ARTISTIC RESEARCH IN JAZZ

POSITIONS, THEORIES, METHODS

Edited by
Michael Kahr

Artistic Research in Jazz

This book presents the recent positions, theories, and methods of artistic research in jazz, inviting readers to critically engage in and establish a sustained discourse regarding theoretical, methodological, and analytic perspectives.

A panel of eleven international contributors presents an in-depth discourse on shared and specific approaches to artistic research in jazz, aiming at an understanding of the specificity of current practices, both improvisational and composed. The topics addressed throughout consider the cultural, institutional, epistemological, philosophical, ethical, and practical aspects of the discipline, as well as the influence of race, gender, and politics. The book is structured in three parts: first, on topics related to improvisation, theory and history; second, on institutional and pedagogical positions; and third, on methodical approaches in four specific research projects conducted by the authors.

In thinking outside established theoretical frameworks, this book invites further exploration and participation, and encourages practitioners, scholars, students, and teachers at all academic levels to shape the future of artistic research collectively. It will be of interest to students in jazz and popular music studies, performance studies, improvisation studies, music philosophy, music aesthetics, and Western art music research.

Michael Kahr is Senior Lecturer at the Institute for Jazz at the University of Music and Performing Arts Graz, Austria as well as Dean of Music Faculty and Head of Master Studies at the Jam Music Lab University in Vienna, Austria.

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Contributors

Andrew Bain is one of the leading performers and educators in the UK. He has performed at many prestigious venues and festivals around the world with jazz luminaries such as Wynton Marsalis, Natalie Cole, Kenny Wheeler, Randy Brecker, Dave Liebman, Bob Mintzer, John Taylor, Mike Gibbs, NDR Big Band, Elliott Sharp, Gavin Bryars, Jason Rebello, Phil Robson, Iain Ballamy, Ivo Neame, Jim Hart, Mark Lockheart, Chris Batchelor, Jacqui Dankworth, Houston Pearson, John Parricelli, Stan Sulzmann, and Sir John Dankworth. Receiving his BMus(Hons) from the Guildhall School of Music and Drama in 2001, Andrew was resident in New York from 2001–2007 gaining his MMus from the Manhattan School of Music in 2003 and performing with Jon Irabagon, Jason Liebman, Mostly Other People Do The Killing, Dave Lalama, Alex Smith, and Matt Brewer. Since relocating back to the UK in 2007, Andrew has played in regular projects directed by Michael Janisch, Paul Booth, and Andre Canniere, as well as appearing with touring artists such as Walter Smith III, Jure Pukl, Tim Armacost, and Patrick Cornelius. Andrew has a trio of his own projects in action at the moment. Player Piano (2015) with Mike Walker, Gwilym Simcock, Iain Dixon, and Steve Watts; Embodied Hope (Whirlwind Recordings 2017) with George Colligan, Jon Irabagon, and Michael Janisch; and his latest project – (no)boundaries (Whirlwind Recordings 2020) – a free improv exploration featuring Peter Evans, Alex Bonney, and John O'Gallagher (March 2020). Andrew is Deputy Head of Jazz and Senior Lecturer at the Royal Birmingham Conservatoire. He is Artistic Director of Jazz for the National Youth Orchestras of Scotland and sits on the steering committee for the International Network of Artistic Research in Jazz. He completed his PhD *Empathic Interaction: A study of jazz ensemble performance* in summer 2021.

William C. Banfield served as Professor, founding director of Africana Studies Center, Berklee College of Music. He taught in the college from 2005 until his retirement in 2020. Dr. Banfield was professor in Liberal Arts and teaching as well in the Department of Composition and the graduate school, Berklee College of Music. The college named him, Professor Emeritus founding director of Africana Studies Center. In 2002, he served as a W.E.B. Dubois

fellow at Harvard University and was appointed by Toni Morrison to serve as the visiting Atelier Professor, Princeton University, 2003. He served as Assistant Professor in Music/Afro American Studies at Indiana University (1992–1997) and Endowed Chair of Humanities and Fine Arts, Founding Chair of American Cultural Studies, Popular and World Music Studies at University of St. Thomas, Minnesota (1997–2005). He was commissioned by Quincy Jones to write approaches/curriculum to teaching the history of American popular music (2009–2013). Banfield was appointed in 2019 as a research associate with the Smithsonian Center for Folklife and Cultural Heritage (CFCH), one of the Smithsonian's 12 research and cultural centers. Having been a Pulitzer Prize judge and chair in American music (2010/2016/2020), Banfield is an award-winning composer whose symphonies, operas, and chamber works have been performed and recorded by major symphonies across the country. Banfield is founder/director of *Jazz Urbane*, a contemporary jazz art recording label, dedicated to producing creative new artists. The seminal project released in 2014, was produced by legendary icon George Duke, and included such leading artists as; Christian Scott, Terri Lyn Carrington, Najee, Greg Osby, and Grace Kelly. The label has already produced and released eight albums now heard internationally.

Robert L. Burke (PhD Monash University) is an Associate Professor in Jazz and Improvisation at Monash University and president of the Australasian Jazz and Improvisation Research Network (AJIRN). Robert's practice and research interests include composition, improvisation, artistic research, human-machine relationships, and more recently gender studies in music. At the heart of Rob's research lies the question: *What happens when we improvise?* His publications include *Experimentation in Improvised Jazz. Chasing Ideas* (Routledge 2019) and the edited books *Perspectives on Artistic Research in Music* (Lexington 2017) written in collaboration with Andrys Onsman. An improvising musician, Rob's performance and compositions appear on over 300 CDs. He has released 15 CDs under his own name recording with George Lewis, Raymond MacDonald, Dave Douglas, Enrico Rava, Hermeto Pascoal, Kenny Werner, Mark Helias, Ben Monder, Tom Rainey, Nasheet Waites, George Garzone, Paul Grabowsky, Stephen Magnusson, Nick Haywood, Tony Floyd, Tony Gould, Debasis Chackroborty and Paulo Angeli.

Marcel Cobussen is Full Professor of Auditory Culture and Music Philosophy at Leiden University (the Netherlands) and the Orpheus Institute in Ghent (Belgium). He studied jazz piano at the Conservatory of Rotterdam and Art and Cultural Studies at Erasmus University, Rotterdam (the Netherlands). Cobussen has authored several books, among them *The Field of Musical Improvisation* (LUP 2017), *Music and Ethics* (Ashgate 2012/Routledge 2017, co-author Nanette Nielsen), and *Thresholds. Rethinking Spirituality Through Music* (Ashgate 2008). He is a co-editor of *The Bloomsbury Handbook of Sonic Methodologies* (Bloomsbury 2020) and *The Routledge Companion to Sounding Art* (Routledge 2016), editor of *Resonanties. Verkenningen tussen kunsten en wetenschappen* (LUP 2011) and is also editor-in-chief of the open-access

online *Journal of Sonic Studies* (www.sonicstudies.org). His PhD dissertation *Deconstruction in Music* (Erasmus University Rotterdam 2002) is presented as a website, located at www.deconstruction-in-music.com.

Roger T. Dean is a composer/improviser and, since 2007, a Research Professor in Music Cognition and Computation at the MARCS Institute at Western Sydney University. He founded and directs the ensemble austraLYSIS, which has performed in 30 countries. He has also performed as bassist, pianist, and laptop computer artist in many other contexts, from the Academy of Ancient Music to the London Sinfonietta and Graham Collier Music, a leading European jazz ensemble. Fifty CDs and numerous digital intermedia pieces represent his creative work; as a researcher he has published more than 300 journal articles. His current research involves affect in music, the role of acoustic intensity and timbre, and rhythm generation and perception. He was previously the CEO of the Heart Research Institute in Sydney, researching in biochemistry, and then Vice-Chancellor and President of the University of Canberra.

Marc Duby serves as Professor in Musicology at the University of South Africa. Appointed in 2001 as the first director of the Standard Bank National Youth Jazz Band, he completed his doctoral thesis in 2006 on the topic of Soundpainting, the New York composer Walter Thompson's sign language for live composition. Awarded established researcher status in 2010 by the National Research Foundation, Duby has presented academic papers in India, Tenerife, Bologna, New Orleans, Thessaloniki, at Cambridge University and the Universidad de la Rioja (Logroño, Spain), as well as serving as visiting lecturer at the University of Jyväskylä (Finland) and Universidad Veracruzana (México). His research interests are in musical performance from the standpoints of ecological psychology, systems theory, and the dynamics of groups (teams and ensembles); his work on musical interfaces (instruments, audio, and interface technologies in general) is informed by Gibson's theory of affordances. During a performing career of more than four decades, Duby has worked with a host of local and international artists, among whom are Barney Rachabane, John Fourie, Winston "Mankunku" Ngozi, Nataniël, Syd Kitchen, the Kalahari Surfers, and Pandit Sanjoy Bandophadyaye (India), Malcolm Braff (Brazil) and François Jeanneau (France).

Petter Frost Fadnes is a Norwegian saxophone player, lecturer and researcher based at the University of Stavanger. With a PhD in performance from the University of Leeds, Frost Fadnes was for many years part of the highly creative Leeds music scene, and now performs regularly with The Geordie Approach, Mole and Kitchen Orchestra. He has released several albums, tours internationally, and continues to seek "the perfect melody" through eclectic musical approaches – mostly within the settings of improvised music. Working in parallel as a practice-based researcher, Frost Fadnes' interest is focused on improvisational thinking; methods and approaches related to

performative processes. In parallel with varying degrees of transdisciplinary theory, his research tends to utilize ethnographic and reflective approaches, with the aim to contribute multiple perspectives of subjectivity to the improvisational discourse. With this in mind, Frost Fadnes has published on a wide range of performance-based topics, such as jazz collectives, cultural factories, film scoring, jazz for young people and improvisational pedagogy. He is Professor of Improvised Music, and former principal investigator for the HERA-funded research project *Rhythm Changes. Jazz Cultures and European Identities*. His book, *Jazz on the Line – Improvisation in Practice*, was published in 2020 by Routledge.

Michael Kahr is Senior Lecturer at the Institute for Jazz at the University of Music and Performing Arts Graz and Dean of the Music Faculty at the Jam Music Lab Private University for Jazz and Popular Music in Vienna, Austria. Moreover, he has taught at the Universities of Sydney, Linz, Salzburg and Vienna. Kahr is a board member of the International Society for Jazz Research and convenor of the International Network for Artistic Research in Jazz (www.artisticjazzresearch.com). He holds a PhD in musicology from the University of Sydney, Australia and is a recipient of a Fulbright Scholar Award for research on Clare Fischer. His postdoctoral research project "Jazz & the City. Identity of a Capital of Jazz" (www.jazzandthecity.org) was financed by the Austrian Science Fund and produced a range of artistic research publications including the award-winning monograph *Jazz & the City. Jazz in Graz von 1965 bis 2015* (Leykam, 2016) and the CD *Jazz & the City (and me…)* (Alessa Records 2016). As a pianist and composer, he has appeared at festivals and in concert venues across the globe and is featured on several CDs (www.michaelkahr.com).

Tracy McMullen is a saxophonist, composer and Associate Professor of American Vernacular Music at Bowdoin College in Brunswick, Maine. Her 2019 book, Haunthenticity: Musical Replay and the Fear of the Real (Wesleyan University Press) contextualizes live musical reenactments (tribute bands, jazz revivals) within postmodern conceptions and fears about identity and difference. She is 2020–21 ACLS Frederick Burkhardt Residential Fellow at the Berklee College of Music's Institute of Jazz of Gender Justice where she is conducting research on jazz pedagogy and inclusivity for her second book. As a saxophonist and composer, she has recorded on Cadence, Parma and Plutonium Records.

Vincent Meelberg is Senior Lecturer and researcher in the Department of Cultural Studies at Radboud University, Nijmegen, the Netherlands, and at the Academy for Creative and Performing Arts in Leiden and The Hague. He studied double bass at the Conservatoire of Rotterdam and received his MA both in musicology and in philosophy at Utrecht University. He wrote his dissertation on the relation between narrativity and contemporary music at Leiden University, Department of Literary Studies. His publications include *New Sounds, New Stories. Narrativity in Contemporary*

Music, published in 2006 by Leiden University Press, *Meer dan ontspanning alleen. Over het belang van muziek* [More than Mere Entertainment. On the Importance of Music], with Roger Scruton and Martin Hoondert, published by Damon, and *Kernthema's in het muziekonderzoek* [Key Themes in Music Studies], published by Boom in 2010. Together with Barry Truax and Marcel Cobussen, he also co-edited the *Routledge Companion to Sounding Art* (2017). He is founding editor of the online *Journal of Sonic Studies*. His current research focuses on the relation between sound, interaction and creativity. Beside his academic activities he is active both as a double bassist in several jazz groups and as a sound designer.

Chris Stover is a Senior Lecturer in Music Studies and Research at Queensland Conservatorium, Griffith University, and a Research Fellow at the RITMO Centre for Interdisciplinary Study in Rhythm, Time and Motion at the University of Oslo. He is co-editor of *Rancière and Music* (EUP) and is completing a book on temporal and relational processes in African and Afrodiasporic music. He is also a busy improvising trombonist and composer.

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Preface and Acknowledgments

Michael Kahr

As the emerging institutionalization of artistic research has begun to provide solid academic contexts for the acknowledgment of artistic practices as research, this book provides a first collection on artistic research in jazz. The contributions are authored by leading artist-scholars in the field and convey relevant and current positions, theories and methods.

I am delighted about this publication and would like to express my gratitude to all authors for their high-quality contributions, their support and endurance throughout the preparation process. In addition, I would like to thank André Doehring, chair of the Institute for Jazz Research at the University of Music and Performing Arts in Graz and Marcus Ratka, rector of the Jam Music Lab Private University for Jazz and Popular Music in Vienna, who have supported this project throughout its development. Several highly qualified colleagues from a variety of research fields provided indispensable assistance through their comments on earlier drafts of individual chapters; thank you Alessandro Bertinetto, Nicole De Brabandere, Dan DiPiero, Damian Evans, Mike Fletcher, Lukas Gabric, Dave Goodman, Dick de Graaf, Kristin McGee, Nisha Sajnani, Dylan van der Schyff, Steve Tromans, Christopher A. Williams, Katherine Williams, Jenny Wilson and Wolf-Georg Zaddach. Finally, without Routledge's interest in this volume and their support regarding the publication process, this book would not have seen the light of the day.

Artistic Research in Jazz

An Introduction

Michael Kahr

Artistic research in music has reached a first level of comfort at academic institutions. The debates regarding its compatibility and equivalence with scholarly/scientific approaches are ongoing but diminishing. Arts institutions have started to embrace the creative and epistemic potential of artistic research, which is driven by a genuine interest in new knowledge and new art works, and distinguished by multiple connections between artistic practice, systematic scholarly/scientific approaches and new discursive formats. Artistic research in music is now a multifaceted endeavor which involves practice-based, practice-led and practice-driven approaches (Assis and D'Errico, 2019, 3). It is research *in* and *through* art, usually conducted by artist-scholars and it differentiates itself from the more traditional research *on* the arts.

Artistic research associated with jazz has emerged regularly and in the form of high-quality projects, however, publications have scattered across various research fields including jazz and popular music studies, performance studies, improvisation studies, music philosophy, music aesthetics and, at times, as incidental remarks in artistic research on Western art music. Projects of artistic research in jazz were only recently acknowledged by jazz research communities such as at the Rhythm Changes VI Conference in Graz in 2019.[1] This event led to the foundation of an international network of artistic jazz researchers with its first symposium in Vienna in the same year.[2] However, there is currently no sustained debate on the shared and specific aspects regarding artistic research in jazz. It represents a current niche with high relevance for the understanding of the human condition, considering the socio-cultural impact of jazz and related popular music in the twentieth and twenty-first century, which can hardly be underestimated.

The potential of artistic research as an artist-based research perspective, which unfolds and develops in dynamic connections to more traditional forms of research, applies to all art forms including jazz and related popular music. Artistic research provides insight as a genuinely inter- and transdisciplinary practice. Artistic researchers seek answers to new questions, contribute new knowledge and have started to educate a new generation of reflective and articulate artists.

This volume invites its readers to critical engagement with artistic research in jazz, aiming to establish a sustained discourse regarding the

theoretical, methodological and analytical perspectives in the field. The topics addressed in this book reflect cultural, epistemological, ethical, historical, institutional, pedagogical, philosophical and practical aspects, relevant arts-based issues such as affect, composition, embodiment, empathy, gesture, improvisation, interaction, performance, silence, teaching and learning, touch and freedom, as well as a general sensibility regarding matters of race, gender and politics. The heterogeneity of contributions conveys a diversity of approaches fostered by geographical and contextual positions, theories and methods, which are relevant for and representative of the current field of artistic research in jazz.

The Institutional Development of Artistic Research and the Specific Case of Jazz

The academic acknowledgment of artistic research has appeared as a gradual process, which started during the mid- to late twentieth century. Discourses in art research began to move beyond traditional object- and text-based approaches, and inquiries into meaning in performance grew in prominence; the term "performative turn" became the indicator of a paradigm shift in the humanities and social science, which prepared academia for the advent of artistic research methodologies.

The traditional hermeneutic approaches in musicology, viewing music as a form of text, were fundamentally challenged by historically informed performance practices beginning in the mid-twentieth century, followed by a performance-centered musicological approach. A group of UK-based scholars, most prominently Eric Clarke, Nicholas Cook and John Rink, were instrumental in the institutionalization of performance studies in music. The advent of the Centre for the History and Analysis of Recorded Music (CHARM, 2004–2009), the subsequent AHRC Research Centre for Musical Performance as Creative Practice (CMPCP, 2009–2014), and the current Cambridge Centre for Musical Performance Studies (CMPS, 2015-) have emphasized the impact of changing discourses around the study of music. As noted by Cook, the main orientation of the influential work at CHARM and CMPCP was musicological, although the latter also engaged practitioners as co-researchers (Cook, 2016, 19). Most projects were conducted by mixed teams of musicologists and practitioners, but the generation of performance-based knowledge was central to a few projects such as Doğantan-Dack's "Alchemy in the spotlight: qualitative transformations in chamber music performance" (Cook, 2016, 20 and Doğantan-Dack, 2012, 37). The output of these projects included performative events, such as workshops and concerts, which were documented by recordings, rather than text-based analyses. The current CMPS "embraces a range of research initiatives, some of which are practice-based" and hosts practice-based research events.

The conceptual development of artistic research in Europe is intrinsically interrelated with institutional policies following the Bologna Declaration in 1999, which fostered a harmonization of higher education. Soon thereafter

European universities started to install arts-based doctoral programs in music and, more recently, professorships in artistic research. However, these activities have appeared as follow-up initiatives upon the pioneering development in the US and Australia. The American DMA programs refer to a much longer history of combining practice and research in more or less close relationships, starting with the first degree in 1955 as a "means to creating career tracks for performance teachers" (Cook, 2016, 17). In Australia the first practice-based PhD was awarded in 1984 in the field of creative writing (Candy, 2006).

Institutional support for artistic research in music is granted within organizations addressing all art forms as well as in special programs. For instance, the conferences and publications by the Society for Artistic Research (SAR), the Platform for Artistic Research Sweden (PARSE) and the more recently established "International Conference on Deleuze and Artistic Research" have attracted researchers in art, design, architecture, literature, film, media, performing arts as well as music. A landmark organization for artistic research in music is the Orpheus Instituut in Ghent, Belgium, which is celebrating its 25th anniversary in 2021. The AEC European Platform for Artistic Research in Music (EPARM) of the Association Européenne des Conservatoires, Académies de Musique et Musikhochschulen (AEC) has been instrumental in developing definitions, concepts and policies for European universities since 2010. The development of these institutions and projects was accompanied by a growing body of publications in the form of book series, monographs, conference proceedings and journals, which cover a wide range of research questions, theoretical positions and methodical strategies. Financial support to the growing and vital community of practice-based researchers has been provided by funding programs such as the PEEK Program of the Austrian Science Fund, the Norwegian Artistic Research Program and the artistic research funding scheme of the Swedish Research Council. A prestigious Starting Grant by the European Research Council was awarded to the project *Music Experiment 21* under the leadership of Paulo de Assis, which has particularly contributed to the visibility of artistic music research within wider arts and research communities.

A notable recent direction regarding artistic research was expressed in the theme "Please Specify!" of the 8th International Conference on Artistic Research, held in Helsinki on 28 and 29 April 2017. The underlying observation regarding the current status of artistic research was elaborated on in the call for contributions: "The period of inauguration characterized by multi-faceted discussions concerning institutional and disciplinary questions has, in many contexts, reached a saturation point. Diverse perspectives have emerged."[3] The increasing curiosity regarding specific approaches may be a natural process based on researchers' aspirations for new experiences and knowledge; the basic concept of artistic research has been established, "now let's dig deeper!" so to speak. This implies a growing interest in highly distinctive approaches to positions, theories and methods across various artistic research communities, and specific artistic practices within various genres of music as well as institutional structures and conventions.

Jazz has developed as a musical hybrid involving a wide range of influences from music traditions all over the globe. Jazz practices are improvisatory and celebrate uncertainty, which allows the music to appear in any imaginable form. And yet, the documents of the rich history of jazz in the form of audio and video recordings, artefacts and texts invite practitioners and observers to develop preferences for a particular approach over another. For instance, institutionalized jazz education programs have historically struggled to balance the acknowledgment of the so-called jazz tradition and the inherent reification of corresponding stylistic features as well as the dynamic and creative nature of expressive practices in jazz. As a result, the aims of training methods at jazz and popular music courses differ – in some respect quite significantly – from the required competencies of classically trained musicians. Despite ongoing attempts to emphasize the historical, structural and cultural similarities between jazz, popular and classical music, the solid boundaries between university departments as well as the mechanisms of the music business will continue to highlight jazz as a distinct art form based on specific forms of knowledge among jazz practitioners, at least in the near future.

Mapping the Field of Artistic Research in Jazz

As demonstrated in the eleven chapters of this book, the current discourse on artistic research in jazz and related popular and improvised music commonly foregrounds rather specific aspects of their domains, but is also based on shared principles across the arts and firmly anchored in the wider contexts of artistic research and music studies. The contributions engage with discursive formation, which is intrinsically connected to the authors' artistic practices. All authors have established careers as artistic and academic leaders and represent the first generation of artistic researchers in jazz. Their affiliations with academic institutions in Australia, Austria, Netherlands, Norway, South Africa, the UK and the US provide diversity regarding geographical perspectives. The inter- and transdisciplinary nature of their individual projects conveys multiple positions, theories and methods of relevance in the emerging field of artistic research in jazz.

The book is structured in three parts: the first part focuses on topics related to improvisation, theory and history; the second part explores institutional and pedagogical positions; and the third part reveals methodical approaches in four specific research projects conducted by the authors.

In Chapter 1, Marcel Cobussen explores the relationships between improvisation and artistic research by reflecting on improvisation as a research object and method. By seeking to answer questions referring to the potential contributions of improvisation in artistic research, Cobussen critically engages with prominent literature in art theory and philosophy. His artistic knowledge as an improviser remains in the background, implicitly informing his reasoning towards a theoretical framework for the understanding of improvised spaces in/and research. In Chapter 2, Vincent Meelberg connects the discussion of improvisation to his artistic performance with

the groove-oriented improvisation trio *Molloy*. The discussion links concrete artistic experiences with conceptual thought and relevant theories about touch and gesture. The author categorizes various forms and functions of touch in relation to improvisation and articulates how improvisation is as much dependent on the improviser's kinesthetic relationships as touch itself is improvisatory, creational and communicative. Chris Stover's study in Chapter 3 focuses on improvisatory practices in jazz and their interrelation with theory and analysis in the artistic process. Stover develops an artistic research methodology aimed at gaining an understanding of interaction in jazz. It is based on affect theory and intertwines knowledge concerning the artistic experience and creation as well as music theory and analysis. The author draws from literature in a wide field including philosophy and artistic research as well as from his own expertise as an improvising jazz musician and music theorist. In Chapter 4, Michael Kahr discusses historical contexts related to the interrelation between jazz theory and artistic research. The study traces predecessors of artistic research in the history of jazz theory by analyzing prominent literature in the field. Based on a case study of historically informed composition practice, the author proposes artistic research as a method for the study of jazz history to account for embodied, pre-linguistic forms of knowledge from and about the past.

The second part of the book opens with Petter Frost Fadnes' thorough discussion of the institutional frameworks regarding artistic research in jazz (Chapter 5). He scrutinizes the historical challenges involved with the academization of jazz and, by considering the potential of the more recently installed arts-based PhD programs, calls for institutional support for transdisciplinarity as required by projects of artistic research in jazz. In Chapter 6, Tracy McMullen examines the transfer of knowledge in and through jazz practice in the context of jazz pedagogy. She critically observes the implicitly evident Eurocentric value systems of traditional jazz education programs and calls for a transformative shift by linking case studies by Dr. Billy Taylor, Jason Moran and Terri Lyne Carrington with her own artistic experience. Chapter 7, which is authored by William C. Banfield, addresses the challenges of a generational gap in jazz education from an African American perspective and proposes communication and interaction as a method to maintain the music's cultural relevancy. Banfield discusses his performing and recording collective *The Jazz Urbane* as artistic research aiming to convey historical "through-lines" to a younger generation, as demonstrated by his artistic collaboration with younger artists such as Esperanza Spalding, Christian Scott and Grace Kelly.

In Chapter 8, Roger Dean discusses the first of a series of case studies, which form the third part of this book. His reflection is based on a cyclic interrelation between "applied improvisation" in Miles Davis' and Teo Macero's creative work on "Shh/Peaceful", musicological analysis and artistic practice as research. Drawing from the author's much cited concept of the "iterative cyclic web" (Smith and Dean, 2009), Dean analyzes the Davis/Macero collaboration as a form of practice-led research by pointing out the

artistic ramifications of audio mixing procedures regarding the use of silence. The results of Dean's detailed analysis then inform a compositional process, which closes the "cyclic web" and represents a distinct outcome of artistic research in the context of jazz. Robert Burke situates artistic experimentation as research in a case study of his own saxophone performance in Chapter 9. The reflection is structured in macro, medium and micro levels, and based on an application of artistic research in combination with Jan LaRue's *Guidelines for Style Analysis* (1992). His conclusion addresses the generation of new knowledge regarding the art form of jazz improvisation as well as his personal artistic development. In Chapter 10, Marc Duby reflects a South African recording project, which is contextualized by a discussion of artistic research methodology, systems theory, group cohesion and issues of national legislation and institutional implementation measures regarding artistic research. Andrew Bain provides a study of non-verbal social interaction in a jazz ensemble in Chapter 11. By reflecting a composition and performance project based on theories regarding empathy by Roslyn Arnold and modes of communication during jazz improvisation by Frederick Seddon, Bain provides a particular drummer-based perspective regarding the improvisational practice of expert musicians and measures their "attempts to cultivate musical attunement", examining the "inherent dynamic between embedded and enacted knowledge in live performance".

In sum, this book confirms the variety regarding positions, theories and methods in the field of artistic research in jazz. In line with current publications in artistic research, this volume conveys a specific attitude [*Haltung*] towards research in and through jazz practices. Rather than portraying a discipline with established theoretical frameworks and methodical procedures, the contributions in this book propose further explorations and participation in the emerging discourse regarding artistic research. Thus, the book invites practitioners, scholars, students and teachers to shape the future of jazz research collectively.

Notes

1 https://jazzresearch.org/rhythm-changes-conference-2019-graz [Accessed 23 July 2020].
2 https://artisticjazzresearch.com [Accessed 23 July 2020].
3 See call and program of the 8th International Conference on Artistic Research in Helsinki, https://www.researchcatalogue.net/view/292240/294410 [Accessed 13 July 2020].

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Part I

Improvisation, Theory, and History

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1 Improvising Artistic Research

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Introduction

Can and should there be a (conceptual) space specifically devoted to artistic research and/in jazz or musical improvisation that is not already explored, occupied, or engaged with by other musics? That was perhaps the first and most urgent question I posed to myself when starting to reflect on a proper theme for this chapter. In other words, what legitimates this specific topic? What can be said about the relation between artistic research and jazz or improvised music that cannot be said about the relation between artistic research and "non-improvised" music?[1] How is artistic research taking place within the domains of jazz and improvisation? And although this will definitely be the starting point of my modest meditations, I was immediately thinking of an opposite direction as well: what can improvisation contribute to artistic research? How can artistic research benefit from improvisational strategies? How can artistic research be improvised and what would that imply in terms of its methodology? And perhaps a more provocative statement could be: artistic research cannot take place without improvisation.

In the first part of this chapter I will elaborate on how artistic research might be understood to occur when one wants to learn to improvise. Here the focus will be on an ethnographic and phenomenological study of the improvising body as well as the resulting corporeal knowledge that exceeds or precedes conceptualizations. In the second part a turn occurs: improvisation is not so much the *aim* anymore, but becomes a *method* through which artistic research is executed. Here, improvising is conceived and understood as a process of continuous experimentation and exploration, not reproducing or augmenting knowledge per se, as in the sciences, but almost always singular and stimulating a form of reflexivity that affects perception and experience rather than understanding. Improvising as a research method implies opening up a field of possibilities and trying to keep it open – by allowing risks, misunderstandings and ambiguity, etc. – instead of aiming at a clearly demarcated and pre-established endpoint, solution, or answer.

The Knowing Body

Arguably, one of the first written accounts of artistic research on improvisation is David Sudnow's auto-ethnographic *Ways of the Hand* from 1978; in fact, this is artistic research or practice-based research through music *avant la lettre*, as these terms were practically unknown at that time. Sudnow is an amateur pianist, eager to learn to improvise and in the book he attempts to describe – as meticulously as possible and – "from the viewpoint of the actor, not through an introspective consciousness, but by a fine examination of concrete problems" – the execution of "an orderly activity, which improvisation certainly is" (Sudnow, 1978, xiii). Through a phenomenological and auto-ethnographic approach, he describes the process of learning to improvise in a more or less traditional jazz idiom, that is, a corporeal practice in which the body is trained to perform jazz patterns.

"I see fingers doing thinking" (Sudnow, 1978, xiii) – these five words from the Preface expressed (at first) the quintessence of this study for me and, in fact, the rationale of practice-based research in and through music in a nutshell. *I see fingers doing thinking* testifies to a kind of knowing or consciousness that is embodied rather than articulable in or by the mind, an actual-corporeal involvement instead of or next to (mainly) theoretical doing. This involvement is primarily a sensuous, non-cognitive experience, a term that can be related to Alfred North Whitehead's term "prehension", coined by him in order to circumvent rationalistic connotations. Probably this kind of incorporated knowledge is immediately recognizable for musicians and they will (probably) also recognize that, as soon as they try to put this knowledge into words, they start to stammer or fall silent altogether. In my opinion, it is exactly this recognition of a space where knowledge is present, where it presents itself in a non-conceptualizable concreteness, nearly unattainable for verbal reflection and analysis, a space where knowledge can only be expressed through specific and orderly bodily movements, that offers a good entrance to think about artistic research and simultaneously justifies its existence. And to be more precise, I employ the word knowledge here in a rather broad sense, not only as cognition, but also as affect, experience and awareness.

I see fingers doing thinking discloses a space where theory and practice are mutually implicated, where doing and thinking meet: better yet, where doing becomes thinking and thinking becomes doing, where doing = thinking. It is significant that Sudnow starts his book with a quote from Martin Heidegger's *What Is Called Thinking?* in which he reflects on the hand's essence:

> [T]he craft of the hand is richer than we commonly imagine. The hand does not only grasp and catch, or push and pull. The hand reaches and extends, receives and welcomes […] [T]he hand's gestures run everywhere through language, in their most perfect purity precisely when man speaks by being silent. And only when man speaks, does he think – not the other way around, as metaphysics still believes. Every motion of the hand in

> every one of its works carries itself through the element of thinking, every bearing of the hand bears itself in that element.
>
> (Heidegger, 1968, 16)

Sudnow doesn't refer to or reflect on this quote in the rest of his book, but it is interesting to dwell for a moment on Heidegger's ideas on what it means to think. As J. Glenn Gray makes clear in his introduction to the English translation of Heidegger's twenty-one university lectures from 1951–1952, which together form *What Is Called Thinking?*, Heidegger sets his ideas about thinking apart from more regular definitions such as having an opinion, representing a state of affairs, forms of ratiocinating that lead to logical conclusions, or systematic conceptualizing. Instead, thinking for Heidegger is an involved, patient and disciplined focusing on what lies before us in order to discover the essential nature of things; thinking is receptive and attending to what things convey; thinking is responding to their call, non-conceptually and non-systematically, yet with rigor and strictness: "The call of thought is thus the call to be attentive to things as they are, to let them be as they are and to think them and ourselves together" (Heidegger, 1968, xiv-xv). Heidegger connects this to the principle of *inter-esse*, to be among and in the midst of things, which differs from finding things interesting, as the latter can freely be regarded as uninteresting the next moment, to be replaced by something else (Heidegger, 1968, 5).

The hands come in when Heidegger compares thinking to building a cabinet, that is, to a handicraft, with "craft" literally meaning the strength and skill in the hands. For a true cabinetmaker, all the work of his hands is rooted in the kind of thinking Heidegger proposes. Instead of merely using tools and simply making furniture, a true cabinetmaker

> makes himself answer and respond above all to the different kinds of wood and to the shapes slumbering within the wood – to wood as it enters into man's dwelling with all the hidden riches of its nature. In fact, this relatedness to wood is what maintains the whole craft. Without this relatedness, the craft will never be anything but empty busywork.
>
> (Heidegger, 1968, 14–15)

The kind of doing Heidegger refers to here not only bears similarity to the way he wants to rethink thinking; thinking *is* this doing, establishing this relatedness to things, that is, being with and in the midst of things. Using wood means handling it – "which has always been a turning to the thing in hand according to its nature, thus letting that nature become manifest by the handling" (Heidegger, 1968, 195). Once more, thinking and doing are not simply comparable activities: the one is present in the other. Heidegger uses almost the same words when defining thinking as when describing handicraft.

Sudnow summarizes Heidegger's thoughtful meditations with the simple phrase "a hand knowing" (Sudnow, 1978, 52), which of course also echoes the philosophy of Maurice Merleau-Ponty and, as already stated, also underlies

an important rationale for artistic research: the body has knowledge, practical knowledge, which (perhaps) cannot be achieved through thinking with the brain alone.[2] Connected to Heidegger's thoughts on handling, Sudnow's "knowing hand" knows how, where and when to touch the keys in order to make the piano sound optimally; the knowing hand treats the instrument with respect, responding to its actual state. In that sense, the common phrase "to master the instrument" would need some reconsideration from the perspective of Heidegger's contemplation: musician and instrument enter into a dialogue, a mutual exchange of actions and reactions.

The Instrument

In a subtle way, another *agent* has entered stage here: the instrument. Better yet, what has been emphasized in the above paragraphs is the interaction between two bodies, the human body and the instrument's body. In fact one could state that music making in general and improvising in particular emerges from this interacting between human and instrument:[3] the fingers press the keys, pluck the strings, or close the holes; the feet press the pedals; the mouth senses the reed, Bakelite or metal; the violin presses against arm and shoulder; the cello touches the knees; the saxophone makes you feel your neck, etc. As catchy a title as it may be, *Ways of the Hand* seems to ignore that improvising requires more than being able to put your hands at the right places and let the *fingers doing thinking*. Of course Sudnow is aware of this too: not only does he mention the role of the arms and shoulders and, in fact, the position of the whole body when discussing the possibilities within improvising, he also stresses the role of vision ("Looking's work became expansive in scope", 9), of the ears ("I was immediately listening in a different way", 14; "I was listening-in-order-to-make-my-way", 38; "To leave the hands out of the 'hearing' enterprise at the piano is to leave music as a production unexamined", 43), and, perhaps most importantly, the necessity of utilizing various functions of the brain, from motivation ("The hand had to be motivated to particular next keys to depress", 18) to recognition ("I would play a figure, go for its repetition, get some way into it, and […] accomplish the beginning of a reiteration (transposition, inversion, pitched-essential duplication, exact duplication, etc.)", 56). Additionally, he mentions the keyboard as an active participant:

> The keyboard is a setting of places, with measurable dimensions. The hand is an 'organ' with measurable dimensions. The knowing relationships obtaining between them, the way the hand finds itself correspondingly configurated to fit dimensions of this keyboard, involves a mobile hand engaged in a course of action.
>
> (Sudnow, 1978, 58)

Almost thirty years after Sudnow's auto-ethnographic report, Aden Evens emphasizes in *Sound Ideas* that the instrument doesn't disappear in the act of music making; instead it offers itself to the musician. But what sort of offer is

this? According to Evens, "it offers to the musician a resistance; it pushes back […] [T]he instrument cooperates by resisting" (Evens, 2005, 159). And, he continues, the technique a musician develops by practicing is not meant to minimize this resistance:

> on the contrary, technique is designed to place the instrument's resistance in contact with the musician, to allow him to feel the many dynamics it offers of force and sound […] [T]echnique is experiment, feeling the subtlest shape of the instrument, the tiniest textures of its response as inseparable from the timbral minutiae of the sound.
>
> (Evens, 2005, 160)

In other words, the instrument is not just a passive tool, submitted to the musician's desires; neither does a musician simply seek to impose his will on the instrument: "Musician and instrument meet, each drawing the other out of its native territory […]. Neither music nor instrument is predetermined" (Evens, 2005, 160).[4] Music, musician and instrument can be considered as becomings, in and through their affective interactions. The materiality of the instrument contributes in its own specific way to the act of music making as well as to the final musical result; the resistance of the material world is essential for a creative expression like improvising and this knowledge can only be gained through embodied learning (Evens, 2005, 163–165). Indeed, Evens arrives at his thoughts on the instrument's resistance immediately following a subchapter on improvisation and experimentation. It is, first and foremost, by improvising and experimenting that a musician can seek, encounter, explore, and productively and creatively deploy this "struggle" with the instrument: "Generation of resistance is essential to creative improvisation; the body must be made to feel awkward in relation to the instrument, the known must be unknown" (Evens, 2005, 153). An oft-used tactic to increase unfamiliarity and therefore resistance, is to alter the instrument: string instruments can be retuned; mouthpieces of wind instruments can be removed; pianos can be prepared by putting objects of various materials between the strings; conventional instruments can be connected to computers – all this in order to evoke the unforeseen, the literal translation of improvisation.

Although these strategies of adding resistance to explore unknown musical terrain and to generate new ideas is no longer (and never has been) the exclusive domain of the (free) improvisation scene, it is still reserved for the more adventurous and experimental musician. Of more importance within the context of this chapter, however, is that a systematic and thorough research into the (im)possibilities of the instrument's resistance to excessive familiarity, conventional training and passed-on playing techniques can only be carried out by an experienced performer who is also equipped with sufficient research skills. Experimenting *is* thinking, as the researcher-musician assumes a reflective stance. Improvisation plays an important role here, as the activities executed while experimenting are not completely pre-thought. Rather, what works and what doesn't is discovered during these improvisational experimentations, and

these discoveries at the same time constitute the kind of knowledge that is produced in this "doing-thinking". "Doing-thinking" is a process of "empirical thinking" in which activities of the human body and its sensations affect and are affected by thinking. As such it comes close to Theodor Adorno's idea of "lived experience", which precedes language and cognition and thus eludes theory, critique and appropriation through concepts. It is here that artistic research may prove itself of use, as it does not seek to articulate the unarticulatable but exposes the unarticulatable as unarticulatable in and through, for example, sound and music.[5]

From End to Method

Elsewhere I have argued in much more detail that the ideas presented above on resistance should not be limited to the interactions between musician and instrument alone: the venue or studio, acoustics, technology, audience, politics, aesthetics and cultural background are but a handful of potential other "actants" that in one way or another and in various gradations can determine a musical process.[6]

Here I will explore in a more extensive way the potential consequences of the connection Evens raises between resistance and improvisation. To stress this point once more, Evens "discovers" the instrument's resistance *in* and *through* improvisation. In other words, one of the outcomes of the work of the experimental musician who attempts to tease out more instrumental resistance by enhancing unfamiliarity is new music, formed and informed by improvisation.[7] Hence, improvisation is the result of the musician's systematic or serendipitous (re)search into the (im)possible interactions with the instrument. However, Evens simultaneously claims that improvisation is the *method* through which the instrument is able to show its known and unknown potentialities.

Here, presented in a more general context, improvisation becomes a methodical tool through which artists can investigate a specific issue.[8] However, it should be clear from the start that improvising as method cannot be understood as simply and merely applying a set of research techniques; this method should instead be defined as a groping, a following of paths that are not prescribed, and a dissolving of the idea of arriving at a clear endpoint. Improvising as method requires modesty, uncertainty, flexibility and adaptability. In the very beginning of his book *After Method* sociologist John Law briefly considers a few alternative methods aside from the traditional, established ones: experiencing "reality" through bodily involvement; allowing emotions, sensibilities, passions, intuitions and fears to become integral parts of doing research; and being aware that knowledge is always situated, particular to a specific time, location, discipline, culture, etc. (Law, 2004, 3). However, he warns, such methods – Law calls it a *method assemblage* consisting of multiplicity, indefiniteness and flux – can only be successful when researchers "no longer seek the definite, the repeatable, the more or less stable", that is, when they rethink ideas about "clarity and rigor, and find ways of knowing the indistinct and

the slippery without trying to grasp and hold them tight" (Law, 2004, 3–6). If improvisation can be part of such a method assemblage, can it *as method* be relevant for artistic research, the latter primarily regarded as devoted to conjuring up new unprecedented experiences, expressions, affects, knowledge and/or awareness?

Improvisation as Research Experimentation

In *A Dictionary of Musical Terms*, first published in 1876, the prolific Victorian composer Sir John Stainer and the lecturer in music William Barrett define research as "an extemporaneous performance on the organ or pianoforte in which the leading themes or subjects in the piece to which it serves as prelude are suggested and employed" (quoted in Doruff, 2010). Already in 1728 the British encyclopaedist Ephraim Chambers gives a comparable definition in his *Cyclopaedia*: research, according to Chambers, can be defined as a kind of prelude "wherein the Composer deems to *Search*, to look out for the Strains, and Touches of Harmony, which he is to use in the regular piece to be play'd afterwards" (Chambers, 1728, 997).

There is an interesting double bind, a contradictory double moment in these quotes: the prelude – that what is played *before* "the regular piece", a starter let's say – is, although improvised, meant to introduce a composed work with fixed melodies and harmonies. So, although extemporized – literally brought into existence *outside time* – it foreshadows what has already been prepared *before* the extemporization: the pre-lude becomes a post-lude, performed after-the-fact. As Derrida (1994) would say, echoing Hamlet, time seems out of joint here. However, out of joint as it may be, this improvised foreshadowing is teleological, as it refers to a demarcated endpoint, the piece to which it serves as a prelude. This seems to do injustice to the essential inclination of improvisation, namely to be open to and to present the unforeseen.

However, on the other, more positive, side, Stainer, Barrett and Chambers regard re-search as a thorough and repetitive (hence the prefix "re") investigation or quest *in and through a performative act* for which the outcomes are not (completely) predefined, pre-composed or pre-established. Research as improvisation, as an improvising doing-thinking, not only lets us encounter *known knowns* (what we know that we know) or *known unknowns* (what we know we don't know) but also holds the promise – the possibility or potentiality – of discovering *unknown unknowns* (what we don't know we don't know) (Doruff, 2010, 7). If, as Henk Borgdorff claims in *The Conflict of the Faculties*, "artistic research is the realization that we do not yet know what we don't know" instead of an explication of the implicit or less implicit knowledge enclosed in art works (Borgdorff, 2012, 173), improvising might be a potential method that allows one to chance upon contingent affective tonalities. Improvisation as experimentation is not merely a methodological vehicle "to test (confirm or reject) knowledge that has already been theoretically grounded or hypothetically postulated, as classical philosophy of science would have it. Experiments are the actual generators of that knowledge – knowledge of which we previously

had no knowledge at all", Borgdorff states, echoing Hans-Jörg Rheinberger's ideas on experimental systems (Borgdorff, 2012, 189).[9]

In line with this, philosopher-musician Gary Peters in *The Philosophy of Improvisation* differentiates between methodology and method. Although, according to Peters, both allow degrees of improvisation – here understood as forms of trial and error as well as risk taking – they ontologically and epistemologically differ from one another. A methodology is teleological, aiming to lead to a clear outcome, eventually; therefore, its improvised parts are limited, temporary and always measured against the teleological straightness that the methodology provides and requires. Conversely, method can be characterized as singular and as a non-teleological progression, "where progress in the act or activation of thinking and the production of work actually *depends upon* error and the failure to reach a goal". Erring is a continuous groping, attempting and searching, resisting the desire to terminate the process and to arrive at a conclusion (Peters, 2009, 162–163).[10]

Therefore, improvisation and/as experimentation in artistic research can be a method if it reaches beyond the already known and escapes from the familiar. The contingent and situated nature of experimentation is "an imperative to move out or beyond what is given, to escape entropy" (Douglas and Gulari, 2015, 396).

However, sidelining methodology in favor of a search for unknown unknowns does not mean that anything goes. In addition, improvisation should not be considered, one-dimensionally, as aspiring to or dealing with absolute freedom or originality, lacking limits and constraints, as is all too often claimed by improvisers themselves, "heirs to a modernistic aesthetic (or ideology) of innovation and novelty", according to Peters (2009, 1).[11] Improvising is not acting without preparation or plan; instead, as Germanist Edgar Landgraf claims, it should be understood as

> a self-organizing process that relies on and stages the particular constraints that encourage the emergence of something new and inventive. […] Improvisation cannot be decoupled from structure and repetition; rather than being the expression of unbridled freedom, improvisation must be seen as a mode of engaging existing structures and constraints.
>
> (Landgraf, 2014, 5–11)

In much the same way, management scholar Erlend Dehlin deconstructs the opposition between improvisation and formal models – rules, structures, routines, systems. Rather than considering the latter as restraint jackets, they are tools that must be "worked with, adapted, elaborated on, renewed, and put into contextual action" (Dehlin, 2008, 120); while respecting them, they should simultaneously be bent. Engaging with formal models implies improvising on them, as they always need to be adapted to specific situations, making their effects, applications and outcomes to a large extent unforeseen. The models become dynamic by being processed and reprocessed, and it is not until this (re)processing has started that a researcher, attentive to the contingencies of the specific circumstances, knows how to proceed. Improvisation

thus takes place between freedom and fixity; better yet, it makes clear that the realm of freedom always already includes elements of fixity and vice versa: the one is inevitably present in the other.

In short, using improvisation as a methodical tool in artistic research doesn't necessarily imply getting rid of stability and systematization; instead it serves as a model to elicit the complex relations and interdependencies between method and methodology, between the methodical and the methodological. Improvising (on) research derives from rather than opposes the formal models that Dehlin speaks about; it implies calculating incalculability, recognizing that stability is always provisional, thereby arriving at outcomes beyond the intentions and planning of the researcher (Landgraf, 2014, 38–39). Even though bound to the structure of iterability, artistic research is always also singular, particular, situated and enacted; it must be worked out, per-formed, recognizable but not predictable. Without a clear map or systematic navigation, without a determined endpoint, artistic research actualizes new modes of affective interaction, just as improvisation does.

Conclusion

In the beginning of this text I stated that for David Sudnow improvisation was a goal, a desired result of searching, of rehearsing and of letting his fingers do the thinking. I contrasted his auto-ethnographical reflections on learning to improvise with Aden Evens' thoughts in which improvisation becomes a method through which an instrument's resistance can be encountered and productively engaged. However, a readjustment is needed, as evinced by a rereading of the title of Sudnow's book. *Ways of the Hand* not only describes a retrospective reflection on the trajectories of Sudnow's hands, body and mind, followed and traced by the author on their paths towards a successful and satisfying improvisation. Instead of putting the emphasis on this retrospect, what Sudnow has written down are precisely the various trajectories, the ways, and the modes his journey towards improvisation have taken. And even though the broader objective was clear from the start, this journey was not straightforward and resolved in advance, but marked by trial and error, with many sideways paths. Knowledge did not precede act, nor did reflections only take place *after* piano playing; often thinking and doing concurred – reflection-in-action as Donald Schön describes it in *The Reflective Practitioner*. Schön claims that this reflection-in-action almost always takes place when people are improvising, as it "hinges on the experience of surprise" (Schön, 1983, 56). When a research process yields nothing more than the expected results, this type of doing-thinking becomes futile; however, when a researcher needs to cope with troublesome divergent situations of practice, reflection-in-action can become key.[12]

Sudnow's journey was certainly not a straightforward methodology leading towards a clear, stable and repeatable goal; instead, it was marked by failures and mistakes, by doubts and hesitations, by groping and searching, by trying and trying again differently, in short, by a method which could be described as operating improvisationally. Sudnow's endeavors were not characterized

by "thinking first and (mechanical) execution later, but rather of evolving, ongoing action involving varying degrees of creativity and spontaneity" (Dehlin, 2008, 15). His was a researching as a practice, constantly revised while acting, a dynamic process not guided by strict routines and predetermined rules but enabling the emergence of the new and the unforeseen: a factum instead of a datum.[13] Improvisation as a method for artistic research means operating at the interface of the (infinite) virtual and the (finite) actual, with the virtual regarded as a force that enfolds as it concurrently unfolds potentials and capacities through contingent and productive encounters and the actual regarded as the domain of actualized expressions. It is in this virtual-actual space that improvisation fosters the emergence of all that the new and unprecedented understanding, experiential knowledge and perceptual and affective awareness would like to conjure up, in and through art, in and through music.

Notes

1 In *The Field of Musical Improvisation* (Cobussen, 2017) I argue that all music making contains improvisatory elements. In other words, musical improvisation should not be confined to improvised music (for example, jazz); it permeates all styles and genres. In the current context I use the term "non-improvised music" in a conventional way to refer to music that is not primarily meant to be (perceived as) improvised.

2 Merleau-Ponty's phenomenology has as its central point the human experience, an experience that always occurs in time and space. Before they think, human beings love, move and situate themselves in the world, and in order to do so they have knowledge and their disposal that does not derive from (cognitive) reflection. The simple fact that we are able to execute thousands of rather small and insignificant movements every day without having to think about them implies that embodied knowledge doesn't manifest itself solely in and through brain activity. According to Merleau-Ponty these non-reflective bodily movements do not only occur in the more advanced movements of the craftsman, sportsman or musician, but especially and primarily in our daily routine actions; he concentrates on knowledge, stored in and by the body, to get up, to open the eyes, to breathe, to pick up something, to drink. This knowledge is what Merleau-Ponty calls *habitude*, which is grounded on a forgetting rather than a remembering: when climbing stairs, one "forgets" the bodily movements that make this action possible. That is why Merleau-Ponty doesn't speak about mental knowledge and consciousness but rather focuses on *practognosia*: knowledge that takes shape in actions and knowledge that originates in the acting itself.

3 Here, I leave aside the discussion regarding whether animals also make music. I would say that animals can produce sounds that we, humans, might recognize or label as music. As far as I know, however, animals do not have the concept "music".

4 Sudnow also recognizes the instrument as an active agent in the process of learning to improvise when he writes that "the gesture's surety is given in the movement toward a key and at the same time *through a key*" (Sudnow, 1978, 77, my emphasis). The key is obviously not a passive element, simply there to be pressed; it is affecting – and, to a certain extent, determining – the motion of finger, hand, arm and shoulders of the piano player, forcing them to make rather specific maneuvers. This also resonates with Heidegger's objections to regarding a tool solely from an instrumental point of view.

5 My argument here comes close to what Jean-François Lyotard understands as the postmodern. In *The Postmodern Explained* he describes it as that "which in the modern invokes the unpresentable in presentation itself, which refuses the consolation of correct forms, refuses the consensus of taste permitting a common experience of nostalgia for the impossible, and inquires into new presentations – not to take pleasure in them but to better produce the feeling that there is something unpresentable" (Lyotard, 1992, 14). The difference with the modern (Lyotard prefers the term "the differend" here) is subtle but fundamental: whereas modern aesthetics is nostalgic – the unpresentable is a loss – the postmodern is affirmative. However, where Lyotard continues by stating that it is our task "to invent allusions to what is conceivable but not presentable" (Lyotard, 1992, 15), artistic research works on forms of exposition that escape the Kantian categorical thinking or the faculty of (determinant) concepts. In *The Inhuman* Lyotard claims that this might occur when we "suspend the activity of comparing and grasping, the aggressivity, the 'hands-on' [*mancipium*] and the negotiation that are the regime of mind […] an-objectable, because it can only 'take place' or find its occasion at the price of suspending these active powers of the mind. I'd say that it suspends them for at least 'an instant' " (Lyotard, 1991, 139).

6 For more on this topic, see Cobussen, 2017. The term "actants" comes from Bruno Latour. He coined this term as an alternative to "actors", the connotations of which are too anthropocentric. My proposal to regard improvisation as a complex system in which many actants are operative comes close to Hans-Jörg Rheinberger's idea of dynamic experimental systems, considered as an interplay of material (machines, objects) and immaterial (techniques, concepts, protocols) assemblages in combination with a complex background of social and institutional conditions.

7 To be clear, for me experimental musicians are not necessarily musicians who make contemporary innovative music; they are first of all musicians who try to make music differently (and thereby, sometimes, different music) through processes of experimentation for which the outcomes cannot always be foreseen. A good example is Paulo de Assis' *Diabelli Machines*, part of his research project "Experiment21. Experimentation versus Interpretation. Exploring New Paths in Music Performance for the 21st Century" (see https://musicexperiment21.wordpress.com/), combining conventional piano performances of Beethoven's *Diabelli Variations*, transcriptions of the original variations for ensemble and contemporary pieces.

8 Within a jazz context, the PhD dissertation of Dutch saxophonist Dick de Graaf, "Beyond Borders: Broadening the Artistic Palette of (Composing) Improvisers in Jazz," (https://www.researchcatalogue.net/view/354613/377339) comes to mind. By experimenting in and through playing and composing, De Graaf developed several new musical strategies that go beyond functional harmony and conventional chord-scale approaches.

9 It is the progression from theory-dominated perspectives to practice-driven views on research that, according to Rheinberger, has prompted his ideas on experimental systems. Instead of regarding science as a system of concepts, experimental systems are processes of the coming into being of knowledge. They create knowledge that transcends our capacities of anticipation (Rheinberger, 2004, 2–8).

10 Experiment comes from the Latin "experire", meaning "to try out" or "to attempt to".

11 it should be highlighted that for a long time improvisation was regarded as a process of repeating and altering existing patterns and structures rather than emphasizing innovation, originality and newness.

12 One of the examples that Schön himself gives is that of medical professionals who, almost always, also rely on tacit recognitions, judgments and skilled performances for which they cannot always articulate adequate criteria. When something unusual or extraordinary takes place, they may reflect on their actions, even while acting, thereby reassessing the understandings already implicit in their actions: "What features do I notice when I recognize this? How am I framing the problem that I am trying to solve?" (Schön, 1983, 49–50).

13 While a datum can be described as something that has been given in advance, a factum is something that has to be made (see Borgdorff, 2012, 195).

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2 Improvising Touch

Musical Improvisation Considered as a Tactile Practice

Vincent Meelberg

Introduction

Touch seems to be a rather neglected human sense. Vision is usually regarded as the most important means by which human subjects acquire knowledge regarding the world, and ever since the visual turn theory has focused on that sense primarily. Only recently hearing is increasingly regarded as a sense worthy of study as well. Touch, however, remains rather undertheorized, at least in music.[1] Yet, touch is essential to our survival. Through touch we are able to establish contact with the outside world. Touch enables us to manipulate and interact with our environment. And interpersonal contact, let alone intimate contact, also depends on touch. Touch thus seems to be rather important after all.

Touch is also important where musical performance is concerned. Musicians touch their instruments, and in doing so are able to produce sounds. These sounds, in turn, touch their eardrums and their entire bodies, as well as those of the audience, if there is an audience present. The music that may be the result of the production of sounds, too, touches listeners and performers alike, both metaphorically and literally.

Moreover, many forms of musical improvisation seem to primarily focus on physical movements rather than sonic outcomes, even though these sonic outcomes are interesting in their own right. Put differently, improvisation also, and in some cases even primarily, is about feeling gestures. And a crucial aspect of these gestures is touch: feeling one's instrument, feeling the presence of fellow performance or an audience. Therefore, a proper understanding of the role and function of touch in musical performance may enrich our insights into musical practices in general, and musical improvisation in particular.

In this chapter I will examine the role touch plays in musical improvisation, by taking an improvisatory performance, recorded on 14 September 2018 in Amsterdam, of my trio Molloy, consisting of Jasper den Hertog on keyboards and electronics, Marc Huisman on drums and myself on double bass, as a case study.[2] Even though all Molloy performances are completely improvised, the music often is quite groove-oriented, and thus is inspired more by Miles Davis during his Bitches Brew era rather than the Dutch free improv scene.

In Fragment 1 the beginning of this performance can be heard.[3] The improvisation begins with listening and feeling. We feel our instruments, our movements, and we hear the sounds that are the results of these movements. We also feel these sounds in our bodies. We are touched by them. We also feel the presence of the other musicians, even though we do not directly touch each other physically with our bodies. We try to arrive at some kind of interaction, by exploring the sonic environment we are at the same time creating.

This fragment shows how improvisation is exploratory, just as touch often is. Like trying to find your way in a darkened room by feeling around you, the beginning of this improvisation consists of the exploration of sounds, not knowing where this exploration will end or even how it will evolve. We need to wait and see, or rather, hear and feel.

In musical performance three kinds of touch, exploratory or otherwise, can be distinguished. Firstly, each musical performance is created through instrumental touch. Musical performance involves touching instruments. But touch can also be instrumental in that one tries to achieve something through touch. Touch then literally is the instrument with which accomplishing something is attempted. The second kind of touch pertinent to musical performance is sonic touch. Sound is a phenomenon that touches performers and listeners, both literally and metaphorically. Finally, musical performance involves interpersonal touch, which is touch that enables contact with other performers and/or the audience.

This chapter will explore the role these kinds of touch play in musical improvisation. First, I will discuss which methods I hold to be productive when conducting artistic research into musical improvisation. The results of the analysis of the Molloy performance, done with the aid of these methods, will next be used in the construction of an account of the function of touch in musical performance in general, and in musical improvisation in particular. In this construction theories about touch as developed by Erin Manning and Matthew Fulkerson will be incorporated, as well as David Borgo's ideas regarding improvisation and Mine Doğantan-Dack's interpretation of gesture. Finally, using this account as a starting point, I will tentatively outline the possible ways in which improvisation may teach us about the role touch plays in musical and other expressive activities.

Musical Improvisation as Artistic Research

Artistic research into musical improvisation entails (at least) three perspectives: that of the performance itself, that of the artist-researcher and that of the other people involved in the improvisation, including an audience if present. Each of these perspectives can be studied by using a method appropriate to that perspective. The performance itself, for instance, can be investigated by aural analysis of the audio recording, supplemented by visual analysis if a video recording is made of the performance as well. This approach is similar to methods used in musicology and performance studies.

Studying the perspective of the artist-researcher, however, requires a method that is generally not applied in more conventional music or performance studies: autoethnography. Autoethnography here focuses on the experiences of an artist-researcher, researching and writing from a first-person perspective about the artist-researcher's own experiences. According to Heewon Chang, one of the main tasks of autoethnography is understanding the relationship between self and others. In order to do so, autoethnography combines cultural analysis and interpretation with narrative details. As a consequence, it is scholarly, despite – or perhaps precisely because – its self-reflexive character, as it is not merely descriptive or performative storytelling. Instead, the stories of autoethnographers "[…] are to be reflected upon, analyzed, and interpreted within their broader sociocultural context" (Chang 2008: 46). Chang points out that autoethnography is affirmed as an ethnographic research method that focuses on cultural analysis and interpretation: "[A]utoethnography should be ethnographic in its methodological orientation, cultural in its interpretive orientation, and autobiographical in its content orientation" (p.48).

Chang maintains that cultural analysis and interpretation are quintessential to autoethnography because this process "[…] transforms bits of autobiographical data into a culturally meaningful and sensible text. Instead of merely describing what happened in your life, you try to explain how fragments of memories may be strung together to explain your cultural tenets and relationship with others in society" (2008, 126). It is in this sense that autoethnography is a genuine scholarly endeavor that differs from other, non-scholarly, self-narrative, autobiographical writings that mainly concentrate on storytelling rather than analysis and interpretation. In the autoethnographical research done for this chapter theories regarding touch function as the cultural theoretical underpinnings of this research.

In order to ensure its academic, scholarly value, autoethnographers need to make sure to avoid excessive focus on self in isolation from others. Furthermore, the emphasis needs to be on analysis and cultural interpretation, rather than on narration. Moreover, the research should not rely exclusively on personal memory and recalling as a data source. Other sources, including the accounts of other people, need to be incorporated into the research.

This brings us to the third perspective pertinent to musical improvisation: other people involved in the improvisation, including an audience, if present. One method to investigate this perspective is interpretative phenomenological analysis (IPA). Jonathan Smith, Paul Flowers and Michael Larkin (2009) explain that IPA is concerned with the detailed examination of human lived experience. It aims to conduct this examination in a way which as far as possible enables that experience to be expressed in its own terms, rather than according to predefined category systems, and this is what makes IPA phenomenological.

IPA research focuses upon people's attempts to make meanings out of their activities and to the things happening to them. This implies that IPA is concerned with the particular rather than the general. IPA sets out to understand how particular experiential phenomena (in this case a musical

improvisation) have been understood from the perspective of particular people (here the improvisers), in a particular context (the recording of a musical performance). As a consequence, the data collection method that is best suited to IPA is one that will invite participants to offer a rich, detailed, first-person account of their experiences. In-depth interviews, Smith, Flowers and Larkin (2009) assert, may be the best means of accessing such accounts.

IPA thus may be a productive way to arrive at insights into the experiences of improvisers other than the artist-researchers themselves, insights that are vital for a proper understanding of what improvisation may be. For the present research I conducted interviews with my fellow musicians directly after the performance itself on 14 September 2018 in Amsterdam. I made audio recordings of the interviews and transcribed them.

The results of the aural analysis, the autoethnographical research and IPA are incorporated in the next sections, in which I will construct an account of the function of touch in musical performance in general, and in improvisation in particular. Each kind of touch, i.e. instrumental, sonic and interpersonal touch, will be discussed in separate sections, but I will address the connections between these kinds of touch as well.

Instrumental Touch

Instrumental touch is necessary in order to be able to produce sounds. Making music is the act of producing gestures through touching an instrument or gesturing with the mouth in the case of singing. The musical instrument functions as an interface between gesture and sound. Feeling the instrument, as well as proprioceptively experiencing the act of playing an instrument, codetermine the manner in which the performance is experienced by musicians.[4] This may be one of the reasons why Guerino Mazzola and Paul Cherlin (2009) call playing jazz "thinking music through the body". Improvisation does not necessarily start with concrete musical ideas that are preconceived in the improviser's mind, but with physical interactions between musician, instrument and fellow musicians instead. These interactions may subsequently lead to musical ideas and the production of new musical sounds, which in turn may influence the manner in which these interactions will develop.

Mine Doğantan-Dack also stresses the relation between bodily gesture and musical sound. According to Doğantan-Dack, it is in the timbres of the musical sounds that the physicality of musicians can be perceived: "Perceptually the physical cause of a sound is most directly revealed in its timbre rather than in its pitch or duration. The manner of physically initiating and sustaining a sound, that is, the gestural aspect in producing it, is one of the decisive factors for its timbral identity" (2011, 248). Timbre, Doğantan-Dack asserts, represents the unique interaction between the musicians' bodies and the instrument, "[…] the experiential result of the constant attunement between the force they supply to initiate and sustain the sounds and the counter-force exerted by the sounding instrument" (p.250).

The physicality of playing an instrument can be approached from two perspectives: that of performers and that of listeners. Artistic research would typically focus on the former and would involve exploring how a performer experiences bodily movement, Doğantan-Dack points out: "[H]ow conscious they are of their bodily involvement in the performance event; the kinds of movements and gestures that are musically relevant for the performer themselves; and how we can verbalise the embodied knowledge involved in executing performance gestures" (pp.247–8). This perspective thus centers around the performers' own proprioceptive sensations as well as their relationship with the resulting sounds and their interaction with the tools, the instruments, that are used in order to produce these sounds.

Skilled musicians generally have a special relationship with their tools, their instruments. When musicians reach a certain level of proficiency, their instruments feel almost literally like an extension of their bodies. The instrument becomes a part of their bodies even, and the skills acquired that lead to experiencing using these tools as an extension of their bodies may become a source of pleasure in itself, Donna Haraway asserts: "Intense pleasure in skill, machine skill, ceases to be a sin, but an aspect of embodiment. The machine is not an it to be animated, worshipped, and dominated. The machine is us, our processes, an aspect of our embodiment" (1991, 180). The proprioceptive sensations of using one's skill when playing an instrument, which includes the touching of the instrument, may itself already be pleasurable. The sheer joy of playing an instrument is not only caused by the sounds that can be produced in this way, but also because the act of applying one's skills in playing feels pleasurable. The bodily involvement in the performance event is itself a potential source of pleasure for the performers.

In Fragment 2, which begins at 10:53 in the recording, the physical pleasure of playing the double bass is co-responsible for the musical result that can be heard.[5] The way the pattern that I played at the beginning of this fragment felt in my left hand, the way the instrument resonated with some of the notes, and, by extension, resonated in my body, all felt pleasurable in the sense that there appeared to be a state of non-distinction, or unity, between the instrument, the sounds and me. I appeared to be in a state where I had let go of my conscious ego and instead felt one with the physical gestures that I made, the sounds that were produced and the instrument. And that was the main reason I played this pattern for a relatively long period of time.

According to Matthew Fulkerson (2014) there are two kinds of pleasure-inducing touch: affect-causing touch and affect-presenting touch. Affect-causing touch is the kind of touch that results in a pleasurable sensation, but the touch itself is not necessarily pleasant. For example, if you think you have lost your keys, and you feel around in your pocket to search for them – which is an instance of exploratory touch – the sensation of feeling, and thus having found, your keys induces pleasure. Not because the keys themselves feel nice, but because you feel relieved. This kind of touch is a trigger for joy, and therefore, Fulkerson asserts, a form of what he calls emotional touch.

Affect-presenting touch, on the other hand, is joyful because the touch itself is inherently pleasurable. It is the result of the sensory features of the object itself that is touched. The feeling of silk sheets, for instance, may be inherently pleasurable, or petting a cat, or hugging a teddy bear, depending on your individual preferences. This kind of pleasurable touch is what Fulkerson calls genuine "pleasant touch".

The question is whether playing an instrument involves affect-presenting or affect-causing touch. As I mentioned above, part of the joy of playing an instrument is the way it feels to the player. Playing literally feels pleasurable. Yet, it cannot be denied that playing an instrument also feels nice because of the pleasurable sounds that are the results of touching the instrument. The sound can even change the way the instrument feels to the touch. The keyboard player, for instance, remarked that he plays differently when hearing himself in stereo through headphones as compared to playing through a (mono) combo amplifier. The former feels more natural to him, despite the fact that the sound is coming from headphones. The fact that he is able to hear the sounds in stereo completely changes the feel of the instrument to him. For me, as a bass player, it makes a huge difference whether I play amplified or not. The instrument seems to respond, and thus feel, differently when playing amplified. As a result, I tend to make different musical choices when playing amplified as opposed to playing acoustically. Not only because certain musical decisions sound better when amplified or, conversely, when played acoustically, but also because it literally feels different to play acoustically compared to playing amplified, as the sounds and vibrations do not primarily come from the instrument anymore, but from one or more speakers located away from the instrument and the performer. The relationship between gestures and sounds changes because there is a spatial decoupling of the two in the case of playing through an amplifier.

Thus, the pleasure of touching the instrument could be considered a combination of affect-presenting (the feeling of playing the instrument itself is pleasurable) and affect-causing touch (the sonic result of musical touch is pleasant), and the balance between the two depends on the player, the instrument, and the kind of music that is played.

Sonic Touch

Instrumental touch results in the production of sounds. These sounds, in turn, touch musicians and listeners as well. In other words: instrumental touch leads to sonic touch.

Sound literally touches bodies. Listening is a corporeal feeling, the feeling of vibrations against the eardrums and the body, penetrating the body even, as Brandon LaBelle (2006) asserts. Sound may penetrate and affect bodies. Elsewhere (Meelberg, 2009) I proposed to call those sounds that have an affective and intrusive character *sonic strokes*. Sonic strokes are those sounds that have an impact on listeners because of their specific sonic characteristics. These characteristics may vary from being surprising within the specific aural

context in which these sounds appear, or the softness or loudness of the sounds, to specific timbral elements that contribute to their impact on listeners.

This impact often happens at an unconscious level and is beyond control of listeners. This implies that sonic strokes may induce intensities, or affects, in listeners. According to Brian Massumi, "[i]ntensity is embodied in purely autonomic reactions most directly manifested in the skin – at the surface of the body, at its interface with things" (2002, 25). Intensity thus can be considered a form of touch as well; hearing a sonic stroke can result in chills running up and down a listener's spine, a physical reaction of that listener's body to the sonic sensation that is literally felt in the body. As this affective reaction is involuntary and inescapable, listeners are always vulnerable to the impact of sonic strokes.

As such, sound may even be considered an intrusive event. It literally intrudes a listener's body and changes the way this body feels to that listener. An intruder, Jean-Luc Nancy explains, "[…] continues to come and its coming never stops being in some way an intrusion: that is, having no right, no familiarity, no accustomedness, and being, on the contrary, a disorder, a disturbance in intimacy" (2000, 12; translation by Philip Adamek). And indeed, sonic strokes act as intruders, because they, too, are disturbances that cause very intimate reactions within listeners' bodies, exactly because they are unfamiliar or surprising. This is not to say that this intrusion thus necessarily is unpleasant, though. The disturbances created by sonic intrusion quite often result in quite pleasurable sensations, and may be one of the reasons why we like to listen to music, which consists of sequences of sounds, with some of them acting as sonic strokes.

Just as sonic affection, musical affection, that is, the way in which music has an impact on listeners, is involuntary and inescapable. Charles Nussbaum qualifies musical affect as a "friendly touch":

> [T]he longitudinal compression waves that impinge on our eardrums and set them into sympathetic motion emanate from the musician's motions and vibrating instrument. But in touching this body part in this way, and so in "touching" us, the musical sound engenders joy, because to experience a touch (under appropriate circumstances) that is nearly instantaneously perceived as overwhelmingly benignant and as promising more of the same engenders joy.
>
> (Nussbaum, 2007, 211)

Musical touch thus is considered as affect-presenting here, as a touch that is inherently pleasurable: "That is how the lovely musical sound and execution strike us, and what initially draw us in, whatever particular emotionally expressive contours and structural properties the musical work turns out to possess" (Nussbaum, 2007, 211).

Musical touch can be affect-causing, too. It is affect-causing as soon as some kind of meaning and structure is recognized in or attributed to the music, and it is this meaning and structure that is affective, instead of the

"sounds themselves". In general, musical sounds that function as sonic strokes have affect-presenting qualities, whereas musical sounds that do not function as sonic strokes may contribute to the affect-causing qualities of the music, although sonic strokes can themselves in turn also be part of musical phrases that are affect-causing. As I have explained elsewhere (Meelberg, 2012), sonic strokes mark gestures in the music. According to Robert Hatten (2004), a musical gesture is a temporal unfolding of a succession of sounds that may be interpreted as significant. Marc Leman adds that the expressiveness of a musical gesture is produced by the body, which, through the firing mirror neurons, kinesthetically senses the musical gesture and determines the completeness of the gesture (2008, 130–1). In this way the body enframes sound: it gives sonic strokes a reference by interpreting them as constituting a musical gesture. Put differently, the affect-presenting, intrusive character of a sonic stroke may subsequently lead to an affect-causing musical gesture.

The intrusive character of sonic touch can be heard in Fragment 3, which starts at 15:00 into the improvisation. At 16:20, a synthesizer sound literally "interferes" in the music and can even be considered a sonic stroke.[6] It changes the character of the performance and its influence is inescapable. It motivates the performers to stir the improvisation into a different direction, one that is even more frantic than the previous phrase. The keyboard player explained that he quite liked the direction the music was heading to, but he was afraid that the musical energy would diminish soon. Therefore, he introduced a sound that he believed would provoke the other players to perform even more energetically, which indeed happened. The drummer added that this sound, to him, functioned as an energy boost and that the only way to productively deal with this energy was to play even more. As a result of the sonic stroke produced by the synthesizer, I switched from playing pizzicato to playing arco, as this for me was the only way to adequately contribute to the improvisation and provide more musical and sonic power to the performance.

Interpersonal Touch

The synthesizer sound in Fragment 3 is also an example of the way performers can signal other performers. Put differently: the sonic touch that is the synthesizer sound is also an instance of interpersonal contact, in this case the contact between different performers. According to Fulkerson, interpersonal contact can be established through what he calls affiliative touch: affiliative touch "[…] involves contact through touch with another person. Such affiliative touch need not be sensual or intimate, but almost always it is thought to play an important social function mediating close relationships" (2014, 11).

Affiliative touch is often distal, indirect, or mediated. Direct affiliative, interpersonal touch is quite intimate, sometimes erotic even. Caressing another person's body, or kissing someone else's lips, are examples of quite intimate and affective acts of affiliative touch.

In musical performance, too, a lot of interpersonal contact via affiliative touch takes place, but generally not in a direct manner. Instead, touch takes place via pressure waves, vibrations, in short: through sonic touch. Fulkerson himself also mentions this possibility:

> Through touch we are sensitive to pressure waves and vibrations, as well as other similar signals, and these stimuli are capable of travel through media just like light and sound waves. It thus makes sense that our touch receptors could bring us into contact with distal objects or features, especially when there is a strong mutual informational link between the distal object and our bodies supported by our exploratory actions.
>
> (Fulkerson, 2014, 150)

Through sound as a mediator, in musical performance affiliative touch can be established in a distal manner, which in turn affords musical interaction. In improvisation, in particular, musicians try to synchronize with each other through distal, sonic touch and to arrive at a musical understanding.

According to David Borgo (2005) human beings have a natural tendency to synchronize, both to other human beings and to non-human phenomena such as sounds. Borgo asserts that this tendency begins with humans' ability to predict what will happen next, their capacity for anticipation (p.69):

> Humans evolved a general capacity for anticipation in order to enhance survival both in the wild and in highly social communities. We continually predict the physical actions of others and their complex thoughts and behaviours by attributing intention and planning to them. This natural mechanism rewards correct anticipation with pleasure, arouses curiosity when anticipation fails mildly, arouses doubt and uncertainty for greater failures, and arouses fear in case of significant failure in a dangerous situation […] When comparing anticipation with reality in the relatively safe environment of music listening, these same instinctive responses appear to provide the origin of musical emotion […] Music pleasure, it seems, arrives not from exact matching of expectation with reality, but rather from slight readjustments to our future anticipations following surprise. This also helps to explain the ongoing pleasure that musicians encounter when transforming familiar materials in subtle ways.

Musical pleasure can thus be considered as the interplay between being able to predict what will sound next and being surprised by the music. As a result, Borgo suggests, the challenge of improvised music is "[…] to provide this heightened sense of expectation and surprise to both audience members and to other performers collectively, in a more or less bottom-up fashion" (p.139).

Borgo stresses that musical expectation and surprise is not a purely mental phenomenon. In referring to research done by Vijay Iyer and Wayne Bowman

he explains that the body is involved in music listening as well, especially when rhythm is concerned:

> If it is indeed the case that rhythmic/temporal features in music perception/cognition arise from activation of substantial parts of the same neural circuitry involved in bodily movement and action, the bodily dimension so often evident in acts of musical listening (and music making) is not just a function of fortuitous resemblance, representation, or association. If listening and music making activate the same neural circuitry as bodies in motion, we have a material basis for the claim that bodily action is an indelible and fundamental part of what music, qua music, is. And if music requires bodily motion as a precondition of its being, so too may music shape and inform other possibilities for embodied being.
>
> (Bowman, as quoted in Borgo, 2005, 50)

Bodily motion is a precondition for music listening, which implies that being able to synchronize with music, i.e. the capacity for musical anticipation, is at least partly bodily as well. As I have discussed elsewhere (Meelberg, 2011), this also holds for the performance of music. The ability to play together with other musicians, the capacity for synchronizing with fellow performers, depends on embodiment, on feeling each others' musical and physical presence.

Sonic touch may contribute to such a synchronization. A vibrating, sonic body is produced by musicians, with their own bodies – indirectly, by playing an instrument – while these same vibrations act as sonic entities that are separated from the musicians' bodies. These sonic entities, in turn, can affect those very same musicians. The musicians' movements – the process of touching their instruments – are transformed into sonic movements, which in turn can affect listeners, but also the musicians themselves, through sonic touch, and provoke them to synchronization. Moreover, the fact that musicians can kinesthetically feel the gestures of the other musicians, by looking at them, may contribute to synchronization.

An example of kinesthetically trying to synchronize with other musicians can be heard in Fragment 4, which starts at 7:07 in the recording.[7] Here the keyboard player is playing a syncopated pattern that is constantly changing and the drummer tries to play along with the accents of that pattern. The drummer pointed out that it was impossible for him to predict when the next accent would be played by the keyboard by listening alone, and that he had to look at the gestures produced by the keyboard player in order to place the accents more or less correctly. He added that trying to imagine what it would feel like to play the accents by looking at the keyboard player was of great help to him at this point in the improvisation.

This example shows that in improvisation performers may strive for the creation of some kind of unity through synchronization. Yet improvisers sometimes also want to retain a sense of individuality. Performers generally contribute to the improvisation as a whole, but often desire to leave their own "signature" in the improvisational performance as well. Erin Manning suggests

that it is through touch, specifically, that a balance between individuality and unity can be achieved: "As I reach toward, I reach not toward the 'you' I ascertain but toward the 'you' you will become in relation to our exchange" (2007, 7). Synchronization, which is established through distal, sonic touch, implies closeness, a coming together, and through this coming together identity is formed and reformed; both of the identity of the performance as a whole, as well as that of the individual performers.

Touch, Manning asserts, articulates the body, "[…] giving it a language through which it can begin to feel the world" (2007, 58). By feeling the world synchronization can be established, but feeling and touch also embodies difference:

> [T]hrough touch I ascertain the difference between bodies and surfaces. This espacement that marks the difference between spaces introduces my body to a becoming-space of time and a becoming-time of space. This becoming is the constitution of a subjectivity that is in movement, a subjectification that is formed within the tactile hollows of difference.
>
> (Manning, 2007, 58–59)

Through touch we become conscious of the difference between "I" and "the environment". Even though we may arrive at some kind of union by touching each other, we will also always be aware of our individuality. Feeling unified or "one" is a relational and experiential phenomenon, not an act of actually melting into one entity. Bodies are able to establish relationships with other bodies, and enter into states of synchronization, and we may feel unified, but at the same time we will always remain separate individuals.

In musical improvisation the same happens. Musicians synchronize with other musicians through distal, sonic touch. Sonic touch, created via instrumental touch, is a way to make yourself, as a musician, known to other musicians. At the same time you acknowledge the presence, sonic and otherwise, of other musicians. Throughout the improvisation, a balance is sought between you and the other musicians. And in doing so, your musical identity, as well as that of the performance as a whole, is formed and reformed. And all this happens through touch, sonic and otherwise.

An example can be heard in Fragment 2. The synchronization between the bass, the keyboard player and the loop that was playing at the beginning of this fragment was pleasant to me. Interestingly, it was the tension between the drummer and the other players that contributed to this pleasurable feeling as well. At 11:54, for a brief period, the drummer and the other players synchronized, but mostly he played rhythms that went against the groove that was established. Paradoxically, this only seemed to reinforce this groove, and thus the synchronization between the double bass and the keyboards.

The drummer explained that he found the groove that was created by the interplay between the keyboards and the double bass too "obvious", and wanted to make it more interesting, while also signaling to the other players that he did not want to join in with the groove. Put differently: the drummer articulated

his identity as a drummer by contrasting himself with the other players, who tried to create a unified identity at that moment by sonically touching each other. As a result, because of the contrast between the drummer's rhythms and the groove established by the double bass and the keyboards, both identities were strengthened.

Conclusion

Touch is essential for the creation and understanding of musical performance in general, and musical improvisation in particular. By focusing on the kinds of touch that are relevant in musical performance, i.e. instrumental, sonic and interpersonal touch, the different touches in performance can be identified. These touches can then be qualified by determining if they are affect-causing or affect-presenting, or a combination of both. Finally, the manner in which these different kinds of touches, pleasant or unpleasant, are communicated and contribute to synchronization, to musical interaction, can be investigated by incorporation of the notion of mediated touch.

Touch in musical improvisation is a creational and communicative act. It creates a musical event, it co-creates musical identities, and these identities can be communicated through touch. And it is not only in musical improvisation that touch is creational and communicative, as Manning (2007, xv) asserts:

> [T]ouch – every act of reaching toward – enables the creation of worlds. This production is relational. I reach out to touch you in order to invent a relation that will, in turn, invent me. To touch is to engage in the potential of an individuation. Individuation is understood throughout as the capacity to become beyond identity. We individuate inventively. Relationally, we engage in individuations that require difference and repetition.

Touch connects bodies, minds and also sounds. It creates identities, musical and otherwise. And through touch, these identities are constantly formed, reformed and communicated.

This account again confirms that touch is exploratory. Touch depends on improvisation, on in-the-moment actions and reactions, a process that is exemplified in musical improvisation. Improvisation thus may be considered an articulation of the manners in which we communicate and create identities through touch in our daily lives, how we use touch to express ourselves, to communicate who we are and connect with others. Touch is improvised, just as improvisation is grounded in touch, and by investigating the function of touch in musical improvisation we may learn about the role of touch in our everyday lives as well. In everyday life, too, we connect with people and things through touch, and this connecting through touch generally is not completely premeditated. We pick something up, we feel its weight, resistance, the actions it may afford, and we act as a reaction to this first tactile encounter. We enter into what could be called an improvised dialogue of touch. The same holds

for touching other people. This, too, often is improvised. How does the other person feel? How do they react to your touch, and you to the fact that they may touch you as well, or refrain from touching you? In order to investigate these dialogues of touch a first-person perspective of the improviser is indispensable, and artistic research may be best equipped to do this.

Notes

1 One notable exception is David Sudnow's *Ways of the hand* (1978), in which tactility is discussed extensively from a first-person perspective.
2 See https://www.researchcatalogue.net/view/520714/520715 for a recording of the improvisation.
3 See https://www.researchcatalogue.net/view/520714/520718.
4 Proprioception is the sensing of one's own body movements (Leman, 2008).
5 See https://www.researchcatalogue.net/view/520714/520719.
6 See https://www.researchcatalogue.net/view/520714/520720.
7 See https://www.researchcatalogue.net/view/520714/520721.

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3 Mapping Jazz's Affect

Implications for Music Theory and Analysis

Chris Stover

Introduction

One way to think of jazz as artistic research is to consider how its processes and procedures open onto new modes of music theory and analysis, and conversely how theory and analysis engender new performative possibilities. Two axioms ground this claim. First, that a jazz performance unfolds within a range of loosely agreed-upon conditions – what I will describe below as shared aspects between the genealogical constitutions of its participants, their shared understanding of the formal constraints with(in) which they are co-creating, and a shared commitment to the knowledge that at any moment along the way the range of possibilities for what will come next is open and contingent. And second, that if a goal of analysis is to attempt to account for those conditions, then such an analysis might serve to produce new knowledges about how those conditions engender the particular processes through which jazz performances can unfold. Analysis in this way is a *practice* that co-creates with and alongside jazz performance. The knowledge it produces becomes a catalyst for newly thinking-through-performing, or what Erin Manning (2016) calls "making as thinking". This relationship, in the way I am envisioning it in this chapter, embodies what Sophie Stévance and Serge Lacasse (2018, 136) characterize as a two-way "causal interaction between […] research questioning and […] artistic practice in order to produce both new scholarly knowledge and new artistic to output."

What I am proposing in this chapter begins with an analytic posture that derives from and extends what I call jazz theory's pragmatic attitude (Stover, 2017b).[1] Jazz theory, I argue, is oriented toward practical application, providing the performer with an array of tools for successfully navigating the diverse performance contexts that might be encountered: chord progressions in familiar or new configurations, ranges of syntactically significant substitution possibilities and so on.[2] Jazz theory intends to provide a means for inventive creation within a relatively proscribed melodic-harmonic-rhythmic syntax, and to do so even when encountering a new situation (such as sitting in and playing a song for the first time, with no rehearsal). From the perspective of artistic research, jazz theory, in conjunction with the performance practices it interacts with, produces knowledge in the sense that it produces an attitude toward any given

emergent context in which performers find themselves, the actions constitutive of which flow in important ways from the practice of theorizing. It is important to challenge the conventional dictum that theory *follows* practice (in this and all cases), since the reality is that the two modalities are complexly intertwined, each feeding transversally into the other. I insist that this is not a dialectical process: theory and practice are not opposed in any way; they represent what in Deleuzian terms we might call differential perspectives immanent to the ongoing event. This is why I say that theory, and by extension analysis, is a form of practice. Or as bell hooks (2010, 7) trenchantly puts it, "thinking is an action". And of course, the inverse ought to be true as well, as the chapters in the present volume make clear: practice is a form of theorizing, which is again to say, of producing knowledge. This has important implications, for example, in the discourse of jazz musicians. When an iconic musician like Sonny Rollins insists that he is not thinking while he is playing, we need to resist translating his position as saying that there is no thinking in high-level improvisation, or that to think is somehow to arrest the creative 'flow'.[3] Instead, we should consider the pre- or para-linguistic aspects of what it means to think *through* playing, or what it means for playing to be a form of thinking that stands up on its own, without need for a mediating image of thought that somehow internally narrates what is happening while it is happening. Rollins's insistence ought then be read as something like "my playing, which operates more quickly and nimbly than the discursive language that in any case only partially reaches the nuance of musical expression, is doing the thinking". This inverts hooks's claim: action is a thinking.

From the perspective of scaffolding theory in education, this playing-as-thinking can be done precisely because of the intimate interconnection between playing (practicing) and attending to theory during one's formative years. We build our structural scaffolding through a differential process of learning and doing (and learning by doing), and when we achieve that level of competency commonly described as "internalized" or "second nature", the scaffolding can be removed. This of course is the logic behind Charlie Parker's apocryphal "and when you get up on the bandstand, forget about all that and just wail". But that is not the point I am trying to make here, nor is it how I read Rollins's point. Without discounting the central role that scaffolding techniques play in a jazz musician's education, to turn to playing-as-thinking is to elide concepts of internalization and to displace the conscious-unconscious binary by rethinking what it means to know. More so, it means displacing where we think we understand "knowing" to occur, from what is traditionally conceived as a mental process to an embodied, affective, pre-cognitive one. That is, mentally-infused processes don't coalesce into internalized ones; rather, the act of learning by doing reconditions our affect attunement such that we are differently open to affective conjunctions with ongoing musical stimuli.

Gilles Deleuze provides some enticing language for thinking about different modes of doing as thinking. The most far-reaching of these is how he theorizes affect, which will be my primary focus below. But Rollins's statement resonates

specifically with what Deleuze at several points describes as the "speed of thought", an elusive concept rich with productive implications for artistic research. As Stamatia Portanova (2008) explains,

> Being generated in (and not by) a continuously sensing and moving body, ideas appear not only as creative points of departure but also as residual effects emerging from the quickest, most ungraspable movements of thought. An idea is a *differential* of thought, a node, an intensive coagulation in the continuous unfolding of the sensing/thinking body, a body-mind event […]. [I]deas come from who knows where and do not aim toward any predetermined point, their infinity and instantaneity going beyond the clear coordinates of intellectual orientation. It is not *I* who thinks but, quoting Gilles Deleuze, "another thinks in me". Forces think in me. Traveling at the speed of thought, ideas are energetic intensifications that escape the subject and its consciousness while dissolving into an incorporeal and inessential realm, pure virtualities to be experienced, actualized and expressed.

Thought, in Portanova's account, is a product of sense and movement (and not the other way around). A thought is not "mine", it is the result of the impingement of transversal forces or "energetic intensifications". Thought is an opening, a constitution of constellations of virtual forces, outside of consciousness but conditioning how consciousness can proceed as some singular actualization or expression of those virtual forces. I would like to slightly amend one of Portanova's suggestions: an idea (or thought, as I am reframing it) does not "come from who knows where"; rather, it is a product of a very specific coming-together of affective forces in some very particular configuration; again, I'll turn to this in more detail below. One aspect of that configuration is revealed by turning to an intriguing and fraught theme in current music (including jazz) analysis: interaction.

How do we study musical interaction? This is among the most complex questions in musicology and music theory today. It draws together themes and methodologies from performance studies, embodied cognition, critical theories of bodies and relations, phenomenology, ethnography and social theory, and much more. It draws upon methodologies from artistic research and, if done in the right spirit, ought to be considered a form of artistic research. The perspective I adopt in this chapter stems, as I have been alluding to, from affect theory, which shines a light on what in Deleuze studies is called the "pre-personal" space that precedes and conditions cognition and agency.[4] This is the space of pure interaction (or, as Karen Barad reframes it, *intra-action*[5] – this distinction will become important below) where the conditions within which a given action or gesture, or constellation of actions/gestures, occurs are ever-newly created. In musical terms, affect's pre-personal spacetime is, among many other things, the emergent spacetime where played sounds detach themselves from the forces of their production, to be taken up affectively according to the particular disposition or affordances of any given participant in the music-making

process. In analytic terms, to think through affective relationality is to refuse to reduce away the "mess" within which cognition occurs.[6] A turn to affect therefore should be thought of as an intervention that troubles accounts of interaction that try to simplify dimensional parameters by creating controlled experimental settings, or that reduce affectively-charged interactive flows to cognitive processes. Both of these end up drawing conclusions that falsify the lively, largely pre-cognitive reality of interactive musical expression.

The remainder of this chapter will unfold in two parts. First, I will clarify what I mean by affect theory and how I wish to use it as a tool for analytically engaging interaction in jazz. Over-simply, I will begin to build an analytic apparatus that takes seriously the ways in which affective impingements constitute lively *events*, which come together to form *contexts*. Contexts are temporal and transversal phenomena – they are literal and metaphorical spacetimes where actions occur, and relations take hold and change. They are temporal because they both take and make time: the events that form a context unfold over some span of time, and in their unfolding they also make time in the sense that they participate in the creation of meaningful relations of before and after. Contexts are transversal because multiple co-occurring events impinge affectively on one another. As I described above, some of these events operate at a conscious level, some not; a turn to affect importantly elides the question of conscious versus unconscious (or, in Deleuzian terms, active versus passive) by *folding* the former into the latter. Consciousness, in this reading, is a special case of unconsciousness, and the relationship, always in flux in the sense that nothing is ever precisely one or the other, is mediated by the pre-personal movement of affect.[7]

Second, I will advance an analytic framework for engaging musical interaction from the perspective of affective encounters and their effects – an affect methodology (or, perhaps, an *anti-methodology*) that brings ethnography, narrative analysis, cartography and music-analytic techniques into dialogue. This will necessarily be contingent and partial, not just because the fundamental nature of affect theory is to be open and in motion, ever repurposing and redirecting itself, but also because, as the engagement with a process that is perspectival and itself temporally unfolding, an affective analytic model will attempt to feel with the "grain" of the performance as it unfolds. My appeal to the partial, perspectival nature of this project is indebted as much to Donna Haraway's (1988) important interventions into science studies as it is to John Rink's (2015) insistence that musical structure (for example) is given in each performed instantiation (including the performance of listening) and is, therefore, constructed rather than somehow immanent.

Another way to say this is that there will necessarily be an element of speculation and incompleteness to such an analytic posture (is there not always?), for which I will ask the reader's indulgence as I consider the use-value of what Deleuze and Félix Guattari (1994, 171) call "fabulation", Barad (2007, 139–140) "agential realism", Jacques Rancière (1974, 101–102) a turn away from epistemology's reproduction of ideology toward a politics of immediacy, Donna Haraway (1988, 582–583) an appeal to the value of partial, positioned

knowledges rather than the false confidence of a totalizing system. As Brian Massumi summarizes what I would call the animating theme of Deleuze and Guattari's collaborative works,

> The question is not, Is it true? But, Does it work? What new thoughts does it make possible to think? What new emotions does it make possible to feel? What new sensations and perceptions does it open in the body?
> (Massumi, 1992, 8)

From this perspective, the very act of turning to affect is itself the animating of affective forces. The theory that I begin to lay out in this chapter is, therefore, not just speculative but radically, provocatively so, intended less to answer questions than to ask ever new ones, to problematize but also to contextualize and ultimately provide theoretical ballast for existing avenues of study.

In the Middle

Affect begins in the middle, between bodies. It flows or swarms, surges or shimmers, emerges, occurs, happens: each of these active words involves multi-directional movement, and each opens a zone of intensity with profound implications for analytic engagement. Bodies are constituted affectively: what does this mean? It means, first of all, that affective impingements contribute to a continuous double process of stabilizing and destabilizing bodies: double because through affect, bodily identities are formed, but those formations are of entities that are fundamentally temporal and ephemeral. A body, therefore, is always becoming other-than-itself; I will revisit this important formulation shortly. Constitution has a specifically affective register in this definition, as the simultaneous formation and breaking-down of bodies. Deleuze refers to this as the double movement of becoming-actual and becoming-virtual, whereby virtual forces become actual through their materialization in and as bodies, and actual forces become-virtual as they open onto new possibilities (see Deleuze, 1994, 207). This double movement, which, crucially, is always ongoing and co-creative, recurs in many of Deleuze and Guattari's doubled terms/concepts: territorialization and deterritorialization, molecular and molar, smooth and striated. Deleuze's affective mantra, borrowing from Spinoza, is "we don't even know what a body is capable of" (Deleuze, 1978, 7). This is a profound statement in terms of jazz, where progressive practitioners – John Coltrane being among the most celebrated – have long sought to push the boundaries of what a prosthetic human-instrument assemblage can do. From an affective perspective, this manifests as the manifold relations between Coltrane and saxophone, and in any given encounter between the Coltrane-saxophone assemblage and his human-instrument co-creators (e.g. the affective feedback loops engendered during his recorded duets with Rashied Ali) or, relevant to this chapter, the theoretical materials he famously worked through. Coltrane's engagement with Nicolas Slonimsky's speculative compendium *Thesaurus of Scales and Melodic Patterns* (Slonimsky, 1997) is only the most famous of many

such encounters that reinforces the idea that theory and practice are intricately entangled, that theorizing is a form of practice and that practice, as the lively, creative working out of ideas, can be a form of theorizing.[8] And from the Deleuzian/Spinozan perspective of bodily capacities (in this case of posthuman, prosthetic human-instrument bodies), Coltrane's specific pursuit – his hermeneutically-open research question, to put it in artistic research terms[9] – was to continually push the expressive, technical and relational limits of his embodied practice.

Bodies, furthermore, are affected differently: the ways in which a bodily capacity might be activated (or suppressed) varies according to that body's *affect attunement* (Massumi, 2011, 114). Affect attunement is a product of a body's genealogy: its histories, contexts, past and now-ongoing experiences; its interests, desires and drives, its conscious and unconscious affinities and alignments.[10] So the way that a given body – a human performing body, a prosthetic human-instrument body, the sonorous "body" of a musical gesture – is historically and contextually constituted affects the way it is open to be affected. Say for example that one young saxophonist learns and internalizes very well two versions of the blues scale, while another learns an array of chord-scales and connects them to aural experience with some competent degree of facility. Each player will respond affectively to an unexpected stimulus – say, a piano player playing a "back-door" substitution IV to ♭VII leading to I – quite differently. There might be some degree of agency involved (perhaps more in the aurally-grounded second player's engagement, but not necessarily), but this all goes by very quickly, and to some important extent unfolds at a pre-cognitive or affective level. That is to say, the less experienced blues-scale player might not even hear the substitution (or might not notice that they heard it), but might respond affectively to the change in intensity in any number of ways: by playing faster or louder, by playing less or stopping altogether, by doubling down and blowing through the phrase to reinforce the chord that was "supposed" to be there. The chord-scale player, on the other hand, might hear the harmonic change and respond with a learned gesture, drawing an alternate melodic pathway to the substitution's resolution. By suggesting that this occurs at the level of affect, we elide the question of agency. The harmonic substitution is a feeling, a "something-doing", which we experience as and in what Henri Bergson (1991, 32) calls a temporally infinitesimal "zone of indeterminacy" within which we act, prior to cognition. The zone of indeterminacy is an event, the product of the double movement of affective forces. An event is the spacetime *constituted by* and *in which* something happens, which conditions affectively the ways in which next events will occur and relate.

The third implication of suggesting that bodies are constituted through affective encounters, mediated by the evolving singularities of their affect attunements, is that we are entering into an inquiry space that is, necessarily, slippery, always escaping any effort to pin knowledge down by fixing it with words or theories or data analysis. The question of what it means to invent and use an affect methodology looms large here. But my contention is that engaging interactive improvised-music contexts like jazz allows us to come

relatively close to inventing such a methodology. There are a few reasons for this, some of which I suggested above: (1) the context of a jazz performance is somewhat more proscribed than other social spacetimes, since the performers have been partially shaped by shared or similar genealogical forces that condition their affect attunements (for example, canonic musical repertoires, modes of attention to iconic recordings, performance practice roles, music-theoretical discourses and performance-space social dynamics). (2) There is a shared sense of, if not quite working toward a common goal, at least working within a common, micro-culturally agreed-upon framework, which again is known by all participants. And (3), and this is where jazz and other overtly improvised musics differ from more scripted contexts like chamber music, the directional arc of a jazz performance is to some important degree *open*, in a process of becoming, its openness to radically divergent practices of expressive variation eclipsing any cleavage to a work-drive that aligns either with Romantic teleological ideals or with Modernist formalist ones.

Toward an Affect (Anti-)Methodology

Here, then, is the beginning of an affect-oriented methodological framework for engaging interactive improvisational contexts analytically. To repeat these three framing themes slightly differently, we begin with (1) a constellation of shared (or highly similar) past experiences, (2) a shared sense of working within a provisionally proscribed framework, which brings with it certain expectations about what might or might not occur and (3) a shared understanding that within those constraints an attitude of open creativity governs interactive actions, where the precise way a performance will unfold remains through the entire process unknown. We might add a few more themes that flow through these: (4) a shared understanding that what is transpiring *is jazz*, which allows for certain kinds of relational behaviors and (to varying degrees, depending on the attunements of the participants) forecloses others; (5) stemming from this, a shared belief that a particular kind of novelty – one that works within and on given structural and processual frameworks by reworking them in ways that express both their constraining factors and their potential for continued change – is an optimal goal; and (6) a shared commitment to the elusive notion of "telling a story" through improvisational expression.

All of these themes condition the interactive contexts that comprise any given jazz performance. How, then, to account for these conditioning themes analytically? What would it even mean to do so? To return to a concept I began with, all of these make up aspects of any given participant's genealogy, and as such, they partially condition how that participant is attuned in the event of any given musical interaction. One component of an affect methodology might be ethnographic engagement: Who did the participants learn from? Who have they played with? What audiences have they interacted with, in what kinds of contexts? What recordings have they engaged with, what theoretical perspectives has their study orbited around? What stories have they been told, or have they participated in recounting?

What values or perspectives have they internalized and how do they think they express them? What connections do they draw between these different themes (and between the actions they thematize) – for example, how do they express their understanding of the relation between theory and practice? Importantly, none of this ought to be for the purpose of explaining anything or making any kinds of causal determinations: genealogies are not linear, causal relations are at best multidirectional, partial and speculative, and "facts" are fluid, provisional and heuristic. The purpose of ethnographic work in this sense is to draw provisional connections that open onto possibilities: not to explain why any given event happened in the way it did (an impossible task, at any rate) but to strive to understand how the conditions in which that event occurred were formed and how they conjoin with that event to produce further possible expressions. A question might then be: what previous affective encounters leave passive traces that *have something to do* with how an ongoing one unfolds?

Here is how Brian Massumi (2002, 25) describes the lively way in which the past impinges on any given present event: "past actions and contexts are conserved and repeated, autonomically reactivated but not accomplished, begun but not completed". Any given event is – crucially, if very partially – an expression of its genealogy. Over-simply, what I *can do* as an improvising musician – what I am technically able to articulate on my instrument; how I am able to respond to ongoing stimuli – is conditioned by what I have done: what and how I have practiced, what I have spent time listening to, and so on. The language is important here: not constraints in the sense that I am limited to what I have worked on (this, again, is problematically causal), but modes of conditioning my attunement, my how-I-am-finding-myself. These are my "past actions and contexts", which are "conserved and repeated" in any now-ongoing action or context. They are (mostly) passive, but as Massumi makes clear, they are *reactivated* in that they are made-active-again: they become active participants that *intra-act* in the constitution of an ongoing context.[11] As Deleuze might say, what is repeated is the difference that is already bound up within them. Say I am the chord-scale saxophonist from the blues scenario above: when the piano player plays that back-door substitution, it triggers an affective stimulus: I have heard this progression before, I have learned tunes that use it, I have transcribed solos in which it occurs, I have learned strategies for manoeuvring my way through it. Furthermore, I have absorbed a narrative in which my job is to be reactive in this context: to hear the change and respond accordingly. This is an important signifier of competence within the jazz community: by hearing and responding to a textural change, I demonstrate that I *can* do so.

From an analytic perspective, it is not a question of determining which of these specific details of my past is being brought to bear in this instance. Instead, it is a matter of understanding the complexities of how I am attuned through these past actions and contexts to act within this now-ongoing encounter, and what range of possibilities is engendered within that attunement.[12] For this reason, affect theory turns out to have profound implications for interaction

studies, since the way participants are attuned to (tend to) affect and to be affected has a great deal to do with how any next event, each a collaborative encounter between human and non-human actors, will occur. This is what Erin Manning calls the *more-than* of an ongoing context, and it opens that context temporally in two ways: as the swelling past that impinges passively on the present, and as a "speculative pragmatism" that opens onto the future (Manning, 2016, 32–33).[13]

This is a second reason why jazz theory, as a pragmatic endeavor, does not follow practice but operates affectively upon it. Every jazz musician is, in some important way, also a theorist in that through the ongoing process of becoming a jazz musician, engagements with and – crucially – pragmatic redirections of theoretical models and trajectories are part of one's constitutive practice. Again, much of this is passive, operating at a pre-cognitive, affective level. One of the goals of ethnographic engagement ought to be to tease out and provisionally thematize one's relationship with received information; for example, to begin to develop an understanding of what singular kinds of theoretical models a given musician has engaged, and what they *did* with them – what work was done with them. Throughout, close attention to *how* stories are told is also important. Narrative analysis methods are therefore also fruitful for thematizing how participants understand and relate to their genealogical contexts, including what they value and why, and what roles different "characters" play in their story. For example, a recurring trope through modern jazz history has been a vilification of certain ways of doing – emphasizing complexity over emotion; learning from books rather than recordings; learning a "system" versus a more "organic" approach. These narratives invariably locate the storyteller as a kind of Romantic hero that understands the "right" ways of learning and doing, unlike the nameless villains who seem, according to the narrative, to be "cheating" in some way. Conversely, some of jazz's foundational origin stories involve deliberate removal from "real world" interactive learning – Parker's woodshed, Rollins's bridge, Coltrane's green room. The tension between these stories has not been adequately addressed in jazz scholarship, but again, the truth value of these narratives is irrelevant: the point is the work they do in constructing one's subjectivity as a jazz musician. But these kinds of narratives reveal analytically interesting themes that need both to be deconstructed and read diffractively through one another in order to understand the political stakes at work in cleaving to one or another fabulatory posture in any given process of subjectification.

Ethnography, then, is one tool, and in an affect methodology should be practiced with a particular attitude oriented toward the more-than of experience and against the oversimplification of causal ascription. Likewise with narrative analysis. A parallel procedure is what Deleuze and Guattari call *cartography*, through which we can finally bring music analysis into the picture. Mark Bonta and John Protevi (2004, 67) describe cartography as a practice of "making maps that establish the contours of intensive processes". That is, it is a practice of mapping force-relations – not of things, but of the ways in which they impinge on one another. Cartography is a creative process of

sense-making that involves attending to ongoing phenomena and drawing provisional paths between them to see what kinds of meaning-enactments occur. These meaning-enactments are in the in-between, therefore cartography involves a shift of focus from nodes to the lines that connect them, and an understanding that these lines are in every event provisional, in motion, and potentially subject to radical displacement.[14] What happens *between* Coltrane's permutational manipulation of melodic cells and Rashied Ali's densely polyrhythmic soundscape that not only deterritorializes the former, ultimately enacting a transubstantiation from discrete musical pitches and nominally quantifiable rhythms to something more like pure timbral intensity, but that ought to likewise deterritorialize our analytic apparatus to account for such a transformation? But also, how does the act of mapping this intensive, liminal spacetime fold back to produce new music-improvisational possibilities? (This would certainly be on the mind of two generations of progressive jazz musicians that have sought to understand and, in many cases, extend the radically innovative technical and expressive potential that Coltrane and many of his interlocutors made us aware of.)

Cartography is an "occurrent art" that exists in its doing (Massumi, 2011). It is also an aesthetic practice that, like music analysis, is essentially, irreducibly creative.[15] As an aesthetic, occurrent practice, it flows from within the middle of the action; as education theorist Margaret Hagood (2004, 145) describes, cartography "picks up in the middle and focuses upon what is already going on when it is happening". The cartographer therefore is an active, creative participant in the meaning-constituting process, which is one reason that artistic research (especially the mode of artistic research where the artist is also the researcher (see Stévance and Lacasse, 2018, 134–136)) is such potentially fertile ground for cartographic analysis.

What would this kind of music-analytic mapping of a jazz context look like? It would, first of all, begin from the middle: perhaps from some bundle of sounds in the event of their utterance. Those sounds are taking place in *and* constituting a context. The context is multivalent and lively: multivalent because it involves transversal conjunctions between human participants, the sounds they produce, the ways in which those sounds are affectively decoupled from their agential production, spaces and physical materialities, temporal trajectories and much more; lively because it is *happening*, it is already in a process of unfolding in time, which includes opening onto future possibilities. So, we might begin by mapping some relational conjunctions that start with those sounds, constituting a provisional 'node 1' that is itself an assemblage of all of these human and non-human actors.

In this schematic (Fig. 3.1), players *X*, *Y* and *Z* produce sounds *x*, *y* and *z* respectively. This conjunction constitutes an *event* – the production of 'composite' sound {*x*,*y*,*z*}. The ways each player produces their respective sounds reflect aspects of how their individual genealogies produce their affect attunement (each player, therefore, functions as a micro-node that connects to that genealogical multiplicity). Once the sounds are produced, they intermingle affectively and fold back onto the performers, leaving traces of affective

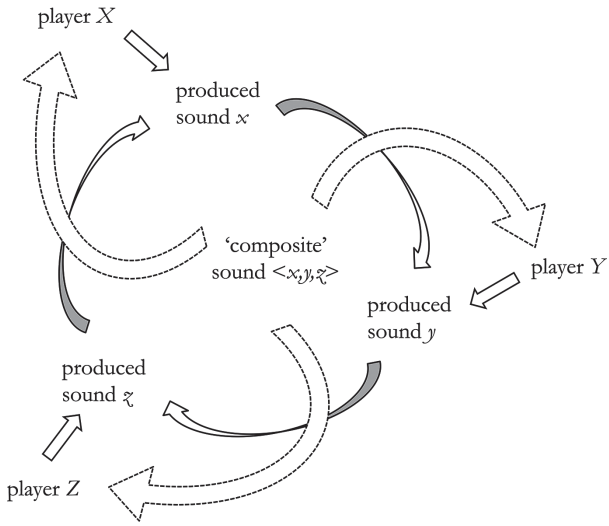

Figure 3.1 Transversal, intensive mapping to, from, and around "the sounds".

residue that re-condition each participant anew: in some important way each participant is changed through the encounter. This is an iterative process, as this event folds into the next one to produce a complex context.

Say the now-ongoing context is a live jam-session performance of Charlie Parker's "Moose the Mooche". "Moose the Mooche" functions as 'node 2' in our cartographic system. While it is important to understand that we are turning away from nodes and toward the lines that creatively and productively connect them, this particular node is ontologically useful because, I would argue, a jazz tune is a Deleuze-Guattarian rhizome par excellence, given that its identity is continuously in flux and that in every instant it radically resists sedimentation into a "work". The identity of a jazz tune is a swirling, shifting process of intensive forces impinging on one another, and so anything that we might perceive as a node-like property is really an opening onto, and very provisional seizure of, bundles of affective forces that can potentially condition how this particular instantiation unfolds.

Our cartographic analysis of "Moose the Mooche" (Fig. 3.2) might continue by plotting some of the conjunctions between song and participants. As the mapping of virtual, intensive forces, this means thinking about how they affect one another. What lines connect a participant's playing of "Moose the Mooche" with further proliferating, assignifying conjunctions and ruptures? For participant X, as "node 3", we might discover that this song is a favorite "rhythm changes" tune, learned by carefully attending to the original Charlie Parker recording, supplemented by attending to other iconic recordings, and a staple of late-night jams and practice sessions. Participant X might have transcribed Parker's solo and committed it to memory, along with perhaps dozens of other

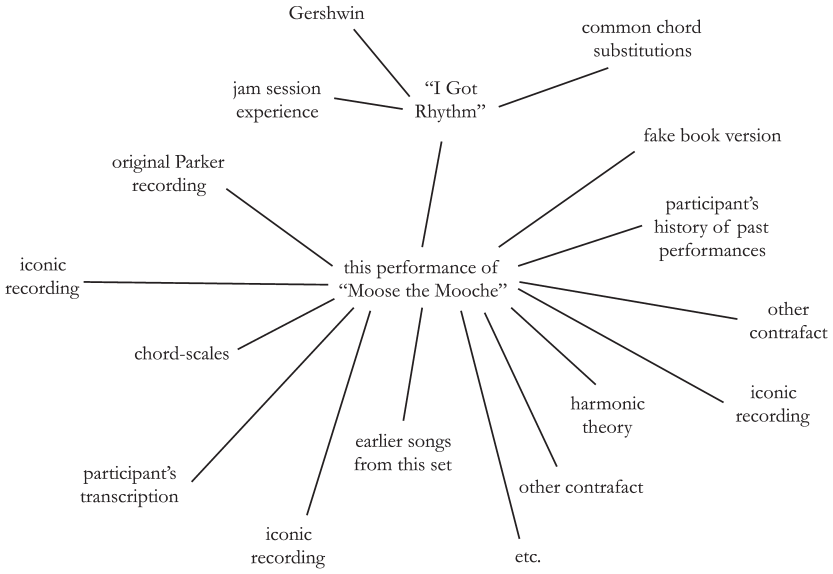

Figure 3.2 Mappings around and through "Moose the Mooche".

contemporaneous solos. They might also have internalized the narrative that demands that in order to be an "authentic" jazz musician one must work their way out from this very particular historical and geographical moment: the late-1940s New York City-grounded bebop of Charlie Parker and a small handful of co-collaborators. Improvising fluently over (the canonic jazz version of) the chord progression to George Gershwin's "I Got Rhythm" is a rite of passage for young jazz musicians – in twelve keys for a certain sub-population. Equally important is fluency with canonic counterfacts – "Anthropology", "Rhythm-a-ning", "Oleo" – and common harmonic substitutions that complexify the extended genealogy of the performance practice of "rhythm changes" and problematize its "work" status.

Contrast this with participant *Y*, "node 4" in our cartographic process. Participant *Y* knew all of the things that they were "supposed" to study, to listen to, to fold into their process of becoming-musician. But participant *Y* didn't fully buy into aspects of the story as told, the story that insists there is a proper path to become a fluent jazz musician. Participant *Y* focused on other aspects of improvisational fluency: motivic and rhythmic developmental processes, intervallic manipulation, playing "around" the changes. "Moose the Mooche" was not a focus coming up, but they know it well enough to use its resources as starting points for improvisational development.

From an affective perspective, all of these genealogical factors contribute passively to how participants *X* and *Y* are attuned to co-create in the now-ongoing context. It is in the moment of the ongoing co-creative event, call it

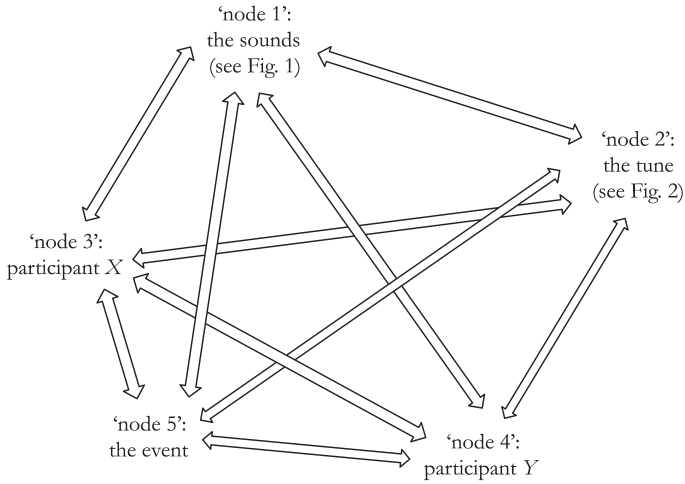

Figure 3.3 Five provisional nodes through which affect mappings can be drawn.

"node 5", that things really start to proliferate, and that the attunements of each participant are put to the test (Fig. 3.3). How does participant X's attunement condition their openness to participant Y's improvisational contributions, and vice versa, when each utterance expresses both a genealogical lineage and an openness onto next possibilities that might challenge – perhaps egregiously – the other's sense of how the collaborative encounter ought to proceed? Again, there is an important degree to which all of this is happening at a pre-conscious level, but there is also a degree to which thoughtful ethnographic engagement, with analytic attention to the ways in which the story of what happened in this ongoing series of events unfolded, can bring out important resonances.

All of this folds into music analysis, as a cartographic technique. Specifically, into the potential use that music analysis can play in mapping connections between genealogies, ongoing events and openings onto future possibilities. If every event is an expression of some aspect of the manifold genealogical conditionings – the attunements – of its participants, then careful analytic attention to the sounds produced within an event can potentially reveal fruitful temporal connections. Furthermore, since analysis occurs after the fact (perhaps by first recording and transcribing the performance), we can examine not only how the singular constitution of a given context opens up an imminent range of possibilities for next events, but we can examine which next events actually did then occur, which of course become next nodes in the proliferating cartographic process. What is interesting from a Deleuze-Guattarian perspective is how those next events become-actual upon their iteration, but are operative prior to their actualization, as are all of the other virtualities that never do become actual in a material, sounded way but are absolutely real in terms of the affective roles they play in constituting the ongoing context (for

example, if a series of events strongly suggests to enculturated insiders that some particular next event will follow, then that event has a real effect on what the context means affectively even if it never happens – even if some other next event occurs instead). Furthermore, such a cartographic analysis opens onto an additional range of virtual relations: future possibilities, drawing lines toward provisional next performances, practices and modes of relational context-forming.

To summarize, an affect methodology for engaging the lively, interactive, temporally unfolding context of a jazz performance might proceed as the creative conjunction of the following activities: collaborative playing, ethnographic work and narrative analysis, cartographic techniques and music analysis, all flowing differentially through one another, each picking up the residue of the others in an ongoing, mutually reinforcing process. It is the relational nature of this work that qualifies the process as artistic research.

Jazz, Analysis and Artistic Research

Affect theory and artistic research share as a first principle that knowledge is produced in the doing: that touching-feeling and making-as-thinking are essential, legitimate forms of knowledge production. In both affect theory and artistic research (as well as in music analysis), the question of language looms large, in the sense that what both practices intend to do is, in large part, to produce knowledge in domains that language touches only with great difficulty, if at all. This is the great conceit of artistic research – that, for example, music can itself be a form of inquiry and as such can do the work of proper research. At stake in both practices is how to disseminate research findings in words. This is probably the central question that troubles artistic research politically and institutionally, since as several authors have explained, artistic research operates within institutional contexts that value traditional outputs like articles and books.[16] The affect methodology I am suggesting here brings words, concepts and musical sounds together in ways that I hope will mitigate the problematic gap between music and writing about music by writing "from within" and by continuously folding music and writing into one another.

The title of this chapter refers to the values that thinking affectively brings to music theory and analysis, and the chapter's inclusion in this volume suggests that thinking about music theory and analysis from this perspective has implications for artistic research. I have suggested some ways in which methods from qualitative and post-qualitative analysis (ethnographic interview, narrative analysis, cartography) can be brought into dialogue with and through music analysis in order to develop a provisional understanding of how participants in a collaborative jazz performance "are finding themselves". I mean this in two senses of the phrase: how they find themselves affectively attuned, and from the perspective of orientation – through acts of finding their ways through actual and virtual collaborative spacetimes – as cartographers themselves, seeking new lines of conjunction and rupture in

order to passively shape their unfolding subjectivities. The role of music analysis in all this is threefold: (1) to draw attention to how musical sounds, as intra-acting participants, impinge affectively on human co-creators and on each other to constitute ongoing contexts; (2) to function as a cartographic technique that connects historical conditioning factors to played expressions; and (3) to remind us that theory and analysis are *always* constitutive aspects of musical subject-formations (even when theory and analysis are not formalized or codified specifically as such).

Notes

1 While that earlier essay is more about theory and the current one more about analysis, it is important not to draw too firm a distinction between the two practices.
2 Note that there is no single "jazz theory", as much a loosely consistent constellation of pedagogical practices built around themes like harmonic function and substitution, chord-scale isomorphism and melodic syntax.
3 See for example Rollins's 2014 interview on NPR's *All Things Considered*: "The thing is this: When I play, what I try to do is to reach my subconscious level. I don't want to overtly think about anything, because you can't think and play at the same time – believe me, I've tried it (*laughs*). It goes by too fast." https://www.npr.org/2014/05/03/309047616/sonny-rollins-you-cant-think-and-play-at-the-same-time [Accessed 8 December, 2020].
4 "Pre-personal" is Brian Massumi's term but is in common usage in Deleuze studies. See Massumi, "Notes on the Translation and Acknowledgments", in Deleuze and Guattari (1987, xvi).
5 Barad (2007). I will return to this formulation below.
6 See Law (2004) for more on methodological mess.
7 A (sometimes mute) tenet of affect theory is an eschewal of binary oppositions like conscious versus unconscious, in favor of a perspective that considers (a) a spectrum of identities, and (b) a concept of qualitative difference where we consider, rather than an oppositional relation that defines *y* as not-*x*, one that locates in *y* some *d* of *x*, where *d* is a differential quality in *x*'s status as, always already, a multiplicity.
8 To wit, Slonimsky's volume (Slonimsky, 1997) itself moves doubly: it describes a constellation of existing quasi-syntactic practices as well as opening imaginatively onto an open-ended range of possible future practices.
9 On the kinds of research questions that "create possibilities" rather than seek answers, see Burke and Onsman (2016, 6).
10 See Stover (2017a), para. 2.15–2.16 for a development of what we might now call the affective genealogy of a jazz musician.
11 This language foregrounds one way that non-human participants become agential actors in the formation of an ongoing context (see Barad, 2007).
12 A great many additional factors contribute to my attunement in this instance, including my mood, my physical health, my degree of attention to ongoing stimuli, the temperature in the room, ongoing feedback loops of audience- and co-performer-responses, and on and on.
13 See Stover (2017a) for more on the temporal implications of all this.
14 To this end, Bonta and Protevi describe how "rather than stay on the register of the extensive properties of actual substances […] we move to the study of the virtual structure of the intensive morphogenetic processes that give rise to such substances

by 'placing the variables themselves in a state of continuous variation'." (Bonta and Protevi, 2004, 22; interior quote from Deleuze and Guattari, 1987, 369).

15 An implication of this aesthetic register of Deleuze-Guattarian cartography is a mode of connecting with Jacques Rancière's definition of aesthetics, which involves a displacement of representational thinking. As Rosi Braidotti describes, cartography seeks to draw new kinds of "relational images" that eschew represention just as as Deleuze and Guattari's assemblages eschew reductive causal explanations (see Rancière, 2013 and Braidotti, 1994).

16 See, for instance, Chapters 4, 5, and 10 in this volume.

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4 Artistic Research in Jazz
Historical Contexts

Michael Kahr

Introduction

Although much of the debate concerning artistic research has rather recently been developed at academic institutions, advocates frequently point out historical precursors, as in a note by Gerald Bast, rector of the University of Applied Arts in Vienna (2016, 119):

> Of course, artistic research has always been there – even if it was not referred to as such – in music as well as in the visual arts. Monteverdi revolutionized music by developing the form of opera. What does Nikolaus Harnoncourt do with Monteverdi, Mozart and even Johann Strauss? Or another example, Joaquin Rodrigo's *Concerto de Aranjuez* – what did Miles Davis do with that?[1]

Notwithstanding the acknowledgment of the reflective artistic practice of these artists, whether embodied, verbally transmitted or both, their works hardly resemble the current normative requirements of artistic research. Nicholas Cook expresses a similar view, pointing out the transformation of epistemic activities in the history of music (2016, 21): "It is not, after all, as if reflective practice did not exist until the final decades of the 20th century. It is rather that practice as research reshapes it for the circumstances of today's knowledge economy."

The contributions in this book discuss various aspects of current artistic research in jazz; this chapter provides an overview of the historical contexts surrounding the field. It begins with an investigation of epistemic activities in the history of jazz, observes the interrelation of practice and academic research throughout the history of jazz theory including its various dissemination formats and discusses the methodological potential of artistic research in a case study of historical jazz research.

Precursors of Artistic Research in the History of Jazz and Popular Music

Gerald Bast's abovementioned quote portrays the artistic practices of Monteverdi, Harnoncourt and Davis as creative, innovative and influencing

the development of art – and, more importantly for this study, as epistemic endeavors. These activities can be described as the association of knowledge embodied in artistic practices with various forms of reflection and its transmission via these forms. Monteverdi's private letters, for instance, offer insight into his self-reflexive work as a composer and contributor to the development of the opera as a musical form. Harnoncourt's publications, lectures, interviews and recordings are testament to his achievements in the field of historically informed performance practice. Less obvious are reflexive accounts of Davis' influential version of the second movement of Rodrigo's *Concierto de Aranjuez* – and yet in retrospect, these accounts also yield knowledge from a range of methodical, theoretical, aesthetical, embodied and affective perspectives; the practice-based information mainly pertains to conceptual issues (artistic collaboration, re-composition, re-orchestration and re-harmonization), performative issues (tone production, phrasing and orchestral blending) and technical aspects (studio techniques, rehearsal issues and notation). This information can be found in a number of publications, based on interviews with Davis, collaborating arranger Gil Evans, the producers and some participating musicians (cf. Carr, 1998; Hentoff, 1960; Horricks, 1984, 33–35; Davis and Troupe, 1989, 241–245; Lajoie, 2003; Yudkin, 2008, 54–57). Davis' and Evans' *Concierto de Aranjuez* was based on an experimental setting fusing structural and performative characteristics of established genres, i.e., classical composition, flamenco and jazz. The artistic process involved various forms of knowledge production, led to the development of new artistic techniques and produced the score and recording as research results. The creation of this version of the *Concierto*, then, was an epistemic activity, based on explicit and implicit knowledge and – according to the aforementioned publications – discussed through various forms of reflection. The artists' reflexive accounts of various stages of the production process and their signification of affective positions were predominantly expressed in interviews and couched in the specificities of 'jazz slang'. As with the reflexive accounts of Monteverdi and Harnoncourt, Evans' and Davis' reflections were naturally situated in their specific environments, not in the current academic debates on artistic research. The identification of such work as an early form of reflective practice and epistemic activity requires a modern interpreter, both experienced in the specificity of the art form and able to retrospectively map the artists' research positions to the academic conventions of artistic research.

A notable factor for the interpretation of these historical examples as epistemic activities is their impact. Bast chose three influential artists as examples and compared their artistic achievements to artistic research; moreover, the contextualization of Davis's work in the field of Western art music (and the implied epistemic activity in the recasting of Rodrigo's classical composition as jazz) tell us something about the reception of both jazz and artistic research: might Bast, a well-known Miles Davis aficionado, have declined to mention a jazz example with less influence and impact (Bast, 2010, 9–10)? Must artistic practices be influential or regarded as 'highbrow' in order to be accepted as research? What if artistic practices in jazz (and even more so in popular music)

focus on vernacular articulations in music – can they still be called 'artistic research'? Perhaps the notion of artistic research serves these questions more appropriately by avoiding the segregating term 'artistic'? A contextual analysis regarding the impact of the Evans/Davis collaboration is certainly helpful to situate this example within the current academic debate – and yet, there are further questions regarding potentially different models of historical epistemic activity in jazz and popular music.

The following section addresses such questions and highlights examples of reflexive practice and epistemic activity and products selected from jazz history; each example represents a musician-based approach in deriving, theorizing and dispensing knowledge from within artistic practices.

George Russell and *The Lydian Chromatic Concept of Tonal Organization*

George Russell's monumental publication *The Lydian Chromatic Concept of Tonal Organization*, first published in 1953, is widely regarded as the first milestone of jazz theory (cf. Russell, 1959; Martin, 1996, 1–14; Kahr, 2008, 113–124). By providing a formalized system for composition and improvisation, the Lydian Chromatic Concept inspired a wealth of similar publications and, for all practical purposes, established the field of academic jazz theory. Russell's theory is largely musician-based, derived from the author's own practice and used conceptually in his artistic work.

According to the music theorist Henry Martin, jazz theory is commonly split into three categories (1996, 1–4): "musician-based", a category further divisible into "pedagogical" and "speculative"; "analytical", or conducted from a listener's position; and "critical", involving historical and evaluative interests. Although there are frequent overlaps, the first category has the highest potential to be reckoned the result of a reflective and epistemic practice: it assumes the "point of view of the player or composer" and teaches "models containing tools for composition or improvisation", conveying musical rudiments at the pedagogical level and "creative strategies musicians may wish to pursue as either writers or improvisers" at the "speculative" level (Martin, 1996, 2). Musician-based jazz theories are derived from and interrelated with the artistic practices of their authors, as I will discuss here, and based on a process of explicating practical knowledge by verbal and symbolic means, including explanatory texts and analytical symbols. In this sense, musician-based jazz theory resembles the process of explicating tacit knowledge according to academic conventions; this explication, in jazz composition and improvisation, may take the form of fully developed artistic concepts based on structural thought, philosophical positions, embodied sensations and potentially other aspects.[2]

Russell's concept is, according to the above-mentioned taxonomy, a speculative jazz theory: it suggests a creative 'toolbox' for composition and improvisation. The Lydian Chromatic Concept emphasizes the Lydian scale and a related system of chords; it spurred the development of chord-scale theory in jazz and its impact on the development of modal jazz is widely acknowledged.

Russell himself regarded the theory as a philosophy and a method for the creation of new musical works (Russell, 1959, 1):

> The Lydian Chromatic Concept of Tonal Organization is a chromatic concept providing the musician with an awareness of the full spectrum of tonal colors available in the equal temperament tuning. There are no rules, no "do's" or "don'ts". It is, therefore, not a system, but rather a view or philosophy of tonality in which the student, it is hoped, will find his own identity.

The theory's development is closely interrelated with Russell's own artistic practice, as declared in an interview published by Bob Blumenthal in 1973 (Blumenthal, 2016):

> The idea for the first book was conceived in about 1945, and was worked on in such a way that I was always using music to test it out […] I needed it in order to internalize the theory, and music helped me to do that; and the book needed it to see if the theories worked in practice.

Russell's first recognized composition, "Cubano-Be, Cubano-Bop", was written in 1947 for Dizzy Gillespie and His Orchestra in collaboration with Gillespie and Chano Pozo, and is generally accepted as the first modal piece in jazz (Heining, 2010, x-xi). Its most obvious characteristic is the fusion of Afro-Cuban rhythms with jazz, but Russell's particular arrangement garnered positive notice, as critic Bill Shoemaker noted in an essay commissioned in 1999 by the Library of Congress:

> […] the massive chords and propulsive rhythm of Russell's 24-bar introduction in the first movement, as well as his scoring of the piece's exultant climax, created a new synergy between bold structural design, imaginative orchestration, jazz lyricism and rhythmic excitement.

In 1948, Russell started to formally develop his theory, reportedly during an extended hospital stay. He also continued writing music during the period, producing "A Bird in Igor's Yard" for Buddy DeFranco and His Orchestra and pieces for Earl Hines, Charlie Ventura, Artie Shaw, Claude Thornhill, singer Lucy Reed, Teddy Charles, Hal McKusick and Lee Konitz. By the time the Lydian Chromatic Concept was published in 1953, Russell's theoretical ideas were already circulating via 'word of mouth' in the New York jazz scene. Russell biographer Duncan Heining saw the theory's development as closely related to the musical practice of Russell's peer group at that time, an observation confirmed by John Lewis in an interview with Ian Carr in 1992 (quoted in Heining, 2010, 102): "It was [a breakthrough], but not for me and not for the same generation that he [Russell] and I both belonged to, because the things he was using were the way we both played and thought." Just as the development of the theory was based on Russell's artistic practice and negotiated

among – and perhaps derived from – his peer group, his subsequent artistic output correlated with the evolution of his theory. In 1956 Russell released *Jazz Workshop*, his first album as a leader; this was followed by several albums for labels such as Decca, Riverside and MPS, in which "he put 'the concept' to work in a combo setting", according to Bob Blumenthal's interview. Russell's fame grew significantly after the 1959 Miles Davis album *Kind of Blue* successfully introduced modal jazz to a wider audience.

The evident impact of artistic practice on the development of his concept – and, conversely, the effect of this speculative jazz theory on his musical output – supports Russell's own perception of the strong interrelation of practice and theory in his work. The Lydian Chromatic Concept was a reflection of Russell's practice; his practice served as an experimental platform for the development of these theoretical ideas. Russell's Lydian Chromatic Concept and compositions have had a major impact on jazz and, in sum, appear as an outstanding historical example of reflected epistemic activity in the genre.

Further Examples of Musician-Based Jazz Theory

Further examples of the interrelation of practice and musician-based jazz theory include works by saxophonists Jerry Coker, Jamey Aebersold and Dave Liebman, pianists Bill Dobbins, Mark Levine and John Mehegan, trombonists David Baker and Hal Crook and composer/arrangers Don Sebesky and Ted Pease. All these musicians have been known for both their artistic achievements and their influential jazz theory books. Most of these theories are application-oriented and as such similar to Russell's Lydian Chromatic Concept; however, in contrast to Russell, these authors are more explicit about their pedagogical intentions: some of the books' titles, for instance – *How to Play Jazz and Improvise* (Aebersold, 1967), *How to Improvise* (Crook, 1991) and *Patterns for Jazz* (Coker et al., 1970) – make their intention clear: they offer methodical approaches to the acquisition of basic structures used in jazz improvisation, composition and arranging, as well as a guide to their practical application; this marks them as pedagogical jazz theories, according to Martin's classification. These theories explicate structural material but also refer to both the tacit knowledge embodied in recordings and the creative practice of teachers and students. For instance, in Coker's *Improvising Jazz,* first published in 1964 (pp. 3–4): "Five factors are chiefly responsible for the outcome of the jazz player's improvisation: intuition, intellect, emotion, sense of pitch, and habit." Most authors view their own artistic practice as vital to the explication of the musician-based knowledge in their work. This is perhaps most clearly stated by Baker, a pioneer of jazz education, in his 1994 book *A Creative Approach to Practicing Jazz: New and Exciting Strategies for Unlocking Your Creative Potential*:

> The materials contained in *A Creative Approach to Practicing Jazz* are the result of more than 45 years of trial and error, experimentation, and observing and analyzing the practice habits and attendant successes of the world's most accomplished musicians, resulting in the formulation and

> refinement of various techniques and strategies for deriving maximum benefits from the time spent in the practice room.

Similar statements can be found in the prefaces of books by other authors throughout the history of jazz education. While such groundbreaking musician-based jazz theories have little in common with current academic forms of artistic research, the pedagogical jazz theory books mentioned are undoubtedly noteworthy products of reflective practice in the history of academic jazz education.

Since the 1960s, growing numbers of academic jazz programs have helped shape the academic knowledge economy by introducing and refining working methods for students and promoting academic careers. Jazz education at the university level has adopted many of the conventions of Western art music education, including its formal language, publication formats, institutions and academic career paths. The current artistic research ecosystem, consisting of academic research programs, publications and institutions, is regarded by Nicholas Cook as a result of the historical development of Western music education (2016, 21):

> All of this might be seen as the continuation of a process that began with the transition during the 19th and early 20th centuries from the traditional, apprenticeship-based model of musical learning to the more institutionalized teaching of the conservatory. Now extended to research and to the broader range of twenty-first-century higher education institutions, performance has been disciplined in the same way as the many other highly skilled practices that have been brought within modern institutions of learning.

Accordingly, artistic research in jazz and popular music appears as a current academic phenomenon, both deeply embedded in the history of jazz and Western art music education and representative of our modern knowledge economy. Pedagogical jazz theories – notwithstanding their educational intent – may thus be seen as precursors to current artistic research methods, early attempts to disseminate musician-based knowledge and inform creative practices.

The work of several prominent jazz theorists, including pianists Bill Dobbins and Ron Miller, saxophonists Dave Liebman and Jerry Bergonzi and composer/arranger Ted Pease, can be described as both pedagogical and speculative in nature; these will be discussed in the following paragraphs.

Dobbins, in several of his publications, addresses the creative potential derived from an analytical understanding of the conceptual approach of historically significant jazz composers, arrangers and improvisers. In his book *Jazz Arranging and Composing: A Linear Approach*, published in 1986, Dobbins suggests strategies for jazz composition and arrangement based on the music of Sammy Nestico, Oliver Nelson, Duke Ellington and Gil Evans. While the work is mainly analytical, it also suggests structural models for the creation of original musical techniques and works. Similarly, Dobbins examines the

creative potential of important jazz pianists' musical devices for improvisation-based music in his series *The Contemporary Jazz Pianist, Volumes 1–4*, published in 1983, 1985 and 1988. The first two volumes discuss the more rudimental aspects of the idiom; the latter two – featuring the author's own arrangements and compositions, based on his own historically informed understanding of jazz – suggest creative strategies for the utilization of historical musical approaches in contemporary settings.

Liebman's approach to chromaticism as an improviser and composer is reflected in his complex theoretical work *A Chromatic Approach to Jazz Harmony and Melody*, published in 1991. Drawing from his own artistic experience and analysis of various examples of chromaticism in jazz and classical music, Liebman presents a theory of chromaticism in both tonal and non-tonal settings, coupled with a wealth of conceptual ideas regarding the use of chromatic material in jazz improvisation and composition. The work is clearly aimed for "the musician well-versed in the bebop language" at an "advanced university course" and, rather than offering a step-by-step method, offers "an array of approaches" to be developed according to personal preference.

Bergonzi's five-volume *Inside Improvisation* series, published 1992–2000, offer vast resources regarding melodic structures. The major categories include four-note groupings and possible permutations, systematic formulation of pentatonic ideas, jazz lines starting from different tones (with the systematic inclusion of chromatic passing tones), melodic rhythms and a thesaurus of intervallic melodies (again based on a long list of systematic permutations). Each volume is devoted to a single topic and illustrated by numerous musical examples. Due to this systematic approach – for instance, the coverage of all possible permutations of four-note groups – Bergonzi's works abound with notated examples. Many of these examples cover fundamental aspects of jazz improvisation, but Bergonzi's approach in its totality also suggests speculative aspects (in Martin's sense), aimed at the achievement of advanced musicianship.

Miller's two volumes of *Modal Jazz Composition and Harmony* (1996 and 2002) aim to evoke the student's "latent creative abilities" by introducing what the author calls the "chromatic-modal harmonic system" and "free-asymmetric form". The first volume explores the major and minor modes via an analysis of tetrachord relationships; additional emphasis is placed on emotional responses to chord qualities in the process of jazz composition. The second volume focuses on melody writing and reharmonization techniques based on analysis of the music of Gil Evans, Duke Ellington, Charles Mingus and Herbie Hancock. Similar to Dobbins' and Liebman's works, Miller draws from the work of iconic jazz musicians but offers his own analytical conceptions as creative strategies for the production of new works.

Pease's *Jazz Composition: Theory and Practice* (2003) is a comprehensive theoretical work on various aspect of jazz composition, drawing from the works of seminal jazz writers and author's own experience in teaching: "This book is about what they do", states the author in the introduction. It encompasses fundamental issues of melody, harmony, form and style in a clear and systematic

manner, but also emphasizes more recent and advanced aspects of jazz composition, such as metric modulation and extended forms.

All these books involve systematic accounts of arts-based knowledge. While Russell's Lydian Chromatic Concept represents a first milestone in jazz theory, the subsequent publications cover a range of topics related to both rudimental and speculative aspects of jazz. Rudiments facilitate the reproduction of shared conventions and stereotypical structures in jazz improvisation and composition, while speculative theories convey possible methodologies for the creation of new improvisational and compositional strategies. In all of these publications, the authors' practice-based knowledge is structurally explicated as a theoretical text and disseminated via academic language, symbols and formal structures.

The Interrelation of Practice and Research in Musicological Jazz Studies

In addition to the jazz theory books mentioned above, some early academic jazz research publications also address and interrelate with practice-based perspectives. The first issue of *Jazzforschung / Jazz Research*, published in 1970, contains the papers given at the first international jazz research conference, organized by the International Society for Jazz Research (IGJ) in 1969 in Graz, Austria: although the aim of the IGJ (and the Institute for Jazz Research, founded soon after the conference at the current University of Music and Performing Arts in Graz) was the establishment of jazz research as a subdiscipline of musicology (Kahr, 2016, 177–195), some of the papers in this issue reflect their authors' unease with the application of scientific methods in jazz studies and stress artistic positions and methods in jazz research.

Hermann Rauhe, who was later instrumental in establishing popular music as a subject of study at the Hochschule für Theater and Musik in Hamburg, criticized the "positivistic description" of rhythmical features in jazz, maintaining that artistic perception and interpretation were adequate (Rauhe, 1970, 26). Rauhe concluded that specific phenomena in jazz cannot be accurately described in scientific terms and suggested an artistic act of translation (*Ibid.*, 43).

Dieter Glawischnig's analysis of motivic development in a trombone solo by Albert Mangelsdorff bears a close connection to the author's own artistic conception (Glawischnig, 1970, 133–139). Glawischnig analyzed Mangelsdorff's motivic development as an improvisational method; Friedrich Waidacher, in a separate article in the same volume on "freedom in restriction", also described it as a distinct feature of Glawischnig's improvisational approach (Waidacher, 1970, 140–147). Hence, "motive work" appeared both as an analytical denominator and as a creative concept in Glawischnig's work; he experimented artistically with motivic development in improvisation from the late 1950s and reflected on his artistic concept in print as "motivically and formally bound improvisational free jazz"[3] as early as 1960 (Felber, 2005, 31; Kahr, 2016, 358–359; Glawischnig, 1998, 59).

Other examples of early jazz research publications combining artistic practice and reflection in the research process include Pavel Blatny's aesthetic reflections in *Jazz Research 3 / 4* and Alfred Pike's "A Phenomenology of Jazz" in Volume 2 of the *Journal of Jazz Studies* (Blatny, 1971/72, 217–224; Pike, 1974, 88–94).

Practice-based approaches have a long tradition in ethnomusicology as participant observation, a method employing adaptation and learning to understand unfamiliar practices and their social meaning, thus facilitating knowledge gathering in foreign communities. More recently, autoethnography has emerged as an artistic research method (Manovski, 2014). Examples of ethnomusicological research relevant to the field of jazz research include Paul F. Berliner's monumental book *Thinking in Jazz* (1994) and Ingrid Monson's *Saying Something* (1996), both of which involve the authors' personal experience with, and reflection on, artistic practices.

Artistic research has also been included more recently in interdisciplinary research initiatives on improvisation and jazz. The major project *Improvisation, Community, Social Practice* (ICASP, 2007–2013)[4] and the subsequently established International Institute for Critical Studies in Improvisation (IICSI, 2013-)[5] were both initiated and directed by Ajay Heble and funded by the Canadian Social Sciences and Humanities Research Council. The project was based on the core hypothesis that "musical improvisation is a crucial model for political, cultural, and ethical dialogue and action"; it investigated improvisation "as a model for social change" in the areas of law and justice, pedagogy, social policy, transcultural understanding, gender and the body, text and media.[6] The initiative was instrumental in developing the field of critical studies in improvisation, as represented in publications including the journal *Critical Studies in Improvisation / Études critiques en improvisation* (2004-) and various books (Caines and Heble, 2015; Born, Lewis and Straw, 2017; Siddall and Waterman 2016; Fischlin, Heble and Lipsitz, 2013; Heble and Wallace, 2013; Lewis and Piekut, 2017). The IICSI builds and expands upon the accomplishments of the ICASP; "Improvisation as Practice-Based Research" is one of the designated research areas. In general, the project, institute and publications have explored the social dimensions of improvisation, with an emphasis on practice-based perspectives, across art forms including jazz and popular music.

Artistic research also played a role in the international research project *Rhythm Changes* (2010–2013), led by Tony Whyton and funded through the Humanities European Research Area (HERA).[7] The *Rhythm Changes* team integrated the artistic research approaches of investigators such as principal researcher Petter Frost-Fadnes, who also contributes a chapter to this volume.[8]

The Dissemination of Tacit Knowledge in Jazz: Oral History and "Jazz Talk"

The dissemination of tacit, practice-based knowledge in jazz is not limited to academic forms of representation. As I have argued elsewhere, the implicit

structural knowledge embodied in the musical conception of jazz composers and improvisers is independent from its formal appearance as a theory (Kahr, 2008, 114–115): it is rather a specific form of tacit knowledge referring to the unconscious 'know-how' in the artistic process.[9] While it is undisputed that the written representation of an artistic conception (e.g. in the form of a theory) is an effective form of dissemination, structural knowledge is not necessarily bound to its written form.

Tacit knowledge in jazz has been expressed and developed throughout jazz history by the music's rich oral tradition, which includes informal language (i.e. 'jazz talk'), physical gestures, processual and sensory aspects (Berliner, 1994; Monson, 1996; Kahr, 2016; Kahr, 2017). The implicit conceptual knowledge in musicians' minds, bodies and practice is different from a written theoretical concept, yet artistic practitioners do perform epistemic activities, acknowledged – for instance – in informal, vernacular language based on culturally embedded codes for "telling a story" or "sayin' something" (Monson, 1996).

Prominent examples for the use of 'jazz talk' in the communication of tacit, practice-based knowledge can be found in the work of pianists Ethan Iverson and Brad Mehldau. Iverson has published reflexive accounts of his own and other musicians' artistic practice from 2005, first on his internet blog *Do The Math* and now on his personal website.[10] His analyses, commentary, occasionally polemical essays and interviews with other jazz artists convey critical arguments on various aspects of jazz and provide insight into his personal musical perception. Mehldau is known for his elaborate CD booklet texts, which proffer analytical and contextual information as well as reflections on his artistic approach. Mehldau has published analyses and used poetic language and references to literary work in descriptions of his artistic perspective.

'Jazz talk' is an important aspect of the crowdfunding platform *ArtistShare*, developed exclusively for jazz projects with the aim of connecting "creative artists with fans in order to share the creative process and fund the creation of new artistic works".[11] A number of jazz artists, such as Maria Schneider, Kevin Eubanks, Chris Potter and Billy Childs, offer insight into their creative processes via rehearsal videos, lectures and written commentary and invite selected audience members to meet and participate in the production processes. *ArtistShare* is a commercial platform, but it has unquestionably contributed to the production and sharing of artistic knowledge among participating artists, producers and audience members.

Artistic Research as a Method in Historical Jazz Research

Artistic research as a method in historical jazz research was introduced in the research project *Jazz & the City: Identity of a Capital of Jazz*, funded by the Austrian Science Fund FWF in its program for artistic research (2011–2013, cf. Kahr, 2016, 2020).[12] It focused on aspects of identity and inheritance in the history of jazz in the Austrian city of Graz from 1965 to 2015. The project was largely based on conventional musicological methodology: historical research

provided contextual background information, with several experimental artistic research settings providing supplementary material, exploring artistic perspectives – including various forms of tacit knowledge – in local jazz history.

One of these experiments involved a compositional process with the aim of processing sounding, conceptual, performance-based, bodily and sensory aspects of artistic practice of the Graz jazz tradition. The work's progress was reflected and documented in a composition diary, in line with similar previous approaches in studies of artistic processes (Zembylas and Niederauer, 2016; Zembylas and Dürr, 2009; Germeraad, 2013). The diary entries attempted to provide the greatest possible transparency and replicability for the findings.[13]

Knowledge about the author's position as an artist-researcher and member of the local jazz scene as a pianist, composer and educator since 1993 is crucial to intersubjectivity in the interpretation of these research results. His artistic collaborations with a wide range of local and visiting musicians has afforded him a good understanding of the predominant musical approaches in the local jazz scene; he has also been engaged in the organization of performances and involved in the work of concert promoters and representatives of the local arts council.

The following analyses of selected examples from the author's composition *Annäherung* [Rapproachement] illustrate the application of artistic research in a study of local jazz history in Graz, revealing details of the applied compositional processes. The analyses also describe the multidirectional streams of knowledge between archival research, structural analysis of sound recordings and jazz composition.

The opening section of the piece artistically reflects the rather ambiguous dualism of 'traditional' and 'free' approaches as represented in the media reception of jazz history in Graz. This dualism is common in jazz history and – based on interviews with witnesses and local media coverage – was particularly observable in Graz during the 1970s. Two locally influential artists and consecutive chairs of the Institute for Jazz, Dieter Glawischnig (b. 1938) and Harald Neuwirth (b. 1939), were seen as leaders of the 'free' and 'mainstream/traditional' camps, respectively.[14] Indeed, their relationship was characterized by open rivalry concerning career matters, academic methodologies and philosophical views.[15] However, a closer investigation reveals commonalities in their artistic approaches, suggesting a more nuanced interpretation of their artistic identities: both engaged in a wide range of musical projects involving both traditional and free approaches.[16]

The reflection of such complex relationships in the author's composition led to the exploration of correlating musical representations of divergence, ambiguity and fusion, all based on their interrelation to Graz jazz history and the author's artistic perception thereof. Hence, the piece begins with a collective free improvisation by trumpet, saxophone, trombone, bass and drums, accompanied by a repeated piano motive. The motive, with a tonal center of D♯, provides a sense of underlying stability but also functions as a source of ambiguity, due to its chromatic structure and mirrored metric subdivisions (4+3:3+4:3+4:4+3; see Fig. 4.1). The metric subdivision is inspired by the

Figure 4.1 Chromatic structure and mirrored metric subdivisions, piano motive, opening section

mirror effect of the harmonic structure in Thelonious Monk's composition "Epistrophy" (C♯^{7}–D^{7}, D♯^{7}–E^{7}:D♯^{7}–E^{7}, C♯^{7}–D^{7}). Monk's music has had a considerable impact on the local jazz scene, largely due to the influence of pianists Neuwirth, Uli Rennert and Claus Raible.[17]

The piano motive was conceived both as a structuring element and as a challenge for the improvisers and serves as both in the performance and recording of the composition:[18] although its tonal center provides harmonic direction and the chromatic progression inspired melodic inventiveness, the metric structure was difficult to grasp while improvising.[19] On the recording, the improvisations can be heard as either opposing or interacting with the predetermined placement of the piano chords, but this performative uncertainty is not necessarily incongruous with the intention: rather, it can be interpreted as a sensory account of the unrestrained artistic approaches of early modern jazz musicians in Graz, adding another perspective to the historical data on the perceived 'free'/'traditional' dichotomy.

The next example offers some insight into artistic transformation and aspects of style in local jazz history. The music is based on two melodic lines performed respectively by Glawischnig and Neuwirth at the festival *Erste Grazer Internationale Jazztage 1965*.[20] The first line was transcribed from a recording of Glawischnig's performance: the author's internalization of Glawischnig's original melody and improvisations around it led to a rhythmic transformation and an Ellingtonesque arrangement for solo piano, which was then used in the composition (see Fig. 4.2).

The transcribed and rearranged melody of the A section in Neuwirth's "Waltz for You" is introduced first as a solo by baritone saxophone, then in a four-voice harmonization for trumpet, alto saxophone, tenor saxophone and trombone, with baritone saxophone doubling the trumpet lead (see Fig. 4.3). The harmonization of the passage is based on the Dorian mode (Cm^{7}) and utilizes various harmonization techniques evoking the mainstream modern jazz sound of the early 1960s – for instance, Oliver Nelson's recordings in that period (e.g. Nelson, 1961).

Nelson's music had a long-lasting impact on the jazz scene in Graz: some of his arrangements were used as educational tools at the Institute for Jazz; he also inspired vibraphonist and composer Berndt Luef, leader of the Jazztett Forum Graz. This well-known local band has existed since 1993 and consists of five horns, vibraphone, bass and drums; the author was also influenced by his encounters with Nelson's music at the jazz institute and listening to and

Figure 4.2 Transformation of an excerpt of Glawischnig's piano performance

Figure 4.3 Harmonization of a transcribed melody based on Neuwirths "Waltz for You", A section

performing with Luef's ensemble. Knowledge of this approach, including the ability to improvise well in this particular style, has long been regarded as a quality common to many jazz musicians in Graz – and is in fact a prerequisite for successful graduation from the Institute for Jazz. This approach, both in theory and practice, represents a significant aspect of the 'jazz tradition' in the view of many local musicians.

Another artistic concept of convergence regarding the free/traditionalist dichotomy is reflected in the final passage of *Annäherung*'s opening section. Utilizing a five-part harmonization of the melody in the B section of Neuwirth's "Waltz for You" (see Fig. 4.4), the passage modulates via a chromatic progression ($B^{(add9)}$/F# – Cm^{11}/G) back to the opening piano motive, which now serves as the framework for a piano solo in 3/4 Waltz feel.

As the foregoing examples have attempted to show, the composition *Annäherung* forges a connection between the creative process of composition and the exploration of historical data and artistic strategies, as observed in jazz music made in Graz. The topics examined here include intellectual concepts, physical and emotional experiences as well as the author's own memories and were transformed and expressed in the composition and recording of the piece. While the historical and structural aspects must be communicated verbally, the sensory data of the artistic research is available both through the descriptions and examples included here – but most directly by listening to the recording.[21] Only on the recording, for instance, can one experience the ambiguity conveyed by the improvisers as they attempt to interact with each other and the piano motive and develop chromatic melodies based on the tonal center and metric structure of the piece's opening section. Similarly, the recording concretely demonstrates the different emotional implications embodied in the melody fragments of Glawischnig and Neuwirth and elucidates aspects of the local jazz tradition.

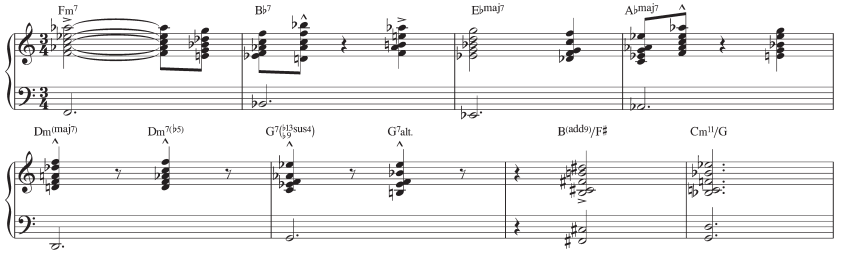

Figure 4.4 Harmonization of a transcribed melody based on Neuwirths "Waltz for You", B section, modulation to the piano motive

Summary and Conclusion

Epistemic activities in the arts, based on the interrelation of practice and reflection, have been cited as important sources of new knowledge about art and its development. Gerald Bast's speculations regarding Miles Davis' artistic work as a precursor of artistic research have gained empirical support from an investigation of the historical interrelations between artistic experimentation and structural knowledge in jazz. Evidence in this regard was provided throughout the history of academically relevant jazz theory, starting with George Russell's landmark publication of the *Lydian Chromatic Concept of Tonal Organization*. Reflexive accounts of artistic processes may exist in a written format equaling or emulating the current requirements of academic artistic research, but they may also take other forms – for instance, non-academic verbal and non-verbal accounts, which may require retrospective analysis by qualified agents such as trained musicians. Thus, precursors of artistic research in the history of jazz and popular music can be found (1) in the work of outstanding protagonists, (2) in musician-based jazz theories, (3) in non-academic settings and (4) in academic research.

Just as the dynamic interrelation between artistic practice, systematic reflection and participation in academic discourses constituted relevant aspects in the development of jazz throughout the past 50 years, the understanding of this past may benefit from an equally inclusive perspective, which involves arts-based research positions, theories and methods beyond the established musicological and sociological approaches. Artistic research in the sense of a historically informed performance and composition practice, which has been instrumental in establishing artistic research in classical music, has begun to contribute new knowledge about historical jazz practices (Heyman, 2015; Pillai, 2018; Kahr, 2016, 2020). In addition, by considering the significance of the Afro-American tradition for the development of jazz, the adaption of a non-Eurocentric (or, at least not exclusively Eurocentric) viewpoint in the reflection of jazz history must gain momentum (McMullen, 2017).[22] This involves the consideration of the past as an inclusive combination of retractable data

and facts as well as fluid, dynamic and sometime messy conditions, which are embodied in artistic practices and their reception.

The case study in this chapter provided an example of generating knowledge about the art form's history by considering artistic practices as an inclusive element of the methodical toolkit in historical jazz research. The author's knowledge involved artistic experiences and musicological competence; his artistic research method aimed at increasing the epistemic dimension of both in the context of historical jazz in the city of Graz; the dissemination of this form of research involved text, discourse, performance, composition, recordings and structural analysis.[23]

In sum, the information on artistic research in its historical contexts and the case study described in this chapter represent a potential means of effectively combining musicological and arts-based approaches in jazz history research – ideally leading to an understanding of jazz history that is both cognitive and multi-sensorial in nature.

Notes

1 Translated from German by the author: "Natürlich hat es künstlerische Forschung schon immer gegeben. Auch wenn sie nicht so genannt wurde. In der Musik ebenso wie in der bildenden Kunst. Monteverdi hat die Musik revolutioniert, indem er die Form der Oper entwickelte. Was macht Nikolaus Harnoncourt aus Monteverdi, aus Mozart oder sogar Johann Strauß? Oder ein anderes Beispiel. Das Concerto de Aranjuez von Joaquin Rodrigo – und was hat Miles Davis daraus gemacht?"
2 In a previous publication, I suggested the addition of the category "abstract theory" to account for jazz musicians' tacit knowledge as a form of musician-based jazz theory (Kahr, 2008, 114–115).
3 Translated from German by the author: "motivisch und formal gebundener Free Jazz".
4 Improvisation, Community and Social Practice. Project website, http://www.improvcommunity.ca/about
5 Institute for Critical Studies in Improvisation. Project website, http://improvisationinstitute.ca
6 *Ibid.*
7 Rhythm Changes. Project website, www.rhythmchanges.net
8 See Chapter 5 in this book (Petter Frost Fadnes: Wordplay: Negotiating the Conservatory 'Culture Clash').
9 Recent scholarly attempts have mainly attempted to codify aspects of tacit knowledge in artistic practice from a sociological perspective; for instance, philosopher and social scientist Tasos Zembylas has dissected artistic practice in music composition and literary writing (cf. Zembylas and Niederauer, 2016; Zembylas and Dürr, 2009).
10 Ethan Iverson. Personal website, https://ethaniverson.com
11 ArtistShare. Commercial website, http://www.artistshare.com
12 *Jazz & the City: Identity of a Capital of Jazz*. Project website, http://jazzforschung.kug.ac.at/institut-16-jazzforschung/forschung/jazz-the-city-identitaet-einer-jazzhauptstadt.html
13 The complete diary entries, including the full score of the composition and a professional recording of the piece, are published with the historical documentation

in a monograph (Kahr, 2016). The publication includes a detailed account of the history of academic jazz in Graz, with biographical information of significant protagonists and accounts of their artistic processes and the resulting music.

14 For detailed biographies of the two pianists, as well as examples of the media's representation of the "free" vs. "traditional" or "innovative" vs. "mainstream" struggle in Graz, refer to Kahr, 2016 and Kahr, 2020.

15 For instance, vibraphonist and composer Berndt Luef, who studied at the jazz institute in the 1970s, reports on aspects of the "free" and "traditional" approaches in Graz and the rivalry between Glawischnig and Neuwirth (Luef, n.d.).

16 Bassist Adelhard Roidinger, who worked with Neuwirth in Graz prior to his international career, talked about their early experiments with free improvisation in an interview (Piller, 2015). Some of Neuwirth's students who pursued careers beyond mainstream jazz include Mathias Rüegg, founder of the *Vienna Art Orchestra*, Bernhard Lang and Peter Ablinger, both recognized contemporary music composers.

17 Raible's reviewers frequently point out his indebtedness to Monk (see http://www.clausraible.com); Rennert's CD *Project M* explored Monk's music (Rennert, 2007); Neuwirth presented a Monk-centered concert program at the *Jazzsommer Graz* festival in 2004.

18 The recording is released on CD (Kahr, 2016a).

19 The participating musicians reported that they were unable to consciously respond to the notated meter.

20 The two-day festival was one of the jazz institute's first major public presentations; it was recorded and broadcast by the Austrian broadcasting corporation and received much attention in the local newspapers (Kolleritsch, 1995, 201–203).

21 Besides the inclusion of the recording in the previously mentioned monograph (Kahr, 2016) and on the CD (Kahr, 2016a), a low-resolution version can be streamed at http://jazz-the-city-and-me.webnode.at/shop/.

22 Also, see Chapter 6 in this book (Tracy McMullen, The Lessons of Jazz: What We Teach When We Teach Jazz in College).

23 See https://jazzandthecity.org/final-report/ [Accessed 23 July 2020].

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Part II

Institutional and Pedagogical Considerations

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5 Wordplay

Negotiating the Conservatory 'Culture Clash'

Petter Frost Fadnes

Introduction

In 1963, Becker published the essay "The Culture of a Deviant Group", categorizing – as a cultural "case in point" – the modern-day "dance musician" (jazz musician) as having a "distinctive way of life"; "bizarre and unconventional". These 'deviants' in turn referred to all outsiders as "squares", equally signifying, as Becker puts it, "a kind of person"; "a quality of behavior and object" (1997, 55–57). Although Becker's view of jazz cultures' extreme social unconventionality is questionable – even by 1960s' standards – vestiges of similar stereotyping has nevertheless been surprisingly resilient from both perspectives: the "squares" and the "deviant" alike communicating jazz cultures as something inherently unconventional and different. In fact, decades beyond Becker's study, we still see versions of the 'jazz deviant' being perpetuated throughout cultural life, and no less so within our academic institutions; where jazz-staffers cultivate outsidedness as an inherent part of their group identity. As an early curator of 'new jazz studies', Tony Whyton reminds us, these representations of "natural outsiders", also show how "anti-intellectualism" and "anti-educational stances" are historically engrained facets of jazz cultures (2014, 24 and 28).[1]

On a metalevel, different Cartesian angles are here at play, including attitudes that the intellect is somehow undermining creativity/artistry, and a rejection of Western enlightenment (including academia) as somewhat 'soulless' and 'straight'. Both perspectives are clichéd authenticity-markers with a long-reaching history – including a racially subverted mind-over-body-hierarchy, in which Louis Armstrong is less threatening towards the white bourgeoisie as 'the natural genius' than an artistic intellectual. From the 'jazzcamp' point of view, the binary line is solidified further by levels of exclusion, where 'non-jazzers'/non-performers (e.g. theorists) become the equivalent of 'squares'; demoting other colleagues as utterly unfamiliar with their professional workings. The fear of academization within such a binary, should not be confused with an unwillingness to *learn*, but rather reflects a form of hierarchical unconformity and cultural protectionism. Similar schismatic attitudes are of course found amongst theorists, with a widespread belief that research constitutes the written word, and that performers are unwilling *and*

unable to describe their own practices through any sense of rigorous, scientific logic. In addition, the conservatories themselves are slow to adapt to the needs of new artforms outside the realms of classical music. As Bash and Kuzmich (1985) stipulated over three decades ago: "Perhaps due to the nature of jazz, with its emphasis on improvisation and its roots in the social/cultural context of music, jazz research suffered some initial resistance from faculty advisors, often resulting in a lack of support, direction and focus" (p.14). Although this (hopefully) reflects a somewhat caricaturized version of the status quo, it might nevertheless be more accurate than we would like to think – even more than fifty years after jazz was well and truly established as part of higher education (HE). Acutely aware of large institutional variables, this chapter criticizes conservatories' inability to solve the 'culture clash', whilst also recognizing developments within the educational sciences, artistic research (AR), and the artistic fields themselves – including increased uses of transdisciplinarity – which might help negotiate future solutions.

An Emerging Field

As the 1990s drew to a close, and HE-Europe gathered under the Bologna agreement (1999), we saw music conservatories merging (assimilating) with the larger, more robust universities to comply with new regulation on course construction, research and formal expertise amongst staff (PhDs and professorships). In an attempt to shift on a par with other fields, various countries kick-started PhD-programs, new conference arenas and networks in order to 'raise the standard' of conservatory research to that of the university music department (where forms of musicology reigned strong). For example, the 1992 UK decision to include "creative work" (Butt, 2017, 74) into the *Research Assessment Exercise* (RAE), gave arts-based research access to funds based on a "direct assessment", but also highlighted questions on how e.g. publications would pair up with more traditional, scientific-based research. Correspondingly, music colleges "became eligible to enter the exercise in 1996"; with "composition and performance regarded as the equivalent of research" (Page et al., 2001, 27). Other important UK-factors were the Arts and Humanities Research Funding Council's decision "to award grants for practice in creative and performing arts and design", plus the "publication of guidelines for practical doctorates by the UK Graduate Council" (Mason, 2008, 280). These, and similar national policies, created new opportunities for funding within performance-based research (including growth of third-cycle programs), but also forced subsequent publications into models somewhat unfit to capture the essence of arts-based practices. Nevertheless, backed by new guidelines and funding, the University of Leeds graduated its first PhD in Performance in 2004,[2] and Guildhall School of Music organized (in 2006) a pioneering conference dedicated to the conservatory sector ("The Reflective Conservatoire"). As early as the late 1990s, Australia had developed its Doctor of Creative Arts (DCA) (see Milech and Schilo, 2004), and on a different hemisphere, Norway established a nationwide doctorate-equivalent-program

('PhD-light') for the performing arts sector in 2003 (e.g. Malterud, 2012); upgraded to formal PhD from 2018. Similarly, Sweden developed "full educational progression" in "Fine, Applied and Performing Arts" in 2009 (Lilja, 2015, 17), Austria around the same time, with Finland offering a "Doctor of Music degree" as early as 1981 (with AR as the standard term from 2007) (ibid., 42). In sum, by 2013, 280 institutions were offering arts-based PhDs globally, varying in philosophy and content, e.g. from the 'Nordic model' (research for art) to the 'UK model' (tied to scientific rigor), and what Elkins calls the "lack of a North American model" ("no consensus") (2013, 10–11).

A process of jazz academization had already pre-empted these formalizations of third-cycle programs, where, through mid-1990s-publications like Gabbard's *Jazz among the Discourses* (1995),[3] jazz research started to bypass "traditional analytical tools"; attempting to escape the compartmentalization of practice "as something 'static' and 'frozen'" (Dybo, 2002, 131). Third-cycle programs nevertheless provided important institutional opportunities to upgrade qualifications; solidifying connection between academia and performance. Developing further, the inclusion of performance-based research became included in a number of exciting new publications,[4] conferences, interest groups and research programs; e.g. *Journal for Artistic Research* (JAR), *Research Catalogue* (AR database), the *SHARE* network ("enhancing the '3rd cycle' of arts research and education" (SHARE, 2018)), plus the various outcomes of HERA JRP *Rhythm Changes* (2010–2013); which saw performance-based jazz research forming part of a large EU-funded call (other examples listed by Whyton, 2014, 28). Despite all this, a major 'spanner in the works' is that national research schemes are still exclusionary, Norway disregarding performance-outputs at *any level* within their result-based HE-funding, and Australia increasingly, in the words of Wilson, excluding the arts "from the list of acceptable text-based outputs that are applied to demonstrate research performance" – illustration further, from a global perspective, that the struggle is "as valid today as it was in the mid-1990s" (2018, 25).

The 'Culture Clash'

Grove Music Online reminds us that the first DMus (a certain Mr Fayrfax) was awarded at Oxford as far back as 1511; continuing with references to an Oxbridge rivalry, that requirements were "stricter at Cambridge, where proof of theoretical and practical experience was required" (Page et al., 2001, 5). Although the specifics of this are unclear, declaring theory and practice as separate entities nevertheless provide clues towards a binary with a long and comprehensive history. In fact, as the field developed through modern times, challenges emerged between two, well-established working cultures: With the conservatory sector traditionally having a profession-oriented focus, new demands from the more theory based university sector revealed large conflicts of interest, ranging from pedagogical outlook and management structures, to understandings of research and performance practices. Students were squeezed between staff-interests, and many conservatories were divided

between performers and theorists; often with highly limited levels of knowledge exchange (KE) between camps.

What is described as the *academic*, *academization*, or theoretical *intervention* to otherwise non-academic artistic contexts, is nevertheless curiously contradictory: Murphy (2009) highlighting how academization propagates uniformity, how education is "changing the music", and that the inclusion of theory merely refine 'Aebersold-type' approaches to improvising. Whyton (2006) has similar concerns – but from an opposite standpoint – arguing how "'jazz studies' tends to be split between institutions that run performance-based programmes" and "those that view the subject from a more socio-critical perspective". And whereas the "former have a tendency to approach jazz using the 'American' model, focusing on 'repertoire' studies" ("the ABC methodology – Aebersold/Baker/Coker"), the latter, according to Whyton, highlights the "impact of music" (p.76). Back to Murphy (2009), he sees transdisciplinary solutions through a "holistic" blend between "academic and non-academic"; for educators to pay a closer attention to the "student discourse", and the ability to place "meaningful knowledge" within a practical context (p.172). Butt (2017) agrees, claiming how "neither the faith in idealist forms of university knowledge nor the thorough scepticism about the potential of aesthetic understanding in the university appears justified" (p.80). According to Davey (2010), the whole thing is based on "a typography of unease", overcome – as he sees it – by a use of "theoria" ("contemplation"), language as hermeneutics ("that art addresses us"), and the "sharing of subject matter". Although Davey here wisely touches upon different epistemologies/ontologies (showing how they complement each other), he gives few clues towards potential transdisciplinarity, beyond the cryptic; that "theory serves as a midwife to practice", and the obvious; that "art is fundamentally dialogical" (pp.20–23).

The multiplicity of subject-object relations this brings up, nevertheless gives credence to social contexts and contrasting ideologies, where, in the words of Winter et al., "the producer is linked to an emphasis on his or her values". This recognizes individuality, but also the artist as "constructed and constrained by the politics of perspective; positioned in relation to race, gender, class, disability, nationality, and the rest" (Winter, Griffiths and Green, 2000, 28). Finally, the *SHARE Handbook for Artistic Research Education*[5] (Wilson and Ruiten, 2013), sums up by bringing the debate back to different *forms of knowledge* (epistemological "and/or" ontological), in addition to (still present) politicized pressures questioning the existence of what is now commonly known as *artistic research* (AR). To complicate things further, the AR 'ethos' (the content of which will be discussed further) has a number of more or less defined 'siblings' derived from slightly different needs within the field, such as *Artistic Practice*, *Arts-based Research*, *Practice as Research* (PaR), and *Performance Research* (PR). There are looser terms as well, e.g. what Wilson calls "practice-infused research" (where "practice permeates the research on all levels") (Wilson, 2018, vi) and the more transdisciplinary, *artistic experimentation in music*; "between the boundaries of the conventional categories of performance" (see Crispin and Gilmore, 2014). With regards to the field of

jazz-studies, I prefer the term *performative research (PeR?)* – "[t]aking its name from J.L. Austin's speech act theory" (Haseman, 2006) – and a Butlerian use of *performativity*.[6] As a curiosity, the official Norwegian policy-term for AR is *kunstnerisk utviklingsarbeid*, loosely translated as *artistic development work*, with the word *research* removed altogether.[7] Sweden initially used the same terminology, but chose to upgrade it to AR in 2013 (Lilja, 2015), presumably to align itself to a growing global AR discourse.

Whatever you choose to call fields of research preoccupied with performative perspectives, we – broadly speaking – see how the practice-based field highlights a discourse equally preoccupied with establishing internal epistemologies (including criteria for judge-based PhDs), together with a unified 'front' against external forces (political or academic) questioning the worth – or existence – of an artistic-ontological disposition. This 'two-front attitude', cuts off engagement with the broader academic field, as well as limited interaction at an institutional level; including KE and a potential for subject-based synergies. Ample warning has been given, Whyton (2006) for example – in his suitably named article "Birth of the School" – showing how 'aversions' against forms of systematized epistemology can be traced back to jazz-pedagogy's lack of critical engagement within its programs. Beyond "opportunities to cultivate and benchmark" skills, Whyton subsequently saw how pedagogical publications where lacking a "critical engagement with the educators' methodologies", as well as "the nature of jazz education itself" (p.65). Around the same time, in 2007, I co-authored a paper entitled "Integrating theory and practice in conservatoires" (Parsonage, Fadnes and Taylor, 2007), in which we questioned the lack of "informed performance" within our undergraduate programs. As Western societies place upon the conservatory to train musicians within increasing number of idioms, we similarly believed programs had to adapt and develop in parallel in order to produce innovative musicians for the future – instead of the past. Although we recognized how critical reflection can be seen "as distractions" from 'actual playing', we nevertheless demonstrated (based on case-studies) how theory-practice integrations help irradiate binary conflicts and "funnel all subjects and skills into performance outcomes" (pp.309–310). Nelson (2013) seconds this at a tertiary level, with the sobering reminder that the "impulsion to write critical commentary comes more perhaps from a research imperative than a motivation to develop an arts practice", but that through such writings "artists come better to understand their practices in context" and "enhances the artist's work" (p.59). MacLeod and Holdridge (2010) similarly talk about how "the cornerstone of originality and personal expression" is based on contextuality; "that contemporary art practice" is about positioning "the individual's practice within an appropriate critical discourse and contextual framework" (p.203). I uphold the claim from over ten years ago however, that such insight – valuing the role of the critical/reflective artistic – needs to be part of a learning path from day one. As the years pass and jazz research continues to shift from pockets of individuals within the conservatories to fully-fledged PhD programs on a global scale, we see how it becomes virtually impossible to engrain critical thinking

into doctoral candidates who have previously gone through degree-programs without reflection forming part of their coursework.[8]

This does not question the validity of research in/through art in itself, but recognize ongoing problems between merging – in the broadest sense – two working cultures; in which theorized research and art practices are logically linked on the one hand, and separate(d) by institutionalized cultures on the other. The way in which AR challenges these working cultures does indeed help transfer the excitement of arts aesthetics into the 'squareness' of academia, but also reveals the level of scepticism the AR field have towards being indoctrinated ('swallowed up') by academization to begin with. Through such a discourse of 'otherness', Dombois et al. sees AR as "independent of 'discipline'" (2012, 11) and a defined methodology, reflecting an AR field eager to avoid the 'trappings' of an academic ontology in order to uphold artistic freedom and theoretical independence. Even the main European Conservatory network, *The Association Européenne des* Conservatoires (AEC), express similar sentiments: that AR "should be viewed inclusively", avoiding "a particular orthodoxy" and "avail itself of any research discipline or method relevant to its purpose" (*Key Concepts for AEC Members: Artistic Research*, 2015). What, in fact, is to be considered *purposely relevant* (selected by whom, why and how) is not clarified beyond references to the (obvious) "subjective nature" (ibid.) of AR. I am not actually questioning the variety, adaptability, or even lack of agreed methodology, I am questioning the institutionalized unwillingness to discuss what an AR methodology *might* be and its potential implication to specific AR approaches. From a perspective of knowledge exchange (KE), Candlin (2000) suggests that "instead of trying to fit academic regulations", AR should be utilized "as a way of re-thinking academic conventions and scholarly requirements" (p.96). As a way of 'changing from within', this is only achievable, as I see it, by actively engaging with academia in a transdisciplinary manner befitting both AR *as well as* jazz research.

In fact – unexciting as it might sound – the binaries I raise do not necessarily occur between the perceived rigorous knowledge systems within science and the more esoteric, unconscious arts practices (neither necessarily true), but rather between working cultures; institutionalized practices, infrastructure, compartmentalized pedagogies and (the lack of) communication between camps. Sarath (2013) here reminds us that although a "fragmented conception of the musical landscape" might be the norm within academia, a more progressive perspective see all parts as "inextricably linked areas within a broader whole" (p.3). In addition, emerging generations of performers with PhD-qualifications are 'stuck' in-between binaries of academic/artistic preconceptions; unbelonging to both, provoking suspicions of 'hidden agendas'; accused of 'covert' academization of musical practices, or the dumbing down of research. It might sound like I am forcing a chasm between camps, but the truth is that many of the first-generation PhDs who are still active artists, have expressed similar experiences – myself included. As mentioned earlier, the issue is also a question about the *role* of jazz within the modern conservatory, including its consistent placement as merely a set

of systematized binaries – e.g. canonized practices vs. experimentalism, commerciality vs. audience reception, research vs. arts practices – under one institutional roof. In fact, by bringing jazz into a polarized conservatory discourse, we 'put fuel to the fire' by introducing a performance culture with less of a track record than its classical siblings; where academization (see e.g. Tønsberg, 2013; Whyton, 2006), critical reflection and new jazz studies (Parsonage et al., 2007; Whyton, 2012) and canon and innovation within pedagogy (Prouty, 2004) are hot topics in themselves.

Recognizing the conservatory model (from infrastructure to pedagogy) as a classical-ideology-construction, gives clues to why jazz finds it hard to establish institutionalized teaching and research ideologies within formalized degree programs – at least without compromising its working methods. Turned around, such a short academic track record is also emancipatory, with less of an academic-canonical 'burden', adaptable to ever-changing contemporary demands. Idiomatically for example, jazz is used to innovative use of technology, is highly adaptable to experimental performance situations, is comfortable with stylistic hybridity, and is used to working with a broad spectrum of conceptual ideas. Summarized as an ideological foundation therefore, the majority of jazz-based PhD-projects are preoccupied with innovation and artistic non-conformity, more than for example repertoire-based projects and canonical restraints. Opposite, the classical conservatory is constructed on ideologies reaching back to the teachings of Plato and a 'modern' conservatory boasting connections to a post-reformation Europe (see e.g. Mark, 2013). And, although music initially "played a small role in university curricula", it was nevertheless firmly established by the "early 19th century" (Page et al., 2001). Jazz on the other hand – and although relying on folk-based oralities with its own ancient history – developed in parallel to modernity and established a conservatory footing as late as post 1960s.[9] The consequences for a "new" idiom within institutions set up for classical music are still evident, where the infrastructure of conservatories (see e.g. Kingsbury, 2010) – including managerial structures and overall curriculum of courses – are based on a classical ideology; favoring single-study practice rooms, large lecture auditoriums and an overall pedagogical and managerial 'ethos' based on repertoire-based training.

A lack of ensemble-room facilities, for example, limits collective experimentation and restricts possibilities for collective practices and theory in the same room. Similarly, canon-steered-pedagogy means a reluctance to adapt curriculum according to individual genre-specialized needs and an outspoken emphasis on 'right and wrong'. Although this chapter cannot delve into contradictions between pedagogy and creative practices prevalent across the sector, suffice to say the current direction of jazz courses does not exactly aid the development of AR within the field; i.e. what starts as a 'gap' in early student days evolve into an influential 'chasm' as they develop tertiary projects. Prouty says that "the distinction between such approaches within improvisational pedagogy" has to do with how "they are framed within the instructional situation" (2004, 9); or, put otherwise, that theory and practice has to

be merged from early instructional encounters in order for children, students and professionals to embrace attitudes of inclusiveness and transdisciplinarity. Working against this, we see how subversive pedagogies and exclusionism have a tendency to be reinforced by policy and structure, with for example the Norwegian regulations for professorship-upgrades distinguishing between documenting competence based on "scientific or artistic"[10] merits – effectively demanding a double effort for researchers combining the two. As an ironic twist, Kingsbury (2010) reminds us that the perceived divisions between artistic-focused teachers and managerial structures undermine "the strength of the "studio" social organization in the conservatory", where "the aural tradition" in the classroom – vital to the jazz artform – is miraculously maintained against all odds (p.57). Furthermore, Kingsbury brings *talent* into the discussion, and how esteem, authority and – ultimately – power become deciding factors ("judgement") in a valuation system in which reflection and theory – within day-to-day practical training – have limited access. The suspicion goes both ways in other words; artistic aurality superseding scientific theorizing, and theory disengaging with the arts it was meant to serve. A key, as I see it, is how Kingsbury sees the "connection between the 'verbal performance' and the 'performative utterance' aspects of critical evaluation" (2010, 75), in which the credibility of criticism is reliant on esteem, established as a co-dependent relationship within a peer-network.

In Search of Knowledge

In Norway, the status of AR has – ever since 1995 – been equaled to scientific research by *The Norwegian University and University Colleges Act*. As a result, the government set up a nationwide *Artistic Research Fellowship Program* in 2003; both in order to raise the competency level within the arts, music and dance academies (e.g. providing future qualified teacher-practitioners), but also to secure a steady stream of funding towards AR within the respective disciplines. Specifically, the program is meant to accept artistic projects "at a high level", "with national and international relevance", and where "different forms of reflection are central"; including "new insight, knowledge and/or experience" (see Malterud et al., 2015 (my translation)). Furthermore, forms of reflection are highlighted as compulsive to the artistic work, asking the candidates to mediate process, national/international standing and how the project may contribute towards developments in the field. Several questions may be raised here, in terms of *what forms* of reflection are expected and how e.g. innovation and experimentalism are evaluated as having "international standard" – especially if the standard is challenged as part of the project.

"*What is critical reflection?*" Vassenden (2013) subsequently asks in the title to his report (commissioned by the Norwegian Fellowship program), in which a viable attempt is made to produce an answer to a difficult question. Based on fourteen critical reflections (final submissions) by Norwegian artistic research fellows, the report is meant to enlighten us to the common construction of critical reflection and help us understand its "value" within doctoral-level AR.

Vassenden refers to "goals for the work" based on program regulations and Final Assessment instructions, how they deliver a certain "freedom of choice" with regards to "medium and form", but that "a written product" nevertheless is the most common reflective output (2013, 2–4). In other words, written language is *chosen* where innovative technology and new media are possible alternatives. Through forms of writing therefore, the candidate needs to find a language which may convey, discuss and problematize multiple aspects of self-experience, where "creative practice, filtered through a different medium, also becomes visible to the creative subject"; beyond mere "'tacit' experience" (ibid., 5–6).

Within jazz cultures, Prouty (2011) reminds us, the "written discourse" exists in "parallel" with the creative object, ranging "from music-focused musicological analysis, to critical opinion journalism, to culturally grounded studies, and nearly everything in between". In much the same way jazz is "open to multiple interpretations", Prouty feels a "written discourse should reflect this", and that such writings – as 'free standing' bridges between performativity and text – constitute "a culture by itself" (p.71). Through new jazz studies, questions have frequently arisen in which way such writings can serve to maintain the uniqueness of jazz eclecticism, as well as adhere to academic standards of critical reflection. I have for a long time suggested the subjective perspective as an obvious solution (see e.g. Fadnes, 2015, 2020; Fadnes and Thortveit, 2016), one where other fields could learn from e.g. phenomenological 'jazz writings' and where jazz ideologies demonstrate how subject/object-knowledge is transmittable/transferrable in accordance with critical standards. Back to Vassenden, although his fourteen samples vary in style and structure, the most interesting commonality is the apparent need to emphasize a "biographical presentation" and to give subjective narrative a "central place" (2013, 14). Vassenden is ambiguous towards the lack of critical distance; valuing the insight of subjectivity, but criticizes tendencies towards poor contextualization and naïve perspectives. This touches upon a phenomenological (Merleau-Ponty, 1996) or ecological (Windsor and de Bézenac, 2012) realization that "all thinking is inexorably embodied" (Nelson, 2013, 57); where artistic practices are transmittable not through the totally objective, but neither through complete subjectivity. Nelson identifies this as "intersubjective sharing through reflecting on mutual engagements in a practice", and to, at the very least, "assist in disseminating the (initially embodied) mode of knowing" (2013, 57). Prouty seconds this, highlighting how "written texts can serve as an expression of jazz knowledge as an act of community and cultural agency". Writers have "constructed methods and models for *knowing* jazz [my emphasis]" Prouty continues, juxtaposing the importance of the written text with the "musical content of that canon", without which "little meaning" is transmittable "beyond the reception of individual artists by individual listeners" (2011, 71). Although canon here tends to refer to performativity in a historical context, even the most innovative/contemporary practices work in constant juxtaposition to historicity, offering a timeless credence to Prouty's arguments.

A substantial mid-1990s UK-study by Hockey and Allen-Collinson (2000) on the subject of PhDs and supervision in art and design, identified early 'teething-problems' within the array of new practice-based programs. Although the study identified the importance of combining "the creative with the analytic"; including how "the resulting work should portray the interconnectedness of the two dimensions", they nevertheless saw how supervisors struggled to maintain a balance towards PhD-candidates unfamiliar with an "analytic dimension" and "the academic written form". They furthermore saw how practice and theory were conflicted, with tendencies of "an overcompensation in practice", or, opposite, a focus on theory "to the detriment of the quality of practice". Through this newfound academic "anxiety" (anyone?), Hockey and Allen-Collinson pinpointed "'over-theorization' or 'pseudo-sophistication'" (p.350) as endemic problems. Although these concerned were raised twenty years ago, little seems to have changed. In fact, moving beyond 'the trappings' of pseudo-AR, it might be useful to ask the question: What – *exactly* – is the experiential perspective these artists are trying so hard to convey?

Nelson (2013) reminds us that although there now is a substantial literature on performance as research (PaR), it is nevertheless "dominated by the presentation of case-studies which do not always bring out clearly what constitutes research" (p.4). Nelson hinting at a resistance towards an "institutionalized research culture" and any related "systems of knowledge" (Nelson, 2013, 5). Although, according to Milech and Schilo (2004), creative outputs "entail research", "not all such work instantiates research in the sense meant when we speak of research in a university context". The imperative, according to them, that we "do not confuse the politics" of "governmental funding formulas" with "our responsibilities for developing higher degree research programs in the fields of creative and production arts" (p.6).

Recognizing forms of reflection as already integrated qualities of most artistic practices (something Butt (2017) refers to as the "ironic cleavage" between artistic researchers and artists), our main concern is not with the reflection itself (e.g. the reasoned, processual thinking *behind or within*), but the realization that it loses much of its value (as transferable knowledge) through poor attempts at structuring reflections through what is believed to be academic rigor. This is not to say we should demand a scientifically proven evidence of process, but rather that the process in question is communicable beyond the work itself. And although there are vast disagreements as to what *rigor* means in this context, I am referring to systematic work based on an adapted methodology – interconnected and adapted to artistic methodologies – which might help secure knowledge closely related to the artistic work in question.[11] The pitfalls are here grounded on the mentioned pseudo-sophistication, or what Butt calls "quasi-scientific definitions of research" (2017, 81), undermining (well-meant) attempts at 'rigorousness' and good practice.

Another key to modern-day research – and one of the pillars of the European Commission – is the implication of knowledge exchange (KE) and transferability. Recognizing how innovative practices have inbuilt oppositional stances to canon and normative thinking (i.e. Whyton's 'anti-ideologies'

referred to earlier), I am nevertheless skeptical when parts of the AR-field disregard the significance of transferability. In my mind, devaluing arguments for academic legitimization, does nothing but underestimate the inherent value of the work. Without KE, the "ironic cleavage" referred to earlier – i.e. the sometimes-hazy separation between PhD-work and professional practice – becomes a dangerously strong argument against future HE-investments within the AR-field. Against such preconceptions, Coady and Webb (2017) concluded in their study of eleven Australian PhD-candidates, how "a culture of sharing innovative processes" was a crucial motivating factor "at least as much as the aim of transforming one's artistic voice or the aim of contributing to standing academic discourse" (p.78). At the same time – and although such translations between people and disciplines is key to bridging the 'gap' – it may also constitute a quasi-scientific methodology; virtually destroying transferrable prospects more than aiding knowledge sharing. Rather typically to the discourse, no practical solutions were provided by Coady and Webb's study towards this. In fact, through 'degrational translations' (e.g. from practice to language), poor use of theoretical frameworks, or lack of self-insight, the essence of what Nelson (2013, 48) calls "knowledge-producing" qualities, is lost beyond the subjective perspective of the artist. In his much-quoted book, *Educating Artistic Vision*, Eisner (1972) postulated – decades ago – the intrinsic values of artistic experience, how it makes us care about "the inner aspects of experience"; "developing our perceptibility, and hence enable us to savor the previously insignificant" (p.281). In sum, these different perspectives in isolation are unable to mediate the true potentials for deep-found knowledge. Hence practitioners lack language to translate what Nelson refers to as a broader sense of ideology-based "self-reflexivity" (2013, 53), theoreticians the insight to grasp practical knowledge, and institutions the ability to break the deadlock.

From Education to Research

Prolific founder of *The Bauhaus*, Walter Gropius (1965), justified the new pedagogical approaches of his school on the basis that architecture and design had to develop alongside new aesthetics and new needs, and that evolving technologies (i.e. mass production machinery) should be able to realize "standards of excellent", not just mere "transient novelties". Against "the old dilettante handicraft spirit", Gropius demanded his students complete an apprenticeship; "a good all-round training for hand and eye" and "a practical first step in mastering industrial processes". Gropius wanted the best of two worlds; aesthetic innovation and handicraft on the one side, and the knowledge, skills and technology to translate such creativity into mass-production on the other. Gropius seems to merge the "artist of genius" (pure creativity) with the "ordinary artisan" (practical creativity), inserting artistry in everyday life, everyday objects and the morphology of modern life, whereas the academies "drained them of their vitality and brought about the artist's complete isolation from the community" (pp.52–58).

Recent decades' rather exhaustive criticism of Wynton Marsalis' curation of the Lincoln Jazz Orchestra comes to mind, and e.g. Davis' (2012) remarks on the "veritable hall of mirrors" when *LCJO* performed Ellington's "Portrait of Louis Armstrong" for Cootie Williams: "Wynton reflecting Cootie reflecting Pops" (p.69). It highlights the splintering of jazz into the "rebel elite" versus the "preservationist establishment" (ibid. p.72) according to Davis; with Nisenson joining the choir with a corresponding image of Lincoln Center as a "cultural museum" (1997, p.19). Other narratives purvey learning and developmental processes as justifications towards how we value the end result. 'Woodshedding' (the work) and 'ax' (the instrument) illustrating some of the cliché-laden, but still much-used terminology, around which *The American Dialect Society* published the following:

> Presumably the rehearser went outside, in or near the woodshed, to practice. The usual instrument for activity around the woodshed is an ax, and so the rehearsing musician might liken his musical instrument to an ax when woodshedding.
>
> (Cohen, 2006, 189)

Taking this further, presumed jazz-fanatics, MDs Haidet and Picchioni (2016), use woodshedding as a metaphor for developing "communicative chops" in the clinic, where the "essence of the woodshedding paradigm requires educators to acknowledge that skilled communication is developed during practice, *and* that practice exists outside the realm of the formal educational session" (pp.1209–1210). Crucially, the two MDs highlight how "a common notion in the medical communication skills literature is that learners build skill during formal education activities", whereas, as they see it, skills are acquired through practice; in "the clinical woodshed" (ibid.).

Barrett (2007) takes a Foucauldian perspective, and reminds us that not only is artistic work fluent, ambiguous and subjective, so it is – together with language, theory and method – merely a function (not an "individual consciousness" (p.136)). Empowering practice with agency enables us to move beyond the production of the author as constant, see how 'the work' carries author function in itself, and how – through discourse – perspectives of art and language are amalgamated and made meaningful. Similarly, Judith Butler (2011) used the term performativity in order to describe identity formation and its effect on exteriority; a process "of acts", "both intentional and performative" in the "construction of meaning" (pp.190–191). Butler developed performativity from Foucault, from which Barrett argues that "the characteristics that the author function bestows on discourse can be extrapolated and applied as a critical method for evaluating one's own creative output as well as that of others" (2007, 139). This, in turn, reveals how a multiplicity of meanings highlights the need to reflect perspectives in an orderly manner, where theorizing – reflection, criticism, or what Wilson (2018, x) refers to as "exposing practice" – needs developing beyond the artist or the work alone. By shifting

towards a discourse where as many perspectives as possible are discussed, art becomes part of a system, a society and a world. Barrett clarifies:

> Materials, methods *and* theoretical ideas and paradigms may be viewed as the apparatuses, or procedures of production from which the research design emerges. They are not the sole invention of the individual artist/researcher […], but are forged in relation to established or antecedent methods and ideas.
>
> (Barrett, 2007, 138, her italics)

In fact, similar to Gropius, Foucault lists values *within* the work which effectively enables author function, which – when adapted to our field – includes 1) transferability ("appropriation"), 2) hierarchy ("valorization"), 3) concept and technique ("complex operation"), 4) academy ("institutional system") and 5) context and relevance ("do not affect all discourses") (Barrett, 2007; Rabinow, 1984). The problem, also in parallel to Gropius, is that the cutting-edge/avant-garde/experimental is constantly *challenging* many of these Foucauldian values; limiting AR to interacting with contexts (canonical as well as contemporary) through prescribed and tested, high-art-value-systems. Although, Foucault sees the author function as "characteristic of the mode of existence, circulation and functioning of certain discourses within society" (Rabinow, 1984, 108), it nevertheless situates artistic 'texts' within certain prescribed parameters – a prescribed discourse – in which neither the experimental arts, nor innovative research is truly valued. Foucault's solution is highlighting certain authors as "founders of discursivity" ("not just the authors of their own work"), in which the arts can be seen as discursive contributions – perpetuating a form of fluidity and subjective meaning beyond the 'work' in a classic, high-art sense; "something other than their discourse, yet something belonging to what they founded" (Rabinow, 1984, 114).

Conclusion

Although the anti-creative ghost of 'ABC-type' teaching still looms heavily, I nevertheless observe (at least from a personal perspective) how doctoral-level projects outside canonical restrictions are more successful in bridging the gap between theory and practice. A possible explanation is that most levels of emancipation from canonical-artistic thinking demand transdisciplinarity in both practice and theory, which, as we know, happens to be the foundations to any successful research project. There is, however, a direct challenge to our discourse within such a statement: how do we bring repertoire-based projects into a contemporary setting and make them relevant on a par with experimentalism. A solution is dependent on the discourse's capacity to detach itself from the objectification of the canon (Whyton, 2010), and rather shift its focus towards artistic and artefactual re-readings (Fadnes, 2020). Only through such a detachment is the conservatory capable of guiding future generations of

jazz musicians-come-researchers and shift the deadlock within its walls. This discoursal schism might also explain why some performers are reluctant to engage in research to begin with, where a resistance towards placing tradition into the experimental realm of research, in effect blocks off any hope of dialogue between camps. Of course, this could also be down to the inquisitive, creative nature of experimentalism and that – arguably – canonized practices have less to gain from research. In fact, on the contrary, conservative teaching has everything to lose, at least if the goal in itself is merely a preservation of the past.

Whatever idiomatic/non-idiomatic (Bailey, 1993) approaches are chosen however, AR should avoid the stigmas of 'museum art', university art, or whatever we chose to call it, and rather aim towards reflecting vital, relevant aesthetics 'bursting' with transferable knowledge and artistic meaning. Along similar lines, Whyton (2014) argues how we need to realize the symbiotic development of jazz-academia as "part of a complex interrelationship and negotiation between musicians, educators and institutions"[12] (p.25). My concern therefore, is less about the interaction between academia and 'reallife' (this is fluent and constant), and more about the institutional barriers between performance and academic structures *within* the conservatories themselves. In other words, I question to what extent these institutions are able to create, maintain and develop innovative jazz cultures robust enough to 'carry the torch' for future generations of creative musicians. This is perpetuated through to the third-cycle level, where I still see (across institutions) how researches are forced to make a painful choice between disciplines, people and structures, in order to 'fit in'.[13] The blame goes both ways in other words.

Communication (Dias, 2019), social virtuosity (Nicols, 2007), collective work methods (Gebhardt and Whyton, 2015), integration, sustainability, utilization of public spaces (Fadnes, 2020) and what the Leeds-artist Dave Lynch call "superposition"[14] (2018), all point towards increased interdisciplinary and a modern-day reality where the arts are considered central to virtually all research disciplines. Returning to Gropius a final time, he talks about "a double moral responsibility" (1965, p.89), consisting of making students conscious to all sides of contemporarity, but also how to guide such knowledge into practice. The jazz 'working-methods' utilize improvisation in ways which makes its KE increasingly attractive (e.g. jazz showing good practice towards social, integrational and sustainable interaction), and where the conservatory needs to 'step-up' and create centers of excellence worthy of the artform – what McNay (1999) describes in a spirit of Butlerian performativity, as "creative or innovative action", detached "from its original conditions of enactment", evolved as "resources for further action" (p.189). This, finally, constitutes fluidity between camps, disciplines and approaches, where a possible solution is found in the spheres of what Borgdorff calls "boundary work"; "between academia and the art-world" (in Borgdorff and Schwab, 2012, 117), and where – at least personally – I hope to see a gradual enculturation of AR-based PhDs within our institutions, in which *academization* is used as a positive opportunity

for all the actors of conservatory life. In short, imagine a daily, collegial interaction, in which increased transdisciplinarity becomes the empowerment we need to bridge 'the culture clash' once and for all.

Notes

1 Including forms of high-art rejection, development of popular culture and a cultivation of the underground.
2 Coincidentally, the three first candidates graduating from the University of Leeds program (starting with me in 2004), were all on the topic on improvised music.
3 The list of writers in the Gabbard-book represent a variety of backgrounds, utilizing a broad spectrum of theoretical platforms such as comparative literature, African American studies, communication theory, music and film, English literature, American studies, history and philosophy.
4 E.g. launched in 1970, *The Journal of Jazz Studies*, as Prouty notes, "was the first peer-reviewed academic publication devoted specifically to jazz" (2011, 83).
5 Published by the European network *SHARE* (*Step-Change for Higher Arts Research and Education*).
6 Distinguishing between *AR, PaR, PR* (and others) is a virtual minefield, and I feel a thorough terminology debate will be side-tracking my main argumentation. I will however draw on literature and thinkings related to them all where applicable to jazz research from a performative perspective.
7 In Malterud et al. (2015), they hint that omitting *research* from the terminology might have been an error of judgement when legislation regarding the Norwegian AR was formulated, the rapport simultaneously concluding that an official change in policy today would be both complicated and costly.
8 Similar arguments are made by Milech and Schilo (2004).
9 Exceptions exist, and as Kahr (2017) reminds us, the establishment of jazz courses may actually be traced back to 1928, and Dr. Hoch'sche Konservatorium in Frankfurt am Main; unfortunately closed by the Nazis in 1933.
10 Ministry of Education and Research, *Universitets- og Høyskoleloven*/Act relating to Universities and University Colleges.
11 Henk Borgdorff raised similar concerns in his keynote, "Against Isolationism – Artistic Research as STS by other means", at the Artistic Research Forum (Bergen, 25 September 2018), where he demonstrated the potential for Science and technology studies as a possible AR-tool.
12 Remembering back to my days at Leeds College of Music, I now realise how much the College both *formed- and was informed* by the city jazz-scene.
13 Farrin (2017), through his discussions of punk-rebelliousness, refers to how our institutions construct "a managerial state", in which we (staff/senior researchers) "cannot teach our students to be free when so many of our voices are subdued" (p.103).
14 University of Leeds has taken the innovative step of appointing *Cultural Institute Fellows* (Kat Austen, Christophe de Bézenac and Dave Lynch) to "collaborate with research scientists to create new works" and "to explore areas of science research and emerging technologies" (see www.leeds.ac.uk). This places the arts within the centre of innovative research and mediation at the University and give possible clues to how other disciplines get to learn and benefit directly from artistic practices.

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6 The Lessons of Jazz

What We Teach When We Teach Jazz in College

Tracy McMullen

This chapter examines the transfer of knowledge in and through jazz practice, asking what types of knowledge are passed on in different contexts. Jazz entered the academy several decades ago and young musicians now primarily learn jazz in an academic environment, not through the informal mentorship of professional jazz musicians as was common in the 1920s through the 1950s. I highlight some of the lesser discussed problems with learning jazz in colleges and universities, that is, the sexism and racism that I link with the overall value system put forward by many of these programs. At its worst, jazz education *teaches* sexism and racism to its students. By prizing a certain "how" of jazz (the technical aspects) and not the "why" or the "what it's for", jazz programs pass on subtle or not so subtle prejudices embedded in a Eurocentric value system and marginalize other value systems, including what pianist, scholar and advocate, Dr. Billy Taylor argued was the "Afro-American value system" of jazz. My chapter calls for a shift in the understanding of what jazz *is* in higher education and therefore a shift in what is important to teach when we teach jazz as a practice. After a brief discussion of the problem as I see it, I examine three eminent jazz musicians who have merged the collective, utilitarian, ethical and spiritual dimensions of jazz practice with formalized jazz education: Dr. Billy Taylor, Jason Moran and Terri Lyne Carrington. Their work provides direction for a new approach to jazz education that includes the "why" and the "what it's for" in order to help jazz reach heights that have thus far been hindered by sexism and racism.[1]

At a recent talk at New York University, Jason Moran stated that most jazz programs are able to teach the "how" of jazz but do not address the "why" or the "what it's for" (Moran, 2018). By "how", Moran meant the formal and technical elements: harmony, melodic development, tone production, instrumental facility, "vocabulary". Postsecondary jazz programs across the country produce hundreds of capable jazz musicians every year able to perform "jazz" as defined by these formal characteristics. But as Olly Wilson articulated in the 1980s, "black music" has always had a strong social function, reinforcing shared ideals as part of the social fabric (Wilson, 1983). Wilson put forward his argument primarily because jazz was being measured by the yardstick of Western aesthetic ideals that defined (great) art as something that would reside in a museum or concert hall, not the (Baptist) church, tavern, or house

party. Western art was made by a great man (and his mind), not collectively produced and transmitted through multiple listening, dancing, singing and playing bodies. And while some dent has been made in this bias, the "Eurocentric Value system", to follow Taylor, is still with us when it comes to formal jazz education in schools. A focus on the individual over the collective, on scores and other written material, and on precision (clear timbres, rhythmic regularity, distinct notes) as opposed to "blur" (muddy timbres, rhythmic flexibility, smeared or variously obscured notes), pervade jazz pedagogy in most colleges and high schools. Patriarchy and white supremacy are also Eurocentric values passed down while teaching jazz performance, though less discussed than the previous characteristics.[2]

Jazz entered postsecondary education in the 1950s with the intent of training musicians to fill dance bands (Stewart, 2007, 41). Alex Stewart writes: "the two colleges with the oldest jazz programs, North Texas [begun in 1946] and Berklee (founded in 1954) emphasized big band performance and became recruiting grounds for bandleaders such as Woody Herman and Maynard Ferguson" (pp. 42–43). The goal was pragmatic. When Eitan Wilf asked an instructor about the philosophy behind the pedagogy at Berklee, the instructor responded, "We at Berklee don't have a philosophy – it's all pragmatic. Berk's idea was, 'get them a job – help them make a living, […] – treat it as a trade.' […]. Teach them craft, not creativity" (quoted in Wilf, 2014, 35). The emphasis was on written scores and ensemble playing, not trios or quartets focused on improvisation. Such an approach "fit easily with existing pedagogy" of classical music training (Stewart, 2007, 40). For many, jazz's entrance into colleges and universities is considered a progressive action. Paul Berliner places the move in the context of the Civil Rights Movement, the rise of African American studies programs, and a desire to "legitimize" jazz (Berliner, 1994, 56). I think, however, that the effort needs to be recognized as one for and by white men who may or may not have had larger progressive motives. The evidence shows that these programs were designed by white men for white men who saw college as a possibility for themselves and who wanted to be jazz musicians. Further, much of the desire to legitimize jazz came from white men's longing for institutional respect for their own musical taste. Nevertheless, jazz colleges do have benefits for aspiring jazz musicians. They offer a place for musicians to find each other and can provide a home base in a "jazz" city where students can participate in the scene (Berliner, 1994, 56). Some African American jazz artists were employed in colleges and universities at this time, though they were vastly outnumbered by white instructors.[3]

Thus, while these programs provided training for many musicians in jazz they have carried with them pervasive cultural problems, which have also been taught as part and parcel of the "trade". For example, there has been widespread sexism in these programs. With the recent rise of the #MeToo movement, women have begun to speak out in mass regarding harassment and sexism in jazz programs (see, for example, Larimer, 2017). Racism is also embedded in a structure that privileges the perspectives and practices of white men. All of my jazz instructors at North Texas were white men.[4] The program

was developed with and maintained Eurocentric values that focused on formal characteristics separated from issues of culture. My teachers had not been trained in cultural studies and were not comfortable addressing issues of race, so these issues were studiously avoided. True to its long-standing mission, the school was about creating performers, composers and teachers of performance and composition. As the largest music school in the country, the values that UNT teaches (along with other colleges and universities that follow the same model and tradition) are passed on to younger generations as these students become teachers. It is imperative, therefore, that we think about what we are teaching when we teach jazz. I turn to three examples of musician-educators who have been advocating for a different value system in jazz education.

Jazz pianist, Dr. Billy Taylor, worked tirelessly to explain how jazz music had a different value system from the Western view and how important it was to understand this value system in order to properly understand the music. Taylor came of age as a musician in the 1940s, a time when jazz was becoming not only modern, but modernist – that is, according to the jazz writers and critics. And part of this modernist idea was the notion of art for art's sake. As art historian Christopher Witcombe puts it, "Art for Art's Sake is basically a call for release from the tyranny of meaning and purpose" (Witcombe, 2000). Art freed from the tyranny of purpose combined with Eurocentric expectations for formal and technical perfection as the primary yardstick for measuring worth. If a musician did not achieve this in his or her solo, the art was considered of a lesser quality. All other goals or motivations were superfluous. As bebop was increasingly discussed in terms of high and modern art, and considered all the better for it, Taylor resisted. Far from tyrannical, meaning and purpose were fundamental to the art form and if this was not understood, the point of the music was being missed. *Something else* was happening that critics could not see or hear. Taylor wanted to shift the larger narrative developing about jazz and he earned his PhD in Music in 1975 from the University of Massachusetts, Amherst, not only to pursue and research his ideas on jazz history but in support of his growing role as a jazz advocate.

In his book, *Jazz Piano: History and Development*, and memoir, *The Jazz Life of Dr. Billy Taylor*, Taylor refined and articulated the views that guided his activities. There were two main qualities of jazz that Taylor felt were overlooked by many white jazz "experts", qualities that Taylor argued came from an Afro-American value system: functionality and collectivity. Functionality meant that the music had a purpose, something Olly Wilson described as the "utilitarian ideal" of Black music.[5] Black music is embedded into the social fabric; it is not separated out into an object to be consumed as "art" in the Western sense. The Western view of art, as Wilson articulates, views art as separate from everyday life. This creates the distinction between art and entertainment. Black Music is still art, but following a different tradition, one that links music with purpose. Art for love or happiness or truth or justice's sake, say. Taylor writes, "The Afro-American value system was the determining factor of what elements remained in the music or were discarded. Did the music make you want to dance, party, get drunk, make love? Did it

express frustration, anger, joy, sadness? Afro-American music had to have a purpose, had to say something to the person; or it was altered or discarded" (Taylor, 1982, 86). John Gennari echoes this when he compares African American formal and informal criticism by writers and musicians to that of Euro-American critics.

> There's nothing essentially "black" that unites these black musicians/writers; there's also no mistaking that these voices are collectively distinct from those of the white critics. In particular, black musician/critics have tended to emphasize the social messages embodied in the music and usually have been more concerned with jazz's function as a form of communal bonding, ritual, and social interaction – jazz not just as a collection of sounds, but as a way of living in the world.
>
> (Gennari, 2006, 6)

Thus, holding different conceptions of what jazz *is*. "Extra-musical" elements are part of jazz –thus, not, in fact, "extra-musical" or ancillary to a "real" jazz of chord changes and melodic development.

The second quality white critics missed was jazz's collectivity. Learning jazz in Washington, D.C. in his youth and playing on 52nd Street during the growth of bebop, Taylor knew innovations did not spring up whole cloth from one artist, but that changes were gradual and far-reaching as musicians played and listened to one another. Taylor admired Gillespie and Parker, but he also knew that bebop, as it was now being called, was not something "invented" by them. In interviews with jazz scholar Patrick Burke, Taylor stated that

> musicians like Ben Webster and others were actually playing things that were leading the way to what was going to be done by the beboppers… and it was already being done to some extent, […] so it wasn't a thing where all of a sudden, like many books say, all of a sudden this new thing just…sprung out of nowhere, and it surprised everybody. It grew out of musicians who were already expanding the melodic and harmonic language in their own way.
>
> (Taylor, quoted in Burke, 2008, 160)

Again and again, Taylor would advocate for a broader understanding of how jazz developed and develops. As he concisely explained, "thousands of jazz musicians whose names have been forgotten were responsible for each stage of development and evolution of jazz" (Taylor, 1982, 74).

Taylor witnessed a world of camaraderie, not ruthless competition. He explained with tremendous gratitude how Art Tatum and other elder musicians shared information, encouraged and mentored him and other young players, something he was careful to carry on as he became an elder. Further, against the linear thesis put forward by many jazz writers, teachers taught students, but they would also learn from them. There was not a through line of jazz greats innovating in single file, but a whole world of interconnection where students

taught teachers, those who were recorded learned from those who never had the opportunity, and men learned from women. Taylor's attention to the communal aspect of jazz led him to draw out the hidden figures who influenced him and jazz more broadly, but did not fit the mold of great innovator and hero that so many critics sought. Taylor points to the ubiquity of these musicians when he writes:

> The common vocabulary has been enhanced by the compositions and concepts of musicians who did not record, did not travel extensively, and for a variety of reasons were not given the recognition they should have received. Almost every well-known jazz musician can give testimony to such artists from his or her personal experience.
>
> (Taylor, 1982, 203)

Some of these hidden figures were women. Taylor credits his female piano and music teachers as important influences, including Elmira Streets when he was in elementary school, Mary Lorraine Europe (James Reese Europe's sister) at Dunbar High School, and Undine Smith Moore, with whom he studied composition at Virginia State. He described Norma Shepherd as the best pianist in Washington, D.C. Shepherd moved to New York before Taylor and it was she who ushered him into the scene, including introducing him to his idol, Art Tatum. Taylor writes:

> In my opinion, Norma could outplay anyone in DC. Nevertheless, it was hard for women to make a career out of playing back in those days. […]. Even now, I realize that I'm indebted to her for fostering the respect and admiration I've had for the female musicians that I've encountered over the course of my career.
>
> (Taylor and Reed, 2013, 55)

Taylor's explicit acknowledgment of women musicians is reiterated in his consistent use of "he or she", a practice far from universal in books on any subject in 1982.

Billy Taylor offers a helpful model in jazz education. He was committed to mainstream institutions, earning a Ph.D., developing and teaching in university jazz programs, and becoming director of jazz at the Kennedy Center. Yet, he offered a very different narrative and value system than the Great Man narrative with its focus on the individual and on art as separate from everyday life. He did not ignore women artists and he emphasized the collective, communal and functional aspects of jazz that stem from a specific African American value system. He was committed to reshaping the jazz narrative in ways that have not been widely recognized in jazz scholarship.[6] His focus on collectivity sidelined his voice in jazz stories that prized the classic American myth of the hero-innovator. What would be genuinely innovative, of course, would be to disrupt the paradigm that elevates the one "great man" in order to complicate our idea of jazz value.

Although there is probably no way around the heralding of Jason Moran as a "great man" of jazz, the pianist has furthered Taylor's mission to move understandings of jazz away from Eurocentric models and toward African American traditions of collectivity and purpose. Taking over as artistic director for jazz at the Kennedy Center after Taylor's death in 2010, Moran has much in common with his predecessor. He is skilled at merging necessary African American values into a Eurocentric institution and he believes that such merging can transform the institution and, indeed, American culture itself. In a talk at New York University's Tisch School of the Arts, Moran described jazz as a way to *do* things, a way to engage the world. For Max Roach, Moran mused, jazz may have been a "way to fight" (injustice). As for Moran, he told the audience that he "*thinks* through [his] *love* of jazz" (Moran, 2018). In order to unpack this thinking through the love of jazz, I begin with how jazz initially spoke through Moran as a type of transmission. While the transmission happened through a recording, I argue that it is a type of body-to-body transmission that comes from recognizing an aspect of our humanity in another. I then go on to discuss how Moran continues and deepens the activities of Taylor in his emphasis on the collective, utilitarian aspects of jazz.

Growing up in Houston in the 1980s, Jason Moran's ears were first captured by the sounds of hip hop artists like Public Enemy and De La Soul. It was at age 14, however, that he had an *experience*. His parents were watching a TV news report about Texas Congressman, Mickey Leland, a man who was a friend of theirs. He and 15 others had just died in a plane crash in Africa. As Moran recalls it, the TV's sound was off and the only sound in the room was Thelonious Monk playing a solo version of his composition, "'Round Midnight," from the stereo. As his parents were taking in and processing terrible news about a friend and political leader whose life had been cut short at the age of 44, Monk's music "was speaking" and seemed to have conveyed to Moran the ability to hold such depth and reality of the human condition. It was adequate to the moment and may have demonstrated to Moran the power of music and its ability to offer something necessary in the face of what life asks of us. The young Moran thought, "I need to do that. Whatever he does, I want to do" (quoted in Wilkinson, 2013).

This experience was so important to the young artist that not only does he refer to it regularly in interviews, at his NYU talk he played the recording of the song in its entirety for the audience, not an excerpt as is more common in such instances. I felt myself and the audience become restless as we reached the point where speakers usually step in to end the sample and explain why it is important. Gradually the audience realized Moran was not going to stop the recording. We settled into a different type of listening and quality of mind where we could take our time rather than try to gather some quick, "pertinent" information in order to supplement the speaker's point. This *was* the point. My sense was that Moran was trying to give us the same type of transmission that he received. He let Monk speak. He was sharing a transmission that, for him, was the beginning of his love of jazz. I've argued elsewhere that Moran wanted to copy Monk, but what he wanted to copy was not the licks, but the

devotion, the commitment, the seriousness, the profundity, the "something else" that was conveyed to him (McMullen, 2016 and 2019). As he reached college age, Moran sought out teachers who could pass this information on to him in the way he initially encountered with Monk – through the performance of the music.

Mentorship as transmission has been key to Moran's development. His description of learning jazz is reminiscent of a Buddhist saying about teachers being burning logs. If you get next to the teachers and stay there, there is no way that you will not start to burn, too. Moran recounts, "[my teachers would] say, 'Do yourself some service and start putting [older recordings] into the list of things that you're listening to. In the journey, there is no specialist. You're not a specialist, you're a young student, trying to gather logs for the fire that is supposed to keep you burning up until the end'" (quoted in Russonello, 2012). These personal teachers have been Jaki Byard, Muhal Richard Abrams, Betty Carter and others, in addition to copious jazz recordings from throughout its history.

And Moran does not limit this mentorship to musicians. Like Taylor, he stresses the collective aspect of jazz, and also extends the discussion further than his predecessor. He understands jazz as part of a larger African American art practice that does not solidify boundaries between the different arts. When asked about the history of "crossover" between jazz and visual art, Moran responded, "I mean, there's a history of communities living together, like David Hammons and all of his friends: the composer Butch Morris, Henry Threadgill – they have long relationships together. The trombonist George Lewis and the work that he's done with Stan Douglas, maybe twenty years ago." Moran traces this practice even further back. He says:

> And I have this kind of myth about the way that the Harlem Renaissance was working – that, you know, people like Zora Neale Hurston knew Langston Hughes, and they knew Duke Ellington and Mary Lou Williams… People knew each other and people were in contact with each other and each other's process, and that was why the work was so great. So whether it would *blend* these things was not the point. [The point] was that you had conversations that informed your own work and made it more potent, because it had the layers that would sustain through history, as we now understand when we look back at them.
>
> (Moran, quoted in Simonini, 2018)

Moran cites examples of that community today:

> For myself, I wanted to have a relationship with various types of artists like that. The Studio Museum in Harlem has been kind of a great resource in that way, because it's the local museum for me, as a Harlem resident, and what [director and chief curator] Thelma Golden also promotes, having artists know each other. It's community-building.
>
> (Moran, quoted in Simonini, 2018)

As Giovanni Russonello has said of Moran, "None of his projects, in fact, are independent visions" (Russonello, 2012). Crucially, this lack of "independence" is not construed as a weakness but a strength.

Moran sees natural connections across different media as part of his life as a musician. He has been creating multi-media pieces that combine musical performance, visual and performance art, and improvisation since his collaborations with Adrian Piper and Joan Jonas in 2005. *Bleed* (2012), a recent work in collaboration with his wife, mezzo soprano, Alicia Hall Moran, was a curation of a variety of collaborative performances that included Hall Moran versioning Beyonce's "Run the World (Girls)" with Taiko drummers and later receiving acupuncture while describing her thoughts and dreams for the piece; a short film by Maurice Berger, "Threshold", made of clips from popular films and television shows depicting African Americans in movement on various political or aesthetic journeys (The Wiz, Soul Train, Malcolm X); Kara Walker and The Bandwagon deconstructing The Rolling Stone's "Brown Sugar" with words, images and improvisation; and short talks by artists, scholars and journalists. Ben Ratliff described the piece as "about music, film, video, dance, poetry, alternative medicine and much else" (Ratliff, 2012). Moran's aim to be "in contact with each other and each other's [creative] process" is far-reaching. He states, "We're collaborating with other artists, but we're also collaborating with the people running the lights and microphones here". Hall Moran said that a goal for the artists was to "set up a thing where we feel encapsulated and then dispersed" by other artists and friends (quoted in Russonello, 2012). *Bleed* is about connection, but it is also about responsibility. So even as Moran ventures into collaborative art works commissioned by places like the Walker Art Museum, his goal is communication and community building, resisting a concept of art that would disconnect it from the everyday. He does care if you listen.[7] The listener is important. And so is the listening dancer. Under Moran's direction, the Kennedy Center installed the Supersized Jazz Club in the atrium with a dance floor, full bar, couches and some chairs for seating where audiences can dance to jazz. As an educator, Moran also recognizes the importance of the audience to musicians' development. He cites a workshop where bassist Tarus Mateen's student band performed at a higher level after he made the student audience "clap as loudly as you can, like you can't wait for them to play the song!" Moran recalled, "And I'll be damned if that band didn't sound amazing" (quoted in Russonello, 2012). Music is a dialogic process that needs the listener and dancer. Ideally, musicians develop their craft within this relationship.

My third and final example, NEA Jazz Master, drummer, composer, producer and educator, Terri Lyne Carrington, developed her craft within such a relationship, and, like Moran, seeks to infuse the institution with these values. Enjoying a long professional career as a jazz and pop drummer that began when she was a 10-year-old prodigy, Carrington has performed with jazz legends and rising stars as a leader, collaborator and producer. In the tradition of Taylor and Moran, Carrington considers jazz something that extends well beyond formal and technical skills. For her, jazz is a type of responsibility to others that is passed

down generation to generation. As the Zildjian Chair in Performance in the Berklee College of Music's Global Jazz Institute, Carrington is committed to passing along this "spirit" of wisdom that is jazz.[8] Her jazz activism emphasizes awareness and responsibility, aspects that *bleed* together, to follow Moran/Hall Moran. Carrington advocates and embodies jazz-responsibility-awareness-utility all of a piece.

While Carrington was not blind to sexism in jazz, for many years she was able to ignore it in large part because her saxophonist father and jazz luminaries, including Jack DeJohnette and Wayne Shorter, cleared a path for her into the jazz scene. As the #MeToo movement began to foreground issues of inequality for women in all fields, however, Carrington became more conscious of the systemic difficulties women in jazz face. Her conversations with Berklee students during the 2017 revelations of sexual harassment and assault at the college convinced Carrington that she needed to do something about sexism in jazz.[9]

In a bold move, she founded the Berklee Institute of Jazz and Gender Justice with ethnomusicologist Aja Burrell Woods as the managing director and a board of directors that includes Civil Rights activist and professor, Angela Davis, photographer and activist Carrie Mae Weems, professor of Feminist Studies, Gina Dent, and professor of English/Comparative Literature and African-American Studies, Farah Jasmine Griffin. Kicking off in October 2018 (with courses that began in January 2019), the institute hopes to transfigure both historical and performance-based knowledge as taught in postsecondary institutions. For example, the institute has the goal to bring women's compositions into the standard repertoire by performing and recording them, publishing them in a collection, and creating a library of such works. A performance track will foreground support and collaboration, not gladiator-style competitiveness (Carrington, 2017). Women mentors will be available for all students and outreach to middle and high schools will be undertaken to encourage and support younger girls' pathway toward jazz. The institute will also collaborate with other institutions to think through ways to address the problem of sexism in jazz and jazz education (Staff, 2018). Of the institute, Carrington says, "We're not trying to segregate women. We're open to everyone who is concerned about this issue. Gender equity is up to all of us who care about this society and want to work together to change things" (N.A., 2019).

Such a sentiment is foundational to Black feminist thought, a tradition that informs the Institute both through Carrington's words and by dint of its advisory board. Historian Robin D. G. Kelley puts it well: "when bell hooks says, 'feminism is for everybody', she is echoing what has always been a basic assumption of black feminists (hooks, 2015). We are not talking about identity politics but a constantly developing, often contested, revolutionary conversation about how all of us might envision and remake the world" (Kelley, 2002, 137). Carrington states:

> It's not about one person's thoughts and behavior (although it can be a great catalyst for action) or attacking anyone's character or artistry. It's

> about everyone rolling up their sleeves, digging in, widening their view points, further stretching their compassion and understanding that this must be addressed and changed in order for their daughters and sons to have a better, more equitable world to live in.
>
> (Carrington, 2017)

The Institute thus explicitly connects innovation and creativity in jazz with social awareness. It is a broad definition of artistic awareness that includes social, ethical and historical cognizance and responsibility, aspects that need to be woodshedded just like tone production and altered dominant scales. It is a lesson that Carrington learned from her mentors who have linked becoming a better musician to becoming a better person. "Jack DeJohnette, Wayne Shorter, and Herbie Hancock have all taught me that sensitivity and strength, leading and following, confidence and humbleness – balance – helps make the magic happen, on and off stage" (Carrington, 2017). This confluence of social awareness, personal responsibility, gender deconstruction and creativity, indeed, the values described in black feminist thought, is key to understanding what jazz is, I would argue not only for Carrington, but also for Moran and Taylor.

As a jazz educator, Carrington is concerned with passing on the lessons of jazz, lessons that go beyond Berklee's original mission of pragmatism without philosophy. These are embodied lessons the drummer learned and teaches through jazz performance: confidence, relaxation, generosity, caring, trust, commitment and *justice*. Through such work we can see something deeper in what jazz does and can pass on. It is feeling, devotion, acceptance (seeing things as they are), assertiveness, belief, *listening*. In jazz you say your thing and then you step back to support someone else "saying something" (Monson, 1996). Carrington is trying to make this a space where women and gender non-conforming people can say their something. For themselves and also for all of us. It offers a bigger pool of participants to hear and learn from and this helps us all.

When we teach jazz in the institution, we need to think about what it is we are teaching. "Black music has the potential to usher in a new future based in love", says Amiri Baraka by way of Robin Kelley (2002, 11). Taylor, Moran and Carrington are part of a long tradition of music-making that has held and kept values different from the dominant Eurocentric values of the United States. These Eurocentric values have been detrimental to us all. The approaches of Taylor, Moran and Carrington underscore a type of responsibility and blur that is necessary in the twenty-first century (McMullen, forthcoming, see also Moten, 2017). It brings love, spirituality and collectivity into humanist ideals of civil rights and self-determination. It prefers blur to boundary, that is, connection and relationship over separation and individualism. Carrington states, "I'm hoping that we make a lasting cultural shift at the college, but one that goes beyond the college. It's up to both men and women to do this work, and anybody that really cares about the music and cares about humanity will see the value in making it more equitable" (Carrington, quoted in N.A.,

2018). Such jazz artists and scholars are telling us that jazz is *doing* something. Put another way, jazz is done in order to do something. This something, as both Ornette and Cannonball said in 1959, is *something else*, other than the something taught today in most jazz schools. If we can *think* through our *love* of jazz, I believe this music can teach us the something else that we are still waiting to learn.

Notes

1 Angela Davis asserts that jazz has not reached its potential because of how it is "gendered" (Berklee College of Music, 2018). While the racism and sexism found in jazz has its particular history and manifestation, I am not arguing that jazz is more sexist, racist, or homophobic than American culture generally. I am simply looking at one area, jazz pedagogy, for the ways that it can be improved in order to teach jazz better.

2 I am speaking here specifically of teaching jazz performance in the "applied" classroom. My analysis builds upon many scholars who have analyzed race and gender in jazz discourse. Some keys texts include: on African American values differing from Eurocentric values, in addition to Taylor and Wilson, are Baraka (1968) and Gennari (2006); on issues of race, sexuality, gender and jazz are Monson (1995), Rustin and Tucker (2008) and Gennari (2006). Eric Lott (1995) provided a foundational analysis of race, sexuality, and gender in 19th century minstrelsy that has been important for understanding 20th and 21st century jazz narratives. The division of post-secondary jazz studies into "applied" and "social-historical" elements is based on a Eurocentric conception dividing body and mind. While critical gender and race analyses are increasingly a part of jazz history and culture courses, the studios and ensemble rooms are often providing uncomfortable fodder for those very analyses. That students might gain critical tools in one classroom that they can then apply to another is a step in the right direction. If applied music education continues to lag behind the times and is left to be unpacked by other faculty in other classrooms, however, we can expect increasing student push back like that seen at the Berklee College of Music in 2017 (Lazar, 2017a, 2017b and Larimer, 2017). Scholars who have examined the "institutionalization" of jazz include: Solis (2008), Porter (2002), Deveaux (1991), Jones (Baraka) (1967). A foundational text that heralded a shift in jazz studies is O'Meally, Griffin and Edwards (2004).

3 See Wilf for a discussion of black musicians "authenticating" jazz in a predominantly white educational environment.

4 I attended from fall 1999 to spring 2003.

5 In his 1983 essay, "Black Music as an Art Form," Olly Wilson described the characteristics of African American musical practice. These are not only formal characteristics, but a "distinct set of musical qualities which are an expression of… collective cultural values" (2). Thus, while we may find certain stylistic qualities that we can name: call and response, complex timbre, polyrhythm, things that may fall under the "how," this how only happens within a why and what it's for.

6 Most mentions of Billy Taylor are in passing, citing his use of the term "America's Classical Music" to describe jazz. For an excellent article that unpacks Taylor's use of that phrase and delves more deeply into Taylor's work as an advocate for jazz, see Arnold-Forster (2017).

7 To reference the modernist white American composer, Milton Babbitt's, and his infamous 1958 essay.

8 I'm referencing Carrington's 2001 recording, *Jazz is a Spirit*, with Herbie Hancock, Terence Blanchard, Paul Bollenback, Kevin Eubanks, Wallace Roney, Jeff Richman and Malcolm Jamal Warner.

9 In November 2017, beginning with a Boston Globe expose on sexual assault and harassment at the college, it was revealed that at least 11 faculty had been terminated for sexual abuse and harassment over the past 13 years and that the college had pushed students for silence regarding abuse and harassment. Hundreds of students participated in a silent march and sit-in at the Berklee Performance Center on November 13 at an open forum with the president, Roger Brown (Lazar, 2017b).

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7 It Don't Mean a Thing Without My Web Fan Base Thing

A Dance of Cultural Relevancy in Jazz Education Culture Today

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Introduction

Current Western societies are characterized by a changing notion of cultural relevancy. In particular, the development of new media (television, internet, social media) has re-shaped the perception of culture and created a significant distance to academic conventions in the production and understanding of cultural and artistic knowledge. Considering the dramatically changing values embraced by current societies, questions arise regarding the role of academia, music scholarship, pedagogy and music marketing. Jazz sells, marketing and production is critically impacted.

In addressing these urgent issues, the author aims to link value codes of previous and today's generations and proposes a platform of dialogue and understanding. The chapter is based on my current scholarly work, the teaching experience on cultural relevancy and a proactive approach regarding the creation of meaningful artistic and wider societies (Banfield, 2015), as well as on my experience as an artist and my involvement in Black Music Culture.

By addressing the specific processes of creating and negotiating new knowledge in relation to the Afro-American identity (both, at the academia as well as in the wider socio-cultural and socio-political contexts across the US), the chapter will contribute to ongoing questions in the developing academic field of artistic practice as research in jazz. The text involves a free flow of thought related to the aforementioned topics and approaches in scholarly and artistic work, hence a metaphorical "dance" aiming for an understanding of cultural relevancy.

The Musician as a Digital Native

If we are really being honest, and ask the questions of jazz, who listens, who hears, who buys, who cares and why? We would find, I believe, new paradigms for how we can truly map the current directions in non-popular arts forms like jazz. Because we value the artistry and we want to share this great music culture, in order to understand jazz's potential value out there, we need to cut through and into the marketplace playground to find future audiences and make an attractive, sustainable presentation of jazz artistry. Jazz music is first

a cultural language by a people for whom expressive, innovation arts were needed and seen as a way to make a life in a difficult situation, namely to get through racist degrading American social systems.

> Black folks created incredible distractions from the larger "white world" who didn't want us to intrude their world. The black folks I know wanted to ensure our soul comfort. […] Most people construct their experience of life by visualizing "the moment" through storytelling, film, TV, photographic imagery […] the photograph is an instrument of memory that explores the value of self and family in documenting everyday life.
>
> (Willis, 2014)

> The Negro writer who seeks to function within his race as a purposeful agent has a serious responsibility […] He is being called upon to do no less than create values by which his race is to struggle, live and die […] create the myths and symbols that inspire a faith in life. […] It means that in the lives of the Negro writers must be found those materials and experiences which will create a meaningful picture of the world today. […] Surely this is the moment to ask questions, to theorize, to speculate, to wonder out of what materials can a human world be built.
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> (Wright, 1937, 102)

> We are sorely in need of the clarity and inconvenient truths that art allows us to tell, the conversations it sparks, the space for emotion that it makes, the questions it poses, the pressure points in an aching national body politic that it exposes […] it is art, our ability to sit with art and all the possibilities it helps us to imagine, that is so important to our ability to value. […] But under conditions of neoliberalism, which favor the unregulated, unchecked reach of huge multinational corporations into every area of our lives, art and music and the people who produce them all become merely marketable commodities.
>
> (Cooper, 2016)

Jazz music culture and artistry has always held my fascination and provided me and my friends growing up with the highest models for great artistry. That was all we wanted to be like. In sound, look, feel, these were our super music heroes, they meant everything to us. The music the jazz artists played and the way they played it, spoke about it made us dream, gave us soul comfort. There were albums to get – live and get down in – and not for downloads. Can you even today imagine a music that purported to creating the creative values by which your people, the world was to struggle, live and die? God what a thing that had always been for us. Then around the late 1970s, as we reached toward college something hit. A popular music that carried a new powerful construction of experiences of life, and it became visual, of "the moment" through storytelling, something they called "rap music". We hated it, but it literally transformed the popular music world into other things. It was transformative

and lit the music world on fire. Then they built a seemingly magnificent supportive super infrastructure around music with a media and technological build out that changed the very nature of the beast. And I've been spending my creative life walking in the wave of these new creative forces as a musician ever since then.

From the start I will say, even the title, what we still call in the academy and industry jazz, has a powerful and meaningful history of artistry, actions and a legacy of huge importance. But, if I could rename and repurpose jazz, it would be called, modern creative music.

I want to focus on a few values; themes in music culture, to underline a continued need for collaborative dialogue among artists, to refute the over commodification of creative music, as well as address the role of music education to be 'in touch'. I really want to highlight and lift up younger musicians' workings understanding it's *not* our day anymore.

Black music and all great art is about the power to move toward human truths, universal ideals that reflect balance, order, beauty, love, justice and inspiring ideas that change people's lives. This is the most important set of educational values that should guide us in developing and sharing with this generation's musicians. But I sense an enlarging gap between how this generation understands its cultural legacies and commitments and what I remember to be important as foundational or essential. I was born in a past century. My students are 40 years younger than I am. I sense differences. The values' shift is telling.

The first stop in discussing exploratory new paradigms for how we can truly map some current directions in jazz, is through a discussion, examination of new changing values in popular music in general.

Jazz music to be truly dealt with as culture expression deserves to be understood in its challenge to find itself relevant in the culture of today. That means if we are to educate, perform, produce, create in the style, we'd have to see how the form fits in to breathing patterns of today.

My students refer to the community/social/protest music of the 1960s and 1970s, as "back in the day values". Today, young artists are more focused on entrepreneurship, technology use and branding that gains them access to visibility and marketability. They highlight the defining power of complete artistic control and independence and the power of communication platforms, which allow for greater fan base contact. More people now can "like you", support and therefore help determine the ranges of your success. Now of course I argue back, this all has nothing to do with musical success, but my argument is not relevant, it does not register.

Jazz musicians use these approaches today to gain better access to new audiences. It is within this realm of current practices that the dramatic changes of values give rise to questions regarding the role of the academia, music scholarship, pedagogy and music marketing. Jazz, in order to reach people, to sell today must depend on the marketing and production approaches necessary to keep it afloat as a relevant music form in the marketplace. If it is not, you sell it less, less people know or care anything about it, less people come to hear it,

therefore there's no place to hear it, be in it and no place where the artistry and artists are seen doing their own thing.

Some of this is really no different from the challenge of jazz when teenagers preferred Frank Sinatra, Elvis Presley or Grateful Dead, Jimi Hendrix over Miles Davis, John Coltrane and Sarah Vaughn. The major difference, in my view, is that young jazz artists see themselves as actively needing to shape and dance with the larger mega cultural infrastructure to make music matter for their fans. Seems they too have "bought in".

In 2016, senior jazz masters Herbie Hancock and Wayne Shorter wrote an open letter to younger generation of jazz artists:

> We're speaking directly to a system that's in place, a system that conditions consumers to purchase only the products that are dictated to be deemed marketable, a system where money is only the means to an end. The music business is a fraction of the business of life. Living with creative integrity can bring forth benefits never imagined. […] How does any of this lend to the creation of a peaceful society you ask? It begins with a cause. Your causes create the effects that shape your future and the future of all those around you. Be the leaders in the movie of your life. You are the director, producer, and actor. Be bold and tirelessly compassionate as you dance through the voyage that is this lifetime.
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> (Hancock and Shorter, 2016)

So, Where Do We Go on From Here? Music Meaning Something

Our music percolates on an adapting environment and landscaping that is prevalent in contemporary culture where artists can reboot their creative identities on demand. Again, it's not like jazz has never crossed over, been concerned with social political ideas, nor been touched stylistically, culturally or technologically. Any casual search to notable cross over hip-hop pollenated projects bring you to Herbie Hancock's Headhunters (1973), Rockit (1983), or Possibilities (2005), the sampling of Patrice Rushen (Forget Me Nots, Kirk Franklin, Looking For You), Buckshot Lefonque, Miles Davis' Doo-Bop, Roy Hargrove's RH factor projects, JazzMataz Guru, on through the Jazz dripped NeoSoul projects of Erika Badu, Jill Scott, Sting, to Spalding and Glasper. The challenge today is there are fewer linkages between the generations, fewer things all sides accept as a truism, held value, definitely this is true today in music training.

So, the value shift here is also in considering generational differences. Today, musicians of all stripes are very much in lock and step with the larger support valued ingested in their generation. Seemingly obvious but made chokingly real when you consider our freshman class of musicians being trained today in college were born in the early 2000s. Personal computers, internet and meeting your meaning in media is fundamental and huge, and the business of music looms not as a fraction but as a means to the end, to get creative products and identity into the marketplace of music.

The music category jazz does not compute to mean music to be lived in, rather music in the background for this generation. The popular music system does not project images of young people playing instrumental music. Music simply doesn't exist in mainstream culture without vocals or rapping, that's their reality. There are no The Voice, American Idol, or other TV shows devoted to instrumental performance talent. The newer paradigms for how we can truly map the current directions in jazz again is important in order to understand jazz's potential and a need to cut through to find future audiences for a sustainable presentation of jazz artistry.

Today Art Blakey and the Jazz Messengers in its title, purpose and symbolization to listeners would draw a far less algorithm buzz from a word search today, as this compares to connection with a current pop idol. As funny as this sounds, with today's automated reasoning finder functions, perhaps it might be easier for the system to find Blakey defined as "pulsating beat" than as a recognized musician. This suggests a need perhaps for a re-boot, beaming jazz relevance up in our culture. None of this has anything to do with its lack of importance, and no, jazz is not dead, or are we saying there exists inability of this generation to be distinctive musically. But it has everything to do with a devastating lack of education, arts exposure and the need to dismantle a controlling consumerist mentality that today defines everything. It's not about the art; it's all about the cash, radio, media, politics, education and cultural programming follows the cash. Sad.

In a recent conversation with the author, jazz critic Bob Blumenthal (2018) noted:

> Music has always been influenced by technology. […] one of the greatest changes has been the move from analog to digital technology. […] once a music file could be reproduced digitally and therefore stored anywhere, the LP (and soon after the CD) was effectively dead, and accelerated the Darwinian evolution of the human thumb. […] One of the direst consequences for artists today has been the devaluing of the musical product through file sharing. The millennials have grown up getting music "for free". When music is free, the disposable dollar goes elsewhere, often in the direction of technologies unavailable to us when our love of music developed. […] Don't just put jazz in the music curriculum but use it to illuminate other areas of study. Students who learn about Jackie Robinson's integration of baseball in the 1940s, learn too about Benny Goodman's integration of the bandstand in the 1936, or of Louis Armstrong's recordings with white musicians in 1929. And when they study the music of the Civil Rights era, they hear "Freedom Now Suite" and "Alabama" as well as "We Shall Overcome". And yes, jazz is always an interdisciplinary study.

My current work, creative research moves are to discuss with folks in the fields, where are our creative expressive landscapes landing us and, looking like? What I've discovered is that most of the music/art movements, artistry I teach

and have a passion for, call for a certain amount of "appreciate-able" values and norms. Community, the value of history, cultural heroes, commitment to legacy. Few of these values are normative in today's very different mainframe cultural climate, which makes its most salient attributes based on self-branding, access to Internet information and technology acumen, commerciality, profit, power and posture. Beyoncé slays.

The Role of the Academia in Music Scholarship and Pedagogy of Music

> This is not music to roller skate by. It is the kind of muscularity individualistic stuff that will not tolerate indifference, evokes strong reaction in the hearer […] these essential responses must be the basis of judgment, (qualification of music).
>
> (Spellmann, 1964)

What we mean by education is, how and where we think and teach. Creative production is recording, performance and public exposure, and marketing is how the music meets the media, marketplaces, radio etc. These are the touch places that matter. Today's cultural expressions are most ingested through a very different kind of sonic, visual technological media apparatus, that may, actually and do call for different sensibilities. It's easy to see how you must frame the question, the subjects and the reason for engagement in different ways. Today definitely calls for another spin on cultural meaning and matters in education. Many of us are feeling the rub in our preverbal ribs to ingest and decode from all sides, and it is challenging.

All technologies seem to drive us to what we value as relevant, somehow the very idea of live performers communicating music ideas for simply listening, raises eyebrows with today's music sales executives in all platforms. The driving question is not the sound or soul of the music but how will it compete for sell. So how are the productions being recorded? Do they reflect the latest samples, innovations in recording approaches, acoustic and electronic fluency? Are we in the jazz training academy talking and listening to wider amounts of contemporary music?

There is little jazz radio in major cities and most of those stations are college jazz stations or NPR programs that are niche. Much of the jazz market listening happens online, at festivals and in clubs. But the traditional support mechanisms for jazz (radio DJs, record company divisions, management and booking) too have had to give way, adjust to a reality that younger audiences have been hugely lured away in popular media mechanisms that are trend flavored. Let's face it, there is a quantifiable fracturing of generational accountability for carrying out what this means to younger people today.

The definitions of music, what it does and means and how people come to feel and be in music in the actual hearing, comprehension of it, from a mainstream perspective, that must be addressed. That's the real current market demarcation demographic that matters. If no one listens, because no one can

get to it, therefore no one really cares because they have so many other options, who then is served? Now the issue is must we in "education and high-art services" take the great art stand? The market matters have been re-defined.

I recently taught a seminar at Cornel University with high school students and attending college age factotums (assistants) from across the country addressing the question of what they valued in terms of concrete ideals. Granted they were all between the ages of 15 and 25, but they were soundly committed to having their voice cemented around having an identity. The reason why this is important today is largely due to the tremendous evidence of the inevitable collide with market forces but the obvious collapse, marginalization of the authentic agency and folk voice. Thinking, feelings and experiences that mean something and matter, must come from these communities.

If we can conceive of a new way of thinking around embracing today's media, marketing modeling as in the work of Maria Schneider, Christian Scott, Esperanza Spalding, Robert Glasper and Grace Kelly, this may provide some clarity, comfort with how today's artists work and develop at least a robust dialogue on "shared meaning" for today's modern jazz culture.

The Musician as a Digital Native

Every generation has its rights and destiny to assemble its warriors, battle strategies and songs. There are two recent books that bring light to this cultural mash up we find ourselves in: *I Got Schooled* by M. Night Shyamalan (2013) and *Generation on a Tightrope* by Arthur Levine and Diane R. Dean (2012). Both are books that focus on a new education, educational models forward, our cultural systems, provide insights into these shifts and address what could be the worldview of this current generation. Both agree, today's generation is uniquely wired differently, all puns intended.

We need a radical re-boot of our social, cultural and aesthetic platform program, if it is to be inclusive, connected to today's generation, artists, audiences, this society. We simply have to create another "through wire hook up", because our traditional lines won't connect.

All studies show that the number #1 enterprise that was meaningful and significant in the lives of this generation has been the establishment of the worldwide web, and electronic connectivity, social media. Which means most of the cultural codes, values and the means by which we obtained success, are of little significance to today's young people. The shift is major modulation. For example, you can sense this in conversations around the ethics involved in preparation, or to aspire toward achievement. "Digital natives" may acquire things, ideas through a tribal social networking, sharing content and means to get at it. Here you notice a radical shift in the value of obtaining things, goals, from a more traditional "old school" orientation. Original, individual thought, critical thinking has shifted to shared platforms, the speed to gather and have ease of access to. The ethics that says you can achieve what you want because you have direct access has replaced an ethics that is prepared for appreciating the long haul and aspiring hard work to make it in the world, and not it being

made for you. These seem like very different rules. But how will the bridge be built that puts into play sustainable exchanges where shared cultural codes are possible, that is the challenge today, and the economic, generational, cultural gaps have to be considered. The life of jazz music today is certainly impacted by these questions.

My project *The Jazz Urbane* represents an arts-based approach in developing and evaluating such bridging.[1] The Jazz Urbane is a contemporary recording/performing collective, which embraces and is infused with R&B song writing, melodies, band grooves and style. Not really a "New Movement", just a new configuration of mindset/artistry. It is a "collaborative of artists", a music that crosses several bridges. This is music that has grown from urban places and thrives because of creative musicians. The Jazz Urbane represents too, the rise of frustration among musicians with "non-musical culture" dominating mainstream radio music, media. Musically, the past lifeline of jazz progression has always been its reach to younger creative impulses. In that collaborative exchange comes "new voices", an inspiring charged collective, movements of style, aesthetics, a sound, approach. These never severed themselves from the "Blues-Afro-Collective-Spiritual-Pulse", and never dislocated from common-folks' "dance and move" in the world. Such progressive movements were always led by practicing musicians. Market promoters don't determine nor define art, only artists say where the music is coming out of and where the music is, will be and the reasons where and why it should go.

The Bill Banfield Band began in Boston in 1981 and included young performers Najee, Rachel Z, Billy Kilson, Carla Cook and Regina Carter. The project also involved the formation of the publishing company B Magic Music. Its ASCAP affiliation came in 1985. I attempted to put a band together in 2006, with younger bass player Esperanza Spalding. Our idea was to create a band that could gig at a regular venue in Boston and draw. She invited her drummer and a close friend, Christian Scott. By the end of that rehearsal, I realized how gifted she was and how different she conceptualized her groove concepts and harmonies. I had to find my own way back from the 1970s/1980s/1990s grooves into this new generation impulse. I struggled with my inability to catch the "New Beats". So, I created a hybrid idea to cope with this. We created another band (George Russel Jr., Stan Strickland, Lenny Stallworth, Kenwood Dennard) with two worlds coming together with cross-generation/style sharing, gigging in Boston at a regular Club, and invited Spalding, Scott, Alex Han and later Grace Kelly. The idea took off and the Monday jam nights at Darryl's were listed in the *New York Times* as a noted jazz hot spot (2008). Our concept was again cemented.

That Web Thing

No matter, the thing I am finding most trackable is that modern media such as Twitter, Facebook and YouTube all total, provide the greatest potential "cross generation bond" of communicating and shared social cultural coding. The greater "through-line" of course is the internet. Jazz artists of this generation

share more in common in these ways with contemporary hip hop and popular media culture than jazz artists of past generations shared within their own times which were traditionally divided against mainstream popular culture interests. That divide today is almost non-existent. That's the first great relevancy revelation we should consider. Today, jazz depends upon many of the cultural trappings and fixtures present in mainstream popular culture. That's the significant difference from let's say, the 1970s' *Bitches Brew*, when jazz enthusiasts were just beginning to tilt and tip the hat to Rock and Roll. Again the development of new media has re-shaped the perception of culture and created a significant distance to academic conventions in the production and understanding of cultural and artistic knowledge. These approaches today are rolled together. Again as hinted at, these developments within new information media, marketing platforms have significantly impacted the value shape of all creative expressions, as well as the perception of the meaning and use of creative culture.

This too has created a significant challenge within academic conventions in the education, production and understanding of contemporary cultural and artistic aesthetics. When you consider the convenience of YouTube at a push of a button (love it or leave it), where a student is able to watch a full concert, hear interviews, view pedagogy clinics and share this with others' online chats, with the cost of education sky rocketing, why wouldn't a young person today decide to create an independent approach to jazz education? No degree necessary here.

New Paradigms

Grace Kelly's use of her website as a full-service internet-based platform device, is an example of this generation's use of contemporary media to create "buzz and response" to their creative work. Kelly, whom I've known as my student, worked with and have become friends, band members and produced, is one of this generation's most talented contemporary jazz recording artists. She records, tours, appears on TV late night shows, dozens of YouTube performances, has been stamped accepted by even the most canon protecting musician of my generation, Wynton Marsalis, groomed by jazz icons like Phil Woods and has a huge international following, but no major record deal. Grace was the runner-up in 83rd Downbeat Readers' Poll (2018), second only to Kenny Garrett (born 1960).

I believe Grace Kelly is one of the most brilliant saxophonists of this generation. Oh, she does not come in any traditional jazz wrapping. Her brand and others of this generation come delivered as: (1) working rather as an independent, not signed to major labels, (2) rather be booked independent of traditional tour systems and open to doing any festival where there are people who will listen to music, (3) non-categorically defined as a jazz artists, (4) tend to play and project themselves as multi instrumentalists, non-genre record bin busting crossover, (5) tend to be post-civil rights, post-Obama in their political views, (6) see themselves more closely aligned to hip hop than the traditional

blues/bebop based language, (7) all use modern communication platforms to directly reach their audience base such as Twitter, Facebook, Instagram and personal websites.

Jazz pedagogy in any place on the planet should be in discussion of two things: the history and culture of jazz past, and a deep plunge into artistry of today's most arresting artistry and recorded sounds in contemporary jazz. These few distinctions listed above make this generation of jazz artists critically different from artists in the same music family groupings in previous eras. This not surprisingly, making their interpretation, analysis, production and performance practice discussion while not essentially different, dialed into different aesthetic streams, which for them, matter fundamentally.

I very seriously doubt if Betty Carter or John Coltrane would be interested in selling mugs or hoodies at their concerts. But hey, maybe today they would have to. While sampling from recent pop radio traditions is nothing new for jazz artists, today's generation samples even more broadly across not only music materials but select from impulses liberally in media, music, fashion, political, merchandising, electronic and technological troughs.

In email newsletters Kelly distributes invitations to engage her fans in jazz; this includes the music, merchandise, remaking and sampling of traditional material with her own attempts to push her music catalogue, independent label and complete with a tour schedule. It is nearly impossible for a younger student of music to ignore the invite to create their own definitions of a jazz identity with this kind of arrestingly secure model of self-branding. This generation is simply remaking the definitions, broadening the borders of the jazz landscape and inviting a wider range of potential participants, fans onto their multiple stages.

This to me is the new paradigm for discussion in the academy. Jazz will be redefined by the ways it speaks to a contemporary marketplace, not the way it remains beholden to canon, or ideas of fixed definitions of swing, isolated radio playlists, purist notions of non-hybrid associations, without global music accents and without engaging the world of internet media marketing fluidity. Jazz for the "new or next gen" generation has to be culled out of these kinds of education, pedagogical and analysis considerations, and together with our appreciating the early eras of artistry, map jazz forward as a creative musicians' genre where "All Blues", "All Grooves" and "All Use" is the mantra.

Conclusions

In closing, to come to a definitive resolution within the magical questions surrounding jazz education's survival, relevance and grasp on the pressing issues of continuity and continuum, that is difficult. Jazz music is impossible to die in our culture because it is our music's root. In this realm of current practices we must consider these dramatic "changes of values" and consequently the role of preserving institutions, music scholarship, pedagogy and music marketing.

This theory of engagement of "artistic entrepreneurs" actually articulates an ideology of a dual approach that is a balance forward of two forms of arts-related practice: (1) a personal approach first of the integrity of your musical values cemented in the heart and process of the music and (2) an entrepreneurial actions mentality, powered by current technology and information tool systems used in media and internet information-based computer platforms, to post and pull into and to yourself, the world now at your fingertips and in your screen.

The musicians who best navigate these creative and tech driven enterprises stand the best chances at maximizing the meaning of their art, readymade to be placed in today's marketplace. *The mix is on!*

In all matters I have simply tried to suggest that we must be dialed into different aesthetic streams, which for this generation matter fundamentally. These themes raised have become the real dramatically changing values that have now been embraced as the new normative. *We must begin at the new normative*.

You can start at Ellington's band, Miles Davis and Chick Corea, but today's jazz enthusiast is more likely going to hear themself as Snarky Puppy and how that identity best aligns itself within today's definition of forward music identity culture. The very being of jazz as an art form is critically impacted as we even dare suggest it's culturally challenged as being relevant in today's music marketplace. The times and our culture are very different today and the bridges that bring generational connections together are not made with things all sides consider bonding. Take for example what mainstream culture is willing to define as the battleground, which some call cultural carelessness, this pervasive "empty values diet" shapes younger musicians, and critically defines their appetites. In 2018, the Pulitzer Prize-winning composer, was a rapper, Kendrick Lamar, so to even have a dialogue about what's at stake, what musical values are we really all interested in, and who sets the impulses is at the core of a discussion about where jazz can be headed as a subject in music education and as a cultural force.

In Stravinsky's autobiography he states that he can only be valued by what he knows is the truth, and what he's committed to do in the music (Stravinsky, 1936, 157.) His concerns went further "about the culture's creeping paralysis" entailing "very serious consequences", and the "absence of active effort", which amounts to serious danger of the art forms as facilities become atrophied (Stravinsky, 1936, 153). And while for the most of my own career and writings I have advocated cultural essentialism – and being happy in our heritages – I'm now more concerned with slippages in how music is being constructed with the current vagueness in materials organization, good skills representing harmonic, rhythmic and melodic attentiveness, invention and aliveness, and in jazz education these are a "must have".

Blame it perhaps on the over-saturation of sounds and "electronic signifying". There is far too much noise to detect all the potentially great music that is undoubtedly happening. Our only hope in teaching a younger group is through a bridging that can better provide an energy that births a conversation

about how music can rise above the current cultural noises and settle and focus us again on why, how, where and what commitments can be agreed upon, hoping that helps new music culture properly resonate with forward meaning that grows and repopulates the field(s).

How our culture is defined in today's commodified, branded, fluid, accessible creative impulses/narratives, expressions are vastly different and again shape all generational groups today and the platforms, delivery systems are very different. Because so many things are carried on YouTube/internet, therefore copied, downloadable content and based on immediate living experiences, much of this idea of what matters is measured through these lenses. There are many paradigm shifts around the concept of time, history, human value and access to consumer impulses, which completely drives the public mindset. So much of our communication and idea delivery is a copy or immediately downloadable. There is an accepted appreciation for "quick communicate connection" and that it's executed via a text, Facebook, email or other convenient technology/phone driven handheld agency.

Due to our now dependency on these modern technological levers, if you are writing music for YouTube, or a game box or if a motivating factor is how many "likes" one gets or if you can download everything you need to find the answer, then the methods, models, rationale are very different. Jazz education must look deeply into these processes and outcome shifts.

Look, let's face it, much of today's advances in these areas, both culturally and in technology, are very cool. The delight in conveniences is irreversible. The power and innovation in these many tools push us to advances we could only dream about ten years ago. It's that conversation about how our arts conception is defining itself along these advances that drives this inquiry. I am interested mainly in cultural impact in the public sphere, how we define art and what is desired and valued, and how that changes.

My history was wrapped carefully for me by my fore-parents in the songs of the church, the work fields and the blues. Ever since this discovery I have been trying to find myself, using the first music I have ever known as a basic foundation for my search for truth.

> As a singer and activist in the Albany Movement, I sang and heard the freedom songs, and saw them pull together sections of the Black community at times when other means of communication were ineffective. It was the first time that I knew the power of song to be an instrument for the articulation of our community concerns.
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> (Reagon, 2002, 99)

The relationship of humans to current culture is critical. As a matter of fact, there is no definition of man outside of the culture she/he exists in. So then, what is that culture and what does it represent in terms of how man comes out of and works within that culture? That is the question, particularly for creative people today.

I recall ethnomusicologist Leonard Brown's words from a lecture at Berklee College of Music in 2017:

> In my community there was no separation between church and state […] music connected in church, school, community through am radio. The power of those sounds you remember marks your identity. […] Music brings commonalities that diffuses ignorance and bigotry and celebrates our human connectedness. Part of our responsibilities as musicians is to uphold our tradition and heritages. […] Music has to do with how we see ourselves in the universe. Musicians' roles are defined by the work to illuminate the plight of people who are struggling.
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> (Brown, 2017)

Several questions drive my tank these days, the most engaging one is how cultural values define our human definition, interaction and expression, and jazz has had to evolve to address cultural relevance at each turn like no other music. The reason for this is that all jazz grows out of and depended upon mainstream music culture to find itself in, or fuss its way in through.

So, the place to begin in our dialogue is how music is primarily made today with both its forward leaps and being mindful of potential consumer focus pitfalls. This means we might consider such an approach may include teaching in a backwards trajectory from current to the beginning, so the impact of great art is vetted by the prism of contemporary practices, models. That's difficult for educators. But creating and negotiating these current mindsets in relation to the "Afro-American Spiritual Blues impulse" (both, at the academia as well as in the wider socio-cultural and socio-political contexts across the US), will contribute new foci to the developing academic field of artistic practice as research in jazz education, practice, marketing and technology and truly appreciating the history of jazz culture and artistry in all directions.

I truly believe this generation has the talent, more tools and more takes on today's music. Jazz lives forward in approaches that take the music and its new audiences to places that they can expect artistry that ensures that kind of listening and living experience. Let's encourage younger musicians to use their gifts to lift and to point forward.

Note

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8 Silent Groove, Frames and Applied Improvisation in Miles Davis' "Shhh/Peaceful" and austraLYSIS' "Silent Waves"

Practice-led Research Beckons to Research-led Practice

Roger T. Dean

Prologue: Practice-led Research and Applied Improvisation

'Definitions' of research, such as those of the OECD, almost always include the words 'creative' and 'knowledge' and fail to define them (perhaps not surprisingly). Consequently, creating artistic works almost always fits within such definitions. As musicians we can celebrate this, and whenever necessary defend the case, such that eventually parity between artistic work and basic research is accepted everywhere: a creative work such as a musical improvisation or composition necessarily involves "research".

In this chapter, I will first illustrate how creative work can include the use of applied improvisation, and in so doing constitute the first phase of a larger process of practice-led creation and research. I previously described and analyzed the use of applied improvisation in creating large scale works (Smith and Dean, 1997). In applied improvisation, a creator (or creative ensemble), be it Mike Leigh, film maker, with his actors, or Miles Davis and his musicians with studio editor and composer Teo Macero, as discussed here, undertakes repeated private improvisations (perhaps in rehearsals), which are eventually, often cumulatively, codified into a defined (reproducible) publicly released or performed composition or piece of theatre/film. For an improviser this can be a valuable approach to creating large scale works, when so desired. In the case discussed here, Davis/Macero create a work by a combination of applied improvisation during practice-led creation in private studio performance followed by subsequent studio editing/mixing/restructuring. Given normal definitions of "research" just mentioned, this process is already one of research, but of course it did not result in the output of published papers or explicitly generalizable and transferable knowledge. What I present first in this chapter is my own musicological research endeavor concerning the Davis/Macero work: the purpose of this piece of research is to decipher and make available more general understanding of what Davis/Macero undertook and what it implies: thereby I continue a process of practice-led research initiated

by their work. I subsequently used this understanding to make and analyze a new work in a process we have termed research-led practice (Smith and Dean, 2009a). Discussion of that subsequent process forms the shorter final part of the chapter.

In our book (Smith and Dean, 2009a) Hazel Smith and I characterized practice-led research and research-led practice, arguing that ideally, especially in Higher Education (HE) where there is a wealth of interdisciplinary expertise available close by, practice-led research (P-led-R) can be complemented by research-led practice (R-led-P), to form a continuing cycle of activity which can permit both artistic and academic research outputs of the greatest breadth. We presented a model of this repeating process, the "iterative cyclic web" (Smith and Dean, 2009b), which has been much cited and widely used in HE courses. At almost any point in a cycle of the process artistic works may be completed, and complementary research publications created: the two aspects of creativity (that is, P-led-R and R-led-P) can come to be in ongoing and reciprocal dialogue. We do not suggest that everyone should necessarily engage in such cycles, but rather that such iteration provides a particularly stimulating approach to ongoing creativity, and potentially integrates it with academic research in a way which is fitting for higher education, but also highly beneficial within technological and commercial arenas: for example, a musician working for Google or Spotify most likely would benefit from such an approach.

So after the Miles Davis research case study, I provide a Postlude containing a second case study, of its research-led practice implications within our own creative work, as an illustration of one iteration of a P-led-R/R-led-P cycle. As we note in our earlier book, the different parts of such a cycle may be completed by individuals who are both artists and researchers, or by collaborative teams: in the present case, we use the practice-led creative work of Davis/Macero to stimulate practice-led research by myself, and then research-led practice by Hazel Smith and I and our ensemble austraLYSIS. Thus, I discuss the whole of this cycle, just one iteration of a process that can occur repeatedly, in the chapter.

In a Silent Groove: Pauses, Frames and Expectation in Miles Davis' "Shhh/Peaceful"

Introduction: The Pause, Disjunction, and Anticipation

The 1954 edition of Grove's Dictionary of Music (Blom, 1954/1961) says of "Pause": "A temporary cessation of the time of a musical movement". The editor adds: "In performance it is important that a pause should really break the rhythmic motion and that the note or notes marked by it should not be held to the value of some simple multiple of the original duration". A pause sign in Western notation often marks the spot for a cadenza provided (often improvised) by someone other than the original composer of the work. A more recent definition (Oxford Dictionary of Music) adds the idea of temporarily

"freezing" a state of vivid action, while the Macquarie Dictionary (1991) adds the concept of pausing an action because of hesitation, doubt, or to create suspense.

These concepts of pause are oriented to western classical music, but note that both the first description, and the concept of "freezing", implies a challenge to any ongoing pulse structure, such as a groove. I want to consider here the role of pauses in one particular jazz work; while also describing the use of applied improvisation in composing it. Much of jazz, like some African and Asian music (Keil and Feld, 1994) lays heavy emphasis on pulse, and on its continuity in a recognizable groove. The vast majority of recorded jazz pieces remain consistently close to one tempo, while meter and rhythmic density changes slightly if at all. Jazz often also emphasizes syncopation and other rhythmic disjunctions that oppose or contrast with the ongoing pulse and groove. Thus, pauses are quite rare in jazz, but can create such rhythmic disjunction, often with the expectation that the rhythmic features will soon recommence. Their use to insert a new musical stream, like a cadenza, is less common. Can pauses in jazz also create a frame? Let us consider Miles Davis' "Shhh/Peaceful", and applied improvisation using studio technologies for re-composing sound structures.

"Shhh/Peaceful"

The studio recordings embodied in this piece, were made on 18 February 1969. The original issue was on In A Silent Way, released 30 July 1969 (Columbia LP CS 9875); there is a current CD release (Davis, 1969). More recently CBS released The Complete In A Silent Way Sessions (Davis, 1968–9): this contains liner notes which are my main source for the practical information about the sessions which I quote (Belden, 2001), complementing my analysis by listening and transcription.

The remarkable feature of the Complete Sessions is the inclusion not only of the originally issued version of the piece (c.18'), but also a longer version, containing virtually everything initially recorded (c.19'). I shall refer to these released versions of "Shhh/Peaceful" as OI (originally issued), and LI (later issued, longer version). All the material they comprise was recorded in a session from 10 am to 1.30 pm, by Miles Davis (trumpet), Wayne Shorter (soprano saxophone), Chick Corea and Herbie Hancock (Fender electric pianos), Joe Zawinul (organ), John McLaughlin (guitar), Dave Holland (bass) and Tony Williams (drums). The session also included the recording of a "rehearsal" and a "performance" of Joe Zawinul's "In A Silent Way", and Davis' "It's About that Time". Only 40 minutes of music was taped (Belden, 2001) and the sum of the corresponding material released on the original LP lasted about 34 minutes, while that on the re-release lasted almost 40 (it includes the 5 minute 'rehearsal'). Thus, little material remained unused, though as discussed later, Macero duplicated and re-used some sections: for example, "In A Silent Way" appears twice on the original release, sandwiching "It's About that Time". Both versions of "Shh/Peaceful" are credited to Miles Davis as

composer, but they involve substantial creative studio editing by composer Teo Macero, producer of many Davis sessions. Applied improvisation by both artists is involved: Davis, in demanding the repeated performances of a single groove and harmonic structure, retaining virtually constant tempo, together with ancillary motives; and Macero, in shaping the linkages of the resultant performances into a single sequence.

"Shhh/Peaceful" had an initial title "Mornin' Fast Train from Memphis to Harlem", and the studio notes refer to the "choo choo" train patterns. Consistent with this, the core rhythmic groove of OI (sections numbered 2 in Tables 8.1 and 8.2 provided at the end of the text) is a 4/4 with almost continuous regular sixteenth notes articulated usually on the hi-hat cymbal, and the bass playing A1/D2 on the eighth and first eighth note (respectively) of most bars. (I am using the convention of note description in which middle C is C4, and I refer to the sounding double bass pitches, not their notation an octave higher.) The sixteenth notes include some irregular accentuations, and frequent syncopated accents often coinciding with the A or the bass line, creating slight rhythmic perturbation. The harmony revolves continuously around D7, or the corresponding mode. As drummer Jack DeJohnette commented (quoted by Belden), In A Silent Way was a "groove album"; as Belden writes, "they eliminated the exposition altogether and focused on development (translation: no melodies, only solo vamps)". OI indeed contains no elaborated bass lines, and no overt composed melody. It rests almost entirely on the core groove and harmony. The final title refers to these features, the sixteenth note choo/choo (as Shhh) and the peaceful harmonic stasis.

In contrast to silent melodies (Tirro, 1967; Tirro, 1974) common in bebop (where harmonies are detached from the themes to which they originally pertained), there was apparently no silent melody. This feature can be seen as consistent with Lyotard's postmodern "incredulity towards meta-narrative" (Lyotard, 1984) as we have discussed previously in relation to the broader frame of improvisation (Smith and Dean, 1997): unstated bebop themes constitute a meta-narrative, (see also (Lochhead and Auner, 2002) for discussion). This idea is also relevant to the distinctions between framing within OI and LI, as I will discuss later.

Davis' trumpet solo (section 2h in the tables) is repeated in OI (but not LI), and Belden suggests that this creates a classical sonata form, comprising exposition, development, and recapitulation (of the exposition), where the trumpet solo comprises exposition and recapitulation. Unlike the usual ABA form (theme-improvisation-theme), here we have improvisation-variation-repeat improvisation, where applied improvisation has structured the piece. The version of OI as released in 1969 (Davis, 1969) also differs very slightly from the later re-released OI (Davis, 1968–9), notably being ten seconds shorter, but I will not elaborate on that.

A listener's perspectives on OI were changed dramatically with the release of LI. Tables 8.1 and 8.2 compare the overall structures of OI and LI, and are based on those presented by Belden (Belden, 2001), but with changes in metrical interpretation. I use his symbols for the sections, for ease of comparison.

In LI we now have an intermittently recurrent syncopated bass line (1), with accompanying chordal pattern. This line always concludes with a somewhat inflexible bar comprising two crotchets and then three triplet crotchets, followed by a virtual pause (almost complete inactivity), up to a maximum of approximately nine crotchets, sometimes non-integral, before the pattern repeats. The repetitions of (1) are unstable: parts drop out or lag behind, and the instability is heightened by the variable numbers of beats in the largely inactive last pause. Perhaps this was the reason that (1) was not used in OI though other performance 'errors' can be found on Davis recordings (Dean, 1992) and several authors argue that performance 'imperfection' is core to the authenticity and power of jazz (Gioia, 1988; Brown, 2000).

There is also a recurrent melodic line (3) for trumpet and soprano. This introduces modest harmonic movement, and also has an apparently erratic number of beats after reaching its final E root and before the core groove recommences. The performances of this melodic line are confident in comparison with those of (1). Virtually all of the bars of the piece within the core groove (sections numbered 2) are in 4/4 (in my interpretation), but (1) and (4) also contain one asymmetric bar of 7/4 (or sometimes other meters as noted already), forming a rhythmic and metrical disjunction. Even more important for the question of disjunction is the occurrence of the significant pauses in both versions (see Tables 8.1 and 8.2).

Davis used the studio as a site and time in which to generate the conditions for creating pieces, often preconceived only to a limited degree: an archetype of applied improvisation. Davis produced a "sense of the possible" for his group, even when they were quite new to the experience (Smith, 1998). John McLaughlin had never performed with Davis when this album was recorded, and was given cryptic instructions during the session, in the case of Zawinul's "In a Silent Way", resulting in an improvised reconstruction of the harmonic basis of the composition (Belden, 2001). Pieces were recorded in sections, and constructed finally in the editing studio, largely by Macero (again, applied improvisation). The pieces mostly had not been performed in public, and many were never regularly in the Davis' live bandbook.

It is useful to distinguish pure improvisation, revealed to the public while it is pursued, from applied improvisation, done in private as part of the process of developing a new work (Smith and Dean, 1997; Dean, 2003). Granted the fact that the studio creation involved not only the performers, but also Macero and his music-technological intervention, Davis' recording method of this period was clearly applied improvisation, analogous to that by which Mike Leigh developed many of his film and theatrical works (Smith and Dean, 1997).

In the case of "Shhh/Peaceful", the outcome of this process was the complete erasure of the recordings of the bass line (1) and of the melody (3) in OI, and their reinstatement in LI. The concept of erasure rarely applies during public improvisation, though it might when a painter covers up earlier gestures during a public performance (Smith and Dean, 1997). And in sound improvisation, there can only be a retrospective alteration of the impression of some previous musical events, by contrast with subsequent ones, or by

re-presentation of those earlier events in a new context or form. However, in applied improvisation in music in a studio recording context, erasure is possible, which Davis/Macero exploited. Furthermore, applied improvisation using technological intervention after the event, allows the generation of a sound organization long after the original sounds were recorded.

I will now discuss some implications of the pauses, and of the creative methods in the two versions of "Shhh/Peaceful".

Rhythmic Tension, Disjunction, and Mental Streaming

I have previously analyzed in some detail the progressively more complex metrical modulation in the work of Miles Davis during the early 1960s with his quintet of Shorter, Hancock, Ron Carter (bass) and Williams (Dean, 1992). I pointed out how a tension between the imagined continuation of a pulse, and a new pulse, can be produced. In Davis' case, the improvised pulse speeds were generally in the ratio 2:1 or 3:2, but in later recordings with this quintet, more irregular relationships held. These were further developed in the improvised work of groups such as Circle, and my own (austra)LYSIS (Dean, 1992; Dean, 1997), such that multiple pulses could coexist, in mutual competition, during the period of transition to a single new pulse. More recently, Wynton Marsalis has sophisticatedly cultivated such devices in his ironically entitled "Standard Time" set. The psychological reality of such "competing" musical streams, in this case characterized by pulse, has been well established (Bregman, 1994), and the relevance of micro-displacements in jazz is also clear (Dean, 1992; Iyer, 2002). I will not elaborate the evasive discourse of "out of notes" playing, of "signifyin'" (Walser, 1995; Smith and Dean, 1997), which is intrinsic to Miles Davis' trumpet playing, both emphasizing and challenging the rhythmic pulse.

In rhythmic music, there is normally an expectation of the continuation of a well-established pulse and meter, be it that of a classical composition, or of a groove piece. A transition to a new pulse, with or without change of meter, denies such expectation, and Elliott Carter has been a key proponent of such sometimes complex rhythmic transitions devices in classical composition. Leonard Meyer (Meyer, 1956; Meyer, 1965) gradually integrated the idea of such rhythmic tensions and their relevance to 'intensification', to complement his idea of melodic and harmonic expectation as sources of fulfillment or frustration in Western classical music. He argued that these tensions are a major source of "meaning" in music. One paradox of expectation is that it is at any moment and for any individual (whether listener, performer, DJ, VJ, etc.) either conventional (predicting continuity and similarity) or creative (predicting diversification and differentiation).

"Shhh/Peaceful" contains no significant pulse speed changes, in either of its versions. But in both, it contains section 4 (or 4a-4c in LI), a 7/4 bar (in 01), and other variable length "bars" in LI, which break the metrical continuity of the surrounding 4/4 groove (2). I propose that there is a continuum of perturbation of expectation, and one of semiotic impulse, between the rhythmic disjunction in which pulse continues unaltered (such as section 4), the pause,

and other musical devices which function as frames. Tables 8.1 and 8.2 indicate the pauses, and the framing structure I propose (using shared letters to delineate the frames), for OI and LI respectively.

The Pause and Expectation

So, what of the pause, and its impact on expectation? The 1954 Grove article suggested that a pause "should" break the rhythmic continuity, in part by being a length other than an obvious and symmetrical number of beats. While this emphasis is perhaps reasonable for a classical piece, often of low rhythmic intensity, does it have bearing on groove music? The pauses in "Shh/Peaceful" OI and LI are erratic in duration in terms of pulse. Particularly in OI, they create an expectation of a recharging of the "choo choo", which is in two cases significantly displaced; but the pauses are probably not of sufficient length that the pulse disappears from the mind. I have pointed out (Dean, 1992, 207) that the pause in OI at 6' is a length inconsistent with an integral number of pulses, giving the impression of a rhythmic lurch or glitch. (4c) at 10'42" in OI involves a shifting of the bar-line: or to view it another way, involves an interjected bar length other than 4/4, the 7/4 (4) disjunction discussed already. Controlling the length of a pause or bar disjunction within groove music thus allows control of the degree of discontinuity, frustration of rhythmic intensity, or section separation effected. Furthermore, this is often achieved in "Shh/Peaceful" by a technological intervention long after the performing moment.

Pause as Frame?

When the pause is sufficient to create a degree of separation, does it create a frame? As Derrida (1987) writes "There is framing, but the frame does not exist". The contemporary use of "freezing" frames while viewing streaming video tends to create the impression that a pause (button) catches statically what is otherwise a dynamic moment and preserves an impression of that dynamism while it is viewed. Whereas an image of a body in motion, when suspended, implies a physical dis-equilibrium which can only come from motion, and hence does imply that motion, there is no analogous argument for a pause comprising a sustained, decaying sound, such as all those in "Shhh/Peaceful" OI. Thus, a sonic pause, heard alone, is unlikely to constitute a stasis of a dynamic image, but it nevertheless can coexist with the remembered pulse when heard in context. It implies the possibility of a new section, probably with similar pulse to the preceding; it "frames" or fixes the sections. The pause at the beginning of OI is unique (and not shared with LI); it cannot imply continuation to a new listener. But to someone familiar with either version, the pause constitutes a remembrance of the groove associated with the D harmony, and the keyboard/guitar chordal context.

It is interesting to compare this framing by rhythmic stasis with the more recent glitch music (e.g. Fell, 2001). Here the sound of a vinyl scratch, or a digital overload constitutes the rough sound of the "glitch", and commonly

pieces are organized so that these occur very frequently, perhaps with rhythmic regularity. In timbre the noisy sound is usually disjunct with everything around it. But the function is distinct: to celebrate the "frailty" of digital technology, or the previously undesirable sound of the scratch itself; or again, to create the pulse. These glitches are neither pauses nor frames.

Framing and Intertextual Anticipation

If there is a continuum of dislocation achieved by the rhythmic disjunction, the pause and the frame, then how is framing altered in LI by the inclusion of the motivic materials 1 and 3? A comparative analysis of OI and LI (Tables 8.1 and 8.2) reveals that the motivic materials are generally placed in sectionalization positions in OI that either replace or support the pauses of LI. They do contribute to the delineation, and hence the framing, of the sections. For the listener familiar with OI, LI comes as a series of shocks, and one suspects that these are just magnified versions of the Meyeresque perturbations/dislocations which are implied by LI heard naïve of OI. They all depend on the suspension of the core sixteenth note groove and to a lesser degree the D harmonic space. Macero's purpose in re-organizing the recorded sounds was clear and consistent.

It is worthwhile characterizing the frames in more detail, as summarized in Tables 8.1 and 8.2. The frames in OI are all very short pauses/disjunctions, symmetrically placed around the solos. In most cases, the closing part of one frame is the opening of another. One can also envisage a frame (H) separating the two (identical/ repeated recording) trumpet solos (2h), within which frames D-F are nested. LI contains the same number of frames, A-H, but most are far more elaborated (as indicated by the Aa-aA designations on Table 8.2). For example, the first frame, A contains material 1, and not just a pause; the second, B contains 1–1a/1–1a, and the fourth, D, comprises 1c-3–4/1d-3b-4b. So, each frame usually provides the same group of material before and after the section it frames. There is no obvious nested frame analogous to H of OI, but this is a consequence of the fact that the trumpet solo is not repeated in LI. Another way of looking at this could be that in OI the 2 occurrences of 2h (trumpet solo), frame the material within them.

What do these frames contribute to the organized sound? Here we come to a fascinating topic music shares with most other artistic areas. A picture frame might seem to be the barrier between the artistic object and the rest of the world. But it has been debated extensively, for example by philosophers and cultural theorists from Kant to Derrida, whether a frame is part of the art work, a separation between the work and the frame itself, constitutive of the work or contingent upon it (Littlefield, 1996). The commencing and concluding 'silences' abutting the sounds of a piece of 'music' have been the main object of attention as frames in music (Cone, 1966). The silence following a piece has been viewed as a source of musical 'closure', but this concept has proved almost as philosophically slippery and psychologically unverifiable as that which presumes that listeners recognize tonal or other closures (McCreless,

1991; Cook, 1998; McClary, 1992). Indeed there is usually no genuine silence around a performance or domestic listening, and it is rather behavioral or social constraints, which distinguish the 'silent' frame from the 'silence' which precedes and succeeds them, or for that matter from the 'silence' of the sound of the music itself. There is 'confusion between inner and outer, frame and framed' (Littlefield, 1996). Furthermore, a frame within a kinetic work, which continues before and after the frame, cannot have this effect of separation from the external (sound) world. And in some spheres of endeavor, such as architecture, whole movements have focused on whether the frame of a domestic building is a continuum between outside environment and inside, with minimal separation, or rather a transition phase into the inviting but unrevealed (potentially highly disjunct) interior. These architectural issues can be seen partly as an attempt to convert what might be an instantaneous impression of a building, into a kinetically varying one, transforming in time as the building is "entered" and experienced. Indeed, I have proposed a space for improvisers, which denies the concept of fixed frame/entry, and requires continuous evolution (Smith and Dean, 1997, appendix 1). Such a mutable building would have substantial impacts on framing of spatialized sound, yet to be realized or investigated.

So, what constitutes a frame within the kinetic of music, justifying my propositions as to the structures of OI and LI? For our discussion of events on a larger time scale, I argue (in contradistinction to (Cone, 1966), who maintains there are no intramusical frames) that an internal frame presents the following minimal features. It requires two sections of sound which are structurally distinct from another they surround, and which share features such as the bass line of 1; the two sections (in their minimal form) should be symmetrically placed in time in relation to the surrounded entity(ies) (two frames surrounding one entity, three surrounding two entities which are internally related to each other etc.). The frame should probably be less substantial than the entity; whether in duration, extent of event, or harmonic flux. These relationships can fulfill the conventional criteria of evenness in so called well-formed rhythms (London, 2012). They correspond reasonably with Philip Tagg's "episodic marker", in his "modest typology" of musical signs (Tagg, 1991). As Tables 8.1 and 8.2 illustrate, the pauses in OI, and the materials 1, 3 and 4 in LI share the first two features in relation to the entities they frame.

When should one frame with a pause (no or very limited musical material within the frame), or with a kinetic frame (more musical material within the frame)? When does the latter structure become sectionalization, with the frame rather becoming just another piece of musical material? These are probably psychological questions whose answer varies from listener to listener, but they have potential structural and semiotic significance. Again there is probably a functional musical continuum, between the "solid" frame, like that of a picture, and which has little exchange with its surrounds; and the fluid frame, like the opening pause of "Shhh/Peaceful", which mediates exchange between the outside world (preceding time), and the subsequent opening of the core sound and groove of the piece, or between one section and the next. These features

are particularly relevant to pieces constructed by the applied improvisation/studio editing music technology used by Davis/Macero in these recordings.

Derrida has another relevant proposition (Derrida, 1987), as quoted by Littlefield (Littlefield, 1996): "[…] the smallest circle [inscribes] in itself the figure of the largest", perhaps intending also a reference to fractality. This idea corresponds to the nesting of frames I have identified within "Shhh/Peaceful", particularly OI. "Nesting" is a computational terminology to indicate a process, which occurs within another, the material within the frame, the material/frame within the bigger frame.

A terminal pause, recapitulating the opening one, is not found in either OI or LI, but both have fades, within the core groove. These imply that the groove continues after the piece and mediates a transition from the piece to the kinetics of real-world sound that is the reciprocal of that achieved by the opening pause. Implied within that real-world sound is a continuation of the groove, whether or not the listener continues to the next track of the album, which was originally In A Silent Way. A terminal pause could not have achieved this, and the technology of the studio was probably necessary to achieve an interface between the musician and the world. The machine permitted the best transition into the world. While Cage indicated that there is no such thing as silence, terminal or otherwise (Cage, 1961), Takemitsu referred to "silence-as-death", clearly in a sense terminal (Takemitsu, 1995).

Improvisation is not an activity restricted to music, or for that matter the arts in general (Smith and Dean, 1997), but is intrinsic to individual and social behaviors. Thus, Hebdige has written of the capacity of improvisation in either context to allow one to "edge" away from norms, and least implied the idea of the whole of life as an "enframement" of activities such as musical improvisation (Hebdige, 2001). The importance of framing within a piece such as "Shhh/Peaceful", around it, and in allowing a perception of and response to the world and its components, is consequent on these insights, and it highlights the mediating power of technology for sound organization.

Postlude. Groove and Framing in austraLYSIS' "Silent Waves": Practice-led Research Flows into Research-led Practice

Throughout the largely musicological and psychological/philosophical case study above, I have repeatedly alluded to specific research implications. Finally, I want to return to the framework of P-led-R/R-led-P, to illustrate how these flow into further creative work by means of R-led-P. I do so by discussion of a piece created with my ensemble austraLYSIS in which I have pursued these ideas. So overall, the practice-led creation/research of Davis/Macero led to a piece of conventional academic research. The latter in turn flowed into a process of research-led practice, resulting in a new artistic creation by our ensemble.

Framing is precise, technological and deterministic in "Shhh/ Peaceful", OI and LI, whether or not this was self-aware on the part of Macero (or Davis). For this listener enculturated with OI the effects of the two works are very

different, but the perception of sectionalization, and the implied continuity of the core groove and harmony through the space outside the frames and between the pauses are in common. Perhaps the two versions, OI and LI will seem very similar when both have been experienced as frequently as each other; this might be a logical outcome of the proposed frame structures. A fascinating aspect is the relative lack of impact of the framing materials 1 and 4 themselves (those only found in LI, and not used in OI), in comparison with the remainder; it seems the remainder largely create the expectation of the resurgence of the groove. From a memetic perspective, the creation of the piece can be construed as one of evolution of a single meme, the first groove section recorded in the session (Jan, 2000). The piece is still not a 'silent way'. But it has some way to proceed before 1, 3 and 4 become substantive.

These observations on "Shh/Peaceful" relate to current 'remixing'. This term is used for a range of activities, spread from simple timbral/spatial image changes, to complete transformation of the sequence of sonic actions in a piece, producing another. Like Macero, the remixer can create for an experienced listener any degree of continuity or discontinuity with the source piece. Indeed, on Davis' Jack Johnson (Davis, 1970), the piece "Yesternow", of 25 minutes duration, contains 90" (commencing c. 12' 30") of digital quotation from OI, forming a link from old to new material, on top of which 90" there are additional trumpet phrases from Miles. Similarly, Bill Laswell has been able to perform a "reconstruction and mix translation" of music of Miles Davis from 1969–74 (Davis and Laswell, 1998), including "Shhh/Peaceful". One common tendency in remixing is to enforce a particular musical style (for example, the rhythmic features of drum and bass) on top of sonic material of totally different nature, perhaps devoid of pulse. This is to recreate an idiom using new material; while another less exploited possibility is to extrapolate from the material into a sonic world foreign to the remixer. Sonic intertextuality is possibly most interesting when the original texts are not only the artifacts, but also the sonic world itself, as Schafer (Schafer, 1967) or Cage might argue. Only the (non-)'silent way' of the world can underpin complete sonic intertextuality.

So, what of the implications of the case study above for new composition as distinct from remixing? In other words, what are the implications of the practice-led creation/research by Davis/Macero, as analyzed in my musicological research, for research-led practice? One can envisage a continuum in modes of composition between (1) remixing (using previously recorded sound), (2) notated quotation (using sounded motivic elements from a previous work by notating them for fresh interpretation), and (3) using the ideas and processes of a prior work (such as framing, pauses, tempo and metrical ambiguity, applied improvisation) for the creation of new material which makes no explicit sonic reference to the original. It is obviously relatively difficult to define examples of (3) unless a composer/improviser specifies them. Even then, it may be difficult in a purely musicological sense to confirm the links. Case (2) is more accessible. The following example from my own work mainly illustrates (2) but contains numerous sections that close in on (3).

The piece "Silent Waves" (1992) by writer Hazel Smith and me, recorded on CD by our ensemble austraLYSIS (Smith and Dean, 1994), with Sandy Evans playing soprano saxophone, Hazel as text performer, and myself as keyboardist, is a direct example of R-led-P composition/improvisation of types (2) and (3). All three participants were well aware of the original Davis/Macero piece, and of my interest in pauses, irregularity of timing and groove, and of framing. An mp3 of the piece is online (Smith et al., 1992) (with the score linked) and the album is available. Hazel writes in the sleeve note that the performed texts of the piece reference "environmental pollutants and their products, such as the oxides of nitrogen (also known aptly as NOx)" and that in the "textual transformation of relevant ideas […] the words are treated as musical motives rather than logical units". In the piece the silence of space, pause and rhythm, is elided with the silent toxic waves we increasingly experience from the anthropogenically transformed atmosphere. As Hazel continues, the words "evoke tangible and intangible, surreal landscapes, and connect psychological and environmental destruction and survival while also referring to the musical and linguistic structures of which they are a part". The sound of ocean waves is transmuted into the silence of the atmosphere, somewhat in the way the groove of "Shh/Peaceful" transmutes into the silence of a pause or external frame. Indeed, the musical part of the work quotes the 16th note pattern and the D(7) suspension of "Shh/Peaceful", enunciated as a sequence on a sampler, and provides irregular length gaps in the groove, not always pauses, but always dramatically contrasted. Considerable harmonic extension is provided by the chordal keyboard (primarily a sampled vibraphone timbre, secondarily an electric piano-like sound, echoing "Shh/Peaceful") and the soprano saxophone, both of which enunciate extensive notated material and controlled improvisation upon it.

"Silent Waves" essays pauses, frames, silent rhythm and groove, rhythmic ambiguity, and polymetricality. The piece starts with a sampled, four sixteenth notes long cymbal pattern, like that continuous through most of "Shh/Peaceful". This occurs intermittently in the opening 90 secs, with substantial gaps. The four sounds are presented without metrical cues such as accentuation. Listeners may hear this as 2+2 sixteenth notes, but equally as 3 +1. But whereas the 2+2 interpretation represents 4/8, with only one down beat sound at the highest level of the putative metrical hierarchy the piece is establishing, the 3+1 interpretation provides two such down beat sounds (in 3/8) and may be preferred by many listeners. This ambiguity is emphasized by the early bass line entries, which enunciate the A to D movement, as in "Shh/Peaceful", but with a rhythmic pattern which is initially not 2+4 sixteenth notes (A+D) but for example, 6+12, supporting the possible interpretation of the sixteenth notes as 3/8 (3+1). Later the A+D can occur not as an anacrusis, but with the A on the putative downbeat of the meter, creating another tension of ambiguity. As the piece progresses, there is a brief stretch of continuously repeated, four sixteenth notes pattern within the first 90 sec, but thereafter there is only a progressive increase in the number of contiguous repetitions of

the four sixteenth notes before another substantial silencing of the pattern. A cathartic moment of chordal dissonance (on the vibraphone) and a toxic multiphonic (on soprano saxophone) between 4'50" and 5' frames the subsequent section (lasting beyond 8'). In that following section a gradual assembly of larger groups of sixteenth notes (e.g. 12x4, 16x4) separated by substantial silences of the pattern occurs, but this is also gently challenged by repetitions notated as multiple 5/4 (rather than 4/4) bars: by about 8 minutes into the piece, these are twice presented in a long sequence, but thereafter 25 beat continuous patterns occur, which may trigger a feeling of ambiguity in close listeners (since it is no longer readily parsed as a complete sequence of 4/4 bars). Similarly in this late section the A+D bassline sometimes supports the 5/4 interpretation of bars or groups of bars but is mostly absent. By 8–9' the process is ready for the two main long separated blocks of sixteenth notes in which the pattern is repeated numerous times continuously.

Between the emblematic four sixteenth note patterns, there is essentially a "silent rhythm" and listeners may or may not retain it: it may be a silent groove. Meanwhile, the saxophone and vibraphone melodic and harmonic components, often largely independent of each other, bear a poly-metrical relation to the heard and the silent sixteenth note pattern, creating waves of multiple layers. The saxophone several times performs a framing motive comprising dotted crotchet and syncopated swung eight note tied to a long note, with a descending minor third, quoting a component of "Shh/Peaceful" which is more prominent in "It's About that Time". Sometimes the motive is accompanied harmonically. The harmonic components throughout the piece contain but drastically deviate from the D7, into polytonality, atonality and micro-tunings.

The notation (Smith and Dean, 1992) often encourages the players to be free in their timing and in relation to each other: the music progresses monotonically rather than in parallel precise coordination. For example, at the first chordal entry of keyboard and saxophone, their six notated bars indeed correspond roughly in duration to six bars of the continuing sixteenth notes; but elsewhere, rhythms are indicated non-metrically, or spatially, or for example, different numbers of bars are provided for each part in a given space. Later the keyboard and saxophone are requested to use a form of competitive metrical modulation, used quite extensively in some earlier work by our antecedent ensemble LYSIS (e.g. on Suite "Time" Part 3 (Dean, 1991)). After 8'30" there are several passages in which the instrumentalists provide swirling, gliding waves that are far from silent and move at a rate disparate from the by now obviously 4/16 repetitive pattern. These ambiguous multi-layerings and framings continue through the rest of the piece, which is also intermittently framed by the two note/two chord rhythmic feature that eventually concludes it (dotted crotchet, swung eight note tied to minim, at the pulse rate of the sixteenth notes).

For a large part of the opening 5' the performed text mainly occupies defined durations within the silent rhythm range (i.e. between the frames of

the enunciated four sixteenth note pattern). Later on, the text extends and penetrates more to overlap these frames, especially as the number of continuous sixteenth notes in the cymbal pattern increases. The text performer has to enunciate defined musical rhythms, from eight notes to quintuplets and 7-tuplets across multiple beats, again at tempi that do not usually converge with the sixteenth note cymbal line.

The performed text of "Silent Waves" echoes many of these musical concerns as well as the environmental themes. Thus, the first five minutes of the piece present the following performed text (where – [en dash] indicates a substantial temporal gap).

> Silent waves – Pulse – Peaceful… SHHH… – Silent waves – Silent graves are signing – The sea surrenders in a silent way/ seeds hidden meters buried themes/ – rhythm reigns poetic licence/ a war of silence rules the waves/ the tears of fish in drying oceans/ shores shrouded in semantic veils/ pulses feed/ unpeel the unpresentable/ the lead from cars/ the forms we farm/ the missing beats in processed feelings/ – the steadiness which understates/ in words unready swaying stems/ our heads of state are killing whales/ the starts sucked in by status symbols – ozone tones/ green gaze/ cosmic silos/ – psychic searchlights pythons pylons/ – toxic waves dioxide cyclones/token truths on silent signposts/ maps revealing mainland islands/ – the silent weave of silent waves/ – green blue blood of algae blooms/ pulsing on imagined staves/ rise/ – rhythms playing language games – ozone oceans puckered plains/ openings in cosmic veins/ window on a world which pales – pricks drifting syntax – shifting soundtracks of semantic rain/ shadows of forgotten failings/ – music memory mystic mail/ turns neglected soil sustains/ – the old world order new founds nests/ shifting nations migrant worlds

Here the word 'rise' may be transformed vocally, rather than solely enunciated poetically. In addition there are seven text samples that are occasionally sonically manipulated (mostly between the sixteenth note patterns), from both female and male voices, with the original phrases being: pulses feed; whales wing; winds pulse; N..O..X; Nox Veils; unstate; unsteady. These phrases all relate directly to either musical/textual rhythm, and/or environmental and political instability. In addition, "whales wing" is an intertextual reference to our earlier piece "The Wings of the Whale" (based on a poem of Miroslav Holub) from the CD of the same name.

The text concludes:

> will waves be saved, will science last the day?/ silent waves are folding in my fist/ dying pulses peak – waves silence life

Many research ideas from the work on "In A Silent Way" and particularly "Shh/Peaceful" were thus incorporated into this composition, as one possible continuation of the cycle of P-led-R/R-led-P that is the theme of this chapter.

Table 8.1 The sectional structure of "Shh/Peaceful" (OI)[1]

Timing	*Section designation (based on Belden; shared with Table 8.2). Where sections share the same designation, they are literal (or minutely varied) repetitions; where they share simply the number, they are clearcut variants of a common process.*	*Comments*	*Pauses/Rhythmic disjunctions*	*Frames (pairs of capital letters indicate the outer edges of a frame).*
00:00	5	Organ followed by guitar chord (suspended 4 in D^7)	Pause	A B
00:07	2ci	Guitar solo; 16th note vamp commences (on D)		
01:30		Pause also involves an edit	Pause	B C
01:35	2h	Trumpet solo (vamp continues)		
05:15	2v	Keyboards (vamp continues)		
05:57		Pause involves a rhythmic disjunction; Guitar solo commences	Pause/disjunction	C D H
06:14	2cii	Guitar solo with keyboard interaction		
09:15	2e	Soprano saxophone solo		
10:42	4c	A single 7/4 bar. This bar comprises 8th note, followed by two syncopated quarter notes, followed by a syncopated 8th note tied to a whole note.		D E
10:46	2f	Keyboards with guitar, as if duet		
11.57	5	As above	Pause	E F
12:08	2g	Organ with short keyboard and guitar phrases in duet		
		This pause corresponds to 6 quarter notes	Pause	F G H
13:31	2h	Trumpet solo (as above)		
17:11	2v	As above		
17:53	2v	Excerpt, studio remixed	Fades	G
18:17	Finish			A

Table 8.2 The sectional structure of "Shh/Peaceful" (LI)[2]

Timing	*Section designation (based on Belden). Where sections share the same designation, they are literal (or minutely varied) repetitions; where they share simply the number, they are clearcut variants. There are slight differences between 2c in LI and OI, and most of 2d is material not heard in OI.*	*Comments*	*Pauses/rhythmic disjunctions:*	*Frames (pairs of capital letters indicate the outer edges of a frame; pairs of small letters indicate the inner edges, when necessary)*
00:00	1	A pattern of (2x 4/4, 1x 10/4, 1x 7/4, 1x 4/4, plus additional time)	Last 4/4 bar is generally largely devoid of movement	A B
	1a	A 5/4 bar according to Belden, but seemingly closer to 13 8th notes in duration: disjunct rhythmically		a b
00:27	2	Guitar solo. On D^7sus4. Core vamp commences.		
00:45	1	8 repetitions, though variable numbers of beats after the last 4/4 bar (up to a maximum of an additional 5). Instabilities and drop outs in the performances.		b C
	1aii	As for 1a, but 7/4.		B c
02:55	2b	Guitar solo		
04:00	1c	2 repetitions, with 4/4 the last time. 'Abrupt edit', as noted by Belden, creating a rhythmic disjunction, judging the first beat of the bar by the a/d 8th note bass pattern.		c D

04:29	3	Trumpet/soprano composed melody. Harmonic pattern, which moves from D major, through G to E minor.		
04:44	4	A single 7/4 bar, rhythmic pattern as described in Table 8.1, but with an additional 1/4	A rhythmic disjunction	C d
04:48	2c	Guitar solo (with vamp)		
07:06	2d	Guitar solo continues after 'bad edit', as noted by Belden (with vamp)		
07:57	1d	Two repetitions		d E
08:30	3b			
08:40	4b	As for 4 above, but 'a little sloppy', according to Belden	Rhythmic Disjunction	D e
08:45	2e	Soprano saxophone solo, slows down into pause.		
10:20			Pause	e F
10:25	1e	Two repetitions		
10:55	3c			
11:05	4c	As for 4 above; Two keyboards	Disjunction	E f
11:12	2f	Guitar/keyboards duet		
12:22	5	Chord on organ, then joined by guitar	Pause	f G
12:31	1f	Two repetitions. Keyboards omit several chords (5/4 at end)		
13:03	3d			
13:15	4d	As for 4	Disjunction	F g
13:22	2g	Organ with short guitar phrases		
14:43			Pause	G H
14:45	2h	Trumpet solo		
18:25	2v	Vamp and fade	Fade	a H
19:16	Finish			A

Everything discussed relates to compositional process (2) outlined above. But particularly in the sections of "Silent Waves" in which the sixteenth note pattern is silent, texts concern environmental issues, electro-acoustically transformed vocal sounds occur, and the playing is dominantly post-tonal and post-metrical, I would also identify the application of (3): using the ideas and processes of a prior work to create new material which makes no explicit sonic reference to the original.

In other works, I have attempted to further use (3), and I suspect many others will have too. An infinity of such opportunities in creative work in jazz composition and improvisation exist, and I hope that the approach described above will be more widely appreciated and explicitly used: creative work often benefits from method and practice, since it is not easy otherwise to continue to genuinely evolve one's forms and modes of expression. Otherwise, static waves may ensue, rather than waves that are sounded, swirling and teeming: alive.

Notes

1 This is the original issue (O1), but the timings shown are its digital time codes on the re-release compilation (2001).
2 Later issue, digital time codes from the Silent Way sessions compilation, 2001, on which it was issued for the first time.

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9 Analysis and Observations of Pre-learnt and Idiosyncratic Elements in Improvisation

A Methodology for Artistic Research in Jazz

Robert L. Burke

Introduction

Artistic research has the capacity to add to the body of knowledge that is embodied in the domain of musical performance that includes both knowing that and knowing how. It also broadens the analysis and explication beyond the replicable, to provide a more coherent and cohesive articulation of the idiosyncratic processes that generate singular and multiple musical discoveries.

Researching one's own artistry both while performing and in reflection is an approach appropriate to both improvisers and players of repertoire in that it serves to inform in a direct way a performer's musical thinking at a particular stage in the creative process because individual characteristics in phrasing, rhythm, dynamics and approaches to form are captured and made manifest for analysis.

The challenge for improvising jazz musicians is to produce music that is distinctive and individualistic, not resembling too closely the language or style of another player. It is a challenge not to be underestimated, as it requires a careful balance of pre-learned, pre-heard material, and the desire to produce music that, at least to the educated ear appears to be created in the moment. It is the latter that is the focus of this inquiry. An awareness of 'well-worn' material is critical for creative musicians in their constant search for the 'new'. Through the lens of the performer this artistic research methodology allows analysis of improvisers to reflect on both the positive and negative elements in performance that emerge and are discovered in the spontaneous process. In what follows, the author proposes a methodology for identifying pre-learnt and idiosyncratic elements, positions the methodology within the current research and presents a case study to demonstrate the application of scientific and artistic methods.

Historically, jazz analysis has been situated in the historical development of jazz and as Barry Kenny (1999, 57) observes "jazz analytic theory is a comparatively recent phenomenon, with its roots in early analytical texts by Sargeant (1938), Hodeir (1956) and Schuller (1958)". Other methods of analysis were developed by Smith (1983), Berliner (1994), Westendorf (1994), Birkett

(1995) and Duke (1996). Overviews of analytical literature have been written by Potter (1992) and Martin (1996). Within the context of performance analysis specific to jazz improvisation, Kenny identifies five areas under what he labels "theoretical analysis" (p.58), citing leaders of research in these areas:

(1) chord-scale theory: Mehegan (1959), Birkett (1995), Berliner (1994)
(2) formulaic analysis: Owens (1995), Sarath (1996), Kernfeld (1983), Monson (1996), Berliner (1994)
(3) motivic analysis: Schuller (1958), Jost (1975), Cogswell (1989), Berliner (1994), Martin (2001)
(4) pitch class set analysis: Block (1997)
(5) Schenkerian analysis: Stewart (1973), Gilbert (1997), Larson (1998)

Further, Kenny (1999) identifies four areas of jazz analysis: history, criticism, pedagogy and performance analysis. He contends that jazz is largely "a form of spontaneous composition, and notions of performance practice (i.e. pedagogy) cannot be easily separated from the theory that assists with its creation" (p.56). He asserts that jazz history, criticism and pedagogy have on the whole neglected the process of jazz performance and the "perceptual experience of jazz" (p.56). It is a view that reinforces the importance of artistic research and its intersection with scientific methodology.

This chapter offers an analytical methodology that practitioners can apply in order to gain insight into their approach to improvisation and addresses the question: how does artistic research lead to a greater understanding and development of the art of musical improvisation in a jazz context? Through an adaption of Jan LaRues' *Guidelines for Style Analysis* (1992), this methodology allows practitioners to analyze transcriptions and observations of their own performances in the hope of understanding what aspects of their improvisation can be traced to pre-learnt materials and what can be considered personal idiosyncrasies. The study of one's own improvised performances via transcriptions has been for decades part of the teaching and learning process in a number of major music institutions that offer jazz/improvisation programs. Through transcriptions, one can see (and hear) individual characteristics in phrasing, rhythm, dynamics and approaches to form. The analysis of transcriptions of recorded performances provides a substantial body of both quantitative and qualitative evidence about the inner workings of a jazz musician's spontaneous music-making.

> Scientific method highlights the singular, exclusiveness of dispassionate reproduction for verification, the artistic method foregrounds the artistry, by way of analysis of the performance in which the observation from the "insider's" perspective can be seen as complementary to the creative process.
>
> (Burke and Onsman, 2017)

The significance of this adaption of LaRue's method of analysis is the duality of scientific and artistic research methods (Onsman and Burke 2019),[1] which

encompasses data collection and analysis (performance and transcriptions) in combination with observations – reflexive and reflective – of the process of music making. Inclusive are observational approaches that lead to discovery of multiple outcomes compared to the singular outcome: generally, the domain of scientific methodology. At the core of artistic methodology are methods such as a heuristic approach that "involves self-search, self-dialogue, and self-discovery: the research question flows out of inner awareness, meaning and inspiration" (Moustakas, 1990, 11).

Applying these characteristics of artistic research, LaRue's *Guidelines for Style Analysis* (1992), (although the focus of his text is based on classical music repertoire) was identified as highly suitable for examining in detail transcribed improvised performances and observations of 'what happened' from the performer's perspective and using an artistic research methodology; ultimately making discoveries that informed the outcomes of the research and his 'three level' approach to analysis, allowed for a macro, medium and micro view of the music. The adoption of LaRue's methodology for analysis, although modified to accommodate the requirements of jazz improvisation, is ideal for a number of reasons: first, it suits the critical evaluation of the good and not so good aspects of performance. Second, it highlights multiple discoveries as research outcomes. Third, it foregrounds the importance of self-reflective research.

This adapted version of LaRues' method comprises three parts:

(1) background: establishes a frame of reference and the reasons for choice of analytical material
(2) observation: based on three levels of analysis: large, medium and small; all three embrace the elements of sound, harmony, melody, rhythm, growth and style
(3) evaluation: self-evaluation and summary

Inclusive of this case study, sections on 'performer's background' and 'influential figures', both of which fall into the first parameter of 'background', have been abridged to allow for more detail to be included in the analysis of the transcription. It is believed this provides the appropriate context and detail to understand the value of such a method and offers concrete evidence of what can be gained through the method's application.

As this chapter deals primarily with improvisations on saxophone, harmony is discussed in large dimension only, whereas melodic and rhythmic elements undergo both macro and micro examination. Therefore, the method is malleable to the individual. Depending on context, the subject should consider each aspect of the method and decide whether just macro, or macro and micro analysis is most appropriate. Elements are identified that clearly are assimilations of what has been learnt, and others perceived to be more idiosyncratic.

Transcriptions are written in the Western music tradition of notation – annotated where relevant – and consequently observations made are done so within limitations of musical notes on a page. This is especially pertinent with improvised performances where approximations only can be scored,

particularly in relation to rhythm. Berliner makes the point (p.510): "All transcriptions, no matter how detailed comprise reductive representations of the original recordings. Especially elusive are essential rhythmic and timbral features of jazz performance."

Consequently, subtleties and variations in sound quality, tone and rhythmic placement are made more from an aural perspective than the notated score.

Berliner makes one other pertinent comment and it applies to those who transcribe performances other than their own, and those who, as in this research, transcribe their own work:

> Even when transcribers work with the same recorded examples and the same playback system their relative sensitivity to different features of music – harmony, or rhythm or melody distinguishes interpretations. Details that some players hear in the music simply allude other players.
>
> (p.508)

Analytical comment is made under the following headings:

(1) composition and style (large dimension)
(2) harmony (large dimension)
(3) sound (tone, dynamics – large, medium, small dimensions)
(4) melodic and motivic material, (large, medium/small dimensions)
    - structure
    - phrases
    - motives/cells
    - note choices
    - tonality
(5) rhythm (large, medium/small dimensions)

In various ways and to varying degrees these aspects as in the readings above are relevant to 'growth' in a musical work (LaRue's term) and artistic research methods: reflection and observation. LaRue describes growth as the "combining element" because of its "dual existence […] as movement and shape" (p.11). In this chapter, the term 'growth' is used to describe the organic development of materials (melody and rhythm) in the unfolding of improvisations.

Arguably, improvisers who consciously or subconsciously consider the notion of 'growth' and the elements that drive it as critical in performance have a compositional intent when they play spontaneously. Further, improvisers who consciously or subconsciously consider the notion of 'growth' and the elements that drive it as critical in performance have a compositional intent when they play spontaneously. A less engaged approach is to produce a series of notes that might satisfy the melodic/harmonic connections between melody and underlying harmony, and the rhythmic demands of a 'style', but are less concerned with structure or growth and overall design, beyond perhaps becoming 'louder', or somewhat faster in the heat of the performance as the

music unfolds. Although there is room for debate on this issue, the concept of growth within the performance requires a commitment to the music beyond seeing it as the task at hand, else it runs the risk of relying on expertise without artistry.

Case Study: Robert Burke[2]

Background (Influential Figures)

My early music studies were in classical music but being a saxophone player with a strong history in jazz, I was lured to the creative freedom of improvisation. When I started to seriously study jazz, a number of artists were prominent in my learning. This came through transcribing solos and listening intently to their recorded improvisations. While there are a multitude of players that have been influential in my development, I mention only the key players whose influence is substantial in the case study to follow.

John Coltrane (1926–1967) initially inspired me with his passion, sound, technical ability and intensity, but over time a greater study of his harmonic and rhythmic was influential. These influences (see figures below) are identified clearly in transcriptions of my own performances, most notably the use of motivic cells and their development. Coltrane's early and middle career favored a motivic approach to improvisation. His composition "Giant Steps" (1960) is a case in point and a useful tool in understanding his approach to outlining functional chord structures through melodic invention.

Figure 9.1 illustrates Coltrane's harmonic and melodic approach. Part of my practice regime as a developing improviser was to isolate these short motivic statements and play them in all twelve keys; the purpose being to consolidate a basis for playing successfully through chord progressions common in jazz repertoire. Over time, these motivic statements became a 'jumping off' point that led me to a more organic and personal approach to improvisation.

In addition to the use of pentatonic scales and motives in "Giant Steps", Coltrane also includes variations to the main melodic material, and the development rather than repetition of motivic cells. Studying this method of motivic development was integral in my aim to outline chords in a systematic

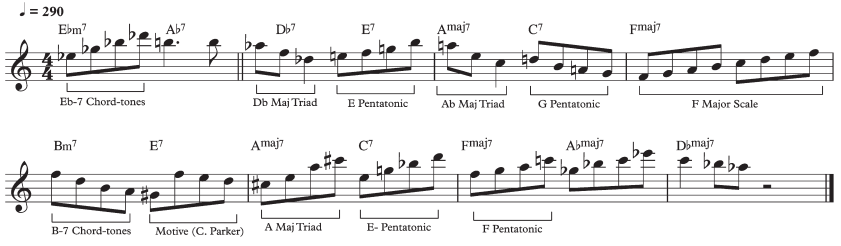

Figure 9.1 First eight bars of John Coltrane's solo "Giant Steps" (Take 5)

way, create tension and release when improvising over chord progressions and to imply chromaticism in *modal* and *free jazz* using Giant Steps' changes (Appendix F).

Miles Davis's (1926–1991) eloquent and understated phrasing, and use of space remains a powerful influence, as does his drive for change in his musical concepts; apparent from the 1950s to the 1980s. The seminal album *Kind of Blue* was a starting point to what became for me an education in composition and improvisation. It is Davis's conceptual approach to improvisation of where to place notes as much as his technique that continues to be influential.

In the late 1970s I discovered the music of Jan Garbarek (b. 1947), whose influence on my playing is related mainly to sound (tone) and phrasing. Whilst he performed with jazz musicians, his style was influenced by Eastern traditions; the sound quality of the North Indian oboe (shehnai) is apparent, especially in his use of long, sustained notes, the bending of notes at the top of the (soprano saxophone), range, ornamentation of notes and his centered, 'sharp' sound. These characteristics can be heard on the recording *Folk Songs* (Garbarek, Gismonti and Haden, 1981).

Observations

This section analyses three choruses of an improvised saxophone solo by the author. The selected case study is an improvisation on the tune "Tahdon" ('I do'), composed by Finnish composer/improviser Jukka Perko, as found on the album *Live at Bennetts Lane* by the Rob Burke Quartet (2011).[3] "Tahdon" was chosen because the improvisation takes place over three consecutive choruses over a fixed form. Elements are identified that clearly are assimilations of pre-learnt material (traced back to the influences of Coltrane, Davis, and Garbarek), and others perceived to be idiosyncratic. Transcriptions are notated and annotated where relevant, and consequently, observations are made within limitations of this form. This is especially pertinent with improvised performances where approximations only can be scored, particularly in relation to rhythm. Berliner states, "all transcriptions, no matter how detailed comprise reductive representations of the original recordings. Especially elusive are essential rhythmic and timbral features of jazz performance" (1994, 510). Consequently, subtleties and variations in sound quality, tone and rhythmic placement are made more from an aural perspective than the notated score.

Composition and Style

Large Dimension

"Tahdon" is twenty bars in length, with an 11-bar coda, and falls outside the traditional, more common jazz standard in terms of structure and harmony. This is attributable in part to it being written for an instrumental ensemble, and partly because the composer is European and one of many from that part

of the world who relies less on African-American jazz influences and repertoire and more on their own compositional voice and culture.

Harmony

Large Dimension

"Tahdon" comprises an A-B form; in D minor and D major, respectively (Appendix D). The most noticeable aspects of its design are (1) the 'release' at bar 11 from minor to major tonality, (2) the solitary 2/4 bar at the end of the form and (3) a *coda* that begins with one bar of 6/4, then 4/4 until the penultimate bar of 2/4, with a final bar of 4/4 in Gb major.

The piece moves between parallel chord movements (bar 1 and the repeat at bar 3) and progressions that are tonally functional (bars 2–3, 4–5, 9–10 and 30–31). Harmonic rhythm is most commonly three or four chords per bar. Perhaps the most unusual harmonic aspect of the piece occurs in the coda (over which improvisations are not played) where the tonality moves to F# minor (bar 23), with the piece ending on Gb major. The challenge for me as the soloist, was the requirement to traverse both parallel and cadential harmonic movement.

While the harmony fits comfortably into the two-bar phrase structure, the 'extra' two bars at the end of each section, and the shortening of the B section by two beats (bar 20) takes it a little out of the ordinary. The analysis of melodic and rhythmic material that follows shows how these 'little surprises' add to the creative design, especially in terms of the flow of ideas.

Sound (Tone/Dynamics)

Large Dimension

Dynamics across the three choruses of improvisation are illustrated in Figure 9.2. Note the gradual crescendo in volume and the consequent growth in tension; not fully released until the final bars of the last solo chorus. Note also, at the approximate center of the graph the dynamic has reached the

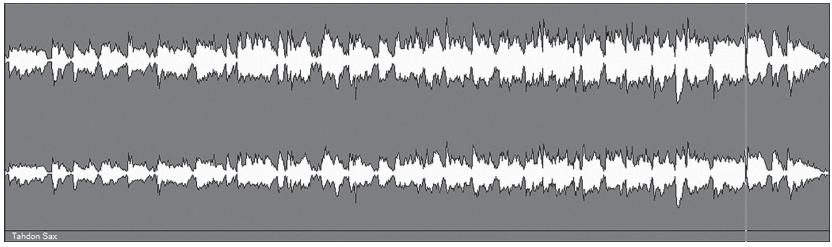

Figure 9.2 WAV file illustrating dynamics over three choruses of improvisation (gradual crescendo)

highest point, and wave shapes are increasingly compacted. Intensity has increased in phrasing, tessitura, and volume.

I describe my tone quality in the opening statement of the melody as 'clean' and 'warm' with limited distortion, through a focus on middle harmonics. In the three choruses of improvisation and the final performance of the melody a focus is on upper harmonics, resulting in a brighter sound overall. The prominence of upper harmonics creates presence or *cut*,[4] increased as the intensity of the improvisation develops. Manipulation of timbre, with consequent, subtle, variance in dynamics is one factor in the creation of tension and release. Influences of Coltrane's sound in the track "Pursuance" from *A Love Supreme*, and to a lesser extent Garbarek's *Folk Songs* are evident.

In summary, my approach to tone and manipulation of sound in this performance can be traced to my background in both classical and jazz music, some aspects being learnt skillsets and others to formal and informal listening to players that have made a lasting impression.

Medium/Small Dimension

The first performance of the composed melody ('Melody A', 2:44 mins, see Figure 9.3) and the melody played after improvisatory choruses ('Melody B', 12:04 mins, see Figure 9.4) represent two different approaches to sound, dynamics and phrasing. 'Melody A' is played with what I describe as with classical sensibility whereas 'Melody B' has a jazz sensibility. Distinctive in 'Melody A' is the clean attack and decay on each note. Most notes and phrases incorporate what could be called 'micro' dynamics. Tension and release is achieved through the use of crescendos and diminuendos within phrases; an assimilation of earlier classical training into jazz.

In summary, the interlinked elements of sound, tone color and dynamics in performances of "Tahdon" show influences from both classical and jazz genres. From classical training comes a concern for evenness of tone and shaping of phrases in precise detail within each phrase. From jazz comes a shift in priorities to a more personal, individualistic way – influenced inevitably by other

Figure 9.3 Melody A, classical style phrasing, opening four bars

Figure 9.4 Melody B, jazz style phrasing, opening four bars

jazz players – but which is an inevitable result of an experienced player of jazz improvising.

Melody

Large Dimension

Beyond the general style and inflections in sound and tone common in contemporary jazz, the overall shape of the solo on these three choruses of improvisation suggests a compositional approach. They unfold through increased activity in notes and extension of pitch range. While there is some fluctuation in forward movement between the second and third chorus the highest pitches are reached in the third, final chorus (bars 1, 12 and 13, Appendix B).

There are also an increasing number of melodic 'gestures' that sit outside the rhythmic foundations set by the bar line and pulse. It is a type of playing that at times helps to create layers of contrasting activity between the soloist and rhythm section, ultimately successful when the underlying pulse remains constant, and arrival at main cadential areas are satisfactorily resolved. Examples of these melodic flourishes can be seen in bars 3, 4 and 5 of chorus 3. While melody is the main focus in the improvisation, a chord-scale approach is also present. Together these create a balance between 'inside' and 'outside' notes in melodic/harmonic relationships. Viewed in a broad perspective, this is important in the overall structure of solos based on tonal functional harmony, regardless of the number and length of solos. Balancing these forces is a critical factor in the creation of tension and release, and in shaping the overall structure and content of an improvisation.

As these ways of playing come intuitively from moment to moment, self-reflective, self-critical analysis after the event is always helpful in correcting any perceived flaws not realized in the act of music-making. These might be overuse of clichés, being unaware of the overall shape of a solo, of rhythmic inconsistencies in terms of pulse, and other more detailed aspects of a performance examined below.

Medium/Small Dimension

To begin a detailed examination of the improvisation on "Tahdon", Figure 9.5 illustrates on the top stave the solo on chorus 2 (bars 1–7) and directly below what is regarded as the melodic essence of the solo, not visually obscured by scalic and other gestural passages.[5]

Periodic bursts of activity (bars 2–7) create momentum over a fixed pulse; an approach not dissimilar to that used in the baroque period where through an increase in the number of notes played in a phrase the music appears to be not only gaining momentum, but increasing in volume.

Following a simple melodic statement in bar 1 (Figure 9.5), a 16th note gesture in bar 2 ends on the first beat of bar 3. Note that this flourish begins with the motive C-A-B*b* and ends in bar 3 on A, indicating that despite the

Figure 9.5 "Tahdon", solo chorus 2, bars 1–7

preceding rapid-fire 16th notes, the continuity of thought is melodically driven. That is, the line flows logically despite the stream of notes that drives the music forward. The same approach is evident in bar 4, where five 16th notes anticipate the rise to A natural and a feature of John Coltrane's 'sheets of sound' approach to improvisation.[6]

While there is a flurry of notes in bars 29–30 the melody is still prominent, perhaps more obvious when listening than looking. From bars 39–41 there is closer adherence to the composed melody in a gradual release of tension, resolving into the piano solo (Appendix A).

Viewed as a whole, these examples are more melodically driven than formulaic, with a persistent re-visiting of notes and phrases fundamental to the identity of the original composition, and thus compositional in intent.

Turning now to the main focus of this section (Figure 9.6, bars 13–20, Appendix B), a triple-tiered transcription of the three solo choruses shows a stacking of choruses over repeats of the form, allowing the melodic material on each repeat to be seen at once. While the underlying intent over all three choruses was to achieve organic flow, themes, motives and cells are examined at the micro level in order to identify degrees of repetition, appropriation and perceived idiosyncrasies.

While the first solo chorus is melodic, with gradual embellishment of the pre-composed tune, the third chorus is a development of the second, through

Figure 9.6 "Tahdon", choruses 1, 2 and 3 stacked, bars 13–20

increased momentum, only 'slowing' with the use of quarter and eighth notes starting at bar 13 in preparation for the final resolution of the solo (Figure 9.6).

Structure and Variety of Phrases

In terms of increased activity – melodically and rhythmically – the second bar of each phrase is a development of the first (chorus 1, bars 1–4, Figure 9.7). It is

Figure 9.7 "Tahdon" choruses 1, 2, 3 stacked, bars 1–10

the internal make-up of the phrases where variety and complexity occurs most. Melodic shapes head towards G natural as a focal point (an anchor) across the four bars, suggesting the flow of the line is the primary consideration rather than complying with note/chord relationships.[7] A faster note movement in the second of the two bar phrases (bars 3 and 5) is evident across all three choruses, with momentum growing in the third chorus. Organic growth is apparent through broadening tessitura; note the highest pitch, *F* natural (chorus 3, bar 1), stronger dynamics, and a more forceful tone quality.

Figure 9.7 Continued

By bar 5, beginning with the same harmonic progression as the first two phrases, phrasing across all three choruses becomes increasingly varied. The only place that all three choruses share some common material is in bars 9 (16th notes) and 10 (triplets), rhythmically, and in melodic contour.

For the most part, phrase structures in this performance are gestural rather than 'falling into line' with the rhythm section and its rhythmical, foundational role. This creates a melodic layer over the top of what is occurring underneath, often complex in itself, all of which can create the tension and release fundamental to music based on tonal functional harmony. Melodically, all three solo choruses, within the parameters of the form and harmony of the composition have a variety of phrasing that suggest a freedom of expression, neither tied rigidly to the bar-line or to the symmetrical nature of phrases or meter. It is a gestural approach to melody and phrasing rather than a rhythmical 'vertical' compliance to the fundamental rhythm of this music (and jazz music generally). It is an example of my approach to focus on the art of improvisation: to be 'in the moment' with the creation of ephemeral ideas and that are not pre-planned.

Motives/Cells

As mentioned earlier, it is inevitable that one will take on some of the characteristics of those listened to and admired over many years. Theoretical

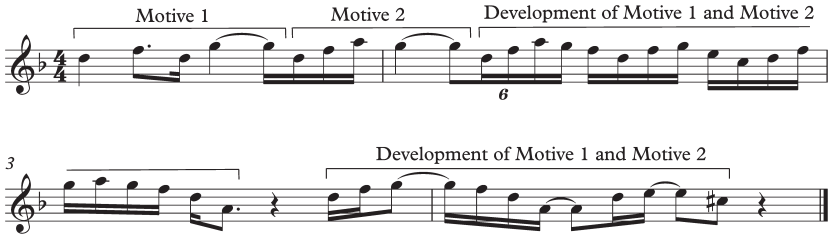

Figure 9.8 "Tahdon", chorus 1, bars 1–4

methods of learning to play jazz are second to the aural experience that I argue is the principal informant, source and inspiration for improvisers.

Two motives in these performances stand out clearly as appropriations from the playing of Coltrane. They occur in bars 1 and 2 (Figure 9.8) and permeate through various guises in other parts of the solo. Although improvised, they are a consequence of listening and assimilated rather than being consciously pre-learnt. They are motives that appealed to the senses and have over time become part of my musical vocabulary. Played consecutively, the second four-note motive (motive 2) is an extension of the first: the first three notes rising and the fourth falling. Both end on G natural, a natural continuity of thought (Figure 9.8).

At times this four-note motive stands alone and at other times is part of a longer phrase or flourish of notes (Figure 9.8).

Two other figures traceable to Coltrane can be seen in the two six note figures in chorus 3, bar 5, and in the same chorus, (bars 11 and 12), where the rising semi-quaver figure across the bar comprises two pentatonic modes (on D then G) minus the fifth note of the mode in each case. This was a signature melodic approach on Coltrane's improvisation as heard on "A Love Supreme".

The shape of the opening phrase of the composed melody where the first three notes rise and the fourth falls, informed this motivic material (Appendix D).

The idea of connecting improvisations with the pre-composed melody, as distinct from stating the melody and then improvising on the chord progression rather than the thematic material is an instinctive choice. It accounts for note choices at the beginning of phrases, and those coming out of the more gestural ones. It is a concern for maintaining the melodic essence and identity of a piece. Further, it avoids over-dependence on non-melodic scales and patterns that although they might connect the horizontal with the vertical (chords), lessen the compositional intent.

At various points through all three choruses, fragments of the composed melody recur as points of reference. From my perspective, the challenge was to balance developmental areas with the more familiar material so that the result is both creative and respectful to the composition (Figure 9.9, Appendix B).

Figure 9.9 "Tahdon", bars 55–61

My primary intent in these improvisations was melodic inventiveness and flow of phrases and gestures rather than predilection for theoretical 'correctness'. It is an approach inspired by Miles Davis. To grasp Davis's inventive genius, it is often necessary to put aside the idea of musical rules, of patterns and stylistic practices. It is not individual notes that make his music making so memorable, but his sound, the shape of phrases, the space (silence) between them, and resolution of phrases.[8]

Note Choices and Tonality

Two aspects regarding note choices in the improvisations discussed here are illuminating. Over three choruses (sixty bars over a 20-bar form) there are only eleven incidents with equal note choices on the first and third beats of bars (see bars 1 (beat 1), 4 (beat 3), 7 (beat 3), 8 (beat 1), 9 (beat 3), 10 (beat 3), 11 (beat 1), 13 (beat 1), 18 (beat 3), 19 (beat 3), 20 (beat 1) (Appendix E). Of these eleven, only three times does this occur in all three choruses and there is not one instance when the same note falls at the same place in the bar. Given the fixed harmonic framework, it can be interpreted as evidence of a subconscious desire for variability in phrasing.[9]

There are instances when note choices fall within the chord, but at other times (Appendix C) they have more to do with flow and tension than

compliance with the underlying harmony; that is, playing through the line rather than observing the protocol of the chords. For example, note choices over the A^7 chord (bar 2) flow from the preceding beats where notes over the *Bb* (inside the chord) are continued.

The idea of stating the tonality through a small motive at the beginning of pieces or sections of pieces is a compositional one, common in both jazz and classical music.[10] It is the nucleus from which organic growth occurs. Bar 1 of chorus 1 (Appendix B) above is a case in point, as it defines the tonality in which the piece starts, and is the basis for what follows in terms of melodic material (Appendix A, B and C).

Note choices in relation to tonality can extend beyond the bar, where melodic constructs heighten the level of tension between the horizontal and the vertical. An example occurs in the opening bars of chorus 1 where a four-note motive – D (repeated), F and G is played over the following chord progression: Dm^7, Em^7, $Fmaj^7$, Bb, Asus, and A^7. The motive remains grounded in D minor (pentatonic) until beat three of bar 4 where a E and C# (major third) establishes the Dominant, A^7. Until then, the melodic line ignores the specific structures of each chord of the progression. Again, the influence of Coltrane is evident in this approach.[11]

In contrast, a different approach is evident in bars 18–19 (Appendix A) where, rather than defying the chords, note choices fall mainly within chords while maintaining the flow of the melodic line.

The improvisations examined here show diversity of approach traceable to a number of important influences, especially the playing of Davis. While I do not profess to reach the artistic heights of Davis, there are aspects of his playing that one aspires to; a freedom of expression within (and at other times without) the confines of a structured piece, and a developing sense of artistic discipline to be able to stay silent at times, allowing the music to breathe. As well, it is a compositional approach to spontaneous improvisation of which understatement and restraint are powerful factors.

Improvisations are invariably a mix of features clearly identifiable with major influences and other more idiosyncratic characteristics that have their origin entirely in the spontaneous creativity of the artist, notwithstanding that one can never be entirely sure the latter are in fact entirely original. With this in mind the following extracts are cited as examples of what might be regarded as personal utterances, occurring 'in the moment', as distinct from those that come from external influences and learnt musical languages (Appendix A).

Rhythm

Large Dimension

Through the improvisations on "Tahdon" there are times when soloist and rhythm section 'sit' comfortably together rhythmically, and at other times the saxophone sets up tension between them. These layers can be highly complex, over both short and long statements, sometimes complementing the soloist,

at other times conflicting and creating tension, ultimately resolving when the cadential areas in the piece warrant. As a whole, the solo on "Tahdon" fluctuates between being 'inside' the time of the rhythm section, and 'outside'. As a result, the malleable nature of the time feel causes a heightening of rhythmic tension and gives agency to each rhythmic idea. Further, there is much interest for the performers and listeners evidenced in the constant interplay between soloist and rhythm section.

Medium/Small Dimension

In the opening eight bars of chorus 1, oscillation between swing and straight eight feel occurs. This is a mix of styles emanating from my practical experiences in jazz, and rock music, where in the latter, rhythm is less malleable though more prominent. Evident is the use of 8th notes, 8th note triplets and combinations of notes performed in groups of 5s and 7s. Rhythmically, the intent, whether playing 'inside' or 'outside' the time, is to connect with the time feel of the ensemble to create a unified 'groove'. This manipulation of time-feel (groove) across the quartet is part of on-going improvisatory conversations, the success or otherwise is dependent upon powers of aural comprehension (of one's own playing and the others) and alertness to change.

Examples of rhythmic fluctuation between swing feel and straight 8th notes can be heard in chorus 1, bars 3 and 4, (3:53mins) (swing feel) and chorus 1, bar 15, (4:25mins), and bar 26 (4:55mins) (straight eight feel) (Appendix A). This explains the varied make-up of phrases that serve to avoid an overly formulaic approach. The momentum of phrases is aimed at release points – the resolution of harmonic cadences. In a sense, my performance on the saxophone plays freely over the pulse but at certain points complies with the rhythmic base of the 'landmark' beats; another mannerism of Davis that can be heard especially on jazz standards.[12]

The opening three bars of chorus 1 reflect this type of rhythmic phrasing where structured time is established, then a freer approach is employed (Appendix A). The release point is in bar 3, beat 4 with the next phrase outlining the time.

Rhythmically then, the playing of my performance can be summarized by a tendency to oscillate between a jazz feel and one more associated with rock/pop, the former malleable and the latter less so, as well as a gestural approach that is less attached rhythmically to the feel of the rhythm section, but which at critical points respects the underlying pulse of the music.

Summary

This chapter explicates an example of artistic research inclusive of artistic methodology: a performance created as a result of a question, hypothesis, discovery and experimentation that yielded a set of data articulated in a way wholly appropriate to the question and importantly in which many discoveries were made. The many discoveries include the essence of artistic research and what differentiates it from scientific methodology.

LaRues' methodology,[13] that included large, medium and small perspectives, underpinned the analysis of the performance of "Tahdon" revealed a number of significant known factors and discoveries in my improvisation; some which clearly come from past practical and aural experiences and others that appear to be idiosyncratic. From the past comes a sound and tone informed by classical training and playing diverse classical repertoire. It was training in this genre that also instilled a concern for detail in approach to phrasing at the micro level, that is within phrases; a concern which necessarily has been modified to suit the jazz genre, where priorities in performance do not focus on the same detail.

A compositional approach, organic growth, placement and levels of tension and release are ongoing pursuits. It is a reason why the transcriptions analyzed in this research help to see the 'big picture'; invaluable in informing one's concept of musical design and structure. Analysis of transcriptions brought attention to elements that do not fall comfortably into the jazz or classical genre, and consequently cited as more idiosyncratic; indicative of players whose musical history shows influences of contrasting styles.

Notwithstanding its immediacy, I generally have a desire to ensure that what is intended in my improvisation actually happens, both in my performance and in my contribution to the group performance: particularly in approaches to melodic invention and rhythm. This is at the heart of reflexivity, where listening both to one's own playing and that of the others in the band is a vital factor.

The impact of this method on my own playing has been significant. It has reinforced the need for constant vigilance about what I produce spontaneously in performance. While the end result will always be a mixture of motor memory, pre-learnt material and what might fairly be called 'moment to moment' creative and idiosyncratic music-making, it has reinforced a conscious desire to ensure that the creative act is to the fore. That is, ideally, pre-learnt material should always take second place to more creative music-making. This has also to do with attitude and intent, and a willingness to constantly stretch one's language and vocabulary beyond what has been instilled in years of playing jazz, but without overstepping the boundaries of what can be called improvisation with a jazz sensibility.[14]

Notes

1 See Onsman and Burke (2019, 57–66) for further explanation of scientific and artistic methodology.

2 For a recording of the composition "Tahdon" which is discussed in the following sections, refer to Burke, R., 2011. Tahdon. *Live at Bennetts Lane*. Head 142, [online] Available at http://robburke.com.au/publications [Accessed 23 July 2020]. Supplementary material in the form of music notation as well as a table are referred to as Appendices A-F, [online] Available at http://robburke.com.au/publications [Accessed 23 July 2020].

3 The ensemble features Rob Burke (saxophones), Tony Gould (piano), Nick Haywood (double bass) and Tony Floyd (drum-kit).

4 'Cut' is a term used to describe when the soloist (saxophone) is able be heard over the rest of the band by using volume, distortion and brighter quality sound (upper harmonics).
5 There are some similarities here to the analytical method of Heinrich Schenker and Henry Martin; a 'stripping away' of layers of notes to reveal the bare structural bones of a melodic line.
6 "Sheets of Sound" was a term that described the "unique improvisational style of John Coltrane" by Ira Gitler in *Down Beat Magazine* (1958, October).
7 In this instance, the term 'flow' means being fully immersed in the moment rather than been contained by traditional musical parameters of the bar-line and/or pulse. Psychologist Mihaly Csikszentmihalyi has written extensively on the subject (1996).
8 These characteristics of Davis' approach to improvisation can be heard on the seminal recording *Kind of Blue* (1959).
9 For a detailed discussion of the connections between theory, analysis and performance practice in artistic research in jazz, see Chapter 3 in this book.
10 The idea of organic growth on a large scale occurs in the music of Bartok – the opening to his *Concerto for Orchestra* being an excellent example – and in jazz the playing of Sonny Rollins "Softly As in a Morning Sunrise" from the album *A Night at the Village Vanguard* (1957).
11 A way of improvising evident on Coltrane's albums *Blue Trane* (1958) and *A Love Supreme* (1964).
12 Mainly from the American song book.
13 Further details and explanation of adaption of LaRue's methodology are explained in Burke (2013).
14 A 'jazz sensibility' is discussed in Onsman and Burke (2019, 36–47).

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10 Articulating Musical Practice and Research

Notes on a South African Recording Project

Marc Duby

Introduction

Jazz in South Africa has a distinguished history and played a significant cultural role in the eventual dismantling of apartheid (Ansell, 2004; Ballantine, 2012; Duby, 2016; Eato, 2016; Olwage, 2008). Since its admission into academia in the mid-1980s, jazz education has taken firm root in the broader South African music landscape, with the Standard Bank Young Artist for Jazz award[1] and the SAMA category of "Best Jazz Album"[2] providing formal recognition for those regarded as innovative jazz performers.

Festivals such as the Cape Town Jazz Festival, Joy of Jazz, and National Youth Jazz festival (Makhanda) – as well as various community engagement and outreach projects under the auspices of SAJE[3] – present a range of educational opportunities for fledgling improvisers. Since the fall of apartheid and the beginnings of South Africa's new democratic dispensation (1994), collaborations between South African and international musicians have opened up, re-invigorating local jazz practice and continuing to bring South African jazz to a global audience. It seems safe to say that jazz practice (in the strict sense of performance) has shown ample evidence of its ability to survive in the field and adapt to the changed circumstances of the twenty-first century.

With the introduction of the new policy on the recognition of creative outputs (Nzimande, 2017), the opportunity arises for practitioners within academia to apply for formal recognition for creative work that is framed differently from more conventional research outputs (such as book chapters, for instance). Such a body of work might consist of a set of musical compositions, examples of theatre and dance practice, or work in film and television, design, and literature as related to a research undertaking.[4]

What seems lacking from this picture, though, is a clear articulation of musical practice as explicitly connected to research and vice versa. This claim is based on some years of experience in assessing documentation offered by practitioners in support of the recognition of creative outputs, prior to the recent government legislation. It seemed evident at the time that many practitioners in academia believe that the creative outputs (products such as CDs and DVDs) sufficed as evidence of research, at least in so far as producing an artefact of this kind presupposes an engagement with a given "tradition", whether drawing from local forms of knowledge or from wider afield.

This chapter argues that the articulation between practice and research remains under-developed despite recent legislation regarding creative outputs, counting as a missed opportunity for practitioner-researchers.[5] The chapter is structured as follows: legislation on creative outputs is examined with regard to the task of linking practice and research for South African practitioners. Aspects of systems theory which pertain to ensemble performance and group cohesion are discussed. My recent experience in recording an album of original material intended as a potential creative output forms a case study of creative processes at play, especially in the piece "Breakfast (On the Edge of the Desert)." In conclusion some suggested ways forward are proposed so as better to articulate the links between practice and research, to make explicit the forms of knowledge under which such renewed practice might flourish. The value of the practitioner-researcher is underlined, whose access to forms of knowledge serves to challenge the dominance of more traditional text-based research outputs.

Legislation Regarding Creative Outputs

In 2017, the former Minister of Arts and Culture, Dr Blade Nzimande, introduced the new policy on creative outputs into parliament.[6] Some practitioners saw this policy as a step forward in providing alternatives to the status quo, where text-based outputs – articles, books, chapters and conference proceedings – have long been recognized (and rewarded) within the South African higher education landscape. The rating system of the South African National Research Foundation (NRF) classifies active researchers into various categories, based on the quality and reach of their outputs. The NRF largely takes account of conventional scholarly outputs in these assessments, although since the release of the new policy the organization has taken into consideration "alternative" forms of research such as creative outputs.

Initiatives by South African higher education institutions (henceforth HEIs) to recognize the creative contributions of individual practitioners have existed for some time. I served as assessor on a number of committees dedicated to evaluating such outputs for the purposes of subsidy allocation. However, the new policy places such practice-based incentives on a more formal footing. Research directorates at various South African HEIs administer the financial incentives accruing from creative outputs, which are allocated to the institution *en bloc*, and eventually distributed among the individual applicants.

Since the policy's introduction, university performing arts departments and their design and visual arts counterparts have joined forces to assist with the practical implementation of the policy.[7] Accordingly, the South African Department of Higher Education and Training (henceforth DHET) has promulgated guidelines for prospective claimants (DHET, 2019, 3–4):

> Each creative output submission must be accompanied by a written commentary (reflection) by the artist/applicant to contextualise or elucidate

the work as a creative research output. The commentary must be between 500–700 words and sets out the following:

(1) The overview of the output: a brief outline of the background information relevant to the output.
(2) The conceptual and scholarly framework in which it should be heard or viewed.
(3) Locate the output within the discipline and demonstrate the contribution to new knowledge.
(4) A public profile of the output (venue/s, date and year of publication, awards received), proof must be attached.

In my participation as peer reviewer in academic initiatives regarding creative outputs in music (that is to say, before the introduction of the new policy and its implementation guidelines), a profound disconnect became apparent in some cases between practice as performance and practice articulated as research. Some applications seeking formal recognition for creative outputs failed to articulate precisely what aspect of their work could be demonstrated to connect with more formal academic research, be it performance, composition, directing ensembles, and so on. In these cases, there appeared the unspoken assumption that the product itself suffices and "speaks for itself". This assumption, however, does shed light on a real difficulty: how does a dancer, for argument's sake, respond to the challenge of translating her lived experience of performance into an altogether different medium?

Implicit resistance from those whose work is generally couched as text compounds this difficulty. Speaking of circumstances in the UK, Pace writes (2015, 62): "Those whose work is almost exclusively in the form of the journal article, book chapter or monograph can find it very hard to view something in sonic rather than written form (let alone a live event, not a recording) as research".[8]

Clearly, the dancer's lived experience is also of a different order from the notation or recording devices used to record her movements; these might well capture such movements for the record as repeatable data but are not descriptions of that particular experience, what Wittmann (2016) calls "felt time". This embodied experience is the cornerstone of the dancer's art, recollections – and predictions – of the feeling of when and how to move.

Practitioners in fine arts, for argument's sake, might well wonder why there is a necessity to provide any kind of position statement, or "explanation" of an artwork couched in the same language as a scholarly article, or at least a reflection (as stipulated by DHET) speaking to its theoretical underpinnings. Resistance to providing such information might be regarded as radical in some quarters, but perhaps necessary for certain creative artists because such a stance calls attention to the facticity of the artwork (Dufrenne, 1973, 1987), which eludes words by definition, by its very existence as it were. Where practice and theory intersect, as in the case of creative outputs, this raises the question as to what approach such a reflection might take. Would field notes suffice in such a

case, or would a more painstaking account of creative processes be necessary? What kind of reflection would justify the artwork's value as a creative output?

Ingold points out how a reluctance to explicate creative processes cannot necessarily be ascribed to reticence on the part of practitioners.

> As anthropologists who have worked with skilled practitioners are all too aware, their mentors are often inclined to expound upon their crafts vociferously, demonstrably and at very great length. The figure of the silent craftsman who is struck dumb when asked to tell of what he does, or how he does it, is largely a fiction sustained by those who have a vested interest in securing an academic monopoly over the spoken and written word.
>
> (Ingold, 2013, 109)

Many performers can talk for hours about the minutest details of their artistic or creative pursuits as he points out, but a tension remains between descriptions of a product and the explication of the processes through which it was arrived at.

Under point 28.2 of the policy (Nzimande, 2017, 10), stipulations with regard to musical composition specify that the works in question "must be especially substantive and exhibit exceptional creative originality, interpretative insights, technical proficiency and research-informed practice". Despite the best intentions of the document's compilers, these remain contested if not downright fractious terms, begging the questions of what constitutes "creative originality", and under what circumstances this becomes "exceptional"? In order to define the exception, one must surely define "the norm", a very complex – if not impossible – task to my mind, since norms and conventions are contested concepts, which mutate as speedily as our interlinked communication allows.

The clause immediately following requires that the creative output under discussion must "extend the particular performing arts discipline [and be] distinguishable from routine 'commercial' music". This stipulation implies that all commercial music is uncreative by definition, surely demonstrably untrue in a field where some degree of innovation is valued.[9]

Whatever specific terms remain open to interpretation in the document, the promulgation of this legislation provides opportunities for local practitioners to enter the field of research and obtain recognition for their creative work on their own terms. I believe that there is a great deal of value in articulating the processes of knowledge production underpinning creative production, to bring to the surface instances of embodied practice. This represents both an opportunity and a challenge for researcher-practitioners to bridge the gulf between embodied action and its description in language.

Systems Theory, Models of Creativity, and Group Cohesion

Systems theory is concerned with understanding how systems change and adapt over time.[10] Ensemble interactions have been framed from this perspective

(Borgo 2005, 2016, 2017; Walton et al. 2015; Kimmel, Hristova and Kussmaul, 2018) and from that of ecological psychology (Clarke, 2005; Love, 2017; Windsor, 2011; Windsor and de Bezenac, 2012). By considering ensembles as living systems, holistically in short, it becomes possible to take account of the fluidly interwoven exchanges that ensue within successful performances. This perspective, while recognizing the operations within the group, acknowledges individual sonic agency as a potential change agent.

With regard to group improvisation, Sawyer has spoken of the dialectic between the individual and the group in these terms:

> Socioculturalists study multiple levels simultaneously by choosing as their unit of analysis the micro-processes of interaction during specific events. I believe this is the only way to understand group improvisation fully – its moment-to-moment unpredictability, its collaboratively created nature, its constant dialectic between individual creative actions and the collaboratively created flow of the improvisation.
>
> (Sawyer, 1999, 202)

The notion of musical ebb and flow within jazz improvisation implies a shifting focus of attention for performer and listener, as the music emerges and transforms over time. As the performance unfolds, successive instrumental soloists negotiate the harmonic implications of the piece in question as individuals, supported by the rest of the ensemble. For instance, the rhythm section may assist by playing more quietly at the beginning of a given solo, so providing a supportive platform for the soloist's contribution. This practice is seldom notated and depends to some degree on a collective tacit decision to allow the soloist breathing room, so to speak. To my mind, such a practice epitomizes good teamwork within the constantly shifting framework of group performance.

Forsyth's definition of teams as "complex, adaptive, dynamic, task-performing systems" (2010, 3) is aligned with some of this discipline's key concerns, namely complexity, responsiveness to environmental changes (adaptivity) and dynamic nature (related to changes over time) (Calvo and Gomila, 2008; Capra and Luisi, 2014; Meadows, 2008). Perhaps most crucial in Forsyth's definition is the understanding that the actions of a team can be approached as a type of system, where there is agreement in advance to carry out a task as a purposeful collective, not as a merely accidental agglomeration of individuals.

> Jazz enables individual musicians to coordinate the innovation process so that they achieve a credible and aesthetically pleasing collective outcome. The jazz process is built on the assumption that each individual musician is simultaneously and consciously adapting to the whole, supporting the other players, and mutually influencing the outcome. Jazz is thus a truly *collective* approach to the entire process of innovation, for it requires that the invention, adoption and implementation of new musical ideas by

> individual musicians occurs within the context of a shared awareness of the group performance as it unfolds over time.
>
> (Bastien and Hostager, 1988, 583, original emphasis)

Bastien and Hostager's early study of improvising jazz musicians is based on what they term a "zero-history" group (1988, 585), one where the performers did not know one another beforehand and whose performance involved a coordinated and collective achievement "without the benefits bestowed by a history of working together" (ibid.). This classic study is striking in its deployment of the notion of turbulence, a concept prevalent in systems theory. The authors claim that "[t]he inherent turbulence in this jazz process produces uncertainty for performers insofar as each musician cannot fully predict the behavior of the other musicians or, for that matter, the behavior of the collectivity" (1988, 586).

This idea of turbulence seems likely to hold best in improvised musical performances, constrained by the musical and aesthetic demands of the genre. Given that stability is more likely than turbulence as a general principle, it follows that an orchestra performing a fully specified score is likely to experience less turbulence than musicians performing spontaneously invented music are. In each case, the musicians contribute as individuals to a collective musical outcome, but the score and the presence of the conductor provide a warrant of stability for the orchestra, not necessarily present in improvised music.

This notion of turbulence (Bastien and Hostager, 1988, 586) corresponds (intentionally or otherwise) to systems-theoretical concepts such as "bifurcation", through which a far from equilibrium situation has the potential to change direction in unpredictable fashion. With regards to jazz improvisation, they describe the jazz performers' task environment as "a complex field for interaction in which individuals are simultaneously required to invent new musical ideas and to adapt their playing to that of the collectivity. Turbulence in this environment not only results from the dynamic process of individual invention; turbulence also arises from the dynamic process of coordinating invention." While not explicitly allied with systems theory, their use of terms such as "dynamic", "complex" and especially "turbulence" harmonize with key tenets of this disciplinary approach (Kelso, 2003; Port and Van Gelder, 1995; Schiavio, van der Schyff, Cespedes-Guevara and Reybrouck, 2016).

Imagine an improvised musical performance in which one of the ensemble participants consistently drowns out or interrupts another, deliberately playing over their contribution and effectively silencing them. Under these circumstances, the two protagonists might escalate the conflict by playing louder and louder over time, or one or both might fall silent altogether. Understanding jazz ensemble practice as a special case of systems theory provides traction for a nuanced concept of team interaction, one which recognizes the prevalence of quick decision-making in the heat of performance, at both individual and collective strata. It is a tenet of systems theory that the more open the structure, in other words, how near to – or far from – equilibrium it may

present itself, the more likely it is that it will exhibit the potential to bifurcate, to exhibit an unexpected change.

Fordham recounts a musical example of bifurcation, describing a famous performance by Duke Ellington's band at the Newport Jazz Festival in 1956 involving Paul Gonsalves:

> In an electrifying performance by the band, Gonsalves – who hadn't played the piece in a while, and was initially uncertain of his way around it – played 27 improvised choruses in a raunchily R&B and gospel-inflected manner. It was an astonishing example of a musician playing way out of his skin – and one who had never been in Ellington's front rank of star soloists.
>
> (Fordham, 2010)

Avakian provides an eyewitness account of this event (Tucker, 1993, 292), speaking somewhat disparagingly of Gonsalves' abilities: "His staunchest fans would never rate Paul among the giants of the saxophone, but after his feat at Newport one wonders who else could have sustained 27 choruses without honking or squealing or trying to take the play from what really counted – the beat." Legend has it that Gonsalves' performance was inspired by Basie's drummer Jo Jones, whose enthusiastic encouragement ignited band and soloist alike, and once the audience began to respond positively to what was emerging, the performance took off.

This event seems appropriate to illustrate the complexities of live performance by a musical group. One cannot discount the influence of Jones' spurring the band on, "armed", as Avakian puts it (ibid.) "with nothing more than appreciation and a rolled-up copy of the Christian Science Monitor". Once the crowd joined in, the stage was set for extraordinary things to happen, as they did by all accounts. However, whose agency exactly drives this performance is less predictable. Systems theory, together with accounts of group creativity and how groups and individuals interact as living systems, may shed light on the complexities at play.

With regard to models of group creativity, Johnson-Laird's NONCE model (Johnson-Laird, 2002, 420) consists of five attributes: "Novel for the individual, Optionally novel for society, Nondeterministic, dependent on Criteria or constraints, and based on Existing elements". Sawyer's ICE model (2006, 148) identifies improvisation, collaboration and emergence as three crucial characteristics. These proposed models cover some distance in defining difficult and contentious terms. Sawyer deploys terms such as "collaborative emergence" and "group genius", claiming that "[i]n jazz the group has the ideas, not the individual musicians" (Sawyer, 2017, xii). Such a claim may seem controversial, given the tendency among some jazz fans and critics to valorize individuality and a mythologized pantheon of lone innovators (Whyton, 2010). At face value, this idea of the solitary innovator might hold true for the rare breed of jazz musicians who maintain careers as soloists as well as participating

in groups. Examples such as Keith Jarrett's solo piano and Jaco Pastorius' solo bass concerts come to mind.

Forsyth (2010, 371) identifies four critical aspects of cohesion for successful teamwork as follows:[11] social cohesion ("attraction of the members to one another and to the group as a whole"), task cohesion ("capacity to perform successfully as a coordinated unit and as part of the group"), perceived cohesion ("the construed coherence of the group") and emotional cohesion ("the affective intensity of the group and individuals when in the group"). I propose that systems theory as applied to ensemble performance provides a robust theoretical framework for understanding the complexities of musical cohesion and how this phenomenon reveals at least two fundamental layers: the individuals who contribute to the team effort and the team as a related entity which emerges from individual interactions. Once such a performance enters the public domain (as a live performance or as a recording), its intended audience and its reception history become further factors in its assessment.

Mota and colleagues describe musical cohesion in these terms (Mota, Loureiro and Laboissière, 2017, 177):

> As in solo performance, musicians playing in ensembles also communicate their expressive intentions through variations in musical parameters with the additional challenging task of coordinating their actions with co-performers. This is essential for converging to musical cohesion, in which not only note synchronization is achieved but also musical ideas are coordinated.

The responsibility for musical cohesion may be distributed among the members of the group or vested in a central figure, who directs the group but doesn't necessarily play an instrument (such as a big band director or orchestra conductor, who control aspects of tempo and dynamics from outside, as it were).

Systems theory as applied to groups suggests that the types of cohesion mentioned above ought not to be assumed to be in place by virtue of the capabilities of the individuals involved. Functioning within teams such as musical ensembles is neither straightforward nor simple. In my own career, for example, I have performed with some "zero-history" groups in jazz festivals with decidedly variable outcomes. Putting any number of expert performers together on the same stage with scant or no rehearsal time does not necessarily guarantee a successful outcome. Under the right circumstances, a memorable and compelling performance may well ensue. However, when adverse circumstances prevail (such as problems with onstage monitoring, so that the performers are unable to hear each other clearly), the performance may well disintegrate into incoherence or simply fall apart.

"Breakfast (On the Edge of the Desert)": A Case Study

The year 2018 presented an opportunity to take my "More Garde than Avant" project (henceforth MGTA) into the studio to document my activities as a

jazz composer: project as opposed to band, because MGTA has endured and evolved over time over the three decades since its inception, with consequent changes of personnel and locale as a result. This project has probably involved less than twenty performances over three decades, but in 2016 we had performed two live concerts, and it seemed the time was right finally to document the project. In addition, I envisaged that the resulting artefact could serve as a pilot project for assessment as a creative output. After a great deal of schedule-juggling and revision to my body of work, the studio dates were fixed, and the recording sessions could finally begin.

It was vital to choose the right combination of musicians, and unlike the case of the group discussed by Bastien and Hostager, this was not a "zero-history" one. I had worked with all the musicians previously on various occasions and know their individual capabilities well. This particular incarnation of MGTA, though, had not performed live, meaning that this specific combination of individuals was not field-tested, so to speak. With limited time and resources at my disposal, I depended on their individual and collective musical skills to get the job done with the minimum of fuss.

I distributed the charts and audio examples ahead of time so that the musicians had at least a modicum of opportunity to hear and read over the pieces in advance. As individuals, they had to understand and interpret the mood or character of the various pieces and respond accordingly when their turn came to improvise over the underlying harmonic structures. As a collective, they had to be able to listen to one another and choose when and how to comment as part of an ongoing conversation.[12]

In this sense, the composition "Breakfast (On the Edge of the Desert)" begins in a far from equilibrium state (on the edge of chaos) with its constant sonority leaving room for bifurcation, here understood as fortuitous accidents on the part of the individual improvisers as well as the group as a whole.[13] The piece also exhibits aspects of emergence, in the sense that none of the participants can predict where the piece is going, with the note-by-note outcome co-created in real time. Further to this point, there is an aspect of nonlinearity contained within the ensemble in that the musical outcome is not a straightforwardly additive one, but rather emergent; the whole is if not greater, at least different from, the sum of the parts.

"Breakfast" calls for moments of collective improvisation so that the piece ebbs and flows while maintaining a constant aura of unresolved tension. The composition is based on a repeated bass figure using the sonority of the C# half-whole diminished scale with an angular and wide-ranging melodic shape.[14] After this brief head is introduced, the bass figure gradually mutates into a free walking bass line, at times returning to the quasi hip-hop flavor of the introduction. What ensues is left to the discretion of the individual improviser; the form, then, is created collectively and emerges in the moment.[15] "Since all have input into the overall sound, the creativity in group improvisation is inherently social, rather than being attributable to or located within a single individual" (Wilson and MacDonald, 2016, 559). Because of the somewhat restricted space in the studio and to minimize leakage, it was impossible

to record all seven musicians together in real time. In consultation with the engineer, it was decided to record the quartet tracks first with a view to overdubbing the brass section later. We decided on the solo order for the quartet (piano introduction, guitar solo, piano solo) in advance so as to leave room for the brass to make their contribution at a later stage.

The direction to the guitarist ("à la Scofield") is cryptic on the face of it. Not so perhaps, to one familiar with the sound and melodic approach of John Scofield (b. 1951), the renowned guitarist whose playing credits include collaborations with Miles Davis, Charlie Haden, Vince Mendoza and many other luminaries of US jazz. The gist of this terse direction would be lost on a player unfamiliar with recent jazz from the United States or from a different music field, but apparently not on the guitarist in this case and we briefly auditioned different flavors of distortion before arriving at a close resemblance to Scofield's sound. The direction was aimed at encapsulating a wealth of listening in three words.

When one of the musicians asked me to explain what was expected on this piece, my response was simply to say that the decision rested with him. I wished to avoid the necessity to fix details in advance. This non-deterministic approach stems from two realizations: first, that the musician knows his instrument better than I and second, that I trust him and want him to feel free to contribute to the proceedings by bringing his own ideas to the table. In retrospect, what I omitted to say was that the chart already contained the seeds of what might follow.

Photograph 10.1 MGTA, October 2018 (by permission of Felicity van Pletzen)

This approach might be characterized as "high-risk", since no-one can predict the outcome in advance and that outcome depends on the individual – and group – creativity of all involved. If the specified details of the written material are adequately dealt with (played with accuracy and a sense of the tenor of the given piece), the composer's task then merely becomes to let go of the material to see (and hear) what develops. This represents my preferred working method as leader because this particular composition allows for space and acknowledges the individual musicians' ability to fill in the gaps accordingly.

This approach is by no means intended as prescriptive since it is a matter of personal choice. Other circumstances will call for other approaches, but the essence of this section is to describe my preferred approach to leading an ensemble. Doubtless, there are less overtly 'collaborative' approaches, as circumstances demand. Big bands generally do not operate on such egalitarian lines and will sometimes draw on the services of a non-performing conductor to set tempi and reinforce aspects of dynamics contained in the score.

For collaborators to grasp the tenor or mood of the piece quickly without the need for overelaboration forms a cornerstone of this (again, personal) approach. Such a relationship depends on trust since the score is not regarded as an end in itself, but a blueprint for what actions need carrying out as the piece progresses. The conventions of jazz leave room for improvisation, generally over a constant harmonic background (like the Baroque chaconne or ground bass). In the case of the jazz standard "All the Things You are," for instance, the chords supporting the head (melodic statement) form the ground for the subsequent improvisations.

In my own work I prefer to demarcate these zones quite strictly, so that there are clear boundaries between the written and improvised sections. What is written needs to be played as is, because this exactitude establishes the tenor or mood of what follows. It then becomes the composer's responsibility to ensure that the score be as clear as possible, so that the musicians know what – and what not – to play.

During the recording of "Breakfast", I deployed a technique borrowed from Walter Thompson's Soundpainting™ method of live composition (Duby, 2007; Minors, 2012a, 2012b; Thompson and Rahfeldt, 2006, 2009, 2014) where I asked the brass section to perform together their choice of sustained notes on cue as improvised backgrounds, using an adapted "long note" sign. The chosen note had to be sustained throughout the gesture; in other words, the player had to stay with the original note no matter what the outcome.

I had earlier used this specific sign during live performances and believed that it would translate well into the studio environment. Since the notes are not specified, the resultant chords may range from consonances to clusters, congruent or incongruent with the prevailing overall sonority of the moment. The adapted gesture specified the dynamic shape and duration of the chord, and when it should begin and end, but the outcome would only reveal itself in the moment of performance.

I chose to discuss "Breakfast" as a case study, because the realization of the composition's open-ended (even skeletal) structure depends entirely on collaboration between the participants. Of all the pieces recorded in those sessions, it is the most unstable (in systems-theoretical terms, the furthest from equilibrium). The rest of the compositions are closer to conventional forms, while allowing room for improvisation, with clearer boundaries between the fixed and improvised sections. In this sense, they are more stable, with less likelihood of unexpected changes at group level. While all the pieces draw from the collective coordinated activities of this particular group at a specific moment in time, "Breakfast" calls into question the extent to which the distinction between composer and performer holds good in music at the edge of chaos.

The Ethics of Teamwork

> In the enthusiasm for embodiment in the social realm the fact is sometimes overlooked that social understanding is crucially an *interactional* process. To social scientists, this may seem a trivial insight, but in cognitive science the importance of the interaction process is only beginning to trickle through the still very individualist net.
>
> (De Jaegher and Di Paolo, 2008, 34, original emphasis)

Forsyth distinguishes teams from groups on the basis that "[e]ach [team] member is assumed to have specialized knowledge, skill and ability that he or she contributes to the team and the team's success depends on combining these individual inputs effectively" (2010, 353). In this sense, teams are more tightly linked than groups, and Forsyth further characterizes teams as "well-structured" (ibid.) with each member's role more or less clearly defined. Teams play football, make films and perform symphonies; in short, they interact.

In the case of a musical group, the player's chosen instrument will tend to define and delimit its primary function, taking into account the unspoken normative standards on its accepted role within the genre in question. For instance, it is exceptional in jazz for the bass to take center stage as a melodic instrument, despite the innovations of players such as Jimmy Blanton, Scott LaFaro, Charles Mingus, Jaco Pastorius, Eberhard Weber and others who have taken advantage of the instrument's melodic potential. Such norms tend not to be discussed beforehand, since it is generally assumed that the player has sufficient familiarity with the norms of the genre and enough experience to understand her instrument's role implicitly, with reference to what Johnson-Laird (2002, 422) calls "the tacit criteria of a genre or paradigm".

Conflicts may arise when these unspoken norms of the instrument's function are violated, whether through inexperience or innovation. In managing ensembles within the music academy, for example, it is not uncommon to hear players transgressing accepted boundaries because they are unfamiliar with the conventions of bebop, for argument's sake. The ensemble director

may suggest specific recordings to guide the player in attentive listening, so adding to the player's store of idiomatically appropriate material for improvising. Innovations in musical meaning-making, their creativity tout court, for Sawyer, depend on striking a balance between "imitation and innovation [while acknowledging] the key role played by convention and tradition" (Sawyer, 2006, 24–25).

Such a balance also implies an understanding of tensions between individual needs and group demands. As Bastien and Hostager claim (1988, 599), "[a]n overemphasis on individual expression and creativity occurred during the past 25 years or so in the jazz profession, an emphasis that leads us to forget the extent to which jazz is inherently and fundamentally a collective activity". However contentious this claim regarding the exaltation of the individual may be, creativity, understood as the province of exceptionally gifted individuals, remains a vexed term and these authors rightly place the emphasis on cooperative and collective action as a framework for understanding jazz practice.[16]

> We treat groups as adaptive, dynamic systems that are driven by *interactions* both among group members and between the group and its embedding contexts. We do not believe that groups can be adequately understood as collections of independently acting individuals. Instead, we focus our attention on *relationships among people, tools, and tasks*, activated by a combination of individual and collective purposes and goals that change and evolve as the group interacts over time.
>
> (Arrow, McGrath and Berdahl, 2000, 34, emphases added)

Within the environment of the recording studio, such interactions and relationships carry with them ethical implications. In live performance, accidents happen. An experienced group will manage to cover up – or at least minimize – temporary obstacles (disagreements over form, and so on) so that these are not brought to the audience's attention. But the more exacting studio environment leaves no room to hide such errors;[17] cases where interactions have gone awry are "on record", so to speak. After briefly discussing the larger scale shape of the pieces, most of the compositions performed by the core quartet during the sessions were recorded in one or two takes. Although the participants were acoustically isolated from each other, so that the opportunity existed to correct mistakes after the fact, in general we aimed for takes which successfully captured the mood of the piece in question.

In such circumstances, notions of power and trust play a significant role.[18] Some leaders will seek to single out the origin of the mistake "to correct" the culprit. How this is handled crucially affects the player's confidence; handled with kindness ("we all make mistakes") empowers the player, while seeking blame and accountability may undermine the player's confidence and lead to the session's achieving less than intended. Harsh criticism may negatively affect the group's cohesion, so the leader needs to manage unexpected events with some diplomacy to maintain the integrity of the collective performance.

Forms of Knowledge and the Practitioner-Researcher

I now turn to examine Forsyth's triumvirate (2010, 353) of "knowledge, skill and ability", to his mind the cornerstones of successful teamwork. In the case of an improvising ensemble, one might argue that there are a number of different abilities at play: the ability to tailor one's own need for self-expression to suit the demands of the given musical task or stated more simply, the ability to function as a team member while contributing as an individual.

With respect to skills, these surely encompass a degree of expertise on one's chosen instrument, commensurate with the music's demands. This is not to exalt virtuosity for its own sake, but to argue that the more familiar the player has become with the idiosyncratic contours of the instrument (how to play, in plain language), the more room is freed up for extra-musical aspects such as gestures and interpersonal communication to ensue. Instrumental facility is grounded in hours of practice to develop what Snyder calls "implicit memory":

> Many implicit memories are memories of muscular acts ("motor" memories), which have no language component. Such memories are essentially the same as skills: knowledge of how to do things. Playing the piano, knowing how to produce a clear tone on a wind instrument, and knowing how to read music are examples of implicit skill memory – one may know how to produce a clear tone on a musical instrument, but not be able to tell anyone else how to do it.
>
> (Snyder, 2000, 73)

The links between Snyder's "implicit skill memory" and notions of embodiment seem particularly clear in this case.[19] Without musicians to move the surrounding air, there would be no music. This truism may well exist at the center of the movement towards reframing cognition (and its attendant notions of creativity) less as the province of the lone individual and more as distributed, embodied and enacted.

As there are many different ways of knowing, it follows that there are many different types of knowledge. In academic circles, such knowledge is more often than not expressed in words in the form of articles, book chapters and so on. In local academic quarters, the tendency remains to privilege so-called "scientific" knowledge especially in the form of written texts (I doubt that this is substantially different beyond our borders) and to make text-based procedural knowledge the gold standard by which other epistemologies are judged.

The status of other forms of knowledge (knowhow, tout court) remains less clear-cut. Vesting such knowledge in the hands of individual experts such as composers does not account for instances of real-time co-creation, a phenomenon exhibited by improvising ensembles at the peak of their game. But there exist many other examples of group creativity over different time scales, such as filmmaking and animation.[20]

> Artworks are outcomes of artists' idiosyncratic trajectories which traverse the world at different points and angles, are touched by the world, and are suffused with these interactions with the world. They contain, but largely conceal from immediate perception, different knowledges and questions.
> (Coessens, Crispin and Douglas, 2009, 78)

The task of the jazz practitioner-researcher then becomes to make such different forms of knowledge explicit, to bring them in the first place into the light of her own immediate perception and then to frame these as vividly as possible in words. People who are able to balance the skills of making and writing are rare and valuable because their understanding of the world and presence in academia serve to challenge established norms about the value and status of knowledge (Duby and Barker, 2017). In this regard, Bruford's ethnographic research into expert drumming (2018) represents to my mind an outstanding contribution to the field, shedding light as it does on the cognitive processes underlying expert performance.

I do not underestimate the complexities of the undertaking to bring these forms of knowledge into the light. However, various practical initiatives to bring about a rapprochement between research and practice have been described in the literature (Coessens et al., 2009; Schatzki, Knorr-Cetina and Savigny, 2001) and the way is open for creative outputs to be debated and re-evaluated in the light of the new policy. Less obvious perhaps is the need to consider the ethical implications of co-creation and how this understanding of practice might challenge the persistent myth of the creator as lone genius. As much as Duke may have been the initiator of 'the Ellington sound', for argument's sake, he would not have been able to realize his particular musical vision without his key collaborators, some of whom (such as Harry Carney and Billy Strayhorn) spent their professional lives in close association with him.

"Manifestations of musicality often depart from the stereotype of a solitary individual producing a tangible, definitive creative production […]; thus, collaboration and distributed cognition are inherent aspects of many music-related activities" (Kozbelt, 2017, 162). Similarly, in the case of the recording project which encompassed the piece "Breakfast" and others, the cohesion of the piece depended on co-creative aspects realized during performance. While I may lay claim to have originated the piece as composer, its realization depended on the collective knowledge of individual agents who participated in this collaborative exercise. Whether the many hours each agent devoted to learning their chosen instrument can be counted as research remains to my mind an open question.

Notes

1 "Now in its 36th year, the Standard Bank Young Artist (SBYA) awards are the country's leading arts award conferred by the National Arts Festival and Standard Bank on deserving young South African artists" (https://www.nationalartsfestival.co.za/news/meet-the-2018-standard-bank-young-artists/, accessed 5 September 2018).

2 The South African Music Awards (http://www.samusicawards.co.za/sama-2018/sama24-winners, accessed 5 September 2018).
3 South African Association of Jazz Educators, founded in 1992 (http://www.saje.org.za, accessed 21 February 2019).
4 The formal process of recognition calls for a 500–700-word artist's statement to accompany the creative output.
5 This material is based upon work supported financially by the National Research Foundation of South Africa. Any opinion, findings and conclusions or recommendations expressed in this material are those of the author and therefore the NRF does not accept any liability thereto.
6 More formally titled as "The Policy on the Evaluation of Creative Outputs and Innovations Produced by Public Higher Education Institutions", its avowed purpose is "to recognise and reward quality creative outputs and innovations produced by public higher education institutions" (Nzimande, 2017).
7 Dr Cameron Harris from the University of the Witwatersrand has convened a number of meetings at which the finer details of the policy have been debated and feedback provided to various interested parties.
8 Hence the necessity of appointing peer reviewers familiar with the field in question.
9 This conclusion is surely not what the compilers of the policy had in mind.
10 See Agazarian and Gantt (2005) for a broad overview.
11 Cohesion between the organs of a living body is crucial to maintaining life. Capra and Luisi understand this notion in terms of patterns (2014, 84): "What is destroyed when a living organism is dissected is its pattern. The components are still there, but the configuration of relationships between them – the pattern – is destroyed, and thus the organism dies."
12 I humbly ask the reader to bear with these linguistic metaphors, acknowledging that music and language are different, if related, phenomena (Arbib, 2013; Patel, 2008).
13 Pressing's (1988) chapter represents an important early contribution to a putative neuroscience of improvisation.
14 Complete score and audio recording available via http://uir.unisa.ac.za/handle/10500/26648 [Accessed 3 September 2020].
15 "Collaborative creativity involves more complex interaction between group members and can yield an outcome that is greater than the sum of individual contributions. This greater collective outcome arises because the difference in task conditions prompted by group members working together, instead of individually, allows for the occurrence of ideas that cannot be attributed to any one person – a phenomenon referred to as emergence." (Bishop, 2018, 2)
16 In recent times, though, and following Hutchins' ground-breaking work on shipboard navigation (1995), this individualistic paradigm has faced challenges from advocates of distributed and other forms of cognition, such as embodied, extended and so on.
17 The advent of digital technologies has made after the fact editing much more convenient, so that mistakes can be corrected with some ease.
18 In the words of Peter Erskine, Pastorius' rhythm section partner in Weather Report: "I enjoy the leader who trusts my choices and lets me do my thing; they concentrate on the bigger picture, but don't provide too much direction" (cited in Bruford, 2018, 195).
19 At specific moments during "Breakfast", the improvisers made use of "ready-made" phrases such as "Birds of Fire" (John McLaughlin) and Charlie Parker's

"Ornithology" respectively, a fairly common tactic in jazz improvisation. As Sawyer (2003, 112) maintains: "Ready-mades are even more important in jazz improvisation. Some of the most famous jazz improvisers relied on a large repertoire of stock phrases; one of the most creative improvisers of all time, Charlie Parker, drew on a personal repertoire of 100 motifs, each of them between 4 and 10 notes in length."

20 "Sawyer's own research on collaborative emergence in small groups, improvisatory theatre and jazz ensembles in particular, contributes significantly to understanding creativity as a dynamic system in action". (McIntyre, 2013, 95)

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11 Embodied Hope

An Empathically Creative Approach to Contemporary Jazz

Andrew Bain

Introduction

This chapter primarily deals with non-verbal musical interaction. It will detail the evolution of group improvisation on a fourteen-date Arts Council England funded tour in 2016 where I performed a self-composed suite of original music alongside world-class jazz musicians George Colligan (piano), Jon Irabagon (saxophone) and Michael Janisch (bass), giving a unique musical perspective from within the ensemble. Examining the inherent dynamic between knowledge as a reservoir and knowledge as an action, I will address the importance of musical/non-musical gesturing in performance and show how this can be used in composition.

Following on from David Borgo's work in *Sync or Swarm* (2006), I will highlight the emergent ecological factors evidenced in our group jazz performances focusing on transactions that:

(1) anticipate experiences and perceptions (only the differences from expectation need to be processed)
(2) use information already in the world (so that mental representations are often not required)
(3) distribute the demands of real-world cognition among several individuals

Taking account of Roslyn Arnold's work on *Empathic Intelligence* (Arnold, 2005) and developed by Fred Seddon in *Modes of Communication during Jazz Improvisation* (2005), I will further test an empathic approach with expert jazz musicians and its effect on relational group improvisation exploring interpersonal and intrapersonal intelligences that "in its expression of these abilities it is dynamic in itself, and can create change in its practitioners and those within their sphere of influence" (Arnold, 2005, 145).

My focus in performance was the creation of a space where the group felt attuned to the music being made and empowered to contribute, contrast and challenge my constructs throughout. As much as I had an idea as to how each piece might be performed, I left room for the opposite to happen.

This research project was created to develop the findings of my previous research project *Player Piano* (2015) and details how improvised music develops with multiple performances in quick succession.[1]

As researcher, composer and performer in the project, this study is self-reflexive in nature, giving a personal and revealing account of each stage of development, posing questions that can only be answered from within artistic research.

Embodied Hope Suite

Explored in *The Fierce Urgency of Now* (Fischlin, Heble and Lipsitz, 2013) is the question of what group improvisation, as a microcosm of human interaction, might teach us about those relationships on a global scale beyond its borders, specifically in the world of politics. The authors also chose to differentiate improvisation from other modes of music making that still give credence to the composer-conductor-musician-audience hierarchal paradigm, showing improvisation as a more democratic form of musicking, stating that:

> Modes of listening and viewing promoted within the Western Art tradition assume distinct divisions between performers and audiences. Listening, in the sense we intend it, fills the space between with co-creative, co-generative aspects of both performance and reception.
>
> (Fischlin, Heble and Lipsitz, 2013, coda)

Inspired by music that 'fills the space between' and the authors' proposition of seven necessary aspects leading to a state of embodied hope, found in the coda of the book, I composed a suite of new music in seven movements. Each movement was dedicated to an aspect in the following order, as it appears in the coda:

(1) Listening
(2) Surprise
(3) Accompaniment
(4) Practice
(5) Responsibility
(6) Trust – leading to;
(7) Hope

The coda also discusses the ethics of co-creation and its effect on jazz improvisation "that cannot readily be scripted, predicted, or compelled into orthodoxy" (Fischlin, Heble and Lipsitz, 2013, 191), and how this "encourages us [the performer and/or listener] to hear the world anew, to imagine new forms of relational being that have significant rights implications" (Fischlin, Heble and Lipsitz, 2013, 232). In writing compositions exploring those themes, I was interested to find later acknowledgment of this within the players' reflections (more detail to follow).

Built around a fourteen-day tour with three world-renowned jazz musicians, the following parameters were drawn:

(1) all music performed would be self-composed
(2) the wide variety of performance situations should aide the development of the music and be rich for analysis
(3) as the musicians had never played together before as a group, the use of a familiar improvisational contexts (well-known harmonic sequences, for example) would help compensate for this
(4) each player should contribute artistic reflections to the project before, during and after the tour, in addition to video interviews for a more instinctual response

The varied and intense tour itinerary was as follows (see Table 11.1):

The variety of performance modes – in concert, in workshop, recorded for broadcast and in the studio – ensured a multitude of variances were documented by live video and/or audio, and would further explore the space between performance and reception.

Key Principles for Composition

My priority was to write compositions conducive to attuned group improvisation that led to empathic creativity. Highlighting developed intuitive and instinctual skills that actively affect the performance of the other members, there was also the space for each member to influence the direction of each composition, key in building the trust that group improvisation thrives on.

As Berliner discusses in *Thinking in Jazz* "the dynamic interplay among different modes of musical thinking forms the heart of improvisation as a compositional process" (Berliner, 1994, 207), so an additional challenge was to create structures for improvisation that emphasised dynamic interplay. To enable this, I integrated musical cues into many pieces in an effort to distribute

Table 11.1 Embodied Hope Tour Schedule

31 Oct 2016	First rehearsal/Trinity College of Music masterclass
1 Nov 2016	Free day
2 Nov 2016	Dempsey's, Cardiff (Concert One)
3 Nov 2016	Ram Jam, Kingston-upon-Thames (Concert Two)
4 Nov 2016	The Verdict, Brighton (Concert Three)
5 Nov 2016	Royal Academy of Music junior department masterclass
6 Nov 2016	Herts Jazz (Concert Four) & BBC Radio 3 recording
7 Nov 2016	Royal Academy of Music masterclass
8 Nov 2016	Watermill Jazz Club, Dorking (Concert Five)
9 Nov 2016	Hull University lessons plus Concert Six
10 Nov 2016	Modern Jazz Club, Cambridge (Concert Seven)
11 Nov 2016	Wincraft Studio day
12 Nov 2016	Masterclass, pre-concert talk, and Concert Eight CBSO Centre, Birmingham
13 Nov 2016	Jazz at the Albert, Bristol (Concert Nine)

the instruction amongst the players. These were used to affect the tempo (up or down), lead the band to a new solo improvisation form, and to cue new sections of each form. These were improvised in every performance and allowed each player to have an element of control over the architecture of each movement. There was also space in the programme for free group improvisation and a solo spot for each instrument. There were no compositional specifics on these spaces, meaning they varied performance to performance and gave additional freedom to each player. Lastly, I used some pre-existing harmonic sequences that the musicians would recognise and have associations with. This familiarity helped situate the starting point for group improvisation and accelerated our creative journey.

The above were incorporated into the seven-movement suite with supporting notes and compositional intentions as follows:[2]

Movement 1: "(10 lines in F minor)" and "Listening"

Starting out with a pre-composed piece comprising ten melodies written over an F-minor pedal point, the first page of this composition is an introduction to what will follow (see Appendix A). The lines can be played in any order and tempo, but they should be played exactly as written with no additional melodic improvisation. The result should feel improvised, however.

The second half of this movement segued to a high-energy *songo* (a salsa-infused rhythm) propelled piece that cycles a 22-bar form. The melody focuses on a consonant/dissonant method of composition as used by McCoy Tyner in *The Real McCoy* (Tyner, 1967), and by Joe Henderson in *In 'n Out* (Henderson, 1964), where chromaticism is employed over pedal points to create tension and release (see Appendix B). These melodic fragments can be developed in improvisation and this piece can manoeuvre to an up-tempo swing feel, as cued by physical gesture, should the soloist choose.

Movement 2: "Surprise"

Based upon Miles Davis' "So What" (Davis, 1959) chord changes, and adapted by John Coltrane for his composition "Impressions" (Coltrane, 1963), this chromatic line with tonic pedals gives the improviser rhythmic and melodic information that can be used during solo exchanges. In addition to this, there are two melodic fragments that can be cued, by either current or subsequent soloist, to metrically modulate the tempo to the dotted crochet pulse (resulting in a slower tempo), or the 6:4 ratio (resulting in a faster tempo), as follows (see Appendix C). Each cue marks the top of a new form so can be used multiple times to add excitement and tension to the performance. I used this well-used chord sequence:

| Dm^7 8bars | Dm^7 8 bars | Ebm^7 8 bars | Dm^7 8 bars |

to provide familiarity in each improviser hoping to enact the embodied knowledge inherent in each musician as they execute a form, they have played countless times before.

Movement 3: "Accompaniment"

This piece is a slow, meditative ballad that should be played as *colla-voce* cues throughout the head and each improvisation (see Appendix D). The tonality is A major in essence and non-functional harmonically. The melody leads the harmony through the head and the rhythm section should freely embellish the composition texturally. The solo accompaniment can contrast the consonance of the melody and should aim to create tension and release. The improvisation should also use the matrix of general pauses and cues creating an original pacing in each performance.

Movement 4: "Practice"

This movement is built from a bass ostinato in perfect fifths with a 27-beat rhythmic cycle (see Appendix E). This riff should be repeated throughout the head and can be used during improvisation. The B section to this composition metrically modulates using the 4:3 ratio, and uses some well-known John Coltrane harmonic changes from his composition "Countdown" (Coltrane, 1960) to contrast the static nature of the A section, (see Appendix F). The challenge of this piece was successfully executing the tempo modulations, hence the title.

Movement 5: "Responsibility"

Based on a New Orleans *second line* groove, this simple composition exploits the #9/natural third resolution on a dominant chord, and a I/bVII hexatonic shape on chord IV. An altered blues sequence in essence, I extended the third line to include a re-harmonization that oscillates between $G\#maj^{7\#11}$ and A^{7}, and includes the New Orleans anticipated rhythmic figure known as the "big four" throughout (see Appendix G).[3] There is a regular 12-bar blues in the unusual key of D major to be played on cue, when the soloist feels ready, acting as a release.

Movement 6: "Trust"

This composition is based around a consonant C major/C harmonic major vamp with a bridge in two melodic lines (see Appendix H). The first solo section is on the vamp, and a contrasting B section (bridge) is played on cue_{4}. The second solo section starts with a modulation up a minor third with the bridge cued by the soloist, there follows a drum solo after the head out. This piece should have an energetic, uplifting feeling and increasingly build throughout.

Movement 7: "Hope"

> […] hope is not about what to expect. It is an embrace of the essential unknowability of the world, of the breaks with the present, the surprises.
>
> (Rebecca Solnit, quoted in Fischlin, Heble and Lipsitz, 2013, 243)

This composition is built on three bell patterns that outline an F major add 2 harmony (see Appendix I). The three interlocking rhythms use differing beat cycles that cadence at varying points, aiming to create a Reichian texture that draws the ear away from the 4/4 time signature.

This cycle contains:

(1) two 3-bar phrases in 4/4
(2) six 7/8-bar phrases with a rhythmic cadence in bar six
(3) four bars of a 3/2 phrase

The melody is built around a consonant Ionian harmony with block harmonizations that stay uniform throughout the head (see Appendix J) and the bass and drums build upon a Brazilian rhythmic feel, accenting the middle of each bar, with improvisations that explore an F major landscape continuing, on cue of the soloist, to the B section. This piece should also feel uplifting.

Interviews and Reflections

As outlined in the methodology for this case study, all players agreed to write reflections before, during and after the tour, and to participate in video interviews. A third party conducted interviews with each member to avoid bias and asked the following three questions:

(1) what have you enjoyed about the music?
(2) how has the music developed during the tour?
(3) what was a memorable moment?

I anonymized the responses to encourage candour and used the following key:

pr = player reflection
vi = video interview

In addition to the above, I was also interviewed by said third party and asked those same questions. The following is resultant of those reflections.

Choosing Solo Sequences for Improvising Musicians

When composing for improvising musicians, the solo sequence is of the utmost importance. Within the suite, I had a balance of well-known solo forms and those with original structures, in an attempt to challenge the players:

> [T]he use of the standard and accepted forms in jazz juxtaposed against other sections with four or eight bar repeating vamps, wildly chromatic and technically difficult melodic lines, the use of 'pop' chords and sensibility, and plenty of room for interpretation and openness from day to day

> […] will most likely lead to vastly different performances over the course of the tour.
>
> (pr2)

To help create the searching and innovative platform I was looking to explore, uncommon compositional structures were also used to create further challenge, and this was echoed in player reflections:

> [O]ne of the pieces […] was an interesting exercise in almost aleatoric music; we were given 10 lines and we were instructed to play them verbatim in terms of notes, but we could do anything else that we wanted with the lines. This was a challenge because in jazz we oftentimes play the material once or twice and then move on to a new idea. I think the result was very unique and challenged all of us in a surprising way.
>
> (pr1)

It was remarked on several times in conversation with other band members that this project – a fourteen-date tour – was quite unusual in today's contemporary jazz scene and reflected upon an historically important approach to playing jazz music as a group:

> [E]very night that we've played it's gotten better and better. And what's great about having a long tour like this is that we're really getting into the spirit of how this music was created. It's very hard these days to do one performance and expect it to live up to everything that it can. When you think about the great bands – Art Blakey, Miles Davis, Duke Ellington – they played all the time. They went out on the road for months, *years*, and that's how they got to be so great. There's no substitute for that.
>
> (vi1)

In the UK contemporary jazz scene currently, it is much more common to play a one-off date or many sporadic dates spread out over a large period of time. Having the opportunity to play consecutive nights was, I believe, essential to our rapid growth and us "developing a rapport as a band" (pr1).

Similarly discussed many times in person and also found in the player reflections, is the manifestation of a body of knowledge, embodied within oneself, that informs jazz improvisation. This reservoir of knowledge is the result of countless hours of playing, listening to and practising jazz improvisation, alongside the working and reworking of methods and musical theories. This reserve of knowledge helped to create a shared group understanding that we could enact in performance, where "it was an outgrowth of our mutual understanding of the jazz lineage, as well as telepathy on the bandstand" (pr2).

The featuring of familiar harmonic sequences and subsequent rapid group development, helped to develop my hypothesis that the pre-existing dynamic between knowledge embodied through countless hours of necessary practice, alongside real-time knowledge production evident as intelligent

transactions between individuals in co-creative settings, makes anew the internalized musical language of previous masters, resulting in a richer and deeper embodied knowledge informed by the musical tradition, but living in the now. Important in that are common artistic frames of reference, as they proved extremely helpful in giving a performative context to the music we were playing. One useful archetype was John Coltrane's Classic Quartet with McCoy Tyner (piano), Jimmy Garrison (bass) and Elvin Jones (drums), as a player reflected: "the underpinning of the Coltrane Quartet helps us find a common ground and make music out of it immediately, which is a great pay off for a band that has never performed as a quartet before" (pr2).

This situated knowledge resulted in the music progressing at an alarming pace, familiar as we were, with the context of the composition. This was clearly understood by all members: "he shared study and learning from different eras and genres helped to make this band fit together in a very short amount of time" (pr2).

Creative Challenge

> Improvisation activates the knowledge that within potential and possibility, which are always in process, always in need of making anew, is embedded the cipher of human affiliation, the fidelity to the other that makes explicit our relational contingency, the empathic connection that is the ground for realising co-creative expression in its most achieved forms.
>
> (Fischlin, Heble and Lipsitz, 2013, 241)

A further creative challenge was to construct a musical framework open enough to facilitate 'the empathic connection' that, I assert here, tacitly appealed to all members of the ensemble:

> So we've been hitting it every night and it's just getting better and better. We're adding little things to it, we're sort of shaping the music beyond, I think, what Andrew thought it was going to be. Although he has some specific ideas, but he's also very open to seeing where it goes, you know. So there's a lot of freedom within the compositions and we're taking full advantage of that.
>
> (vi1)

Another band member was keen to contribute to that direction and saw the compositions as helping to facilitate this:

> [H]e's written a great pad of music but has left it open for interpretation and for all of our individual personalities to come out. So, over the course of the last thirteen days, it's been great to see the music just blossom and take shape, and even with that happening every night, there's something new and some new direction that we go into in each of the pieces.
>
> (vi2)

In choosing musicians that search and strive for finding new ways through the music, an essential strand to the group evolution of the music was in evidence:

> He's left a lot of room for us to improvise in his music, so that's been fun. [We're] really going for it every night on the tour, which has been great because every night's been different and he's chosen personnel in his band that I think they push themselves to play differently every night.
>
> (vi3)

Reflective of the above openness to have the group lead wherever possible, everything – including the set list and solo order – evolved over the touring period. In fact, we did not end up performing or recording the seven necessary aspects in the order they appear in *The Fierce Urgency of Now* (2013). They too had a period of settling: "Bain was not necessarily set on a particular order, which was a wise move. The order 'found itself' after a few performances, based on where the solos seemed to want to go" (pr1).

Another member was also conscious of the solo order of each movement and to trying out different combinations in each performance: "we have started to solidify the solo orders. For example, it works best that I take the second solo on 'Trust' as well as 'Practice'" (pr2), and, although never discussed beforehand, all members came with a view to this firming up as we moved towards the studio date. In fact, it became a focus: "I am also consciously changing solo orders to find which order works best for each movement with an eye towards having the most effective chain ready to go by the recording" (pr2).

The compositions unfolding as they did, facilitated a natural group evolution and musical rapport between the members where "the band becomes really tight and the composition starts moving, like four people moving the composition together" (vi3).

Embodying the Music

In an attempt to be more focused on musical connection and empathic creativity in each performance, I memorized all music in advance of the tour. It was affirming to know other members of the band felt a need to do the same: "I spent some time trying to memorise as much of the music as I could, in order to be more free in interacting with the other musicians" (pr1). This was noticed by another member of the band during the tour and inspired them to do the same, as said player "was already so far down the line of getting past the written page and getting to true music" (pr2).

'Getting to true music' is an apt and accurate way of describing the process of internalizing new music ready to challenge the very boundaries it has set, and contributed to a dynamic of pushing ourselves and each other as a group, aiming to get beyond the literal in order to communicate on a deeper level. As one player reflected, "the music is coming off the page and in the hands of these great players it is becoming something even better" (pr1). We were already moving beyond an empathically attuned performance mode to one

where we had built the trust and confidence to push each other in performance, with an aim to take the music to new heights each night.

Pushing the Boundaries

"I can tell that I will be able to take many chances on this upcoming tour" (pr2); within a democratic improvisational structure there is always the possibility the music can go in a surprising – perhaps unwelcome – direction. At this point I think it is important to note that not everything went according to plan.

The movement "Accompaniment" was written as a ballad and intended to be introverted and subtle. However, on playing it for the first time in rehearsal it had a Coltrane Classic Quartet feel – epic in nature with mallets on the drums, bowed bass and meditative flourishes from the piano and saxophone. Reflected by another band member:

> […] "Accompaniment" had little instruction besides an open, free ballad. It could have gone many different directions […] but once a tremolo in A major was laid down by the rhythm section, the arc of the melody, as well as the range it is written in, led directly into late Coltrane territory. I approached the music with these genres and the jazz lineage/history in mind. (pr2)

It also took a while for some of the music to settle as I reflected at the beginning of the tour after our first rehearsal: "some solo forms need development. They are perhaps too simple or static. As I have prepared various options for solo forms, this is easily remedied. Also the bass line of "Practice" needs looking at, as does the melody to "Listening"" (AB, pr).

There were also some technical challenges to overcome for a band member: "merely playing the melody on 'Surprise' was a technical challenge" (pr1). And some of the movements struggled to feel right. In "Surprise", for example, "the metric modulation cueing back and forth was initially a bit cumbersome for me. However, eventually we all got the hang of it and it yielded great results" (pr1). Certain musical transitions also needed to be firmed up: "after two gigs there are still some loose cues and missed transitions which I am confident will be worked out in time" (pr2).

What became increasingly important as the tour and the music progressed, was rapid group problem solving. Indeed, this became a necessity due to the fluid nature of the suite and its evolving structure. Consequently, the quicker we enacted this thought in action, the more we trusted each other to deal with these changing circumstances, and the more each solo challenged: "each of the soloists are prodding their accompanists to see how far people can push it. On many tours I've been on, it has taken way more than two gigs to get to the level of interaction and listening that is going on" (pr2).

The need to creatively challenge each other – as reflected by all members of the quartet – led to a useful tension: "once in a while, when it seems

appropriate to challenge him for the space, I'll improvise with him into the next melodic phrase, instantaneously changing where his lines go. His playing seemed to perk up and change during these instances" (pr2).

Resultant of an apparent distortion in empathic connection, we were nurturing another level of intuitive communication that actively challenged the creative approach of each individual. Instead of simply sympathizing or attuning to the empathic creativity of another player, we were driven to push each other into uncharted territory aiming to foster elevated and original musical discovery, albeit with an apparent dissonance at times, where player's creative choices clashed.

There was also an understanding that we were on a journey together and, inherent in that, we should continue to challenge each other building on the trust so far developed:

> I am sure that by halfway through the tour, I will be searching for different ways to play on this tune, including different dynamic levels […] an important element to making the highest level of improvisatory music is that there is an understanding and trust amongst everyone on the stage.
>
> (pr2)

There was a tacit understanding that the music should continue to evolve with each performance. This seemed non-negotiable.

Musical Analysis: Development of a Movement and Three Differing Performances

The development of the music from performance to performance created a natural evolution that had multiple dimensions. One such example of this was to be found in the movement 'Hope'. The solo section was an ostinato based on $Fmaj^7$ with an 'on cue' B section, and there was no coda written. Both of these sections were developed live on the bandstand and would become part of the final arrangement.

Example One: Establishing a Coda, Cardiff – First Concert

After we had simple 'down the line' solos (saxophone, then piano) during this first performance, we happened to improvise a pedal-point section following the last playing of the melody. Prompted by using a house drum kit that had similarities to drummer Jack DeJohnette's set-up, the piano player (coincidentally a member of DeJohnette's band) and I casually discussed the possibility of an improvised coda 'a la Jack' prior to the performance. This ended up happening and lasted four and a half minutes in this performance, after which the piano player played the final line of the melody as a cue to finish. Both events were unplanned and ended up being a part of the final arrangement.

Example Two: An Unaccompanied Piano Solo, Brighton – Third Concert

During this performance – perhaps to contrast the density of the saxophone solo that preceded it – the pianist played an unaccompanied solo for the first time. As a band member recalled, that "by playing several gigs in a row we organically, and without really talking about it, came across the idea of everyone dropping out and letting [the piano player] move into other tonal areas alone" (pr2).

Although only about one minute in length in this performance, the piano interlude would be extended upon in later concerts and also become a concrete feature of the arrangement. It gave personal space to the piano player each night and allowed him to be creatively inspired as he chose.

Example Three: Issues of the Day Become Part of the Performance, Hull – Sixth Concert

The tour – aligning as it did with the 2016 US Presidential elections and the surprising election of Donald Trump – led to the American members of the band finding it hard to hide their dismay. In fact, these emotions would find a way into the music via the creative spaces written into each composition and described above.

As a band member explained: "I'm sort of trying to get it out through the music. I'm trying to put my anger and disappointment into the music as much as I can" (vi1).

The tempo of "Hope" was calmer during this performance and the mood more reflective, perhaps indicative of the group feeling. The piano solo followed a particularly rambunctious saxophone solo that ended with a feeling of the blues, and unknown to me until after the performance, gracefully segued into a solo version of the chord changes to Donny Hathaway's "Someday We'll All Be Free" (Hathaway, 1973). A clear representation of his feeling at the time, but eloquently presented with a message of coming together and positivity, another band member noticed a parallel with the *Embodied Hope* concept:

> We launched into our music, and it was a perfect catharsis for the emotions we felt during the day. Tonight, whether by choice or by accident, (the pianist) found his way into the chord progression and rhythms of Donny Hathaway's "Someday We'll All Be Free". The energy in the room changed, and there was […] a sense of hope and possibility. As a coda, we all brought in gospel elements for an extended ending that the crowd erupted for, with some of the members telling me that they 'needed that' later. The idea of this suite connecting different styles and genres within jazz is only strengthened and extended by bringing in other music's elements, and the suite is better for it.
>
> (pr2)

In future performances, we continued to deepen the gospel/blues feeling in the coda that reflected the mood at that time. It seemed remarkable to me that the blues – a music born out of struggle and sacrifice – could also bring so much joy as it helps to overcome everyday challenges. That this movement developed a coda representing this, is both surprising and satisfying.

Important here also, is the transferal of our emotional response to the audience. Representing a catharsis-in-action of sorts, the music had a relevance in this performance that went beyond the initial intention of the composition itself. I believe that the existence of creative space within this movement for each musician to express their personal reflections is representative of both the adaptable nature of jazz composition and of the trust we had nurtured up until this point. The confluence of the issues of the day and their effect on this movement, had given a deeper meaning to the music.

Three Contrasting Performance Situations

Evidenced above and worthy of further investigation here, was the performance of the same suite of music multiple times in different contexts and its effect on the architecture of the composition. Here follows three detailed examples of how the situation affected the music.

Herts Jazz for BBC Radio 3's "Jazz Now", Concert Four – 6 November 2016

Herts Jazz (Concert Four) was both a live concert and a recording for the BBC. Whilst we were there primarily to perform and connect with the live audience, we were also mindful of recording for future broadcast. In general analysis of this performance, whilst the suite was, in many ways, similar to other concerts prior to this date, there were the following alterations:

(1) possibly mindful of the length of each track, improvised codas were shorter in this performance
(2) similarly, solos tended to be curtailed at times
(3) short endings were adhered to in this performance (in "Hope" particularly) in contrast to any other performance
(4) there were some unusual mistakes by the musicians (e.g., melodic discrepancy, failure to find the correct tempo after playing a free introduction)

Perhaps the above were due to the added pressure of performance, the added stress resultant of our late arrival, or, perhaps, it was due to the limited number of performances so far. This remained unclear. There were also some instances where the group was heading towards an elevated performance state and this was not fully achieved. These generally happened in transitions to other solos where the energy dropped dramatically every time, becoming repetitive. This appeared evident of a lack of group trust so early in the tour.

The Studio Performance, The Cotswolds – 11 November 2016

Traditionally jazz musicians record – either in the studio or live – with a view to the music being a concrete future representation of the group. Mindful of that, certain solo features and/or group arrangements might be pre-prepared (alternate takes from John Coltrane's *Blue Train* (Coltrane, 1957) or *Giant Steps* (Coltrane, 1960) good examples of this preparation) and there can be a more considered approach evident. Whilst we had developed a version of the suite respectful of our group journey up until this point, I also wanted there be creative space to continue our experimentation in the studio. We were looking to capture an exemplary version of the *Embodied Hope* suite, but this recording could only ever be a snapshot of an evolving narrative.

The studio day itself took much more energy than we had thought. Having played the suite multiple times at this point of the tour, we assumed that the music would easily flow and require one or two takes only per movement. Although that was the case with some ("Accompaniment", "Hope", "Trust"), others required multiple takes ("Practice", "Responsibility" and "Surprise") – and this was unexpected. In addition to this, we had communication problems on the day as certain members of the group attempted to prescribe the arrangements as we documented them. Going against the democratic ethos of the tour so far, it led to frustrations in the session.

Another added pressure was the presence of a videographer. There to document "Hope" and to record some interviews for the research project, perhaps the time required to set-up cameras, secure shots and the added pressure in performance, negatively affected the flow that day. Regardless, we had to fully concentrate and access our musical reserves to capture the takes we needed for the album, and this is where the multiple performances of the suite paid dividends. Having created live group solutions for each movement in each performance environment, we had a reservoir of knowledge to draw upon and this helped us problem solve in the studio. All evidence led us to expect a more relaxed recording situation, but this did not happen.

Live at CBSO Centre, Birmingham (Concert Eight) – 12 November 2016

Happening the day after the studio recording, there was a deepened and renewed trust between us and, in turn, the music continued to develop. First occurring at the sound check that day, the band began to challenge the consonance of "Hope". Noticing my distaste, another musician remarked that the music was "moving forward" in challenging the very essence of its being – the consonant melody and its conception.

During the performance that night, the challenging and contrasting of the material continued, particularly emanating from the saxophonist. The previously determined textures and details were turned on their head and much more of the music took a late-Coltrane (chromatic and dense) turn.

Clear to me now (although not at the time), this was a necessary last step in the evolution of the music. Pushing the compositional boundaries was essential in realizing the full potential of performance, even if not preferred by me at the time. In creating music for improvisation and allowing the musicians free reign in every aspect, the group-determination of the music would indeed challenge my individual perceptions and become something other than what I had expected.

The above examples of ecological differing speak to the adaptability of the music and the musicians. The music we made was a direct result of the performance space, the audience, the relationship to the previous performance and the issues of the day. All these factors not only fed into the next concert, but challenged the very creativity required to perform the music. Realising the suite with the above challenges, led to a resilience in performance and a deepening confidence in our ability to make the music work whatever the obstacle.

Artistic Impact and Findings

Hendrik Borgdorff's *The Conflict of the Faculties* (Borgdorff, 2012) has been instrumental in situating my research and its impact. Borgdorff argues that, as the research project must have respect from within the academy, the art object must also have gained recognition from within the relevant artistic world, if it is to be regarded as valid artistic research.

Due to the impact of multiple performances on this tour and the support of both Whirlwind Recordings and Arts Council England, we received much press including, an in-depth preview from London Jazz News, a front-cover promotion in the *Sussex Jazz Magazine*, favourable reviews of live performances from The Jazz Breakfast, Mainly Jazz in Bristol, The Jazz Mann and *Jazzwise Magazine*, and BBC Radio 3's "Jazz Now" broadcasts in December 2016 and in November 2017. There was also considerable attention on various social media platforms before, during and after the tour, essential to a modern-day public relations campaign. Since releasing the album, we have received favourable reviews from *All About Jazz* and *The Guardian* UK, the album was shortlisted as jazz album of the year 2017 by UK Vibe, and the *Embodied Hope* suite was nominated for the Scottish Composer Awards 2019 in the jazz category. This level of media attention was unusual for a debut jazz release and, as the music continues to impact on a commercial, artistic and research level, the scope of this work is increasing positive.

Micro/Macro Approach

Very important in the findings above, is the confluence of micro, intuitive performance and a macro, ordered approach. Many times as a practitioner, I have wrestled with the dichotomy of 'losing myself in the music' (intuitive approach) but making sure specific parts of each arrangement are taken care of (macro approach). This seems easily observable from the drum chair, as the

delineation of each section of the arrangement, more often than not, should be led/marked by us. A better analogy might be a oneness with the group, alongside a metaphorically elevated position above the group that oversees the form of the arrangement. Whilst the challenge of these performance modes resonates personally, I can look to the great groups of jazz and find numerous examples.

In the late 1950s and early 1960s, The Bill Evans Trio had an intricacy of interplay that was unique to a piano trio at this time, whilst also being able to create live group arrangements that exhibited a sophisticated arc of performance (e.g. Evans, 1961). John Coltrane's "Classic Quartet", whilst always in the moment, could improvise for fifteen to twenty minutes in very familiar harmonic landscapes, but there was always a feeling of new territory and of moving forward with each chorus and solo. Miles Davis' "Second Great Quintet" are well documented in discussing the detail of that night's concert post-performance and deciding what to experiment with in the next. However, each performance – even with mostly familiar repertoire – felt fresh and unique.

In the *Embodied Hope* tour, there was an implicit group understanding between all the musicians that we would both build upon the music performance-to-performance, yet also challenge the improvisatory solo structures in order to empower the unknown. All players mentioned in interview that due to the musical embodiment of the suite built up over the duration of the tour – and the increasing trust in each other as a direct result of this – there developed a freedom to experiment and to challenge our perceived boundaries exhibiting our micro approach. On a macro level, we were all focusing on the journey towards the studio recording and in documenting a definitive version of the suite that took account of said journey.

Empathic Creativity

In composing the suite, my priority was to enact attuned improvisation that has a propensity to encourage empathic creativity and my methods have been detailed above. However, during the course of this tour, I was aware of three different facets to this phenomenon in the following order of increased connection:

(1) empathic attunement (an empathic alignment with other group members)
(2) empathic creativity (empathic attunement with creative risk-taking and spontaneous musical utterances)
(3) empathic speculation (empathic interaction with the ability to create new and original knowledge exchange not known to any player prior to its inception)

I believe that the appreciation of an empathically creative approach and its further categorization can, not only, give us a greater understanding of improvisation, but also give other practitioners a means of creating richer improvisation in a group setting.

Lastly, I believe this research project speaks to the importance of having time to develop and nurture artistic improvisation in consecutive performances. In an age where the space to develop any artistic endeavour is increasingly rare, the *Embodied Hope* album (Bain, 2017) was a direct result of the adaptability of the compositions, the open-mindedness of the musicians involved, and a product of the space that allowed the music to grow organically. It could not have been possible any other way.

Notes

1 (Completed Oct 2015) – a typical one-off jazz performance with only one rehearsal on the day. The group was made up of myself plus four other previously known musicians playing familiar repertoire. The main findings from analysis of this case study was the importance of non-verbal instruction and gesturing in performance, and how these intelligent transactions affected the arc of group improvisation.
2 Supplementary material in the form of musical notation (scores, score excerpts and examples) are referred to as Appendices A-J, [online] Available at http://www.studio128.co.uk/sites/andrewbain/research.html [Accessed 3 September 2020].
3 Where the chord of the next bar is anticipated on beat four of the previous one, helping to create surprise and forward momentum.

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