His playing too is a natural process, the meaning of his play too, precisely because – and insofar as – he is a part of nature, is a pure self-representation*” (p. 105, italics in original). Both play and art are paths towards self-realization, modes of understanding that occurs in the process of self-presentation.

He writes:

the being of art cannot be defined as an object of an aesthetic consciousness because on the contrary, the aesthetic attitude is more than it knows of itself. It is a part of the *event of being that occurs in presentation*, and belongs essentially to play as play. (Gadamer, 1989, p. 115, italics in original)

Gadamer frames aesthetic understanding in terms of growth, much as Dewey does. He writes, “the work of art does not simply refer to something, because what it refers to is actually there. We could say that the work of art signifies an increase in being” (Gadamer, 1986, p. 35). The increase he refers to is an appreciation of what Dewey had called the work’s integrity.

Aesthetic sensitivity, the experience of “the transformation of knowledge that is effected in imaginative and emotional vision” (Dewey, 2005, p. 301), grows out of an awareness of openness. It is impossible to give art a singular meaning because it allows for re-interpretation, and it is this openness that invites engagement. “Art demands interpretation because of its inexhaustible ambiguity” (Gadamer, 1986, p. 69). Art re-creates the world and transforms those who engage with it, yielding not Truth, but the contingent truths that emerge in the playing.

Eisner on aesthetics

Eliot Eisner, drawing upon the above perspectives, has argued for a more central and comprehensive regard for the arts in education. His opening statement in *The Arts and the Creation of Mind* (2002b) succinctly weaves together many of the themes I have discussed so far: “Education is the process of learning how to invent yourself” (p. 1). Eisner’s analysis is distinctive, however, due to his lucid articulation of the cognitive skills engaged in during this process and the ways in which they find expression in the arts.

Eisner provides a compelling argument for a reevaluation of the role art plays in shaping the mind. While he recognizes the value of understanding art “for its own sake,”

and admits to the possible benefits of using art as a means of complementing study in other “content areas,” Eisner is highly critical of the degree to which art has been relegated to this messenger status, wherein art is a conduit to transmit content. He is keenly aware of the ways in which the creation of art requires a wide range of cognitive skills, skills that dynamically come into play as the creative process unfolds, as the work is revised, reconceived, and opened to new inspiration. The artwork changes with the artist. In a chapter titled “What the Arts Can Teach Education,” Eisner (2002b) focuses on this processual understanding, describing how the arts teach:

the importance of being flexibly purposive in the course of one’s work. In standard views of rational planning, objectives are held constant while means are varied when the means planned do not succeed in enabling one to achieve the goals one has described. When that is the case, new means are conceptualized and implemented, and the evaluation process examines the relationship between outcomes and intentions. The arts are examples of activities in which ends are held flexibly. (Eisner, 2002b, p. 205-206)

Eisner recalls the concept “flexibly purposive” used by Dewey in *Experience and Education* to explain the mindset of artists as their work reveals itself and raises new questions. There is a dialogic back-and-forth between what the work has become and what it could become, a dynamic state of flux that asks the artist to remain open to unexpected changes in direction. These are developments that might cause the artist to not only reconsider immediately preceding moves, but to rethink his or her original agenda. This dynamic encounter with the artwork may be described as problem solving; the end, however, is not a predetermined solution, but one that is aesthetically pleasing. He writes:

Of course, to be in a position to shift goals implies that there is in fact an inquiry process under way. By an inquiry process I mean a process in which an effort is made to resolve a problem. ... Thus, the arts provide vivid examples of individuals immersed in tasks in which they are trying to bring something to

resolution but who are not rigidly pinned to aims that initiated the inquiry.
(Eisner, 2002b, p. 206)

Philip W. Jackson, writing on the central role aesthetics plays in Dewey's work, similarly values these cognitive moves, stating, "The inevitability of choice is what makes selection and rejection the hallmark of art-centered experience" (Jackson, 1998, p. 39). Eisner cites jazz as an art form in which the processual approach to artistic creation is fully explored.

the particular forms that it takes will be a function of unanticipated emerging qualities. Flexible purposing is built into the enterprise of musical improvisation. The capacity to improvise, to exploit unanticipated possibilities, is a substantial cognitive achievement fundamentally different from the lockstep movement of prescribed steps toward a predefined goal. (Eisner, 2002, p. 206)

Art, as it is more removed from practical necessities, represents the fullest exercise of the imagination, is determined by criteria artists agree to or set themselves, and offers artists a medium in which they generate, shape, and critique the creative possibilities that flow from their choices. In this, as noted in the above quote from Sartre, it reflects a primary aspect of human freedom. Hans-Georg Gadamer puts it this way:

For in human fabrication as well, the decisive moment of technical skill does not consist in the fact that something of extraordinary utility or superfluous beauty has emerged. It consists rather in the fact that human production of this kind can set itself various tasks and proceed accordingly to plans that are characterized by an element of free variability. ... "Art" begins precisely there, where we are able to do otherwise." (Gadamer, 1986, p. 125)

We need only compare the cognitive demands placed on an artist faced with a blank canvas and another with a color-by-number picture to see which skills and creative possibilities are being disregarded. I believe that improvisation –based curricula can integrate these cognitive skills and sensibilities more fully by cultivating learning environments where students can view their work in aesthetic terms.

Liora Bresler (2005) continues Eisner's work on aesthetic education, asking the same questions he posed of art to music pedagogy. She comes to a similar conclusion, that music, like art, is evaluated in expressive terms that do not adequately account for the cognitive processes that guide its creation. She argues that:

the low regard for music in schooling stems primarily from the recognition of its *affective* powers, rather than from a lack of recognition of its intellectual properties. In other words, a view of music as nonintellectual stems from the difficulty of grasping the *interdependence* of cognition and affect. (Bresler, 2005, p. 25)

This distorts expectations and assessment. Curricula that regard musical expression solely in terms of its affective content, as an individual *cri de coeur* removed from social contexts, will fail to foster the kinds of intellectual skills that help artists see their work in the context of an evolving tradition. This failure is especially egregious if, as Bresler claims, "Being able to create within a structure, a tradition, is at the heart of intelligent, as compared to rote, activities" (p. 30). If tradition is considered as a form of dialogue, students who are discouraged from seeing their work in relation to a tradition may suffer the same cognitive deprivations Bruner described earlier in regard to language.

While I have spoken of improvisation largely from the learner's perspective, this orientation has great significance when considered as a dynamic that shapes the teacher's engagement as well. I explicitly discuss teacher involvement in the context of Process Drama below.

Artistry in teaching is dependent upon an awareness of time, on a heightened sensitivity to emergence and process. Bresler characterizes artistry in music teaching by contrasting orality with literacy, marking the distinctions discussed in anthropological

contexts earlier. She describes the artistry music teachers need to bring to the task, a sense of artistry which I claim holds for all teaching:

In creating a form that unfolds in time, good teachers organize educational experiences to highlight beginnings and endings, to identify important themes to be developed. Sheet music, like the formal curriculum of textbooks and written materials, represents a fixed representation. But the fluid form of teaching is, like musical improvisation, responsive to other players' input--students' queries, processes, and ways of making sense. (Bresler, 2005, p. 29)

Improvisation invites personal engagement and investment. Rather than imposing standards for knowledge from without, students are encouraged to negotiate the process and articulate their criteria for evaluating the results. I believe that this personal investment will positively impact student motivation as well. This is of vital importance, if, as Eisner believes, “intrinsic satisfaction in the process of some activity is the only reasonable predictor that the activity will be pursued by the individual voluntarily” (Eisner, 2002, p. 203). The linking of aesthetic sensibilities with notions of agency would thus promote a view of learning as an engaged, life-long process, as the creation of self through participation in (and creation of) culture. As composer and free jazz improviser Cornelius Cardew puts it: “The relationship is a formal one - a continuity between altering the environment and altering oneself. Art is a statement of the further continuity of this relationship, it is an education” (Cardew, 1971). This integrative perspective of our place in the world suggests that art and content areas in schools have been falsely dichotomized.

Maxine Greene has been another strong advocate for the promotion of the arts in education, arguing that the arts supply a vital context for the growth of the imagination. Greene’s interdisciplinary views were informed by, amongst other things, her deep connection with the arts, the phenomenology of Merleau-Ponty, the existentialism of

Sartre, and the political theories of Hannah Arendt, and she used her position as director at the Lincoln Center as a platform to make future teachers aware of the ways these influences might shape education.

Greene repeatedly points out the fundamental importance of the imagination, its role in orienting ourselves towards the possible, towards that which we aspire to. The cultivation of the imagination is absolutely essential if we are to envision and plan the creation of democratic, equitable societies. Educational policy, however, has neglected creativity and aesthetic experiences, focusing instead on other priorities, “on the manageable, the predictable, and the measurable. There have been efforts to include the arts in the official statements of goals, but the arguments mustered in their favor are of a piece with the arguments for education geared toward economic competitiveness, technological mastery, and the rest” (Greene, 1995, p. 379). Prendergast (2008) uses the same language of utility to critique an academic ethos that perpetuates standardization with little regard for student involvement: “teachers are charged with producing and reproducing performances of efficiency and effectiveness, both in themselves and in their classrooms. This essentially is an anti-aesthetic position.” Such a system is inimical to personal investment, a developed sense of artistic appreciation, or ownership of learning.

The cultivation of aesthetic sensitivity is in no way at odds with the learning of content in the classroom. The validation of subjective interpretation should not be seen as a mushy relativistic position that compromises the integrity of curricular goals. Instead, by acknowledging individual perspectives, we move beyond “raw facts” to the more complex issues of representation and personal significance. The view of knowledge-making as on-going process is aptly expressed by phenomenologist Maurice Merleau-

Ponty, in a description of painting that celebrates the generative possibilities inherent in improvisational forms of knowing:

If no painting comes to be *the* painting, if no work is ever absolutely completed and done with, still each creation changes, alters, enlightens, deepens, confirms, exalts, recreates, or creates in advance all the others. If creations are not a possession, it is not only that, like all things, they pass away; it is also that they have almost their whole life before them. (Merleau-Ponty, 1964, p. 190, italics in original)

This perspective requires that we be willing to allow for a degree of indeterminacy, not only by refuting positivistic formulations of knowledge but by seeing ourselves as works in progress.

In this section, I have presented aesthetic understanding as an essential and vital component in education. Dewey's work asks us to question the integrity of our curricula, to see whether they allow for the transformation that characterizes aesthetic awareness. Art provides distinct opportunities for self-creation, a dynamic elaborated upon by the theorists discussed above. It does this by engaging us at a number of different levels, by touching us emotionally, by activating our imaginations to alternate visions and revisions, by inviting critical interpretation. Art challenges us to admit of an endless number of possible interpretations and responses. This open-ended, fertile diversity makes possible what Gadamer (1986) called an "increase in being" (p. 35). It is perhaps the indeterminate, ambiguous nature of art that has led to its increasing marginalization in curricula. The greatest promise for learners lies, however, precisely in grappling with these issues, in the complexity represented by a diverse, conflicted and multicultural world. The teacher's role is thereby "to confront learners with a demand to choose in a fundamental way between a desire for harmony with its easy answers and a commitment to the risky search for alternative possibilities" (Greene, 1995, p. 381). Interpretation, and

the ambiguity and multiperspectivism that it entails, renders assessment in art and music highly problematic, especially in the quantitative terms dictated by the current education system. It is precisely this multiperspectivism that lies at the heart of democratic understanding. The role that improvisation may play in deepening this understanding is the subject of the following section.

Democratic Theory and Critical Pedagogy

Men are free—as distinguished from their possessing the gift of freedom— as long as they act, neither before nor after; for to be free and to act are the same.
(Hannah Arendt, 2006/1968b, p. 151, cited in Kanellopoulos, 2007, p. 97)

As an expression of creative negotiation, improvisation in jazz may be seen as a paradigmatic representation of democratic action. I explore this claim by drawing upon Dewey (1966) to highlight features common to both democratic participation and jazz improvisation: voluntary participation, equality, dialogue, criticism, collective decision-making, respect for the other, and the world-view of democracy as process. For an in-depth analysis of jazz as political expression, I turn to Scott Saul (2003), who presents a view of improvisation that balances individual freedom with the constraining yet fertile influences of collaboration and tradition. These views, coupled with notions of selfhood and participation marked out by Hannah Arendt (1958, 1961, 1978), and placed in an educational context by Maxine Greene (1988, 1995, 2001), provide strong support for classroom praxis that engenders political agency. I suggest that these pedagogical goals find expression in Augusto Boal's work (1985, 1992, 1998, 2005, 2006), especially in his *Theater of the Oppressed*, a form of political provocation that achieves its critical and

dialogic ends through improvisation, and consider the political implications of education systems that minimize or deny participation.

Jazz as a site for democratic action

Jazz offers a rich paradigm for the negotiation of freedom. It has long been equated with democracy, a comparison that has become institutionalized:

The fit between American politics and jazz was even elaborated on at the level of aesthetic theory. U.S. Representative Frank Thompson, Jr., wrote in the 1956 Newport Jazz Festival program, “The way jazz works is exactly the way a democracy works. *In democracy, we have complete freedom within a previously and mutually agreed upon framework of laws; in jazz, there is complete freedom within a previously and mutually agreed upon framework of tempo, key, and harmonic progression.*” (Saul, 2003, p. 5, italics in original)

Each of the three characterizations of democracy Dewey offers in *Democracy and Education* (1966) may similarly describe the workings of improvisation. A democracy, he says, is:

1. “primarily a mode of associated living, of conjoint communicated experience”
2. “individuals who participate in an interest so that each has to refer his own action to that of others, and to consider the action of others to give point and direction to his own”
3. “the widening of the area of shared concerns, and the liberation of a greater diversity of personal capacities” (Dewey, 1966, p. 87)

As discussed in chapter 3, improvisers associate to creatively challenge the assumptions of the form. They agree to participate in an activity that raises questions about what had been tacitly accepted or unexplored. This may not be an entirely harmonious encounter. The possibilities generated may run counter to those proposed earlier, and prompt continued (potentially undesirable) negotiation or further critical response. Consensus, therefore, is not a necessary condition for equality, and efforts to ensure it may in fact preclude democratic action, compromising the forms of engagement

open to participants. When equal civil rights are granted, democratic participation involves the ongoing negotiation of dissent freely expressed. Discussing jazz in the 1950s and 1960s, Saul draws attention to the discord that existed between factions of African Americans seeking equal rights, tensions that often revolved around differing conceptions of “freedom”:

for jazz musicians, this sort of equal rights talk was almost counterintuitive to their aesthetic. The dynamism of hard bop depended on the tension and interplay between the members of the group; jazz musicians presumed that their bandmates would press upon their own sense of freedom. When one musician “infringed” upon the rhythm or harmonic space of another musician, it was usefully reconceived as a provocation, a license for bold counter-response. (Saul, 2003, p. 17)

One of the central precepts of democratic involvement is the principle of voluntary participation. Saul sees the African American spirit of social action exemplified in jazz, in which the structure is a vehicle for participation in dialogue. He considers Cicero’s dictum, “freedom is participation in power” (p. 18), situating the participatory frameworks explored in jazz in the context of the civil rights movement.

Curricular theorists Stanley Aronowitz and Henri Giroux speak of the tacit nature of democratic participation – “Democracy is not ... a set of formal rules of participation, but the lived experience of empowerment for the vast majority” (Aronowitz & Giroux, 1985, p. xi). Democracy is not simply a by-product of individual actions; it is the diversity of embodied forms of engagement that people’s lives take as they interact with one another. Maxine Greene puts it succinctly, “They are who they are because of the way they participate” (Greene, 2007, p. 2). Individuals define themselves through their forms of social engagement, in the contexts of the discourse communities to which they belong, and the dialogues they engage in. Dialogue offers us possibilities for self-

representation and creation, for critically transforming relational structures. Improvisation provides a context in which the dialogue itself is co-extensive with the actions of the participants; it presents a collectively defined space where the creative adoption of rules simultaneously constitutes the negotiation, critique and re-creation of those very rules. This collective decision-making is the essence of democratic action. Neil Postman, in *The End of Education* (1996), sees the central question of “the American experiment” as “Can a nation be formed, maintained, and preserved on the principle of continuous argument?” (p. 73). He goes on to bring out a point central to this thesis: “The emphasis is as much on ‘continuous’ as on ‘argumentation’” (p. 73).

Freedom

In the *Social Contract*, Jean-Jacques Rousseau (1973/1762), offers a definition for freedom that nearly identically matches the conditions central to improvisation: “obedience to a law which we prescribe to ourselves is liberty” (p. 195). Whereas Rousseau advocated willing submission to an authority he assumed to be benevolent, improvisers see this authority residing in the emergent context of negotiation, in the interactions of participants. The notion of absolute freedom is built upon the premise that there exists the possibility that things could be otherwise, that it could at any point become something else. Democracy therefore reaches fruition in the continuing dialectic in which the freedom to reinvent social and political forms of interaction is negotiated and exercised. William Day, writing on Stanley Cavell’s Carus Lectures (1988), describes democracy in terms that are equally applicable to jazz: “the necessarily unending commitment to perfecting the self is not only in harmony with the equally

unending or ongoing political commitment to democracy, but it is, in fact, democracy's precondition, even its fullest meaning" (Day, 2000, p. 99). The indeterminacy that typifies democracy is the source of freedom to take critical positions relative to power and authority. We recognize agency as this ongoing ability to respond with choice. This awareness allows for decisive political action, action that incorporates both the epistemological foundation it is built upon and the individual's sensitivity to the contingencies that shape his or her response. As such, it is a form of self-awareness as well. Day, considering jazz as one of the "liberating arts" (p. 108) writes: "The work of genius is one that reveals this understanding of itself: that it exists as unfinished or incomplete and that its task is to serve as representation to the audience of their own incomplete or ongoing work" (p. 104). This is one of the distinctive features of all improvisational work, an appreciation of which unites both the performers and audience, binding them to the unfolding of the work and their jointly experienced context.

Dewey's view of learning as process is coherent with his understanding of democracy, which he claimed to be one of the most basic aims of education. Dewey cogently articulated the ways in which human understanding could be nurtured in schools built upon democratic foundations.

Democracy is faith that the process of experience is more important than any special result attained, so that special results achieved are of ultimate value only as they are used to enrich and order the ongoing process. Since the process of experience is capable of being educative, faith in democracy is all one with faith in experience and education. (Dewey, 2008, p. 229)

As praxis, this critical negotiation of collective expression and interpretation of tradition also has much in common with the enactment of agents Aronowitz and Giroux (1985) have dubbed "transformative intellectuals." These individuals have the moral

obligation toward fostering greater involvement in democratic principles, problematizing “those ideological and material aspects of the dominant society that attempt to separate the issues of power and knowledge” (p. 37). Critical pedagogy, as articulated by Aronowitz and Giroux in their text *Education Under Siege* (1985), takes up the ways in which dominant beliefs and power imbalances are institutionally sanctioned, and subsequently reproduced as unquestionable truths. Instead of the processual characteristics ascribed to democratic participation, schools often resort to pedagogical tactics that are more behaviorist in nature: “the program of neo-conservative school theorists is to introduce habit into the curriculum, to program students in a certain direction so that they will behave in set ways, responding to predetermined situations” (p. 9). These limitations on forms of student engagement entail an equally reductive understanding of knowledge, restricting participation to the reproduction of views and values deemed permissible. As a result, the forms that curricula may take are shaped in accordance with such workings of power, levied without regard for, or even in opposition to, the critical involvement of learners. Aronowitz and Giroux pinpoint the malevolent effects of a politically motivated, coercive view of education:

Pedagogy, in this case, is reduced to the implementation of taxonomies that subordinate knowledge to forms of methodological reification, while theories of teaching are increasingly technicized and standardized in the interest of the efficiency and the management and control of discrete forms of knowledge. (Aronowitz & Giroux, 1985, p. 24)

They speak passionately of creating alternatives to a repressive system, of the responsibilities incumbent upon transformative intellectuals in effecting change. In order to realize the democratic forms of participation we hold in the highest regard, education praxis must reflect the understanding that:

making the political more pedagogical means utilizing forms that treat students as critical agents, problematizes knowledge, utilizes dialogue, and makes knowledge meaningful critical, and ultimately emancipatory. It means developing a critical vernacular that is attentive to problems experienced at the level of everyday life, particularly as these are related to pedagogical experiences connected to classroom practice. (Aronowitz & Giroux, 1985, p. 36-37)

This perspective, which seeks to heighten students' agency by situating learning in the lived contexts of their experiences, calls forth different responses from learners. It achieves its emancipatory goals through forms of interaction we have seen in improvisation, engagement in critical dialogue which problematizes the assumptions and experiences of participants. The critical spirit engendered by this pedagogy could describe the stance of the jazz performer equally well:

intellectual inquiry is characterized by someone who has the breadth of knowledge about the world, who views ideas in more than instrumental terms, and who harbors a spirit of inquiry that is critical and oppositional, one that is true to its own impulses and judgments. (Aronowitz & Giroux, 1985, p. 34)

In like terms, Wynton Marsalis, whose opinions of jazz are highly regarded (and often contested for their conservatism), says: "[Jazz] takes a chance on our decision-making skills instead of legislating our freedom away with written restrictions and restrictive hierarchies" (Marsalis, 2008, p. 165).

Saul demonstrates how closely aligned the expressive aims of hard bop were with the civil rights movement. Jazz was a vehicle for articulating possibilities of freedom and agency, in which "artists sought to mediate social and individual necessity, to bring them into an ever-dynamic state of equilibrium" (Saul, 2003, p. 19). The negotiation of these realms provides a framework for collective and personal exploration, an interplay that prompts socially contextualized directives for self-actualization. As Saul indicates, this

notion of agency was expressed as a desire to achieve self-mastery, a driving force that entailed greater disciplinary practices necessary to express artistic freedom:

Because the freedom of hard bop was tied less to an idea of being your own master (at liberty to choose among options, free from coercion) and more to the idea of mastering your self, self-discipline emerged as a key aspect of hard bop aesthetics. Even among jazz artists, hard bop musicians were particularly dramatic in their insistence that freedom and discipline were compatible values and that the extreme pursuit of individuality in matters of improvisation and style depended on the delimitation of a compositional framework, a sensitive handling of group interplay, and the complete control of one's instrument. (Saul, 2003, p. 20)

Frost and Yarrow look at the discipline and control in theatre practice, where the actor's instrument is her or his body. This sense of self-mastery is predicated upon the ability to remain sensitive to the particulars of the immediate performance and respond with complete awareness. They reflect on the vital links between democratic practice, embodiment, and improvisation, seeing the latter as “a mode and a space in which body, language and identity can be dis- and re-articulated, and that this is an important indicator of the possibility of theatre as a mode of re-engagement in democracy” (Frost & Yarrow, 2007, p. 79). It is in the relational context mutually created by improvisers that they realize their freedom through action.

Arendtian philosophy

The political thought of Hannah Arendt resonates with the democratic principles that may be said to inhere in improvisation. Arendt, who strongly opposed an instrumental understanding of humans, articulated a philosophy that found freedom in the acts of individuals. According to this perspective, “the act of being free manifests in the performance of action within a context of equal yet diverse peers. Freedom truly exists—has the fullest phenomenal reality—only during action's performance” (Brunkhorst,

2000, p. 181). Freedom is a manifestation of agency, the ability to effect different possibilities under one's own volition as opposed to external coercion. Arendt argues against utilitarian understandings of freedom that predicate results that have been determined in advance. For her, free action must be "free from motive on one side, from its intended goal as a predictable effect on the other" (Arendt, 2006/1968, p. 151). Within the frame we have been discussing, this position might describe the interactions of free jazz. As I have noted in my earlier discussion of free jazz, this more extreme position, while it may not have specific application in curricular design, is of theoretical value in that it helps to problematize the degree to which agency has been circumscribed by teleological goals. A reflective practice that problematizes freedom encourages critical thinking in students, and challenges them to deconstruct complex notions of "democracy."

Maxine Greene sees one of the goals of an aesthetic, liberatory education as being to combat what Arendt called "thoughtlessness," or the repetition of empty "truths" (Greene, 1995, p. 380). Relating Arendt's *The Human Condition* (1958) to educational contexts, Greene speaks of the creation of an environment that fundamentally values "the importance of diverse persons speaking to one another as "who" and not "what" they are and, in doing so, creating an "in-between" among themselves" (Greene, 1995, p. 39). In order to actualize this, schools must be wary of pedagogies that reproduce "truths" and condition learners to their passive, uncritical reception:

clichés, stock phrases, [and] all adherence to conventional, standardized codes of expression and conduct [which have] the socially recognized function of protecting us against all reality, that is, against the claim on our thinking attention that all events and facts made by virtue of their existence. (Arendt, 1978, p. 126)

Arendt's perspective is open to the indeterminacy that makes free action possible. She embraces the constant renewal of self and social relations by which agents effect change, saying, "it is in the nature of beginning that something new is started which cannot be expected from whatever may have happened before. This character of startling unexpectedness is inherent in all beginnings" (Arendt, 2006, p. 169). Kanellopoulos (2007) sees improvisation, based upon co-creation, dialogue and discovery, to be a political and communicative format for the workings of Arendtian democracy. It is the intention to disclose our selves, to respond with "clarity and authenticity in the face of thoughtlessness" (Greene, 1995, p. 380) that "redeems the inherent unpredictability of improvisation" (Kanellopoulos, 2007, p. 113). These qualitative values, of clarity and authenticity, are not easily assessed, but this should not render them insignificant in our framing of education. Schools, as contexts for learning, interaction and transformation, must ideally embody and actualize these values. If, as Greene argues, education must center upon developing "a self-reflectiveness that originates in situated life, the life of persons open to one another in their distinctive locations and engaging one another in dialogue" (Greene, 1995, p. 380), then classroom practices must offer contexts in which these aspects are enacted, explored and shared.

Improvisation as emancipatory praxis – the Theatre of the Oppressed

Notions of emancipation are difficult to reconcile with institutions that enforce compulsory education. As a result, Augusto Boal has elected to effect social and political critique outside the confines of the school, creating, in the process, a wide array of techniques to foster dialogic engagement. His work has emancipatory goals that were similarly expressed by his Brazilian compatriot, Paulo Freire, with whom he later became

close. Boal's subversive use of theatre, inspired by both Freire's influential pedagogy and the Marxist theorizing of Brecht (Cabral, 1996, p. 217), moves the locus of dramatic improvisation from the stage back to the street. His book *Theatre of the Oppressed* (1985) provides the anti-Aristotelian theory that underpins "Forum Theatre," an "ethico-political practice" that invites the audience "to intervene and speak or act out alternative responses in order to work towards a potential improvement – thus becoming 'spectactors'" (Frost & Yarrow, 2007, p. 118/116). Boal claimed Aristotle's formulation of theatre served to disengage the masses from political action by promoting emotional catharsis over critical engagement. In Forum Theatre, the actor acts not as a "facilitator," but rather as a "difficultator" (Frost & Yarrow, 2007, p. 117), rendering oppressive power relations problematic and offering spectactors a forum in which they may act as protagonists in search of solutions.

In a chapter entitled "Theatre as politics and transitive democracy as theatre," Boal (1998) lays out the pedagogical features of Legislative Theatre, in which the citizen is transformed into legislator through participation in dramatic negotiation. Boal sees his theatrical approach as an extension of Freire's work, which he describes as "the transitivity of true teaching" (p. 19). He contrasts this relationship, in which both members learn from one another, with the intransitive, one-way relationship that characterizes conventional theatre. Whereas the purpose of the Theatre of the Oppressed had been to transform from spectator into the more agentive actor, Legislative Theatre has more explicit political aims. Boal summarizes the goal of this performative form of critical engagement:

Our mandate's project is to bring theatre back into the centre of political action – the centre of decisions – by making theatre as politics rather than merely making

political theatre. In the latter case, the theatre makes comments on politics; in the former, the theatre is, in itself, one of the ways in which political activity can be conducted. (Boal, 1998, p. 20)

Political engagement of this sort can only take place when participants are free to explore the consequences of their political actions and modify their responses accordingly. Boal sees this improvisation-based approach as a counterbalance to the oppressive, pre-determined restrictions on political action. In this, his desire is to subvert the politically oppressive forms of interaction marked out by Freire, in which “dialogue turns into monologue” (p. 129). Instead of the model Aristotle proposed, which casts each theatre go-er in the passive role of observer, as “the spectator, on whom the theater has imposed finished visions of the world,” Boalian praxis prepares participants for action (Boal, 1985, p. 154-155).

Boal takes pains to ensure that his methods are not seen as prescriptivist, that they remain vitally linked to the possibilities and contingencies of the lived realities of participants; his theatre “must,” he writes, “always present doubt and not certainty, must always be an *anti-model* and not a *model*. An anti-model to debate and not a model to follow” (Boal, 1992, p. 232, italics in original). Boal’s theatre seeks involvement in the dialogic process as a means to problematize disparate views, a point expressed by Adrian Jackson in his introduction to Boal’s *Rainbow of Desire*: “Here there are no misreadings, only multiple readings, and the readings most wildly at odds with each other are often the most fruitful and revealing” (Jackson in Boal, 1995, p. xx). Boal’s many techniques provide the spectator with the opportunity to work through the complexities of their lived situations by engaging in dialogue, an experience that (it is hoped) will bring individual and social transformation. Improvisation, with its foregrounding of personal

experience, its concern for contextual relevance over pre-scripted goals, and its emphasis on democratic process, seems a useful frame for investigating these socio-political dynamics. Improvisation-based curricula may offer changes to effect democratic practices, changes that, although minor, are of great significance, such as the leadership rotation and turn taking schemes Barrett introduced earlier.

Dialogue

A single voice ends nothing and resolves nothing. Two voices is the minimum for life, the minimum for existence - Bakhtin (cited in Charles, 2003, p. 192)

It takes two to know one – Gregory Bateson (cited in Nachmanovitch, 2001)

One of the chief ways that classroom democratic processes are made evident is through dialogue, embodied in the exchanges and affordances learning contexts provide or deny. The centrality of dialogue to civic participation should not be underestimated. Indeed, the very First Amendment of the Bill of Rights of the United States Constitution safeguards individual's freedom of speech (importantly, within bounds). Dialogue is rarely considered a priority, however, in classroom praxes that focus upon "inert" knowledge and de-emphasize interpretation. Improvisation-based practices problematize such standardized curricula by foregrounding subjective response and dialogic interaction. In this section, I look at "language with perhaps its closest parallel, that of jazz" (Culicover, 2005, p. 230) to interrogate the ways in which classroom dialogue may be understood as improvisation.

Improvisation is a process we are intimately familiar with in the form of spoken language. This is clearly evident in jazz, where language is the chief metaphor used to describe musical expression. I briefly turn to jazz practitioners to elaborate on this

metaphor, sounding out voices that ask us to listen to linguistic communication as improvisation. In the classroom, these jazz-like improvisations are enacted in dialogue, a topic I explore in pedagogical contexts in a discussion of teacher's "blackboxing," (Matusov & Hayes, 2000), student questioning (Nystrand, 1997), and the critical perspectives of Paulo Freire (1993) and Nicholas Burbules (2000a, 2000b). As I show below, these perspectives clarify the many ways in which Process Drama complements forms of second language instruction (Kao & O'Neill, 1998), by "incorporat[ing] these aspects in a more complex, immediate, and flexible format" (Liu, 2002, p. 5), aspects that are evident in the contexts for improvisation discussed earlier.

Jazz and language

Comparisons between the improvisatory and generative natures of language use and jazz are commonplace, so much so that both seem to be aspects of a more basic skill – the symbolic manipulation in play contexts I referred to earlier. Language and music are both flexible codes open to reconfiguration, utilizing a series of protocols or idiomatic characteristics that constrain yet do not determine use. Linguists have sought to distinguish internal rules from their expression, particularly in the tradition of generative grammar. Chomsky (1965) made the formal distinction between *competence*, an idealized capacity or knowledge of grammatical and semantic rules, and *performance*, the actual production of utterances. Whereas competence is often granted priority in order to reflect on innate linguistic abilities, other alternatives give precedence to performance. A case in point is the work of Culicover (2005), who considers similarities between language and jazz in his article "Linguistics, cognitive science, and all that jazz." He writes:

A theory of performance forms the basis for a theory of competence. On this view, what is acquired in the course of language acquisition is performance itself. Knowledge is embodied in the performance. It develops as the range of performance grows and generalizes. A generative grammar is an idealized description of this knowledge. (Culicover, 2005, p. 229)

Cognitive psychologist Philip Johnson-Laird (2002) suggests that, “If you are not an improvising musician, then the best analogy to improvisation is your spontaneous speech” (p. 417). Many improvising musicians adopt this metaphor for discussing jazz, as well, and would likely agree with Nachmanovitch when he says that, “Every conversation is a form of jazz. The activity of instantaneous creation is as ordinary to us as breathing” (1990, p. 17).

The most ordinary act of creativity is improvisation, in the form of spontaneous conversation – the art of listening and responding, interacting, taking in the environmental factors unconsciously but with precision, modifying what we do as a result of what we see and hear, a multidimensional feedback. (Nachmanovitch, 2007, p. 1132)

The activity of [jazz improvisation] is much like creative thinking in language, in which routine process is largely devoted to rethinking. By ruminating over formerly held ideas, isolating particular aspects, examining their relationships to the features of other ideas, and, perhaps, struggling to extend ideas in modest steps and redefine them, thinkers typically have the sense of delving more deeply into the possibilities of their ideas. (Berliner, 1994, p. 216)

Stamm (2009) melds the skills of linguistic and musical improvising, highlighting the spontaneous creativity and expressive aims that characterize dialogic interaction:

Over a period of time, the neophyte player develops into a full-blown Jazz linguist, and, if perceptive, realizes this is a life-long task in which he will constantly participate in to become more fluent, so he can enhance his musical vocabulary, find his own highly-individualized voice, and establish a niche for himself with his music . . . I play extemporaneously, just as we talk extemporaneously. Do we think about speaking? Or, isn't our speaking dictated by the situation at hand and based on our need to respond to that situation by expressing our own ideas and thoughts, which then creates a dialogue with those who elicited that response. Jazz improvisation, like speaking, is just that. (Stamm, 2009)

Berliner (1994) speaks of the socially embedded co-creation of both of these communicative forms of expression in much the same terms: “Just as children learn to speak their native language by imitating older competent speakers, so young musicians learn to speak jazz by imitating seasoned improvisers” (p. 95). He explicitly likens learning to “speak jazz” to learning a second language: “Only immersion in the music’s oral literature and the assistance of fluent speakers of jazz enable jazz learners to grasp the actual components and their variants that improvisers use to construct complex musical statements” (p. 101-102). As with the Western classical tradition discussed above, the inclusive dynamics implicit in improvisation lead to the creation of a common language and a resulting community of practitioners. According to Alperson (1984), communicative intention is both more salient and more significant than formal correctness: “we attend to a musical improvisation much in the way that we attend to another’s talk: we listen past the ‘mistakes’” (Alperson, 1984, p. 24). This is an important pedagogical perspective to take as well, as it validates the students’ expressive aims by acknowledging their intent. This is particularly true in second language learning contexts. While efforts to increase competence and grammatical accuracy are necessarily granted a high priority, these must be considered in relation to the speakers’ communicative aims. Sawyer (1997) has considered the ways in which the young child’s improvisation in fantasy play could be tied to the development of linguistic and social skills in other forms of creative collaboration. This development is evident in the children’s verbal interaction, through exchanges that show them to be increasingly capable of co-creating narratives. Sawyer’s more recent work (2004) moves from the role improvisation plays in the social development of the child to the role it plays in classrooms. He sees teaching not simply as

performance, but as improvisational performance that calls upon the teachers' creativity and ability to heighten interaction and maximize student learning (2004). Taken as a whole, Sawyer's work may be regarded as the most sustained look at improvisation as a frame for understanding pedagogical practice.

In summary, language and jazz have much in common: a) the emergent nature of both spontaneous conversation and jazz; b) the social means of transmission; c) the loosely determined structural features and the creative and generative use of elements as they are freely chosen; and d) the goals of proficiency and self-expression. In an improvisation-based approach, all of these aspects may be foregrounded to enhance language learning, building upon naturally occurring linguistic aptitudes. Not least amongst these is the ability for learners to ask sensitive and intelligent questions.

Indeterminacy and the asking of questions

Much of our thought is constituted in language, and opportunities to manipulate, deconstruct, recombine and explore language are essential for the cognitive growth of learners. As Dewey puts it: "The instinct of the investigation seems to grow out of the combination of the constructive impulse with the conversational" (Dewey, 1990, p. 44). Learners who are deprived of opportunities to exercise their nascent linguistic abilities – such as "the lack of opportunity to share in dialogue, to have occasion for paraphrase, to internalize speech as a vehicle of thought – may suffer "virtually irreversible deficits" (Bruner, 1975, p. 28-29). If, as Prévost asserts, "the purpose of an aesthetic of dialogue is to explore and create an inexhaustible variety of responses" (Prévost, 1995, p. 36-7), then

the inaccessibility of such environments may result in cognitive limitations that extend beyond learners use of language to other forms of creativity.

This may in turn hamper critical thinking skills and limit inquiry. Matusov and Hayes (2000) discuss the nature of concepts that are removed from an individual's personal experience, and thereby become non-disputable, or *blackboxed* (p. 227). These statements (e.g., "The Earth rotates around the Sun") "[do] not invite readers to ask questions about the statements' authorship and origin" (p. 231); instead they rest upon an authority that has become common consensus.

Teachers model different orientations to knowledge by the forms of interrogation they practice in their classrooms. Nystrand's (1993) research on the kinds of questions teachers asks clearly suggests that teachers monopolize the role of interrogator, predominantly asking questions that are inauthentic. Inauthentic questions serve to confirm that students can access information they were previously exposed to, or claim comprehension. These have also been termed "restricted" and "unrestricted" uses of language:

Restricted language is demonstrated in teacher's questions which appear in the interrogative form but carry the function of evaluating the students. ... These types of questions are meant to focus on the message (communication +), yet they involve no genuine transfer of information (communication -) for the teacher knows all the answers. "Unrestricted" language, on the contrary, contains genuine questions that aim to elicit information from the students that is unknown to the teacher. (Kao & O'Neill, 1998, p. 41)

It may be said that by limiting critical reflection and discouraging problem-seeking, teachers' inauthentic questions act to blackbox topics. Paulo Freire (1993) sees such "antidialogue" as synonymous with the perpetuation of oppression (p. 119). Classes must

be structured to allow new perspectives to emerge, so that teachers and students remain receptive to each other's roles as free agents.

Whereas non-dialogic forms of interaction objectify participants and reproduce power disparities, the democratic structure of Process Drama, which empowers students to guide interaction and curricular focus, redresses these imbalances to highlight interplay and inquiry. Jerome Bruner speaks of the benefits of such open-ended dialogue:

even a failed effort to refer is not just a failure, but rather ... it is an offer, an invitation to another to search possible contexts with us for a possible referent. In this sense referring to something with the intent of directing another's intention to it requires even at its simplest some form of negotiation, some hermeneutic process. (Bruner, 1986, p. 63)

In his work problematizing dialogue, curriculum theorist Nicholas Burbules emphasizes a pedagogical aim that forsakes closure for the nurturing of a disposition oriented toward ongoing inquiry and engagement. "Learning how to ask a good question," he states directly, "is in one sense *the* central educational task" (Burbules, 2000). He then asks his own question: "But how does one teach in the realm where the goal of teaching is not to answer questions, but to teach how to ask good questions?" (Burbules, 1998). In a fundamental sense, teachers utilizing improvisation-based curricula do just this, by acting as guides in the improvised exploration of the content, instead of as unassailable authorities.

The integration of democratic processes is of fundamental importance in curricular development. Indeed, as a means to promote autonomous thought, foster dialogic encounters, and initiate collective critical thinking, it may be regarded as an imperative. In this section, I have drawn parallels between improvisation and democratic practices in general terms, both inside and outside the school. In the following chapter, I

enter the classroom again to look at the practical application of the improvisational approach currently known as Process Drama, and discuss the pedagogical features specific to the adoption of various improvisation-based approaches.

Chapter VI: Process Drama and the Enactment of Improvisation in the Classroom

In the preceding chapters I have dealt with improvisation in the arts, primarily jazz and theatre. Bringing to bear constructivist and situated cognition understandings, I begin here to show how the adoption of these participatory frameworks in educational contexts involves a reconceptualization of curricular aims. A class utilizing improvisation as a mode of exploring material will necessarily look different than one seeking the reproduction and internalization of pre-scripted curricular objectives. Improvisation has been elaborated most fully as pedagogical practice in drama studies. In this chapter, I link improvisation with classroom practice using an existing method, Process Drama, to underscore benefits I believe applicable in the teaching of other content areas. Drawing on Bolton (2007), I first present a short history on drama in education, noting the increased agency granted participants. Next, I integrate the theoretical perspectives previously discussed in a form that has practical application in the classroom, an approach originally devised by Dorothy Heathcote under the name *The Mantle of the Expert*, more commonly known today as Process Drama. Process Drama has been formulated as a set of principles that effectively integrates teacher and student participation to open up new dialogic possibilities through improvisation. I elaborate the pedagogical philosophy and methods of this approach to learning, drawing upon its primary theorists (Wagner, 1985; Bolton, 1984, 2007; Johnson & O'Neill, 2001; Cabral, 1996). I consider this approach invaluable in contexts that place a premium on dialogue, especially in my own area of expertise, the teaching of English as a Second Language. Finally, this concluding chapter outlines some of the features and potential challenges

common to classroom improvisation more generally, including the demands it makes upon both teachers and students.

Process Drama

Drama, writes Gavin Bolton (2007) in “A History of Drama Education: A Search for Substance,” has been used in educational settings to achieve a number of different ends, amongst them Elsie Fogerty’s “elocution” practice at the Central School of Speech and Drama (1906), Henry Caldwell Cook’s “play-way” as “central methodology for teaching English” (1917), and Winifred Ward’s “Creative Dramatics” (1924). Bolton cites Peter Slade’s seminal text *Child Drama* (1954) as heralding a pedagogical shift in which the teacher and students collaborated to create stories, an approach Brian May would expand as “Children’s Theatre” (1967), which “aimed at developing each child’s intuition and concentration capacities. The personal development of the individual became the new objective for this ‘creative drama’” (Bolton, 2007, p. 50). Bolton’s own work has come to be closely tied to the work of Dorothy Heathcote, who was appointed in 1950 to Newcastle-upon-Tyne University, in the Institute of Education. This approach, under the name of Process Drama, has more recently received a wider audience through the work of Cecily O’Neill.

Process Drama presents one feature that distinguishes it from other drama approaches – it puts the teacher in role with the students, facilitating greater parity in directing the flow and focus of classroom discourse. Kao and O’Neill (1998) see dialogue in these contexts as qualitatively different, in that it allows for greater initiative on the part of the students, increasing their stakes in the work discussed. Matusov (1996) argues that joint activity, “where a higher mental function is distributed among the participants”

(p. 31), fosters symmetry amongst participants and creates the possibility of *intersubjectivity*, (which he defines as “a process of coordination of individual participation in joint sociocultural activity rather than as a relationship of correspondence of individuals’ actions to each other”) (p. 25). Intersubjectivity is a relationship that is clearly enhanced by the mutual support that characterizes improvisatory practices.

During improvisation in Process Drama, the teacher moves in and out of role to facilitate dramatic movement and coordinate content exploration. Students remain in role throughout, and the drama unfolds with the teacher guiding it primarily from the inside. The teacher, whose direction helps shape student interest and input to explore general goals, is no longer the gatekeeper to knowledge but guide and collaborator. This relationship is central to a form of psychotherapy proposed by Jacob L. Moreno. In psychodrama, players explore interpersonal relationships through dramatic action, by which they recognize and resolve internal conflicts (Moreno, 1973). The power of this therapeutic approach derives from the effect that enacted spontaneity has in releasing the creative energies of the participants. This is magnified by the supportive interaction of the group, in which each member may act as therapeutic agent. According to Moreno,

The meaning of the spontaneity player therefore is to eliminate audiences. He does not want to be seen or heard, he wants to co-act and inter-act with all. He cannot bear to have anyone around him reduced to the status of a spectator. (Moreno, 1973, p. 32)

This dynamic echoes the relationship between ethnographer and the subject as described by Fabian (1990), in which both experience coevalness. The therapist does not speak *of* patients’ difficulties, revealing aspects of their personalities of which they were hitherto unaware, but speaks *with* patients, disclosing features that emerge in dialogue.

Heathcote's name for her approach was "The Mantle of the Expert." I believe this title holds much of what is central to improvisation as an educational praxis. When students don the mantle of the expert in dramatic play, they adopt a perspective on their knowledge and their ways to access and act upon it. Experts are not simply technicians who run pre-programmed iterations. Rather, they are able to organize the complexity and the context-specific features that make each new problem they are to solve distinctive. While it is misleading to conceive of students as experts (or even more detrimental, perhaps, to have students consider themselves to have already achieved this), the pretense allows the students the freedom to regard their experience and thoughtful curiosity as up to the task. Perhaps, as experts, they have not yet encountered the problem they currently face – they have, however, a modicum of expertise in asking questions (and may be helped to gain more). Experts have broad knowledge bases, a databank of possible resources and means to access them, and learning gleaned from experience. The Mantle of the Expert encourages the student to call into play the knowledge, resources and experiences of the collective participants in order to explore the content.

Teaching in this approach requires a skill set teachers in training may not have seen modeled in their own learning experiences. Examples of how these skills may be fluidly integrated are beautifully captured in Betty Jane Wagner's book *Drama as a Learning Medium* (1985), which demonstrates how sensitive and respectful guidance can help students direct their own learning in creative and expressive ways. I will look at these in depth, as they suggest a model of improvisation that can, given the teacher's willingness to yield a degree of control and ability to deviate from pre-scripted objectives, be readily integrated into classroom practice.

Wagner's account presents Heathcote as a masterful teacher and guide, effortlessly allowing student inspiration to direct their learning. One of her skills is to support "a situation where students are making the most of the decisions and neither she nor the class knows what will happen next" (Wagner, 1985, p. 25). This indeterminacy does not lead to a state where anything goes, where decontextualized personal expression is lauded; instead, Heathcote is attuned to the need for maintaining the dramatic focus on the narrative. She trusts that students will learn best when the information they are offered is incorporated into the unfolding improvisation. Wagner describes the artistic sensibilities and pedagogical orientation of the teacher that make these dynamic forms of encounter meaningful:

Heathcote doesn't build belief by heaping information on the class, thereby reminding them of the plethora of facts they don't know. Instead, she does it by carefully selecting those few details that children might have had some experience with, and by again shifting the problem of "making it happen" from herself to the class. (Wagner, 1985, p. 26)

Again the information is introduced at a point where the children need it and not before. Heathcote is a master at withholding her factual expertise, at building a need for information before she loads it on the child, and in some cases, of simply leaving the implications unstated, the ends untied, so the class goes on wondering. She resists the teacher's continual temptation - to tell all she knows. (p. 29)

There is no rush to get all of the information covered; facts are introduced when they have practical application and contribute to understanding within the context of the drama. It is incorrect to assume that improvisation means rapid change. This is not the case, and slower pacing (or groove) may spark the most creative responses. In fact, Heathcote deliberately adopts slower tempi to raise the tension and increase provocation. As Wagner (1985) notes: "it's only when you deliberately plan to have the drama stay in the same place that the children have to pull out new information, are trapped into new

experience. This is when they plumb what they didn't know they knew" (p. 45). This "plumbing" takes place in one of the "gaps" I discussed earlier. Instead of filling the student with "inert," pre-scripted answers, the improvising teacher creates a space for the generation of additional questions.

Cabral (1996) focuses on the way in which Heathcote dialectically "upgrades" student contributions, presenting these processes in the following schematic form:

- the teacher 'reads' both context and participants, and questions their knowledge of the subject matter they are going to work on;
- s/he upgrades their contribution by rephrasing and/or enhancing the aspects which seem to represent good learning opportunities;
- s/he picks up a potentially dramatic problem and introduces a new convention to shift the ongoing process towards it;
- s/he challenges the participants' readings of the circumstances at stake, mainly by introducing new conventions which promote an exchange of verbal and visual expressions; and
- the participants' prevailing points of view become the focus to start the process all over again. (Cabral, 1996, p. 219)

There is, then, an iterative cycle in which questions suggest dramatic learning opportunities which are plumbed for the values they challenge, and the questions they raise. Despite its indeterminate structure, Process Drama is guided by clear educational goals – as with the other forms of improvisation we have looked at, random expression is counter to the form. Winston (2005) compares drama in education to Umberto Eco's (1989) definition of 'work in movement', which offers: "the possibility of numerous different personal interventions but ... not an amorphous invitation to indiscriminate participation" (Eco, 1989, p. 19).

Johnson and O'Neill (2001) speak of improvisation in Process Drama in positive terms that parallel the scientific method: "discovering by trial, error and testing; using available materials with respect for their nature, and being guided by this appreciation of

their potential” (p. 44). Instead of the production of de-contextualized knowledge, they consider the learner’s subjective engagement in and appreciation of the process: “the ‘*end-product*’ of improvisation is the *experience* of it” (p. 44). As we have seen before, improvisation does not seek final truths but is a way of responding to uncertainty. Kao and O’Neill believe that working with this indeterminacy benefits students by making them more flexible and capable of facing challenges:

In true dramatic interaction, there is a need to determine, interpret, and respond to the kinds of role being played by others and to cope with any potential interactional ambiguity. This ambiguity is a perfect reinforcement of the need to listen. (Kao & O’Neill, 1998, p. 11)

Utilizing a minimal structure that allows for the exploration of a wide range of possible content areas, Process Drama offers teachers an approach for provoking curiosity, heightening participation, and generating meaningful learning contexts in which students can develop their powers of expression, negotiation and critical thinking. This is especially true when focusing upon the language arts.

Process drama and SLA

As an ESL teacher, the moves in Process Drama towards dialogic processes resonate powerfully with my sense of how content and conversation are intertwined. The unscripted nature of common discourse makes improvisation an especially useful format for language arts pedagogies focusing upon oral communication. Second language classes, as environments that regularly use imagined contexts for the development of social skills, seem especially well-suited to an improvisational approach. Improvisation not only fosters personal expression, but prepares learners for the possible exigencies they will face in “natural” settings. Improvisation, loosely structured to facilitate active

participation, provides a framework that may help keep interrogations open-ended, imbuing the class with a spirit of on-going negotiation.

The essential elements that characterize Di Pietro's (1987) Strategic Interaction (SI) closely resemble Process Drama. Strategic Interaction (a term earlier used by Erving Goffman, 1969, to discuss the play that occurs in interpersonal relations) calls upon:

the ability of language to create and engage students in new roles, situations, and worlds; dynamic tension; the motivating and challenging power of the unexpected; the tactical quality of language acquired under the stress of achieving a goal; the linguistic and psychological ambiguity of human interaction; the group nature of enterprise; and the significance of context. (Liu, 2002, p. 5)

These improvised forms effectively facilitate pragmatic language use and exploration, integrating dramatic tension to heighten risk and increase motivation. Whereas SI uses scenarios in which the student acts as himself or herself, Process Drama extends the dramatic possibilities by engaging the imaginative and fictive, allowing teacher and students to take on other personalities. Despite the fictional nature of situations created, they provoke students to engage in authentic and meaningful ways and collectively solve the emergent problems posed by the drama. Improvisation prompts ingenuity. Liu (2002) notes that such an approach, which provides forms for engagement but only minimally specifies content, "respects the learner's internal syllabus and is under learner control" (p. 4). Kao and O'Neill find support for Process Drama in second language education in Susan L. Stern's research (1981), a psycholinguistic analysis which indicated that drama activities improved communicative competence, by fostering the following psychological factors: "heightened self-esteem, motivation, and spontaneity; moreover, increased capacity for empathy; and lowered sensitivity to rejection" (Kao & O'Neill, 1998, p. 85). Student engagement in improvised dialogues involves negotiation similar to the complex

forms of social interaction they take part in outside the classroom. Kao and O'Neill believe the dramatic activities in Process Drama provide access to more than declarative knowledge; it "provide[s] them with various communicative situations so that their analytical knowledge evolve[s] rapidly into non-analytical knowledge" (p. 117). This approach is effective because it helps learners recognize the ways in which they create and respond to context. These activities invite student participation that is both imaginative and purposeful, helping students develop linguistic competence in generative frameworks that challenge their listening and speaking skills. Of equal importance, it broadens student interaction to create richer social involvement. Kao and O'Neill highlight the benefits of this communal response:

In a typical classroom, the role of the teacher determines the learner activity; based in the assumption that learners can only learn from their appointed instructors, but not from each other. (...) this kind of pedagogy fails to exploit the collective potential of learners as a resource for learning. In contrast, drama temporarily suspends the classroom context in favor of new contexts, new roles and new relationships. These make very different language demands on both teachers and students, so new possibilities of language use and development are opened up. (Kao & O'Neill, 1998, p. 4)

Process Drama, then, offers a curricular approach that integrates many of the exploratory and social features I have elaborated upon in earlier sections of this work. Its radical move is to provide a dramatic, fictional structure that resituates the teacher, a context in which both teacher and student can explore, responding to the emergent flow of ideas as co-creators. Process Drama embodies the democratic ideals described earlier, using an approach that invites students to interact in a dialogic unfolding of curricular content, one that fosters linguistic and expressive mastery. It is a dynamic, indeterminate, and collaborative framework that promotes student engagement. This interactive

environment is especially beneficial for language learners, in that the enriched context and performative aspects increase the probability of comprehensible input.

In the following section, I move from the specific features of Process Drama to regard characteristics and potential difficulties common to classroom improvisation more generally, and look at ways in which the adoption of any given improvisation-based approach makes unique demands upon teachers and students alike.

An approach to improvisation-based curricula

This final section looks at the general features that would characterize a curricular approach based on improvisation, one of pedagogical value for teaching basic content areas.

Improvisation has begun to receive attention as a model for interaction in a number of unrelated fields. Researchers have looked at improvisation in math education (Borko & Livingston, 1989; Empson, 2002; Neyland, 2004a, 2004b, 2004c; Martin, Towers & Pirie, 2006); in science education (Kelly, Brown & Crawford, 2000; Jurow & Creighton, 2005; Monteiro & Carillo, 2008); in medicine (Haidet, 2007); in counseling (Collin, 1996; Walter, 2000; Kanter, 2007); in physical education and dance (Mouchet, 2005; Gard, 2006); and in teaching literature (Villaume, 2000; Cosgrove, 2005). Some of the applications may be surprising. In particular, as a study with decidedly “wrong” answers, math instruction would seem to be an unlikely candidate for improvisation. Neyland (2004a, 2004b), however, uses jazz as an explicit metaphor for the type of ethical interaction he sees conducive to math understanding. He argues that spontaneous invention within optimally minimal structures leads to greater understanding than the

limitations imposed by proceduralism, in which the problem space is over-structured. Improvisation as a practice, Neyland (2004a) claims, allows more intuitive mental processes to come to the fore “allowing the mind to enter the ‘zone’ of poised attentiveness.” This awareness and active involvement is vital because it grants the material greater significance and “without the orientation provided by an horizon of significance, mathematical know-how becomes procedural ... it is adrift from a larger sense of purpose, [and] becomes mindless” (Neyland, 2004b, 2004a). These researchers have found value in improvisation using similar models for interaction, as dynamic, generative frames for group decision-making and weighing of alternatives. Regrettably, an in-depth discussion of improvisation in these diverse fields is beyond the scope of this dissertation. Instead, I will now present an approach that integrates their understandings on improvisation for use in curricular planning.

Features of an Improvisation-based Praxis

The previous chapters have looked at improvisation from a variety of perspectives (in philosophy, anthropology, and knowledge management), in their organic expression in the arts (music and theatre) and finally in the context of pedagogy and learning theory. Each of these contexts makes use of improvisation according to its needs. The following section extrapolates some of these understandings for broader application in curricular design. Below, I outline possible ways to create a classroom environment that is conducive to an improvisational approach, one I see as having the following basic features:

1. *a semi-bounded, fluid sense of time*

Curricula that employ improvisation require unscripted periods of time in the classroom, in which allowances are made for spontaneous and emergent forms of class interaction. It should be clear that if improvisation is largely defined in terms of enactment in the present, a chief concern of any improvisatory approach is making time, setting aside time, freeing time from specified curricular objectives to focus instead upon goals, to allow for unscripted responses to be generated. Allotting a specific time each day or week for improvisation helps to regularize it as a practice, utilizing structures for interaction that the teacher may choose to adopt outside of the time scheduled.

2. classroom spatially organized to facilitate communication

The organization of desks and chairs in the classroom encourage certain types of communication and discourage others. The space plays a large role in directing the flow of dialogue and shaping the interactions. Ideally, the teacher will be able to flexibly sculpt the environment according to the immediate needs of the improvisation. This may simply result in classroom materials used as props, but I believe the continued remodeling of the space is likely to have a more substantial and longer lasting benefit, as it is likely to result in a greater flexibility of mind.

3. clear directives and ground rules for what is permissible, and how leadership roles will be rotated

Improvisation is likely to be an unfamiliar, and potentially stressful, form of learning for most students. When first introducing this approach, the teacher may alleviate some of the initial anxiety by setting loose constraints, and focusing more upon structural rules for participation so as to maximize student engagement. As noted earlier, constraints are prompts for creative problem solving, and the selection and framing of well-chosen ones perpetuate the generative tension between limitations and possibilities. Creative responses must be within the realm of appropriate behavior, and it is important

that the teacher clarify how the rules and constraints have been chosen to facilitate collaborative exploration.

4. atmosphere of emotional support provided

As noted, improvisation is risky. As a result, students may feel threatened by the expectations placed upon them. They may need a safe haven where they can move to if they feel overly pressured. It is up to the teacher's discretion as to how students may best be encouraged to move out of their comfort zones, guidance that requires the teacher exercise sensitivity, foresight and compassion. These attitudes need to be modeled and clarified by the ground rules such that mutual respect is recognized as an integral part of the creative environment.

5. the determination of appropriate constraints and optimal formulation of aims

As the immediate arbiter of curricular relevance, the teacher must determine the information that the improvisation will integrate and explore. While much material will emerge unexpectedly during creative performance, the predetermined aims of the improvisation as represented by the constraints and initial topic selection will be the seed out which this material grows. Teachers will want to vary the degrees of specificity according to the amount of background knowledge available to the students, the conceptual density of the work, and other such factors.

6. background knowledge that may be of use

It follows that the goals selected will suggest foundations upon which the improvisation will rest, and the teacher must provide a means to activate prior knowledge accordingly. This will vary according to the student. Some of the background knowledge will have been created through complementary lessons within the curricula, and the teacher may assume a modicum of common understanding. Many of these assumptions may be overturned, however, by the subjective experiences of students that offer

alternative possibilities for understanding the material. These experiences are, I believe, likely to be more relevant and emotionally compelling for students, and the teacher will do best to value and integrate these accordingly.

7. a positive understanding of mistakes

A key feature of the supportive environment mentioned above is the way “mistakes” are perceived. As noted above “yes, and” is the single most important rule observed by improvisers. In practice, the teacher will want to provide situations (which may take place during or after the improvisation) where the validity of mistaken claims generated during the improvisation is analyzed. That is, the imaginative expressions of the students must be made sense of in light of the “facts” assumed in the curriculum.

8. access to resources with which this knowledge may be furthered

It is important that the teacher provides a means for additional information pertinent to the continued exploration of the topic accessed and integrated in the improvisation (or subsequent explorations derived from it). A premium should be set on the critical engagement with the material, and students will need to have access to external sources (such as textual and internet resources), to supplement, confirm, and clarify their thoughts on the work produced.

This list considers possible features of an approach that favors porosity over impermeability, provocation over proof. These seem well within the range of common classroom practice.

Applied Improvisation – Possible Problems and Correctives

I’d like now to discuss what might be regarded as the excesses of this theoretical framework. It might strike teachers, administrators or policy makers that this is an overly

hopeful position to adopt - that exhorting learners to learn from their mistakes is adopting a cavalier attitude to rigorous study, or that encouraging students to speak freely is tantamount to letting them run wild. I have spoken in detail about the benefits of an improvisation-based approach; I would like now to consider possible arguments against the adoption of such an approach, at what could “go wrong.”

It is important that I clarify two points: firstly, improvisation is meant as a complement to other forms of learning; and secondly, a related issue: some topics may not be amenable to improvisation in the classroom.

Improvisation is suggested as one of many possible approaches that can be made use of in the classroom. I believe that the improvisations will be more powerful and pedagogically effective if balanced by alternative forms of instruction, as these offer contrasting perspectives and knowledge that constitute the raw material brought into play. If classroom time is to be set aside for improvisatory activities, the decision to implement this approach must be integrated with other curricular goals. While improvisation as I have presented it might eventually make up a large part of the curriculum, students are likely to be unfamiliar with the practice at the start, and would benefit from a gradual introduction. This would likely apply to the complexity of issues discussed as well as the amount of time spent improvising. If students are to appreciate the degree to which they are being challenged, the selection of content material and duration must therefore be made judiciously, especially when starting out.

I will address three primary difficulties: (1) a given improvisation lacked coherence or focus – it was inconclusive and meandering, or off topic; (2) the improvisation didn’t develop skills – the time used was ill spent, and could have been

used more productively in drill; and (3) the improvisation resulted in poor behavior – the additional freedom granted students either created greater inequalities in participation, or worse, was used to target other students.

To Provide Additional Coherence

Fine-tune constraints.

The selection of constraints constitutes the primary means by which the initial scope of the improvisation is determined. If student exploration is not progressing satisfactorily, the constraints may be reappraised, and alternatives posited that better accommodate the content. The adjustment of constraints may also significantly impact student participation.

Limit time frames.

Students unfamiliar with improvisation may have more difficulty in maintaining coherence over longer time spans. These students may benefit from more concentrated forms of improv, such as activities that allow them to collectively brainstorm without any role-play. One such activity could be brainstorming the initial characters, setting and conflict of the future improvisation. This set-up preparation also creates time for students to do additional research and ready themselves.

To Shift Focus to Skills

Tighten constraints.

If student responses are sufficiently constrained, learners will be required to improvise using minimal means, and focus upon generative possibilities within a more limited set of choices. The reiteration of variables and subsequent repetition not only helps develop fluency within the set of possibilities delimited, but also encourages

students to exploit those limitations for their maximal creative potential. Additional constraints may then be added to further expand the scope of the improvisation.

Re-evaluate the benefits of improvisation as current approach.

Some of the difficulties that occur may indicate that the students would benefit from other approaches prior to improvisation, such as additional student research, teacher-led instruction, or the introduction of complementary concepts. Improvisation may be more useful if deferred until students evidence mastery with a subset of the skills deemed necessary, or until they are more familiar with relevant topics.

To Reduce Inappropriate or Antisocial Behavior

Clarify ground rules.

One of the pedagogical goals of the improvisations is to encourage a sense of interdependency. The collaboration that occurs within the improvisation may be enhanced if the ground rules are clearly articulated, explained and reinforced. Once the ground rules are agreed upon, this level may be temporarily closed to negotiation. Students who are not initially able to participate in concert with the class may become more able as they see other participants model tolerance, receptivity and critical engagement. In order to facilitate interaction, teachers must not only teach students how to question one another, but how to ask one another for help.

In summary, I return to bebop as my model for classroom interaction. The role of the teacher is to clarify the structural constraints that frame student interaction. This involves the delineation, but not over-determination, of functional aspects of content exploration. Such aspects include, but are not limited to, the determination of topical focuses, time limits, turn-taking procedures, and target vocabulary. Jazz improvisation

utilizes structural conventions, such as call and response and trading fours to facilitate communication, exploring the possibilities inherent in the given melodic and harmonic constraints built into the tune. The more clearly teachers convey equivalent aspects in the content, and the more clearly they represent constraints as generative means for creative thought, the more learners will feel free, supported, and empowered to explore the possibilities therein.

Conclusion

Thinking's important. It's good to know how.
 And someday you'll learn to, but someday's not now.
 Go on to sleep, now. You need your rest.
 Don't think about thinking. It's not on the test.
 "Not On The Test," by Forster & Chapin, 2007

In this work, I have argued for improvisation as a dynamic orientation to an indeterminate world. This work is built on the premise that we are natural improvisers. Our actions are neither entirely rule-governed, nor entirely free from constraints. The decision making processes that help us determine how to interpret, negotiate, and apply rules are also considerations of the free variables that allow us to deconstruct, re-create and break them. I have attempted to show how integrating the skills we effortlessly bring to bear in our daily lives can enhance education. Rashmi Pramanik, in her book *Overburdened school-going children* (2007), cites Margaret Mead, who wrote in *Coming of Age in Samoa: A Psychological Study of Primitive Youth* (2001/1928) that "[W]e must turn all of our educational efforts to training our children for the choices which will confront them" (p. 169), and adds that "We are merely designing a 'changing curriculum' rather than making a curriculum of change" (p. 47). I believe that improvisation-based

curricula prepare students for choice by inviting them to engage in choice through a dialogical exploration of curricular content, rather than through the reproduction of pre-scripted materials and subsequent attainment of predetermined objectives. According to this view, the classroom is a dynamic, vital environment, the dialogic site for learners to interpret the significance of their efforts to learn. Drawing upon familiar models of artistic expression and cognitive agility, I have made a case for improvisation as a heuristic process that helps problematize content, a process that embodies some of our most fundamental cognitive skills and means of comprehending the world. I claim that this view of learning is valuable in that it both complements and critiques those educational practices that insufficiently integrate student subjectivities and student agency in the unfolding of classroom content.

I have tried to make this orientation to learning evident by discussing:

- philosophical perspectives that theorize upon the embeddedness of our becoming and the contextualized nature of our understanding
- cultural transformation as the interplay between socially constructed rules and the individual performance of agency
- our vital, creative apprehension of the world through imagination and play
- the organic re-creation of self through music and the arts
- our generative, expressive linguistic skills and the corresponding interpretive abilities that allow us our unique subjectivities
- the transactional, dialogic features of democratic engagement

Each of the perspectives I have adopted highlights a different facet of learning. I have looked to jazz as a concept-metaphor to explain the salient features for improvisational

engagement, and Process Drama as a useful model for the design of improvisation-based curricula, as both of these forms of interaction exemplify the emergent, collaborative nature of learning. These forms place a high premium on synthesizing and communicating material, and promote student inquiry in ways that run counter to the transmission of “inert” facts.

By way of summary, I’d like to make explicit some of the themes that have become intertwined in this work and highlight the value and implications I believe they hold for classroom practice. Improvisation, inextricably tied to risk, is less easily implemented than other forms of instruction in that it serves to underscore the diversity and complexity of multiple viewpoints, but it offers, I argue, benefits proportional to these risks.

This work has elaborated upon the following points:

Improvisational activities:

1. balance an awareness of rules as constraints that generate possibilities
2. promote metacognition and the playful creation of alternative rules
3. foster attention and presence through the active application and construction of content
4. foreground negotiation and collaboration, thereby enhancing student’s oral communicative skills
5. develop critical thinking by employing ongoing feedback as method
6. empower participants by respecting and incorporating subjectivities for emancipatory ends
7. problematize claims to objective, decontextualized knowledge

I look now at the ways in which my investigation of improvisation as a frame for educational practice clarifies a complex of vital issues marginalized in technicized forms of instruction. These categories necessarily overlap; in this respect they are mutually reinforcing, synergetically creating a context in which learners are challenged to critically explore the relations between themselves, the content, and the world.

Knowledge construction

Improvisation is mode of enactment that foregrounds both intentionality and the dynamic apprehension and manipulation of material. As such, it is very much in line with constructivist thinking, considering the learner as an active, self-directed co-participant in the educational process. Improvisatory practices embody this theoretical position.

Application

The immediacy of improvisation presents learners with opportunities to apply their understandings to a problem as it unfolds, responding to other learners and reframing their questions to suit shifting contingencies as they appear. They test the limits of their understanding, shaping their views in the crucible of the classroom.

Readiness

Improvisation construes classrooms as environments where students are expected to act, critically and decisively. Readiness, within the immediate frame of the class as it unfolds, reveals itself in the form of a heightened sense of attention and the timely application of cognitive skills. It may also contribute to the formation of desirable habits, accustoming students to “think on their feet.” This view promotes study and practice as they perceptibly enhance improvisation, a feedback loop that helps students to take part in society as prepared, active agents.

Problematizing of content

Divorced from a single, authoritative source, an improvisation-based framework helps to balance a view of knowledge as decontextualized; the recognition of multiple perspectives amongst students reifies the content itself as a fluid statement of possible hypotheses.

Interpretation of content

By inviting engaged response, improvisational activities require students to actively synthesize and integrate the viewpoints expressed by other interlocutors. This runs contrary to a reproductive framework that centers upon the perpetuation of attitudes which may pass by uncontested. Students are asked to see their views (as well as those of others) as interpretation.

Creativity

Improvisation grounds learning in the act of creation and invites learners to recognize the generative possibilities in their class content, to see class materials as opportunities for innovation and discovery.

Problem solving and finding skills

A creative handling of curricular materials leads learners to frame hypotheses in problem-solving terms, as open to multiple solutions and interpretations. More importantly, the freedom to play with the rules grants learners additional opportunities for problem finding, as dialogues may step outside pre-determined bounds to cast light on topics from more oblique angles. This approach also creates a supportive, yet critical, environment in which one may, through the collaborative exploration of suppositional assumptions, test the warrant for claims.

Self-representation

The improvisatory frames I am proposing allow the student greater voice, providing opportunities for the articulation of subjective perspectives. Students make aesthetically informed decisions about the ways in which they want to participate, the roles they wish to play, and their presence in class.

Identity formation

As a corollary to the previous point, learners are able to forge an identity through the expressive medium of classroom interaction. An open-ended curriculum creates a dynamic context in which students can act in roles usually mandated to the teacher.

Reflective practice

The additional degrees of freedom that mark improvisatory work requires students to provide warrant for their responses, to consider the aesthetic and social impact of their choices. Are they engaged in ways that synthesize previous work, raise compelling questions, that invite others to look in fresh directions?

Collaboration

Through collaboration, students are able to see their peers as co-creators, as potential resources for knowledge and insight. They are made aware of the social embeddedness of their activity as learners, as well as the forms of social engagement that yield what we construe as knowledge and consider significant.

Negotiation

A fundamental premise of improvisation I hold is that it unfolds through the dialogic engagement between participants and classroom material. Students actively respond to each other's input, co-defining directions for further inquiry and exploration.

Aesthetic sensibilities

Classroom interaction is greatly enhanced by a view that grows out of, and has the explicit aims of, deepening students' aesthetic sensibilities. This orientation acknowledges the inherently interpretive, and therefore incomplete, nature of the content explored. An improvisatory approach shifts attention from the cataloguing of immutable truths to an emphasis on qualitative evaluation, one that accounts for expressive intentions and is wholly compatible with critical thinking.

Democratization

Improvisatory activities in class do not ensure equal participation in class. The open-ended nature of role-playing activities does, however, create opportunities that a sensitive teacher could make use of to both heighten student agency and foster student interdependence. Leadership rotation, especially in learning contexts which foreground negotiation, empowers students to exercise authority by coordinating the work of their peers.

Role modeling of knowledge exchange

In an improvisational context, the teacher's handling of curricular material is of great significance for learners as a heuristic orientation toward knowledge production. The teacher models a mindset, a way of working with others to make sense of the world. Improvisation is both a method and awareness of knowledge as possibility, disclosure and discovery.

A Reconceptualization of Roles

Finally, I'd like to summarize the ways in which the adoption of improvisation as a classroom model leads to a reconceptualization of the roles of participants.

Changes in the Role of the Teacher

As mentioned previously, pedagogical goals are not likely to be realized in improvisations where "anything goes." A degree of scripting, setting of constraints, or intentional redirecting of attention on the part of the teacher may be seen as inevitable, and in many ways desirable. An important concern then is how transparent the teacher makes this process. In theory, the teacher would ideally allow the rationale for the improvisation to emerge organically from the actions of the class, linking the students' ongoing creative thought across the curriculum to previously considered ideas and unconsidered gaps, suggesting larger themes that broaden the discussion. Teachers who participate in the improvisation model critical, creative thinking for their students, responding as equals (as nearly as possible) to the indeterminacy implicit in the dialogue.

Changes in the Role of the Student

The student's role is dramatically shifted in improvisatory settings, from the more passive role of recipient to an active agent co-determining the direction of study, as well as co-creator of meaning. Improvisation asks students to support one another in an indeterminate project, and thereby fosters trust. They are invited to listen attentively to one another and critically respond as the work unfolds, to take responsibility for the course it takes. As agents, students are actively adapting to and shaping their environment, engaged in the co-creation of new problem spaces.

Changes in the Role of the Class

Improvisational activities recontextualize classroom activities and goals, offering a relatively indeterminate space for the creative work of students. This is envisioned as a class which: a) seeks to foster divergent thinking and provides the time for its exploration; b) minimally specifies rules and constraints as a means for opening up spaces for dialogue; c) foregrounds engagement and collaboration, allowing equal access to leadership roles to facilitate engagement; d) empowers participants by respecting and incorporating subjectivities for emancipatory ends, seeing individual perspectives as substantive components of class content; and e) employs ongoing critique as a constructive means of problematizing that content.

Suggestions for further research

The approach I have presented leaves unanswered a number of questions that suggest further research and theorizing. I have argued that curricula may be made overly explicit, reduced to a mastery of facts and procedures leaving little time or room for dialogic thought in the classroom.

The compulsion to achieve these pre-scripted objectives diverts attention from higher-level skills that defy such instrumentalization, namely the negotiation, self-expression and dynamic collaboration that result from grappling with complex problems. The model I have proposed, derived primarily from interaction in jazz, suggests that improvisation may offer students a context to explore and refine these much-needed skills, recognizing the fluidity and indeterminacy of their selves as well as the material. The awareness of such freedom, I have argued, may be fostered by the adoption of

curricula which are more open-ended, open to interpretation and renegotiation. These goals seem in many ways irreproachable. The most beneficial means to effect curricula based upon this model, however, remains unclear. I have noted some general characteristics and concerns of teachers interested in improvisation in the classroom; these following research questions would help these instructors refine their approaches within these contexts.

In discussions concerning the improvisational framework described in this paper, I have been asked to specify the age group of the students I have in mind. Bruner gets at this with these questions:

Is it the case, for example, that it is best to give the young child a minimum set of facts first and then encourage him to draw the fullest set of implications possible from this knowledge? In short, should an episode for a young child contain little new information but emphasize what can be done to go beyond that bit on one's own? (Bruner, 1960, p. 50)

As I believe the understandings afforded by improvisational practice fundamentally shape an individual's epistemology, I am inclined to suggest students engage in such practices as early as possible, certainly in early elementary school. A key question, "How much does one need to know in order to improvise?" might find expression in curricular design as "When does improvisation more fully impart understanding than other (competing) approaches?" As noted in Paglieri's account of play, children begin to favor games which offer more constrained rules in order to display mastery. Perhaps this concern may be broadened to include an intellectual, dialogic mastery, in which one displays mastery, as Carse might have it, by keeping the game going. The capabilities of students to integrate information may prove to have developmental bases which would limit this approach. Improvisation does not preclude

technical ability; it simply redirects these forms of mastery to expressive purposes. As more detailed research regarding open-ended curricula comes available, we may better be able to correlate age with appropriate improvisational constraints. Research clarifying these points would help guide teachers to contexts which more productively foster skills tied to improvisation.

It may seem irresponsible to propose that solutions are to be found case-by-case, yet the utter interdependency of content, context and collaborators lends some truth to this assertion. I have painted teachers with rather broad strokes, placing them in the position where they either yield to the disembodied, artificial schema of the pre-scripted curriculum as dictated by the authorities or see themselves and their students as co-creative agents. It is not my intent to caricature the efforts of most practitioners, but instead to highlight the systemic imbalances we are laboring under.

Lastly, I have had occasional misgivings about adopting the transdisciplinary approach presented here, particularly as its breadth required me to relegate more in-depth analyses “beyond the scope of this paper.” Regrettably, there are large areas that I have had to neglect (amongst them Heidegger and phenomenology, non-Western notions of creativity, comparisons between linguistic and musical cognition, etc.), but it is my hope that the ideas here are found provocative, and inspire others to explore them.

Final Remarks

To sum up the chief claims of this work: there is a point at which the information at the student’s disposal is sufficient for generating valuable learning materials, materials that exceed the value of exposure to additional information from without, and that

additional information that is simply imposed is counter-productive or even detrimental to the learner, in that it contributes to the atrophy of the learner's generative abilities. Learning that provides opportunities for students to improvise invites them to explore, create, and collaborate.

This view of education as improvisation and the high premium it places on resiliency does not necessarily constitute a lack of rigor; rigor is here reframed as the willingness to engage in the critical construction of knowledge. As such, improvisation-based approaches, by sensitizing students to the interpretive nature of knowledge, reduce the probabilities of knowledge reified as positivistic inscription. In *Inventions of Teaching: A Genealogy* (2004), a synoptic text tracing fundamental philosophical underpinnings to teaching since the Greeks, Brent Davis summarizes his position in these words:

Teaching and learning are not about convergence onto a pre-existent truth, but about divergences – about broadening what is knowable, doable, and beable. The emphasis is not on what is, but on what might be brought forth. Thus learning comes to be understood as a recursively elaborative process of opening up new spaces of possibility by exploring current spaces. (Davis, 2004, p. 184)

The improvisational stance, if anything, suggests a desire to become involved, an openness and readiness to critically encounter the world and the others within it with tolerance, curiosity, and respect. I close with a plea to educators to value this openness, a concern that is encapsulated in an observation by Mary Catherine Bateson (2009): “We are not what we know but what we are willing to learn.”

References

- Albert, R.S. & Runco, M. A. (1999) A history of research on creativity. In R. Sternberg (Ed.), *Handbook of creativity* (pp. 16-31). Cambridge, UK: Cambridge University Press.
- Alperson, P. (1984). On musical improvisation. *The Journal of Aesthetics and Art Criticism*, 43(1), 17-29.
- Arendt, H. (1958) *The human condition*. Chicago: University of Chicago Press. p. 182
- Arendt, H. (1978). *Thinking, Vol. 1*. Orlando, Fla.: Harcourt Books. p. 4
- Arendt, H. (2006/1968). *Between past and future: Eight exercises in political thought*. New York: Penguin Books
- Armstrong, I. (2000). *The radical aesthetic*. Malden, Mass: Blackwell Publishers.
- Aronowitz, S. & Giroux, H. A. (1985). *Education under siege: The conservative, liberal and radical debate over schooling*. Mass.: Bergin and Garvey Publishers, Inc.
- Bailey, D. (1992). *Improvisation: Its nature and practice in music*. Da Capo Press.
- Baker-Sennett, J. & Matusov, E. (1997). School “performance”: Improvisational processes in development and education. In R. K. Sawyer (Ed.), *Creativity in performance* (pp. 197-212). Greenwich, CT.: Ablex Publishing.
- Barrett, F. J. (1998). Coda: Creativity and improvisation in jazz and organizations: Implications for organizational learning. *Organization Science*, 9(5), 605-622.
- Bateson, G. (1979) *Mind and nature: A necessary unity*. New York: Bantam Books.
- Bateson, G. (2000). *Steps to an ecology of mind*. Chicago: University of Chicago Press.
- Bateson, G. (2002). *Mind and nature: A necessary unity*. Cresskill, New Jersey: Hampton Press, Inc.

- Bateson, M. C. (1990). *Composing a life*. New York: Plume.
- Bateson, M. C. (1994). *Peripheral visions: Learning along the way*. New York: Harper Collins.
- Bateson, M.C., Retrieved January 18, 2009 from <http://www.marycatherinebateson.com/>
- Belgrad, D. (1998). *The culture of spontaneity: Improvisation and the arts in postwar America*. Chicago: The University of Chicago Press.
- Bergson, H. (2001). *Time and free will: an essay on the immediate data of consciousness*. New York: Dover Books.
- Bergson, H. (2005/1907). *Creative evolution*. New York: Barnes and Nobles Publishing, Inc.
- Berliner, P. F. (1994). *Thinking in jazz: The infinite art of improvisation*. Chicago: The University of Chicago Press.
- Bernstein, L. (1976) *The unanswered question: Six talks at Harvard*. Cambridge, Mass and London: Harvard University Press.
- Blackford, H. (2004). Playground panopticism: Ring-around-the-children, a pocketful of women. *Childhood*, 11(2), 227-249.
- Boal, A. (1985). *Theatre of the oppressed*. (C.A. McBride and M.L. McBride, trans.). New York: Theatre Communications Group.
- Boal, A. (1992). *Games for actors and non-actors*. (A. Jackson, trans.) London and New York: Routledge Press.
- Boal, A. (1998). *Legislative theatre: Using performance to make politics*. London and New York: Routledge Press.

- Boal, A. (2005). *The rainbow of desire: The Boal method of theatre and therapy*. (A. Jackson, trans.). London: Routledge Press.
- Boal, A. (2006). *The aesthetics of the oppressed*, (A. Jackson, trans.). London and New York: Routledge Press.
- Bolton, G. (1984). *Drama as education: an argument for placing drama at the centre of the curriculum*. Essex: Longman Group Limited.
- Bolton, G. (2007). A history of drama education: A search for substance. In *International Handbook of Research in Arts Education*. (L. Bresler, Ed.). Springer.
- Borgo, David (2002). Negotiating freedom: values and practices in contemporary improvised music. *Black Music Research Journal*, 22(2), 165-188.
- Borgo, D. (2007). Free jazz in the classroom: An ecological approach to music education. *Jazz Perspectives*, 1(1), 61-88.
- Borko, H. & Livingston, C. (1989). Cognition and improvisation: differences in mathematics instruction by expert and novice teachers, *American Educational Research Journal*, 26(4), 473-498
- Brecht, B. (1957). Vergnugungstheater oder lehrtheater? from Schriften zum theater. In Barranger, M. S. (1994). *Understanding plays*, 2nd Edition. Allyn and Bacon.
- Bresler, L. (2005). Music and the intellect: perspectives, interpretations, implications for education. *Phi Beta Kappan*, 87(1), 24-31.
- Brothers, T. (1994). Solo and cycle in African-American jazz. *The Musical Quarterly*, 73, No. 4
- Brown, J. S., Collins, A. & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18(1), 32-42.

- Bruner, J. (1969). *On knowing: essays for the left hand*. New York: Athaneum.
- Bruner, J. (1975/1966). *Toward a theory of instruction*. London: Belknap Press
- Bruner, J. S. (1976). Surprise, craft and creativity. In J. S. Bruner, A. Jolly & K. Sylva (Eds.), *Play – its role in development and evolution* (pp. 641-642). New York: Bantam.
- Bruner, J. (1986). *Actual minds, possible worlds*. Cambridge: Harvard University Press.
- Bruner, J. (1993). The autobiographical process. In R. Folkenflik (Ed.), *The culture of autobiography: constructions of self-representation* (pp. 38-56). Stanford: Stanford University Press.
- Bruner, J. (1996). *The culture of education*. Cambridge and London: Harvard University Press.
- Brunkhorst, H. (2000). Equality and elitism in Arendt. In D. Villa (Ed.), *The Cambridge companion to Hannah Arendt* (pp. 178-198). Cambridge: Cambridge University Press.
- Burbules, N. C. (2000a). Constructivism: Moving beyond the impasse. In D.C. Phillips (Ed.), *Constructivism in education* (pp. 308-330). University of Chicago Press.
- Burbules, N. C. (2000b). Aporias, webs, and passages: Doubt as an opportunity to learn. *Curriculum Inquiry*, 30(2), 171-187.
- Burke, K. (1968). *Language as symbolic action*. University of California Press.
- Burns, K. (2001) *Jazz – A Film by Ken Burns* [Motion Picture]. PBS Paramount, DVD (2004).
- Burrow, J. B. (2002). Confucian philosophy and the jazz improviser: Thinking through jazz performance and education. Conference paper delivered at Roylea College of Music, London, UK

- Burton, T. (Director). (2005). *Charlie and the Chocolate Factory* [Motion Picture]. Warner Bros. Pictures, DVD (2005) Based on the novel by Roald Dahl.
- Retrieved March 14, 2009 from <http://johnny-depp.org/projects/scripts/catcf/>
- Buytendijk, F. J. J. (1934). *Wesen und sinn des spiels. Das spielen des menschen und der tiere als erscheinungsform der lebenstriebe*. Berlin: Wolff.
- Cabral, B. (1996). Signs of a post-modern, yet dialectic, practice. *Research in Drama Education, 1*(2), p. 215-220
- Cardew, C. (1971). Towards an ethic of improvisation. From *Treatise Handbook*, Edition Peters, Retrieved April 19, 2008 from http://www.ubu.com/papers/cardew_ethics.html
- Cardwell, S. (2006). Sustaining phronesis in the practice of educational leadership. Retrieved March 10, 2008 from <http://www.science.uva.nl/~seop/entries/episteme-techne/>
- Carroll, J. M. and Rosson, M. B. (2005). *Cases as minimalist information*. Proceedings of the 38th International Conference on System Science.
- Carroll, L. (1981/1865). *Alice's adventures in Wonderland & Through the looking glass*. New York: Bantam Books.
- Carse, J. P. (1986). *Finite and infinite games: A vision of life as play and possibility*. New York: The Free Press.
- Cavell, Stanley (1988). *Conditions handsome and unhandsome: The constitution of Emersonian perfectionism (The Carus lectures)*. Chicago and London: The University of Chicago Press.

- Charles, D. A. (2003). *The novelty of improvisation: Towards a genre of embodied spontaneity*. Dissertation.
- Chelariu, C., Johnston, W.J. & Young, L.C. (2002). Learning to improvise, improvising to learn, a process of responding to complex environments. *Journal of Business Research*, 55(2), 141-147.
- Chernoff, J. M. (1979). *African rhythm and African sensibility*. University of Chicago Press: Chicago.
- Chomsky, N. (1965). *Aspects of the theory of syntax*. Cambridge, MA: MIT Press
- Chomsky, N. & Foucault, M. (2006). *The Chomsky-Foucault debate on human nature*. New York, London: The New Press.
- Cochrane, R. (2000). Playing by the rules: A pragmatic characterization of musical performance. *The Journal of Aesthetics and Art Criticism*, 58(2), 135-142.
- Collin, A. (1996). Re-thinking the relationship between theory and practice: practitioners as map-readers, map-makers, or jazz players? *British Journal of Guidance and Counselling*, 24(1), 67-81. Retrieved June 13, 2008 from <http://www.ingentaconnect.com/content/routledg/cbjg/1996/00000024/00000001/art00007>
- Conquergood, D. (1989). Poetics, play, process, and power: The performative turn in anthropology. *Text and Performance Quarterly*, 9(1), 82-88.
- Conquergood, D. (1991). Rethinking ethnography: Towards a critical cultural politics. *Communication Monographs*. 58(2), 179-194.
- Conquergood, D. (1992). Ethnography, rhetoric, and performance. *Quarterly Journal of Speech*, 78(1), 80-97.

- Corbett, J. (1995). Ephemera underscored: Writing around free improvisation. In K. Gabbard (Ed.), *Jazz among the discourses* (pp. 217-240). Durham: Duke University Press.
- Cosgrove, S. (2005). Teaching and learning as improvisational performance in the creative writing classroom, *Pedagogy*, 5(3), 471-479, Retrieved December 22, 2008 from <http://muse.jhu.edu/journals/pedagogy/v005/5.3cosgrove.html>
- Crease, R. P. (1994). The improvisational problem. *Man and World*. 27(2), 181-193.
- Crossan, M., Vieira da Cunha, J., Pina e Cunha, M. & Dusya, V. (2002). *Time and Organizational Improvisation*. Retrieved July 18, 2008 from <http://fesrvsd.fe.unl.pt/WPFEUNL/WP2002/wp410.pdf>
- Csikszentmihalyi, M. (1996). *Creativity: Flow and the psychology of discovery and invention*. New York: Harper Perennial.
- Csikszentmihalyi, M. (1999). Implications of a systems perspective for the study of creativity. In R.J. Sternberg (Ed.), *Handbook of creativity* (pp. 313-335). Cambridge, UK: Cambridge University Press.
- Culicover, Peter W. (2005). Linguistics, cognitive science, and all that jazz. *The Linguistic Review*. 22(2-4), 227-248. Retrieved January 18, 2008 from <http://www.reference-global.com/doi/pdf/10.1515/tlir.2005.22.2-4.227>
- Davis, B. (2004). *Inventions of teaching: A genealogy*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Day, W. (2000). Knowing as instancing: Jazz improvisation and moral Perfectionism, *The Journal of Aesthetics and Art Criticism*, 58(2), 99-111.

- Dewey, J. (1897) My pedagogic creed. *The School Journal*, LIV, Number 3, 77-80.
- <http://www.infed.org/archives/e-texts/e-dew-pc.ht> Retrieved April 22, 2008
- Dewey, J. (1966/1916). *Democracy and education*. New York: Free Press.
- Dewey, J. (1971/1933). *How we think*. New York: Barnes & Noble.
- Dewey, J. (1990/1900). *The school and society and the child and the curriculum*.
Chicago: University of Chicago Press.
- Dewey, J. (2005/1934). *Art as experience*. New York: The Berkeley Publishing Group.
- Dewey, J. (2008). In J. A. Boydston (Ed.), *The later works of John Dewey, Volume 14, 1925 - 1953: 1939 - 1941, Essays, reviews, and miscellany*. Carbondale, IL: Southern Illinois University Press.
- Dobbins, B. (1980). Improvisation: An essential element of music proficiency. *Music Educators Journal*, 66(5), 36-41.
- Docherty, T. (2006). *Aesthetic democracy*. Stanford: Stanford University Press.
- Doll, W. E. (1993). *A post-modern perspective on curriculum*. Teachers College Press.
- Doll, W. E. (2007). *Keeping knowledge alive*. Papers of International Conference on Process Thinking & Curriculum Reform, 95-100.
- Retrieved October 25, 2008 from
http://www.lsu.edu/faculty/wdoll/Papers/HTML/keeping_knowledge_alive.htm
- Drewal, M. T. (1992). *Yoruba ritual: performers, play, agency*. Indiana University Press: Bloomington and Indianapolis.
- Eco, U. (1989). *The open work*. Cambridge, MA: Harvard University Press.
- Eisner, E. W. (2002a). From episteme to phronesis to artistry in the study and improvement of teaching. *Teaching and Teacher Education*, 18(4), 375-385.

- Eisner, E. (2002b). *The arts and the creation of mind*. Yale University Press: New Haven.
- Ellison, R. (1972). *Shadow and act*. Canada and New York: Vintage.
- Empson, S. B. (2002). Is teaching mathematics for understanding sufficient? *Journal of Curriculum Studies*, 34, No.5, 89-602. Retrieved December 23, 2008 from <http://www.informaworld.com/10.1080/00220270210129507>
- Evans, B. (1959). *Kind of blue*. Columbia/Legacy Records, 8869733552, liner notes
- Fabian, J. (1983). *Time and the Other: how anthropology makes its object*. New York: Columbia University Press.
- Fabian, J. (1990). *Power and performance: Ethnographic explorations through proverbial wisdom and theater in Shaba, Zaire*. Madison: University of Wisconsin Press.
- Feldman, D. H. & Benjamin, A. C. (2006). Creativity and education: An American retrospective. *Cambridge Journal of Education*, 36(3), 319—336.
- Ferland, Ernest T., (1961). *Improvisation in nine centuries of music*. Cologne: A. Volk Verlag.
- Forster, J. & Chapin, T. (2007). *Not on the test*. Limousine Music Co. & The Last Music Co. (ASCAP). Retrieved September 14, 2008 from <http://tomchapin.com/>
- Freire, P. (1993/1970). *Pedagogy of the oppressed*. New York: The Continuum Publishing Company.
- Frost, A. & Yarrow, R. (2007). *Improvisation in drama, 2nd ed*. Palgrave Macmillan.
- Foucault, M. (1975). *Discipline and punish: The birth of the prison*. New York: Random House.)

- Foucault, M. (1997). In P. Rabinow (Ed.) *Ethics: subjectivity and truth, Vol.1*. New York: The New Press.
- Gadamer, H-G. (1986). *The relevance of the beautiful and other essays*. (Nicholas Walker, trans.). Cambridge: Cambridge University Press.
- Gadamer, H-G. (1989/1975). *Truth and method*. London: Continuum Publishing Group.
- Gard, M. (2006). Neither flower child nor artiste be: aesthetics, ability and physical education. *Sport, Education and Society*, 11(3), 231-241 Retrieved September 6, 2008 from <http://www.ingentaconnect.com/content/routledg/cses/2006/00000011/00000003/art00003>
- Garoian, C. R. (1999). *Performing pedagogy: Toward an art of politics*. Albany, New York: State University of New York Press.
- Gates, H.L. (1988). *The signifyin' monkey: A theory of Afro-American literary criticism*. New York: Oxford University Press.
- Geertz, C. (1988). *Works and lives: the anthropologist as author*. Stanford: Stanford University Press.
- Georghiades, P. (2004). From the general to the situated: three decades of metacognition. *International Journal of Science Education*, 26(3), 365-383.
- Gioia, T. (1988). *The imperfect art: Reflections on jazz and modern culture*. New York: Oxford University Press.
- Godine, D. R. (2001/1954). *Dialogues of Alfred North Whitehead: As recorded by Lucien Price*. Jaffrey, NJ: Nonpareil Books.
- Goffman, E. (1969). *Strategic interaction*. Philadelphia: University of Pennsylvania Press

- Goldman, S. L. (2004). *The sciences in the 20th century*. audio/video course, The Teaching Company, Chantilly, VA.
- Göncü, A. & Perone, A. (2005). *Pretend play as a life-span activity*. *Topoi*, 24(2), 137-147.
- Gould, C. S. & Keaton K. (2000). The essential role of improvisation in musical performance. *The Journal of Aesthetics and Art Criticism*, 58(2), 143-148.
- Greene, M. (1988). *The dialectic of freedom*. New York: Teachers College Press.
- Greene, M. (1995). *Releasing the imagination: Essays on education, the arts, and social change*. San Francisco: Jossey-Bass.
- Greene, M. (2001). *Variations on a blue guitar*. New York and London: Teachers College Press.
- Greene, M. (2007). *In search of a pedagogy*. Retrieved October 19, 2008 from http://maxinegreene.org/pdf/articles/downloader.php?file=search_p.pdf
- Gridley, M., Maxham, R. & Hoff, R. (1989). Three approaches to jazz. *The Musical Quarterly*, 73(4), 513-531. Retrieved February 25, 2008 from <http://www.jazzstyles.com/ThreeApproach.html>
- Gruber, H.E. & Vonèche, J. J. (1995/1977). *The essential Piaget*. Northvale, New Jersey: Jack Aronson Inc.
- Guilford, J.P. (1950). Creativity. *American Psychologist*, 5, 444-445
- Gunter, P. (2005). Introduction. In *Creative evolution* (Bergson, H.) New York: Barnes and Nobles Publishing, Inc.
- Gwynn, A.S.J. (1926). *Roman education from Cicero to Quintilian*. New York: Teachers College Press.

- Haidet, P. (2007). Jazz and the 'art' of medicine: Improvisation in the medical encounter. *Annals of Family Medicine*, 5(2), 164-169.
- <http://www.annfammed.org/cgi/reprint/5/2/164> Retrieved July, 15, 2008
- Hastrup, K. (2007). Performing the world: Agency, anticipation and creativity. In T. Ingold & E. Hallam (Eds.). *Creativity and Cultural Improvisation* (pp. 191-206). Berg Press: Oxford.
- Heelan, P. A. (1988). Experiment and theory: Constitution and reality. *The Journal of Philosophy*, 85(10), 515-524
- Hirsch, E. & MacDonald, S. (2007). Introduction. In T. Ingold & E. Hallam (Eds.), *Creativity and Cultural Improvisation* (pp. 185-192). Berg Press: Oxford.
- Holt, J. (2003). *Teach your own: The John Holt book of homeschooling*. New York and Cambridge: Da Capo Press.
- Holzman, L. (1997). *Schools for growth: Radical alternatives to current educational models*. Mahwah, New Jersey: Lawrence Erlbaum Associates, Publishers.
- Huizinga, J. (1964/1950). *Homo ludens: A study of the play element in culture*. Boston: The Beacon Press.
- Humphreys, M., Brown, A.D., & Hatch M.J. (2003). Is ethnography jazz?, *Organization*, 10(5), 5-31.
- Huxley, M. & Witts, N. (Eds.). (1996). *The twentieth-century performance reader*. Routledge Press: London.
- Ingold, T. (1986). *Evolution and social life*. Cambridge: Cambridge University Press
- Ingold, T. & Hallam, E. (Eds.). (2007). *Creativity and cultural improvisation*. Berg Press: Oxford.

- Ionesco, E. (1963). Discovering the theatre. In R. W. Corrigan (Ed.), *Theatre in the Twentieth Century*. New York: Grove Press, Inc.
- Jackson, A. (1995). Translator's introduction. *The rainbow of desire*. London: Routledge
- Jackson, P. W. (1998). *John Dewey and the lessons of art*. New Haven and London: Yale University Press.
- John-Steiner, V. & Mahn, H. (1996). Sociocultural approaches to learning and development: A Vygotskian framework. *Educational Psychologist*, 31(3-4), 191-206
- <http://webpages.charter.net/schmolze1/vygotsky/johnsteiner.html>
- Johnson, L. & O'Neill, C. (2001). *Dorothy Heathcote: Collected writings on education and drama*. Evanston, Illinois: Northwestern University Press.
- Johnson-Laird, P.N. (2002). How jazz musicians improvise. *Music Perception*, 19(3), 415–442.
- Johnstone, K. (1987 /1981). *Impro: Improvisation and the theatre*. London: Methuen Drama.
- Johnstone, K. (1999). *Impro for storytellers*. New York: Routledge Press.
- Jurow, S. & Creighton, L. (2005). Improvisational science discourse: Teaching science in two K-1 classrooms. *Linguistics and Education*, No. 16, 275–297. Retrieved December 22, 2008 from
- http://www.sciencedirect.com/science?_ob=MIimg&_imagekey=B6W5S-4JJGB9C31&_cdi=6578&_user=458507&_orig=search&_coverDate=11%2F30%2F2005&_sk=999839996&view=c&wchp=dGLbVlbzSkzS&_valck=1&md5=f52b2ddb05d18ec8141c42b4f3eaf9c7&ie=/sdarticle.pdf

- Kamoche, K., Pina e Cunha, M., & da Cunha, J. V. (2000). *Shopping for new glasses: Beyond jazz in the study of organizational improvisation*. Retrieved April 23, 2008 from <http://fesrvsd.fe.unl.pt/WPFEUNL/WP2000/wp381.pdf>
- Kanellopoulos, P. (2007). Musical improvisation as action: An Arendtian perspective. *Action, Criticism, and Theory for Music Education*, 6(3): Retrieved March 23, 2008 from http://act.maydaygroup.org/articles/Kanellopoulos6_3.pdf
- Kanter, J. (2007). Disciplined bodies at play: Improvisation in a federal prison. *Cultural Studies <=> Critical Methodologies*, 7(4), 378-396. Retrieved July 4, 2008 from <http://csc.sagepub.com/cgi/content/abstract/7/4/378>
- Kao, S. & O'Neill, C. (1998). *Words into worlds: Learning a second language through Process Drama*. Conn: Ablex Publishing Corp.
- Kelly, G. J., Brown, C., & Crawford, T. (2000). Experiments, contingencies and curriculum: Providing opportunities for learning through improvisation in science teaching. *Science Education*, 84(5), 624 – 657. Retrieved June 12, 2008 from <http://www3.interscience.wiley.com/journal/72514804/abstract?CRETRY=1&SRETRY=0>
- Konitz, L. (1985). Retrieved March 14, 2007 from http://www.melmartin.com/html_pages/Interviews/konitz.html
- Langer, E. J. (1989). *Mindfulness*. Cambridge, Mass: Da Capo Press.
- Langer, E. J. (1997). *The power of mindful learning*. Cambridge: Perseus Publishing
- Lao Tzu, (1963). *Tao te ching* (Lau, D.C., trans.). New York: Penguin Books.

- Lave, J. & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*.
Cambridge: Cambridge University Press.
- Lewis, G. E. (2004). Improvised Music after 1950: Afrological and Eurological perspectives. In D. Fischlin & A. Heble (Eds.). *The other side of nowhere: Jazz, improvisation, and communities in dialogue* (pp. 131-162). Wesleyan University Press.
- Liu, J. (2002). Process Drama in second- and foreign-language classrooms. In G. Bräuer (Ed.), *Body and language. Intercultural learning through drama* (pp. 51-70). Westport, Connecticut & London: Ablex Publishing. Retrieved July 14, 2008 from
http://www.european-mediaculture.org/fileadmin/bibliothek/english/liu_processdrama/liu_processdrama.pdf
- Madison, G.B. (1988). *The hermeneutics of postmodernity: Figures and themes*.
Bloomington and Indianapolis: Indiana University Press. Retrieved from 1/17/09
<http://americanliterature.dukejournals.org/cgi/reprint/78/1/190>
- Malinowski, B. (2002/1922). *Argonauts of the Western Pacific: An account of native enterprise and adventure in the archipelagoes of Melanesian New Guinea*.
London: Routledge Press.
- Mantie, R. (2008). Schooling the future: Perceptions of selected experts on jazz education. *Critical Studies in Improvisation/Études critiques en improvisation*, 3, No. 2
<http://gir.uoguelph.ca/index.php/csieci/article/viewFile/307/640>

- Marsalis, W. (2008). *Moving to higher ground: how jazz can change your life*. Random House.
- Martin, L., Towers, J. & Pirie, S. (2006). Collective mathematical understanding as improvisation. *Mathematical Thinking and Learning*, 8(2), 149-183.
- Matusov, E. (1996). Intersubjectivity without agreement. *Mind, Culture, and Activity*, 3(1), 25-45.
- Matusov, E. & Hayes, R. (2000). Sociocultural critique of Piaget and Vygotsky. *New Ideas in Psychology*, 18(2-3), 215-239.
- McGee, K. (2005). Enactive cognitive science. Part 1: Background and research themes. *Constructivist Foundations*, 1(1), 19-34.
- Mayer, R.E. (1999). Fifty years of creativity research. In R.J. Sternberg (Ed.). *Handbook of creativity*. Cambridge, UK: Cambridge University Press.
- Mead, M. (2001). *Coming of age in Samoa: A psychological study of primitive youth for Western Civilisation*. New York: Perennial Classics.
- Meire, J. (2007). *Qualitative research on children's play: A review of recent literature*. Retrieved on July 21, 2007 from <http://www.k-s.be/docs/LITERATUURSTUDIE%20SPELEN.pdf>
- Merleau-Ponty, M. (1964). *The primacy of perception and other essays on phenomenological psychology, the philosophy of art, history and politics*. (trans. C. Dallery). Evanston: Northwestern University Press.
- Midgley, M. (1991). *Wisdom, information and wonder: what is knowledge for?* New York: Routledge Press.

- Mitter, S. (1995/1992). *Systems of rehearsal: Stanislavsky, Brecht, Grotowski and Brook*. London and New York: Routledge Press.
- Monson, I. (1996). *Saying Something: Jazz Improvisation and Interaction*. Chicago Studies in Ethnomusicology. Chicago: University of Chicago Press.
- Monteiro, R. & Carillo, J. (2008). Emergent theorisations in modeling the teaching of two science teachers. *Aguaded Res Sci Educ* 38, 301–319 Retrieved September 6, 2008 from <http://www.springerlink.com/content/103183263510h130/fulltext.pdf>
- Moore, R. (1992). The decline of improvisation in Western art music: An interpretation of change. *International Review of the Aesthetics and Sociology of Music*, 23(1), 61-84.
- Moran, S. & John-Steiner, V. (2003). Creativity in the making: Vygotsky's contemporary contribution to the dialectic of creativity and development. Retrieved on November 11, 2008 from <http://lhc.ucsd.edu/MCA/Paper/VygotskyCreativityChaper.pdf>
- Moreno, J.L. (1973). *The theatre of spontaneity*. New York: Beacon House.
- Mouchet, A. (2005). Subjectivity in the articulation between strategy and tactics in team sports: an example in rugby. *Italian Journal of Sport Sciences*, 12(1), 24-33. Retrieved July 15, 2008 from http://www.scienzemotione.univaq.it/download/issn1592_5749_12_03_MOUCHET.pdf

- Murphy, J.J. (1987). *Quintilian on the teaching of speaking and writing: Translations from Books One, Two, and Ten of the Institutio Oratoria*. Carbondale, IL: Southern Illinois University Press.
- Nachmanovitch, S. (1990). *Free play: The power of improvisation in life and the arts*. New York: G.P. Putnam's Sons.
- Nachmanovitch, S. (2001/1981). Gregory Bateson: Old men ought to be explorers. Retrieved April 7, 2009 from www.freeplay.com/Writings/GregoryBateson.pdf
- Needleman, J. (2003). *Time and the soul*. San Francisco: Berrett-Koehler Publishers, Inc.
- Neyland, J. (2004a). Effortless mastery and the jazz metaphor. In I. Putt, R. Faragher, & M. McLean (Eds.). *Mathematics education for the third millennium: Towards 2010-Proceedings of the 27th annual conference of the Mathematics Education Research Group of Australasia*, Sydney, MERGA, 390-397.
- Neyland, J. (2004b). Social justice and the jazz metaphor. In I. Putt, R. Faragher, & M. McLean (Eds.). *Mathematics education for the third millennium: Towards 2010-Proceedings of the 27th annual conference of the Mathematics Education Research Group of Australasia*, Sydney, MERGA, 398-405.
- Neyland, J. (2004c). Playing outside: An introduction to the jazz metaphor in mathematics education. *Australian Senior Mathematics Journal*, 18(2), 8-16
Retrieved July 15, 2008 from http://eric.ed.gov:80/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/1d/56/da.pdf
- Noel, J. (1999). On the varieties of phronesis. *Educational Philosophy and Theory*, 31(3), 273-289.

Novalis (2009). Retrieved on March 22, 2009 from <http://www.kirjasto.sci.fi/novalis.htm>

Nystrand, M. (1997). *Opening dialogue: Understanding the dynamics of language and learning in the English classroom*. New York: Teachers College Press.

Ochse, R. (1990). *Before the gates of excellence: the determinants of creative genius*. New York: Cambridge University Press.

Ong, W. T. (1969). World as View and World as Event. *American Anthropologist, New Series*, 71(4), 634-647.

Ong, W. J. (2000/1988). *Orality and literacy*. Oxon, New York: Routledge.

Paglieri, F. (2003). *Modeling play: Toward a cognitive model for playful activities*.

Retrieved July 19, 2008 from <http://www.media.unisi.it/cirg/fp/mopl03.pdf>.

Paglieri, Fabio (2005). Playing by and with the rules: Norms and morality in play development. *Topoi*, 24, 149–167.

Partridge, E. (1966). *Origins: A short etymological dictionary of Modern English*. London: Routledge and Kagen Paul.

Pasteur, L. (1854). *Lecture, University of Lille*. Retrieved June 14, 2008 from http://en.wikiquote.org/wiki/Louis_Pasteur

Pennycook, A. (2007). ‘The rotation gets thick. The constraints get thin’: Creativity, recontextualization, and difference. *Applied Linguistics*, 28(4), 579-596.

Piaget, J. (1955). *The construction of reality in the child*. London: Routledge Press.

Piaget, J. (1962). *Play, dreams, and imitation in childhood*. New York: The Norton Library.

- Piaget, J. (1980). The psychogenesis of knowledge and its epistemological significance. In M. Piattelli-Palmarini (Ed.), *Language and learning* (pp. 21-34). Cambridge, MA: Harvard University Press.
- Piaget, J. (1997). *The moral judgment of the child*. (Gabain, M. trans.). New York: Free Press.
- Pineau, E. L. (1994). Teaching is performance: Reconceptualizing a problematic metaphor. *American Educational Research Journal*. 31(1), 3-25.
- Postman, N. (1996). *The end of education: Redefining the value of school*. New York: Vintage Books.
- Pramanik, R (2007). *Overburdened school-going children*. New Delhi: Concept Publishing Company.
- Prendergast, M. (2008). Teacher as performer: Unpacking a metaphor in performance theory and critical performative pedagogy. *International Journal of Education & the Arts*, 9(2), 1-20.
- Retrieved May 23, 2008 from <http://www.ijea.org/v9n2/>.
- Prévost, E. (1995). *No sound is innocent: AMM and the practice of self-invention. Meta-musical narratives. Essays*. Essex: Copula.
- Rogoff, B. (1995). Observing sociocultural activity on three planes: participatory appropriation, guided participation and apprenticeship. In J.V. Wertsch, P. Del Rio, & A. Alvarez (Eds.), *Sociocultural studies of mind* (pp. 139-164). Cambridge: Cambridge University Press.
- Roper, B. & Davis, D. (2000). Howard Gardner: Knowledge, learning and development in drama and arts education. *Research in Drama Education*, 5(2), 217-233.

- Rose, T. (1994). *Black noise: Rap music and Black culture in contemporary America*. Wesleyan University Press.
- Rousseau, J-J (1773/1762). *On the social contract*. Book I, Ch. 8, rev. J. H. Brumfitt and John C. Hall, (trans. G. D. H. Cole). London: Everyman's Library, p. 195.
- Roy, K. (2005). An untimely intuition: Adding a Bergsonian dimension to experience and education. *Educational Theory*, 55(4), 443-459.
- Rudlin, J. (1986). *Jacques Copeau*. Cambridge: Cambridge University Press
- Sartre, J-P. (1988). *"What is literature?" and other essays*. Harvard University Press, Mass: Cambridge.
- Saul, S. (2003). *Freedom is, freedom ain't: Jazz and the making of the Sixties*. Harvard University Press, Mass: Cambridge.
- Sawyer, R. K. (1997). *Pretend play as improvisation: Conversation in the preschool classroom*. Lawrence Erlbaum Associates: Mahwah, New Jersey.
- Sawyer, R. K. (2000). Improvisation and the creative process: Dewey, Collingwood, and the aesthetics of spontaneity. *The Journal of Aesthetics and Art Criticism*, 58(2), 149-161.
- Sawyer, R. K. (2001). The improvisational performance of everyday life. *Journal of Mundane Behavior*, 2(2), 149-162.
- Sawyer, R. K. (2003). *Group creativity: Music, theatre, collaboration*. Lawrence Erlbaum Associates: Mahwah, New Jersey.
- Sawyer, R.K. (2004). Creative Teaching: Collaborative Discussion as Disciplined Improvisation. *Educational Researcher*, 33(2), 12-20.

- Sawyer, R. K. (2006). *Exploring creativity: the science of human innovation*. Oxford: Oxford University Press.
- Schechner, R. (1985). *Between theatre and anthropology*. Philadelphia: University of Pennsylvania Press.
- Schiller, F. (1980). *On the aesthetic education of man*. (trans. Reginald Snell), Dover Publications. Fifteenth Letter, p. 79
- Schuller, G. (1968). *Early jazz: Its roots and musical development*. New York: Oxford University Press.
- Sipiora, P. & Baulin, J.S. (Eds.). (2002/1986). *Rhetoric and kairos: Essays in history, theory and praxis*. Albany, NY: State University at Albany Press.
- Small, C. (1995). *Musicking: A ritual in social space*. Retrieved December 28, 2006 from <http://www.musickids.org/musicking.html>
- Smith, H. & Dean, R. (1997). *Improvisation, hypermedia and the arts since 1945*. Amsterdam: Overseas Publishing Association.
- Smith, J. E. (2002/1986). Time and qualitative time. In P. Sipiora & J. S Baulin (Eds.), *Rhetoric and kairos: Essays in history, theory and praxis* (pp. 46-57). Albany, NY: State University at Albany Press.
- Soules, M. (2000). *Eshu's cap: Improvisation at the crossroads of the diaspora*. Guelph Jazz Festival. Retrieved September 26, 2007 from <http://records.viu.ca/~soules/cv.htm>
- Spariosu, M. (1989). *Dionysus reborn: Play and the aesthetic dimension in modern philosophical and scientific discourse*. Ithaca: Cornell University Press.

- Spolin, V. (1999). *Improvisation for the theatre, 3rd edition*. Evanston, Illinois: Northwestern University Press.
- Spolin, V. (2001). *Theatre Games for the Lone Actor: A Handbook*. Evanston, Illinois: Northwestern University Press.
- Stamm, M. (2009). Retrieved November 2, 2009 from
<http://home.comcast.net/~nwedder/stamm.htm>
- Standard, (adj.) and (n.). Retrieved February 6, 2009 from *Oxford English dictionary*,
http://dictionary.oed.com/cgi/entry/50236067?query_type=word&queryword=standard&first=1&max_to_show=10&sort_type=alpha&result_place=1&search_id=leqd-9Lwsfl-18196&hilite=50236067
- Standardize, (v.). Retrieved February 6, 2009 from *Oxford English dictionary*,
http://dictionary.oed.com/cgi/entry/50236073?single=1&query_type=word&queryword=standardize&first=1&max_to_show=10
- Stanislavski, C. (1989/1936). *An actor prepares*. Theatre Arts Book
- Starko, A. J. (2001). *Creativity in the classroom: Schools of curious delight*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Stern, P. (1997). The rule of wisdom and the rule of law in Plato's "Statesman." *The American Political Science Review*, 91(2), 264-276.
- Stern, S. (1981). Drama in second language learning from a psycholinguistic perspective. *Language Learning*, 30(1), 77-79. Retrieved March 21, 2009 from
<http://www3.interscience.wiley.com/journal/119586510/abstract?CRETRY=1&SRETRY=0>

- Sternberg, R.J. (Ed.). (2002/1999). *Handbook of creativity*. Cambridge, UK: Cambridge University Press.
- Sternberg, R. J. & Lubart, T. (1999). The concept of creativity: Prospects and paradigms. In R.J. Sternberg (Ed.). *Handbook of Creativity* (pp. 3-15). Cambridge: Cambridge University Press.
- Stockdale, J. (2004). Reading around free improvisation. *The Source: Challenging Jazz Criticism*, 1, 112.
- Stokes, P. D. (2006). *Creativity from constraints: The psychology of breakthrough*. New York: Springer Publishing Company.
- Stokes, P. D. (2007). Using constraints to generate and sustain novelty. *Psychology of Aesthetics, Creativity, and the Arts*, 1(2), 107–113.
- Sutton-Smith, B. (1983). *Piaget, play and cognition revisited*.
- Sutton-Smith, B. (2001/1997). *The ambiguity of play*. Cambridge, Mass: Harvard University Press.
- Tirro, F. (1993). *Jazz: a history*. New York: W.W. Norton & Company.
- Torrance, E.P. (1974). *Torrance test of creative thinking*. Lexington, MA: Personnel Press.
- Toulmin, S. (1990). *Cosmopolis, the hidden agenda of modernity*. Chicago: The University of Chicago Press.
- Tsang, N. M. (2007). Reflection as dialogue. *British Journal of Social Work*, 37(4), 681–694.

- Turner, E. (2004). Rites of communitas. In F.A. Salamone, (Ed.). *Encyclopedia of Religious rites, rituals and festivals* (pp. 97-100). London and New York: Routledge Press.
- Turner, V. (1979). Frame, flow and reflection: Ritual and drama as public liminality. *Japanese Journal of Religious Studies*, 6(4). Retrieved September 15, 2008 from <http://www.ic.nanzan-u.ac.jp/SHUBUNKEN/publications/jjrs/pdf/107.pdf>
- Turner, V. (1986). *The Anthropology of Performance*. New York: PAJ Publications
- Varela, F.J., Thompson, E., & Rosch, E. (1999/1991). *The embodied mind: Cognitive science and human experience*. Cambridge, Mass: The MIT Press.
- Villa, D. (2000). Introduction: The development of Arendt's political thought. In D. Villa (Ed.), *The Cambridge Companion to Hannah Arendt*. Cambridge: Cambridge University Press.
- Villaume, S. K. (2000). The Necessity of Uncertainty: A Case Study of Language Arts Reform, *Journal of Teacher Education*, 51(18). Retrieved December 22, 2008 from <http://jte.sagepub.com/cgi/reprint/51/1/18>
- Vygotsky, L. (1925). *The psychology of art*. Retrieved January 15, 2009 from <http://www.marxists.org/archive/vygotsky/works/1925/art1.htm>
- Vygotsky, L. (1929). The Problem of the Cultural Development of the Child. *Journal of Genetic Psychology*, 36, 415-32. Retrieved August 6, 2008 from <http://www.marxists.org/archive/vygotsky/works/1933/play.htm>
- Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. (Cole, M., Ed.). Cambridge: Harvard University Press.

- Vygotsky, L. (2002/1966). Play and its role in the mental development of the child. *Voprosy psikhologii*, 6. Retrieved August 6, 2008 from <http://www.marxists.org/archive/vygotsky/works/1933/play.htm>
- Wagner, B. J. (1985/1976). *Drama as a learning medium*. Washington, D.C.: National Education Association.
- Walser, R. (1999). *Keeping time: Readings in jazz history*. New York: Oxford UP.
- Walter, U. M. (2000). Toward a third space: Improvisation and professionalism in social work. *Families in Society*, 84(3). Retrieved July 15, 2008 from http://66.102.1.104/scholar?num=50&hl=en&lr=&client=safari&scoring=r&q=cache:XWeZ4rmwdg8J:dev.alliance1.org/Publications/fis/FIS_PDFs/84-3PDFs/FIS84-3_Walter.pdf+pragmatism+improvisation+education
- Weick, K. E. (1998). Introductory essay: Improvisation as a mindset for organizational analysis. *Organization Science*, 9(5), 543-555.
- Wertsch, J. V. (1998). *Mind as action*. New York: Oxford University Press.
- Whitehead, A. N. (1929). *The aims of education*. The Macmillan Company: New York.
- Windschitl, M. (2002). Framing constructivism in practice as the negotiation of dilemmas: An analysis of the conceptual, pedagogical, cultural, and political challenges facing teachers. *Review of Educational Research*, 72(2), 131–175.
- Winston, J. (2005). Between the aesthetic and the ethical: analysing the tension at the heart of Theatre in Education. *Journal of Moral Education*, 34(3), 309—323.
- Wittgenstein, L. (1953). *Philosophical investigations*. New York: Macmillan.
- Wittgenstein, L. (2003/1922). *Tractatus Logico-Philosophicus*, (trans. C.K. Ogden), New York: Barnes and Noble.

- Wolf, D. P. (1987). The art of questioning. *Academic Connections*, 1-7.
- Young, J.O. & Matheson, C. (2000). The metaphysics of jazz. *The Journal of Aesthetics and Art Criticism*, 58(2), 125-133.
- Zack, M. H. (2000). Jazz improvisation and organizing: Once more from the top. *Organization Science*, 11(2), 227-134
- Zbikowski, L.M. (2004). Modeling the groove: Conceptual Structure and Popular Music. *Journal of the Royal Musical Association*, 129(2), 272-297.