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# Beyond Harmony: Incorporating Rhythmic Elements of Jazz Improvisation through Pedagogy and Curriculum

Jonathan M. Campbell

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UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

BEYOND HARMONY: INCORPORATING RHYTHMIC  
ELEMENTS OF JAZZ IMPROVISATION THROUGH  
PEDAGOGY AND CURRICULUM

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This Dissertation by: Jonathan M. Campbell

Entitled: *Beyond Harmony: Incorporating Rhythmic Elements of Jazz Improvisation through Pedagogy and Curriculum*

has been approved as meeting the requirement for the Degree of Doctor of Arts in  
College of Performing and Visual Arts in School of Music, Program in Jazz Studies

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## ABSTRACT

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Jazz studies programs have become established within the realm of formal education systems and currently play an increasingly important role in the development of jazz education as well as providing means for jazz students to study improvisation. Among the array of college-level jazz courses such as jazz history, jazz arranging and composition, jazz theory, and jazz ensembles, jazz improvisation sequences are often the focal point within jazz programs. However, as previous researchers have pointed out, jazz improvisation pedagogy is almost exclusively focused on chord/scale systems and harmonic based elements of improvisation. This has led to a pedagogical model that neglects non-harmonic elements of jazz improvisation.

Through the analysis of improvisations by Sonny Rollins, Ahmad Jamal, Lee Morgan, and Jim Hall, the following research identifies seven primary rhythmic elements of jazz improvisation (rhythmic variety, time feel and beat placement, syncopation, polyrhythm, rhythmic repetition, rhythmic tension and release, and rhythmic motivic improvisation). Each improviser's specific use of these rhythmic elements is analyzed in detail. The findings of these four rhythmic analyses are then used to create a series of pedagogical exercises intended to strengthen jazz musicians application of rhythmic elements within improvisation.

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## CHAPTER I

### INTRODUCTION

Jazz has historically struggled to establish legitimacy within the realm of academia but has become an integral component in music education at the college level. According to the *JazzTimes* “jazz education guide,” in 2014 there were 371 colleges in the United States that offered jazz courses.<sup>1</sup> Institutions currently play an increasingly important role in the development of jazz education and provide means for jazz students to study improvisation. In addition to sequential improvisation courses, jazz programs have expanded their curriculum to include courses on jazz history, jazz composition and arranging, and jazz theory; however, improvisation is considered to be the heart and soul of jazz<sup>2</sup> and has become the primary focus for several jazz studies programs.<sup>3</sup>

Collegiate jazz curriculums are a compilation of pedagogical methods aimed towards furthering the knowledge and skills of jazz students. Before the emergence of jazz institutions “jazz musicians had to learn for themselves” by listening to recordings or pursuing guidance from other musicians.<sup>4</sup> College jazz programs have replaced this

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<sup>1</sup>“Jazz Education Guide,” *JazzTimes*.<http://jazztimes.com/guides/schools> (accessed July 23, 2013)

<sup>2</sup> Gunther Schuller, *Early Jazz: Its Roots and Musical Development* (New York: Oxford University Press, 1968), 58.

<sup>3</sup> Kenneth Prouty, *Knowing Jazz: Community, Pedagogy, and Canon in the Informative Age* (Jackson, MS: University Press of Mississippi, 2012), 60.

<sup>4</sup> James Collier, *Jazz: An American Saga* (New York: Oxford University Press, 1993), 7.

former method of education by offering students formal studies taught by knowledgeable and experienced faculty.<sup>5</sup>

Because of its acceptance, and major role in college music departments, jazz education has become an intriguing and often controversial topic among music researchers. Ethnomusicologist and jazz musician, Paul Austerlitz stated that perspectives on jazz research now come from a variety of academic disciplines such as history, musicology, gender studies, film studies and comparative literature.<sup>6</sup> He also claimed that non-jazz disciplines have contributed more to the literature than the actual jazz education discipline.<sup>7</sup> Still, there is an increasing number of new publications devoted to jazz research, and much of it specifically explores improvisation. Research has been conducted in areas of jazz improvisation including the effectiveness of pedagogical methods, improvisation publications, the psychology of improvisation, and predictors for jazz improvisation achievement; however, there are still a number of topics within jazz research that need to be addressed.

In his 1987 research Robert Zwick analyzed previously published jazz improvisation texts. He concluded that reviewed literature related to jazz pedagogy was almost exclusively centered on chord/scale systems and harmonically based aspects of

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<sup>5</sup> David Ake, "Crossing the Street: Rethinking Jazz Education," in *Jazz/Not Jazz: The Music and its Boundaries*, ed. David Ake, Charles Hiroshi Garrett, and Daniel Goldmark (Berkeley and Los Angeles: University of California Press, 2012), 238.

<sup>6</sup> Paul Austerlitz, *Jazz Consciousness: Music, Race and, Humanity* (Middletown, CT: Wesleyan University Press, 2005), xix-xx.

<sup>7</sup> Ibid.



improvisation.<sup>8</sup> In 1988 researchers Robert Witmer and James Robbins conducted similar analytical studies on jazz improvisation materials and also concluded that there was an over-emphasis on harmony.<sup>9</sup> Additionally, Robbins and Witmer argued that there was an insignificant amount of content devoted to rhythm, melodic development, and the phrasing/shaping of solos. Even contemporary researchers, such as David Ake and Monika Herzig, confirm that jazz improvisation pedagogical methods are overly focused on harmony and neglect other elements of improvisation, such as rhythm.<sup>10</sup>

Although jazz researchers have identified problematic resources within the jazz pedagogical literature, many of these publications are still considered to be seminal contributions to jazz education, and are still employed in college jazz improvisation course sequences. There are a small number of jazz improvisation resources that do address rhythmic elements such as the *Jazz Improvisation* series by John Mehegan, *Melodic Rhythms* by Jerry Bergonzi, and *Forward Motion* by Hal Galper. However, harmonic resources greatly outnumber non-harmonic resources, and a void still remains in content addressing rhythmic elements.

Jazz education has achieved recognition and stability within the academic setting, but many critics still refute the benefits of jazz education. Recurring criticisms by jazz

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<sup>8</sup> Robert Zwick, "Jazz Improvisation: A Recommended Format of Sequential Instruction" (PhD diss, North Texas State University, 1987), 8-9.

<sup>9</sup> James Robbins and Robert Witmer, "A Historical and Critical Survey of Recent Pedagogical Materials for the Teaching and Learning of Jazz," *Bulletin of the Council for Research in Music* 96, (Spring 1988): 23-24.

<sup>10</sup> David Ake, "Learning Jazz, Teaching Jazz," in *The Cambridge Companion to Jazz*, ed. By Mervyn Cooke and David Horne (Cambridge: University of Cambridge Press, 2002); Monika Herzig, "Elements of Jazz Piano Pedagogy: A Content Analysis" (DME diss., Indiana University, 1997)

scholars are that formal instructional systems in jazz improvisation have codified the musicality of many young players, and that the majority of graduating jazz majors lack individuality. Much of this discontent is attributed to the belief that many college jazz musicians sound overwhelmingly similar in their harmonic language, sound, and overall style. In *Jazz: The American Theme Song*, trombonist and researcher James Collier addressed improvisational conformity among jazz students studying at institutions with the following words:

With students all over the United States being taught more or less the same harmonic principles, it is hardly surprising that their solos tend to sound much the same. It is important for us to understand that many of the most influential jazz players developed their own personal harmonic schemes, very frequently because they had little training in theory and were forced to find it their own way.<sup>11</sup>

In this passage Collier identified an important relationship between content taught in college jazz programs and the improvisational style demonstrated by the students. Jazz education systems have become the primary source for learning improvisation and are largely responsible for the outcome of graduating jazz studies students.

Scholars and researchers are not alone in their criticisms of jazz education; several prominent jazz musicians have voiced their concerns about the improvisational stagnation of student jazz performers. Commenting on the result of institutionalized jazz education, saxophonist Joe Henderson stated, “Everybody is doing the same thing, you don’t get the individual fingerprint like you used to among players.”<sup>12</sup> Hal Galper, who has been the

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<sup>11</sup> James L. Collier, *Jazz: The American Theme Song* (New York: Oxford University Press 1994), 155.

<sup>12</sup> Peter Townsend, *Jazz in American Culture* (Jackson: University Press of Mississippi 2000), 177.

pianist for notable jazz musicians such as Cannonball Adderley, Stan Getz, Chet Baker, and Phil Woods, offered:

Everybody's bitching these days about how the new students and young players all sound the same. What else can be expected of a jazz education system that is becoming increasingly codified and standardized? This tendency to over-organize jazz pedagogy has not been in the best interest of those who strive to develop their own voice. When you have a large classroom of students being told "you play this scale over that chord," they're all going to play that chord that way<sup>13</sup>.

Galper is referring to the chord/scale system that enables students to use "correct" scales against given harmonic structures. This system has become the most widespread pedagogical approach in jazz education as well as the infrastructure for most jazz improvisation course sequences.<sup>14</sup> In a 1996 interview for *Jazz Times* guitarist John Scofield commented that students in jazz education programs "play the same licks because they have the same books."<sup>15</sup> In his book *Self-Portrait of a Jazz Artist: Musical Thoughts and Realities*, David Liebman delivered similar opinions on jazz education and individuality. He wrote:

When I first came to New York I was surprised at how "traditional" much of the scene was. I think that's why nothing much has happened in jazz in the last thirty years because of the jazz schools. The program is so based on standards and learning the bebop language that people maybe forget about their own identity. If they had some personality the school can easily take it away if you're not a strong enough person.<sup>16</sup>

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<sup>13</sup> Nicholson, *Is Jazz Dead?*, 101.

<sup>14</sup> David Ake, *Jazz Cultures* (Los Angeles: University of California Press 2002), 122.

<sup>15</sup> Townsend, *Jazz in American Culture*, 177.

<sup>16</sup> David Liebman, *Self-Portrait of a Jazz Artist: Musical Thoughts and Realities* (Rottenburg, N. West Germany: Advance Music Publishing 1988).

Jazz educators and those within the non-academic jazz community have often had a tense relationship.<sup>17</sup> In particular, “self-taught” jazz practitioners have often criticized formal education systems for being too far removed from the traditions of jazz. Research has shown that individuals from both academic and non-academic jazz communities now hold similar concerns towards the current state of jazz education and its effect on student creativity and individuality.

The above criticisms suggest that jazz education systems have become overly focused on the harmonic side of jazz improvisation and that the individuality of jazz students has become homogenized. These criticisms do not account for the fact that current jazz improvisation pedagogic models mostly focus on the imitative process, opposed to the creative process. An imitative approach toward jazz improvisation creates a situation that is difficult to foster individuality.

The musical style and individuality of great improvisers throughout the history of jazz performance is forged through mastery of *all* elements within improvisation, not just harmonic elements. There are several facets of improvisation beyond the scope of harmony, but the majority of jazz students are not being exposed to them. New curricular approaches, such as the rhythmic-based pedagogic model presented in this study, can help balance the harmonic and non-harmonic elements of jazz improvisation pedagogy and enhance the individuality of jazz students. Rhythm is essentially a method of organizing pitches in time. Exploring rhythm on a more sophisticated level in the

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<sup>17</sup>Prouty, *Knowing Jazz*, 47.

academic setting would advance variety and creativity within static harmonic sequences, promoting individuated approaches to improvisation.

### **Purpose of the Study**

The purpose of this study was to identify and define rhythmic elements within jazz improvisation, to analyze rhythmic elements commonly implemented by iconic jazz musicians, and to derive a series of pedagogical exercises that address these rhythmic elements. The exercise collection is meant to serve as a supplementary pedagogical model for jazz improvisation course sequences and is structured around the seven rhythmic elements identified within the analyses: (a) rhythmic variety, (b) time feel and beat placement, (c) syncopation, (d) polyrhythm, (e) rhythmic repetition, (f) rhythmic tension and release, and (g) rhythmic motivic improvisation. Secondary purposes of this study were to investigate the balance between harmonic and rhythmic components of college jazz curriculum. In summary, this dissertation addresses two primary research questions:

- Q1 Which rhythmic elements do jazz improvisers utilize?
- Q2 Can certain practice methods in the realm of rhythm be derived from performances of great jazz improvisers?

### **Scope of Study**

The primary intent of this study is to specifically examine rhythmic elements within jazz improvisation and to create a series of pedagogical exercises that develop the identified rhythmic elements. Improvisations by four iconic jazz performers were selected for rhythmic analysis. All four of the selected performers are non-percussion

instrumentalists (saxophone, piano, trumpet, and guitar) and the date of their improvisations ranged from 1956 to 1975. Genres of jazz outside of these dates were not addressed, nor were the improvisations of percussionists and vocalists.

Seven different rhythmic elements of jazz improvisation were identified: (a) rhythmic variety, (b) time feel and beat placement, (c) syncopation, (d) polyrhythm, (e) rhythmic repetition, and (f) rhythmic tension and release, and (g) rhythmic motivic improvisation. Beat placement and time feel are not examined in the rhythmic analyses or rhythmic exercises because a significant amount of research has previously been devoted to those topics. Although phrasing can be considered a rhythmic element of improvisation, it is also not addressed in the following research.

Lastly, content discussing jazz improvisation sequences is exclusively related to college-level jazz courses and pedagogical methods. Collected syllabi are from well-known collegiate jazz programs in the United States. The identities of participating institutions are not disclosed in this research to maintain the anonymity of respected jazz programs.

## CHAPTER II

### LITERATURE REVIEW

In 1972 fifteen American colleges offered some form of jazz studies degree.<sup>18</sup> This had increased to 72 colleges by 1982.<sup>19</sup> At this time, jazz had earned its place within the academic realm, but there remained a limited amount of methodical research on jazz improvisation pedagogy and curriculum. Establishing the grounds for academic research on jazz improvisation pedagogy, Allan Aitken claimed that improvisation was perhaps the most crucial element in jazz education but was often overlooked in many jazz programs.<sup>20</sup> He identified the recent addition of jazz studies in academia and jazz educator's lack of experience as the primary reasons for the inattention to improvisation in jazz programs. Aitken presented a method for jazz improvisation pedagogy that emphasized the student learning scales, patterns, clichés, and jazz style through a process of aural imitation. Although it was aimed toward jazz trumpet students, his pedagogic model could be implemented into programs needing more structured jazz curriculum.

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<sup>18</sup> Dan Murphy, "Jazz Studies in American Schools and Colleges: A Brief History," *Jazz Educators Journal* 26, no. 3 (March 1994): 34.

<sup>19</sup> Ibid.

<sup>20</sup> Allan Aitken, "A Self-Instructional, Audio Imitation Method Designed to Teach Trumpet Students Jazz Improvisation in the Major Mode" (PhD. diss., University of Oregon, 1975), 9-10.

Aitken concluded that jazz education should be balanced with more pedagogical methods derived from aural imitation.

During the 1970s there was an influx of jazz improvisation materials targeting students and developing jazz musicians, which led to several researchers conducting analytical studies on these materials. Two important studies of this nature were the aforementioned Zwick, and Witmer and Robbins. Zwick's research investigated content contained in several popular jazz improvisation texts by authors such as Jamey Aebersold, David Baker, Jerry Coker, Dan Haerle, Jon LaPorta, Ramon Ricker, and George Russell. He stressed that jazz improvisation should not focus on harmony alone; instead, it should be balanced by including ear-training, rhythm, meter, articulation, melodic development and forward motion.<sup>21</sup> Zwick found that reviewed materials substantially emphasized harmonic based elements of improvisation such as scales, chord progressions and patterns.<sup>22</sup> Witmer and Robbins offered critical research that reviewed several known jazz improvisation pedagogical publications. Following a brief history of jazz improvisation materials and a categorized assessment of more current material, they also concluded that jazz pedagogy has definitely evolved but tends to dwell on chord/scale relationships and standard harmonic progressions.<sup>23</sup> Additionally, Witmer and Robbins affirmed that there were problematic issues within jazz improvisation literature: (a) chord/scale systems were presented as mechanical exercises, (b) if rhythm

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<sup>21</sup>Zwick, "Jazz Improvisation," 8-9.

<sup>22</sup>Ibid., 414-19.

<sup>23</sup> Robbins and Witmer, "A Historical and Critical Survey," 23-24.



is discussed there was an overemphasis on polyrhythms/polymeter, (c) limited information was discussed on shaping solos and phrasing, and (d) there was little attention to melodic construction and development.<sup>24</sup> In 1997 Monika Herzig conducted a content analysis of twelve published jazz piano method books and then discussed her findings with several prominent jazz pianists. She concluded that it was crucial to the future success and development of jazz pedagogy to find balance between jazz tradition, creativity, and individuality.<sup>25</sup> Furthermore, research by Daniel Murphy concurred that there was a void in systematic research on jazz curriculum, specifically curriculum that is essential to the development of jazz educators. Murphy attempted to identify objectives that should be prioritized in the development of a jazz program's pedagogy component, and concluded there were not enough resources that relate specifically to the instruction of future jazz educators.<sup>26</sup>

Charles Brown's 1988 article presented a musicological viewpoint toward jazz education and laid groundwork for the future of jazz research. In general he stated that:

Jazz research is quite extensive in any number of areas. But a further point needs to be made: there is little organizational logic about the overall direction of jazz research. Research is done by the most part by individuals, without any real long range focus. Except for discographers, there is little "networking" among scholars.<sup>27</sup>

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<sup>24</sup> Robbins and Witmer, "A Historical and Critical Survey," 24-25.

<sup>25</sup> Herzig, "Elements of Jazz Piano Pedagogy," 192.

<sup>26</sup> Daniel Murphy, "The Development of Objectives for a Model Studio Pedagogy Component in the Undergraduate Jazz and Contemporary Music Program" (DM diss., University of Northern Colorado, 1990), 121-122.

<sup>27</sup> Charles Brown, "The Current State and Future Directions in Jazz Research: A Personal Perspective," *Bulletin of the Council for Research in Music Education* 96 (1998): 44.

Brown suggested the need for more organization and communication among jazz writers. Since then, there have been several informative contributions to jazz research that conform to Brown's suggestions.

Musicologist and professor of piano, David Ake, contributed a chapter in *The Cambridge Companion to Jazz* that expressed comparative views between traditional and academic aspects of jazz education.<sup>28</sup> His article addressed cultural matters within jazz education communities and their relation to the legitimacy of current jazz artists. Confirming the conclusions of previously mentioned research by Zwick, Witmer and Robbins, and Herzig, Ake suspected jazz pedagogy to be too technique based and imbalanced with a priority towards harmony and chord/scale systems.<sup>29</sup> Ake explored the unique question of "why does jazz education avoid free jazz?" Ake commended free jazz improvisation and urged for its deserving function within jazz education.

Another contributor to recent musicological jazz research, Kenneth Prouty, discussed underlying historical and cultural forces that have influenced current jazz education.<sup>30</sup> His study is "distinguished from previous research on jazz education by virtue of the fact that it focuses not on the structure or effectiveness of curricula as isolated constructs, the application of pedagogical methodologies, or historical descriptions, but rather on the *culture* of jazz education." His work has been particularly effective at investigating several dichotomies that arise within jazz education such as

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<sup>28</sup> David Ake, "Learning Jazz, Teaching Jazz."

<sup>29</sup> Ibid, 259-67.

<sup>30</sup> Kenneth Prouty, "From Storyville to State University: The intersection of Academic and Non-Academic Learning Cultures in Post-Secondary Jazz Education" (PhD diss., University of Pittsburg, 2002): 1.

oral-written, creative-technical, individual-group, and formal-traditional. Prouty's research overlapped with Ake's in regards to the relationships between jazz educators and players but differed by offering thorough material in areas such as specific learning situations, degree programs, and administrative issues within jazz programs.

Stuart Nicholson pointed out that jazz education has become an important aspect of shaping the recent and current direction for jazz, but it also added a particular uniformity, which was often negatively viewed, to graduating jazz majors.<sup>31</sup> Similar to his predecessors in jazz education research, Nicholson also stressed that there are several underlying reasons for the conformity that may not be obvious to jazz communities. For example, Nicholson suggested that the main reason for jazz students lacking individuality is because they generally follow the same pedagogic routes to graduation. "The challenge facing jazz education in the new millennium," Nicholson said, "was the eternal dichotomy of skills building versus creativity."<sup>32</sup> He claimed that unified outcomes of jazz education are largely related to the idea that pedagogical content is centered on bebop and hard-bop conventions from the 1950s and 1960s. Furthermore, Nicholson found that standardization of jazz curriculum is not always controlled by the faculty but overseen by upper-administration and driven by the college's need for higher enrollment numbers. Nicholson stated, "The student numbers required for financial viability can, in

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<sup>31</sup> Nicholson, *Is Jazz Dead?*.

<sup>32</sup> Ibid, 102.

some instances, mean large class sizes, which in turn can lead to a reliance on a rigid pedagogy that makes it difficult to cater to the special needs of the individual.”<sup>33</sup>

A number of studies have addressed the effectiveness of specific pedagogical methods for jazz improvisation. Two of the earliest studies that explored this area of jazz were by researchers Joseph Baudo and Lee Bash. Baudo examined the effectiveness of jazz curriculum in schools and its relationship towards creativity.<sup>34</sup> After a representative sample of instrumental music educators were surveyed and interviewed, Baudo found that 94% of the surveyed educators believed that jazz curriculum enhances the musical creativity in their students. Bash focused his comparative research on the effectiveness of three contrasting jazz improvisation pedagogical approaches: (a) a technical approach emphasizing scales and harmony, (b) an aural approach focusing on imitative vocalization and call and response methods, and (c) a listening approach designed around analyzing historical jazz recordings.<sup>35</sup> A series of instructive lessons were planned around the three different approaches and implemented within a group of sixty high school instrumentalists of varying skill levels and instrument. The study was originally aimed at identifying the most effective approach, but after analyzing his observations, Bash suggested that jazz curriculum should incorporate a balance of all three methods.

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<sup>33</sup> Nicholson, *Is Jazz Dead?*, 104.

<sup>34</sup> Joseph Baudo, “The Effectiveness of Jazz Education on the Enhancement of the Characteristic Traits Associated with Creativity in Music: Implications for Curriculum Planning” (EdD diss., State University of New York Buffalo, 1982).

<sup>35</sup> Lee Bash, “The Effectiveness of Three Instructional Methods on the Acquisition of Jazz Improvisation Skills” (PhD diss., State University of New York at Buffalo, 1983).

Supporting the research of Baudo and Bash was James Laughlin, whose research measured outcomes of harmonic accuracy in beginning jazz improvisers through the use of aural and notated pedagogical methods.<sup>36</sup> Laughlin's studies were unique in the respect that they focused on solely harmonic elements opposed to all characteristics of jazz improvisation. His findings concluded that students demonstrated greater improvement through use of aural pedagogy. Kevin Watson conducted similar studies consisting of sixty-two college instrumentalists with no prior experience in jazz improvisation. Watson's study compared two contrasting methods of teaching jazz improvisation: (a) instruction through aurally presented exercises, and (b) instruction through notated exercises. He concluded, "Students who were exposed to aurally delivered instruction made significantly greater achievement gains than subjects who were exposed to instruction through the use of notated materials."<sup>37</sup>

Michael Day contributed a unique study that differs from previously discussed studies on the effectiveness on jazz improvisation pedagogy by, instead, targeting characteristic elements associated with "high quality" jazz programs.<sup>38</sup> After identifying college jazz programs deemed to be high quality, he set forth to determine what distinguishing factors separated them from other programs in regards to: (a) faculty, (b) department organization (c) ensembles, and (d) curriculum. Day's results confirmed that

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<sup>36</sup> James Laughlin, "The Use of Notated and Aural Exercises as Pedagogical Procedures Intended to Develop Harmonic Accuracy Among Beginning Jazz Improvisers" (PhD diss., University of North Texas, 2001).

<sup>37</sup> Kevin Watson, "The Effect of Aural Versus Notated Instructional Materials on Achievement and Self-Efficacy in Jazz Improvisation" (DME diss., Indiana University, 2008): 145.

<sup>38</sup> Michael Day, "An Assessment of Selected Factors Contributing to the Success of High Quality Jazz Studies Programs" (DMA diss., University of Arizona, 1992).

there were several characteristic elements that contributed to the success of quality jazz programs. First, the outstanding schools employed more full-time jazz faculty. Many of the colleges with non-quality programs did not have a single full-time jazz faculty member. Secondly, the outstanding programs implemented organized plans for jazz scholarships and recruiting. There were also several significant differences in ensemble structure between high-quality and other programs. High-quality programs tended to have more jazz ensembles (specifically more combos), their top big bands were primarily composed of full-time students, and there were more opportunities for students to listen to live jazz music. Lastly, there were many curricula-related factors that contributed to the success of high-quality jazz programs, including the establishment of a jazz studies degree, a jazz emphasis for music education majors, and a much more diverse offering of jazz related courses.<sup>39</sup>

In 1994 Paul Berliner combined multiple approaches to data collection, analysis, and interpretation to create a seminal publication that thoroughly explored how musicians improvise.<sup>40</sup> His work was unique in the sense that much of his research evolved from more than fifteen years of immersion in the jazz world as an ethnomusicologist and professional jazz trumpeter. He attempted to portray the jazz musician's "life cycle" by sequentially addressing issues such as: (a) initially becoming involved with jazz improvisation, (b) developing and practicing necessary skills to improvise, (c) composing

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<sup>39</sup> Michael Day, "An Assessment of Selected Factors Contributing to the Success of High Quality Jazz Studies Programs," 131-36.

<sup>40</sup> Paul Berliner, *Thinking in Jazz: The Infinite Art of Improvisation* (Chicago: University of Chicago Press 1994).

and arranging, (d) musically communicating with ensembles, and (e) performing in varied venue settings. Praising the work of Berliner, Ingrid Monson said:

Paul Berliner's monumental *Thinking in Jazz*, an ethnographic study of jazz improvisation, provides the most comprehensive and detailed account of jazz improvisation currently in existence, as well as the most detailed exposition of ethnotheory in ethnomusicology. Berliner discusses the ways in which musicians go about acquiring and developing the myriad musical skills necessary to perform at a professional level – from individual musical vocabularies to collective musical interplay – through participating in a community of jazz musicians. He painstakingly synthesizes the viewpoints of sixty professional musicians into a comprehensive account of improvisation that has no peer. No musical parameter is left unexamined, and the complex interplay between composition and improvisation is nowhere presented with greater nuance and detail. The musical examples alone provide a grand tour through jazz ensemble – its roles, responsibilities, and artistry – that set new musical, ethical, and epistemological standards for jazz studies. Berliner's commitment to documenting insider perspectives also redresses a long-standing grievance in the jazz community: previous writers had not taken the perspectives and interpretations of jazz musicians seriously enough in their works.<sup>41</sup>

Berliner's publication is certainly not the only effort towards unveiling the mystique surrounding jazz improvisation, but it is considered to be an iconic and often-cited contribution to the arena of jazz research.

Stemming from the monumental work of Berliner, Monson provided a deeper insight into the interactive nature of jazz improvisation and studies the relationship between human character and musical interaction.<sup>42</sup> She explored particular metaphorical imagery used while improvising by interviewing several professional jazz musicians. Instead of studying interaction as a global improvisation concept, Monson limited the scope of her research by focusing on rhythm section players and their thoughts towards musical communication.

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<sup>41</sup> Ingrid Monson, *Saying Something* (Chicago: The University of Chicago Press, 1996), 4-5.

<sup>42</sup> Ibid.

Jeff Pressing, an influential on the psychology of jazz improvisation, provided one of the earliest studies on how individuals improvise.<sup>43</sup> Pressing attempted to explain the mental processes involved with improvisation by offering a theory that integrated concepts from music, psychology, neuropsychology, and human physiology. The following steps can summarize his theory: (1) the improviser generates an idea, (2) the brain devises a plan, (3) the body executes the plan, and (4) the idea is produced. While Pressing had systematically reduced the process of improvisation into a single fundamental formula, he did not explain where original ideas emerge from. Wendy Hargreaves did, however, provide insight towards the explanations of idea generation.<sup>44</sup> Primarily drawing from pre-cursive researchers Pressing and Berliner, Hargreaves presented a current perspective of several psychological elements associated with the generation of musical ideas. She suggested that idea generation, an integral component of jazz improvisation, can be deconstructed into three categories: (a) strategy-generated, (b) audition-generated, and (c) motor-generated.

There have been several studies that examine potential predicting factors for jazz improvisation achievement. Within these studies a wide variety of variables have been investigated including: (a) self-assessment, (b) self-efficacy, (c) motivation, (d) jazz-theory knowledge, (e), time spent practicing, (f) music aptitude, (g) academic achievement, (h) sight-reading ability, and (i) listening experience. Lissa May's 2003 research stressed a need for more extensive research on jazz improvisation achievement

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<sup>43</sup> Jeff Pressing, "Improvisation: Methods and Models," in *Generative Processes in Music*, ed. John Sloboda (Oxford University Press, 1987).

<sup>44</sup> Wendy Hargreaves, "Generating Ideas in Jazz Improvisation: Where Theory Meets Practice," *International Journal of Music Education* 30, no. 4 (October 2012): 354-367.



because of mixed conclusions in regressive studies.<sup>45</sup> Additionally, she argued that much of the previous research focused on technical aspects of improvisation achievement, instead of expressive variables. May did explore expressive facets of improvisation within her research and concluded that self-assessment, followed by aural imitation, were the strongest predictors for jazz improvisation achievement. Charles Ciorba also attempted to create a modernized research model that would predict jazz improvisation achievement. Congruent with May's findings, Ciorba concluded that self-assessment has a strong effect on jazz improvisation achievement, but also argued that jazz-theory knowledge is equally important.<sup>46</sup>

The intention of this chapter is to review previously conducted research in areas of jazz education including: improvisation materials, curriculum, relationships between creativity and improvisation pedagogy, effectiveness of pedagogical methods, sociological and musicological issues, predictors of improvisation achievement, and psychology of improvisation. There has been an increasing amount of literature devoted to jazz research since the 1970s which has identified the following primary issues within jazz education: (a) pedagogical methods have favored notated instruction as opposed to aural imitation, (b) jazz pedagogy has not promoted creativity or individuality, (c) there has been a lack of communication between researchers and a void of systematic research targeting the future of jazz education, and (d) jazz curriculum has been structured around

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<sup>45</sup>Lissa May, "Factors and Abilities Influencing Achievement in Instrumental Jazz Improvisation," *Journal of Research in Music Education* 51, no. 3 (Fall 2003).

<sup>46</sup> Charles Ciorba, "The Creation of a Model to Predict Jazz Improvisation Achievement" (PhD diss., University of Miami, 2006).

bebop and post-bop which neglected incorporation of other genres. Perhaps the most important supportive finding has been that the majority of jazz improvisation materials are saturated with content that focuses on harmonic elements of jazz improvisation and neglects non-harmonic elements such as rhythm. Currently there is a growing amount of jazz research that encompasses a wide variety of topics, but there is still a need for studies directly addressing the previously listed issues within jazz education.

## CHAPTER III

### METHODOLOGY

Procedures for this study are organized into three steps. First, rhythmic elements within jazz improvisation were identified and defined. Second, four selected improvisations were analyzed in regards to discussed rhythmic elements. Finally, a series of pedagogical exercises that promote rhythmic elements of improvisation were derived from the rhythmic analyses.

For the purposes of this study, the following rhythmic elements were identified: (a) rhythmic variety, (b) time feel and beat placement, (c) syncopation, (d) polyrhythm, (e) rhythmic tension and release, (f) rhythmic repetition, and (g) rhythmic motivic improvisation. Rhythmic elements were defined, and then addressed in regards to the role they play within jazz improvisation. Excerpts from the selected improvisations were used to visually demonstrate each rhythmic element.

The analysis portion of this research involved analyzing improvisations by iconic jazz musicians and their approach to each of the previously discussed rhythmic elements. Time feel and beat placement were not included in the rhythmic analyses because these components of rhythm have been thoroughly discussed by previous researchers. An attempt was also made to select jazz musicians with contrasting styles and approaches to improvisation. For that reason, improvisations from four different instruments, and a time

period spanning nineteen years (1956-1975) were chosen. The following four improvisations were selected for rhythmic analysis:

1. Sonny Rollins' improvisation on "Moritat", *Saxophone Colossus* (1956): Sonny Rollins (tenor saxophone), Tommy Flanagan (piano), Doug Watkins (bass), Max Roach (drums). Prestige, PRLP 7079.
2. Ahmad Jamal's improvisation on "But Not For Me," *At the Pershing: But Not For Me* (1958): Ahmad Jamal (piano), Israel Crosby (bass), Vernel Fournier (drums). Argo, LP 628.
3. Lee Morgan's improvisation on "Mr. Kenyatta," *Search for the New Land* (1964): Lee Morgan (trumpet), Wayne Shorter (tenor saxophone), Grant Green (guitar), Herbie Hancock (piano), Reggie Workman (bass), Billy Higgins (drums). Blue Note, BST 84169.
4. Jim Hall's improvisation on "You'd Be So Nice to Come Home To," *Concierto* (1975): Paul Desmond (alto saxophone), Chet Baker (trumpet), Jim Hall (guitar), Roland Hanna (piano), Ron Carter (bass), Steve Gadd (drums). CTI, CTI 6060 S1.

The last research procedure was to derive a series of pedagogical exercises from the rhythmic analyses. The collection of exercises serves as a pedagogical model for practicing musicians, and is intended to enhance the rhythmic component of jazz improvisation. Each exercise is categorized in correlation to the six rhythmic elements identified in the rhythmic analyses (rhythmic variety, syncopation, polyrhythm, rhythmic repetition, rhythmic tension and release, and rhythmic motivic improvisation). For example, Lee Morgan's use of rhythmic motives is discussed in detail throughout the rhythmic analysis chapter, and the presented exercises on motivic improvisation are intended to provide students, or any practicing jazz musician, the appropriate knowledge and rhythmic facility to execute rhythmic motivic concepts in a manner similar to that of great jazz musicians.

## CHAPTER V

### RHYTHMIC ELEMENTS OF JAZZ PERFORMANCE

Rhythm has been a defining force within the jazz idiom since its infancy, but previous research has shown that collegiate jazz improvisation sequences emphasize harmonic aspects of jazz performance and often neglect its rhythmic counterpart. This chapter addresses the importance of rhythm and its relation to jazz performance, as well as identifying rhythmic elements implemented by jazz improvisers.

In a general sense, rhythm is defined as movement that is marked by the regulated succession of strong or weak elements.<sup>47</sup> However, the term has been surrounded by much ambiguity in the realm of research because of its struggle to conform to a single definition. Historians, musicologists, etymologists, and musicians are likely to offer separate, and possibly unique, definitions of rhythm. Margot Fassler, music historian and music history professor at the University of Notre Dame, suggested, “there is no accurate simple definition of the term “rhythm” and no consistent historical tradition to explain its significance.”<sup>48</sup> Music theorist Justin London identified the two primary parameters of music as rhythm and pitch, and offered a definition of rhythm by contrasting these two

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<sup>47</sup> *Grove Music Online*, s.v. “Rhythm,” by Justin London, accessed June 23, 2014, <http://www.oxfordmusiconline.com>.

<sup>48</sup> Margot Fassler, “Accent, Meter, and Rhythm in Medieval Treatises: De Rithmis,” *Journal of Musicology* 5, no. 2 (Spring 1987).

parameters. “If pitch is concerned with the disposition of the frequencies of musical notes, then rhythm is concerned with the description and understanding of their duration and durational patternings.”<sup>49</sup> That is to say, harmony relates to the arrangement of musical pitches, while rhythm relates to the manner in which those pitches are arranged in time and motion.

Rhythm is essential to jazz improvisation and has often been considered its single most important musical component. In his historical text addressing the early developments of jazz, Gunther Schuller stated, “For the jazz musician, on the other hand, pitch is unthinkable without rhythmic impulse at least as strong; rhythm is as much a part of musical expression as pitch or timbre – and possibly more important.”<sup>50</sup> Schuller also suggested that rhythm is the defining element of jazz music and delineates it from the rest of Western music. Scott D. Reeves, author of the often-used jazz improvisation text *Creative Jazz Improvisation*, portrays a similar view to Schuller about rhythm. In the opening statement in his chapter about rhythm, Reeves stated, “rhythm is the most important element in jazz.”<sup>51</sup> Several well-known jazz musicians have also stressed the importance of rhythm, and among them, jazz drummer Ralph Peterson stated:

I was just having a conversation last night about how important it is – when you’re playing a solo – *rhythmically* what the notes say. It’s almost as important, if not *as* important, as the notes themselves, because if you miss a note and the rhythm is logical, then the idea comes across...whether you hit the note dead center or not. But if you miss the time – because music is organized sound in

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<sup>49</sup> London, “Rhythm.”

<sup>50</sup>Schuller, *Early Jazz*, 8.

<sup>51</sup>Scott D. Reeves, *Creative Jazz Improvisation* (New Jersey: Prentice Hall, 2001), 26.

time...if you blow the time you're more likely to do irreparable damage to that particular section of the music.<sup>52</sup>

Not only is rhythm an important stylistic component of jazz improvisation, but it also defines the jazz idiom by adding a uniqueness found only within jazz. Schuller claimed there are two defining rhythmic characteristics that make jazz unique; (a) jazz possesses a specific type of accentuation and inflection with which notes are played or sung, and (b) jazz has continuity – the forwards-propelling directionality – with which individual notes are linked together.<sup>53</sup> Schuller also suggested that these two rhythmic traits are responsible for distinguishing jazz from other forms of music, namely classical.

Although there is an agreed belief that rhythm is monumental to jazz improvisation, it is often ignored in the classroom and throughout pedagogical materials. Reeves clearly stated that rhythm is the most important factor while improvising, yet he only devoted a single chapter to rhythm while there were seventeen chapters discussing harmony. Unfortunately, the majority of pedagogical materials aimed towards jazz improvisation rarely address rhythmic concepts, if at all, and many of these texts are considered to be cornerstone resources for college level jazz improvisation sequences.

The following three charts (figures 1-3) display data derived from syllabi used in collegiate jazz improvisation course sequences. The syllabi were collected from eight well-known college jazz programs throughout the United States. The charts depict how many times a particular jazz-improvisation topic was covered out of the total number of syllabi collected. There were eighth colleges that offered Jazz Improvisation I, six

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<sup>52</sup>Monson, *Saying Something*, 29.

<sup>53</sup>Schuller, *Early Jazz*, 7.

colleges that offered Jazz Improvisation II, and five colleges that offered Jazz Improvisation III (often referred to as Advanced Improvisation).

Of the eight Jazz Improvisation I courses surveyed there were twenty-one total topics covered, and out of those topics, ten addressed harmony while only two addressed rhythm. This trend was also consistent through the topics covered in Jazz Improvisation II and III courses. Only one of the seventeen topics covered in Jazz Improvisation II courses addressed rhythm, and three of the twenty-topics in Jazz Improvisation III courses were related to rhythm. There is a severe imbalance between harmonic and rhythmic elements of jazz performance throughout all levels of jazz improvisation course sequences.

Figure 1. Distribution of topics covered in Jazz improvisation I courses

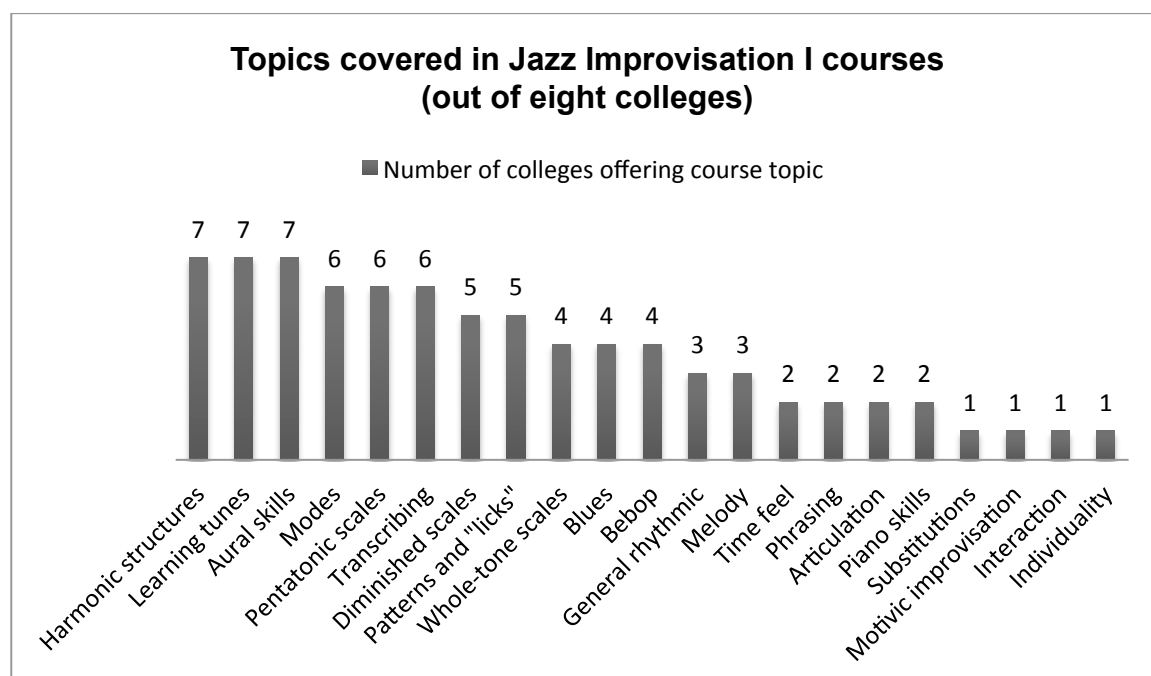




Figure 2. Distribution of topics covered in Jazz Improvisation II courses

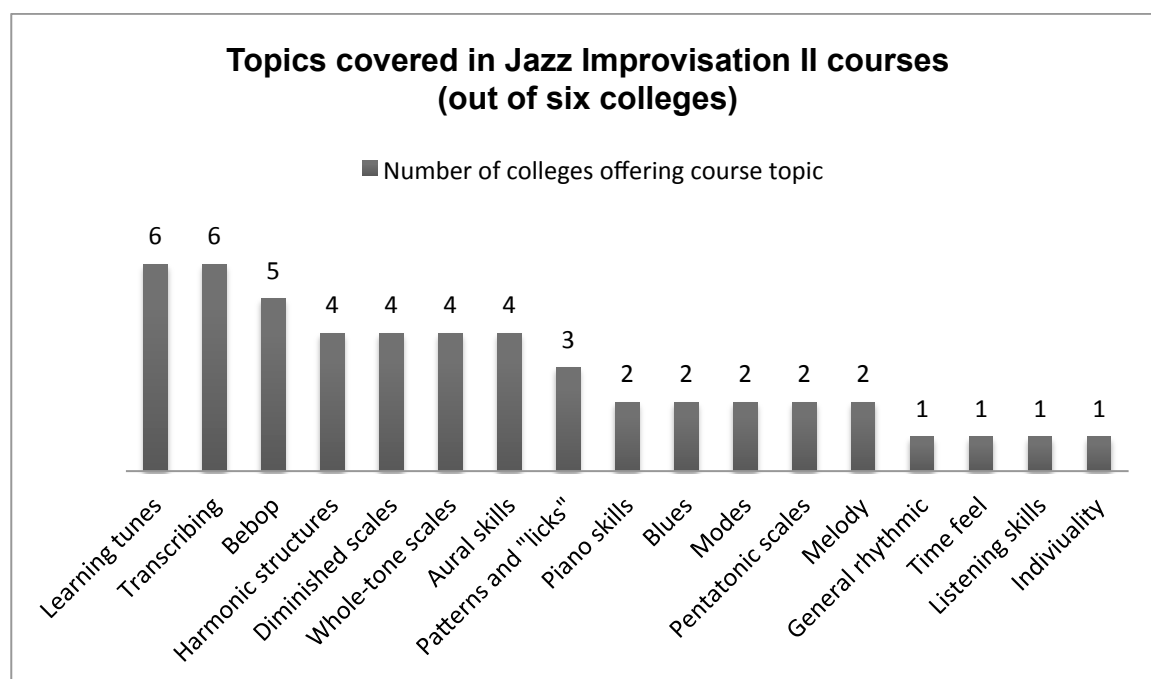
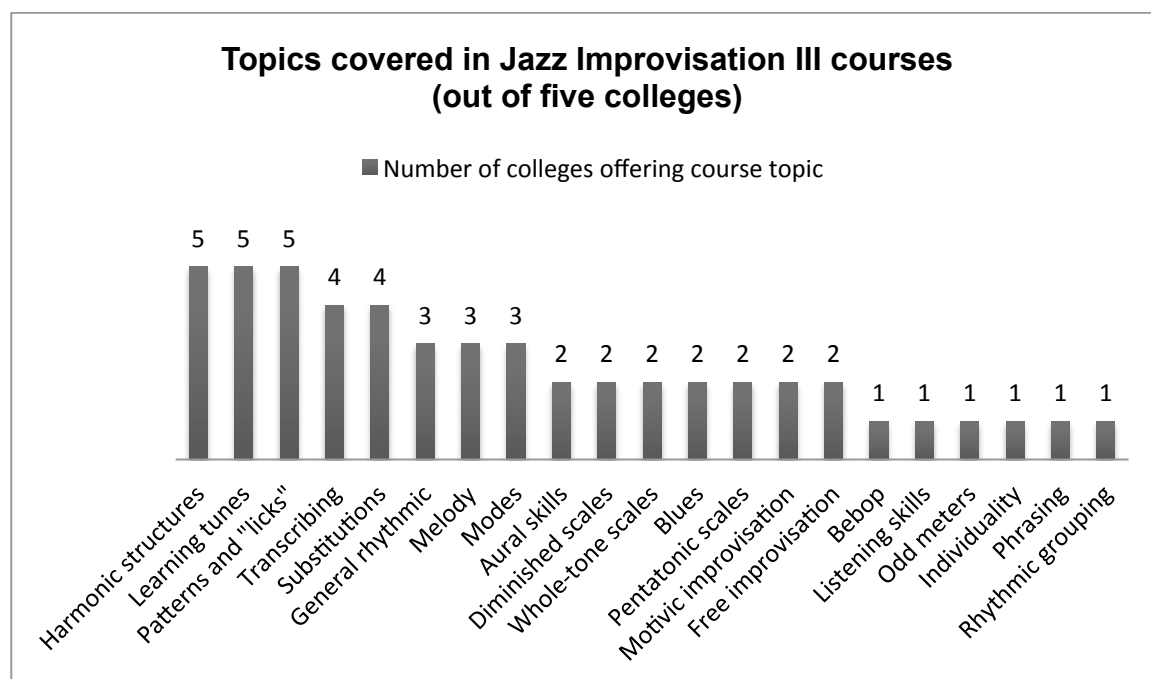


Figure 3. Distribution of topics covered in Jazz Improvisation III courses



The overemphasis of harmonic concepts and neglect towards rhythm is not a newly discovered issue. In the late 1980's Witmer and Robbins, and Zwick had all identified the need for more pedagogical content addressing rhythm. In their research contributions, they each identified a severe absence of pedagogical materials addressing rhythm. If rhythm is such a crucial concept of jazz improvisation – if not the most important – why is it being neglected in collegiate jazz improvisation courses?

### **Rhythmic Variety**

Rhythmic variety is a desired facet of jazz performance, not just as a listener, but also as a performing musician. The obvious explanation for this desire is related to the mind's need for stimulation. When mental stimulation is lost, boredom is found. Struggling to settle on a single definition, Dr. David Jurich suggested that psychologists commonly accept the definition of boredom as a “state of relatively low arousal and dissatisfaction, which is attributed to an inadequately stimulating situation.”<sup>54</sup> Unless jazz musicians intentionally want their listeners to be dissatisfied and uninterested, one would assume that all jazz musicians long for a sense of musical arousal among listeners. The abundance of harmonic-based jazz improvisation materials suggests that there is a preference towards harmonic variety.

Perhaps the most basic method of achieving rhythmic variety is to simply incorporate a diverse palette of rhythmic values while improvising. The spectrum of rhythmic values available to improvisers is arguably limitless. Figure 4 presents the

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<sup>54</sup> David Jurich, “Attribution of Boredom: Attentional Factors and Boredom Proneness” (PhD diss., The New School University, 2004): 19.

variety of rhythmic values found within the selected improvisations. It is extremely difficult, if not impossible, to distinguish the difference between an eighth note marked with a tenuto accent and a quarter note marked with a staccato accent; therefore, the number of instances in each solo is approximate. It is also worth noting that eighth notes serve as the primary rhythmic duration for all four solos and account for over half of each improviser's total rhythmic distribution.

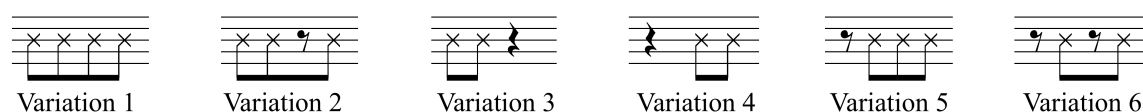
Figure 4. Approximate distribution of rhythmic values throughout selected improvisations (rhythmic values appearing less than five instances are not shown)

Sonny Rollins	Ahmad Jamal	Lee Morgan	Jim Hall
492 eighth notes	243 eighth notes	366 eighth notes	212 eighth notes
73 sixteenth notes	63 quarter notes	88 quarter notes	38 quarter notes
47 eighth note quintuplets	55 eighth note triplets	42 7:5 triplets	18 eighth note triplets
33 quarter notes	47 sixteenth note triplets	37 eighth note triplets	14 dotted quarter notes
29 dotted quarter notes	28 sixteenth notes	27 sixteenth notes	8 sixteenth notes
28 eighth note triplets	13 dotted quarter notes	10 >half notes	5 >half notes
24 sixteenth note triplets	8 half notes	9 half notes	
12 thirty-second notes	5 sixteenth note quintuplets	5 dotted quartet notes	
7 eighth note septuplets			

It is important to consider the linear construction and context of beat durations, because incorporating a broad palette of rhythms is not the only path to rhythmic variety. In a two beat duration, there are six primary combinations of multiple eighth notes and rests (see figure 5). Two combinations are not included because they imply the use of a

staccato quarter note (staccato quarter notes and eighth notes followed by an eighth rest sound identical in jazz performance).

Figure 5. Eighth note variations within two beats



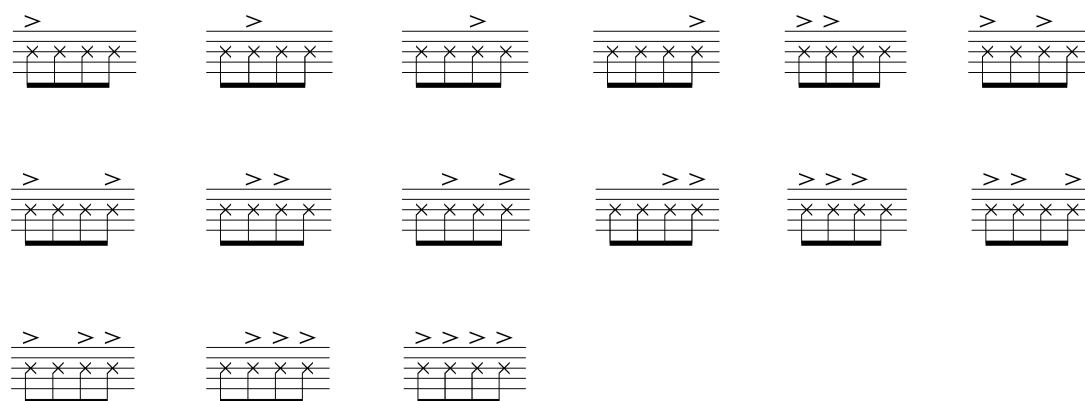
Throughout his 129 measures of improvisation, Rollins incorporates 492 eighth notes. His next most frequent rhythmic value is the quarter note, which is only used in 73 instances. Although Rollins' solo contains a seemingly high frequency of eighth notes, his improvisation still contains rhythmic variety because of his attention to eighth note variation. In a nine-bar excerpt from Rollins' improvisation, he incorporates thirty-eight eighth notes (see figure 6). Although this example primarily consists of consecutive eighth note lines, Rollins maintains a degree of rhythmic interest by using three of the five eighth note variations.

Figure 6. Sonny Rollins' improvisation on "Moritat" (mm. 62-68)



In addition to incorporating a variety of combinations for specific beat durations, rhythmic variety can be enhanced by using accents to imply underlying rhythms. For example, a two beat cell containing four continuous eighth notes (variation 1) becomes repetitive if used too often, but improvisers can avoid rhythmic monotony by incorporating accents into their eighth note lines. Figure 7, shown below, displays all possible accent permutations of four consecutive eighth notes. Some variations are more common, and more appropriate within jazz performance, but all are possibilities. Monotony can be deterred in extended strings of eighth notes by varying the placement of accents.

Figure 7. Accent variations on four consecutive eighth notes



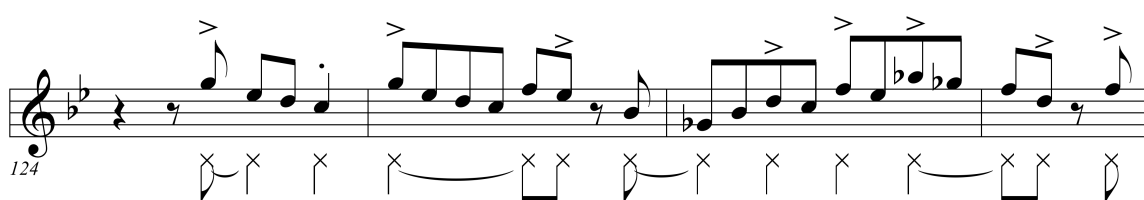
Usage of accents throughout eighth note lines can imply an underlying rhythm. For example, four consecutive eighth notes with accents on the first and fourth can be perceived by listeners as a dotted quarter note followed by an eighth note, notated in figure 8.

Figure 8. Percieved rhythm of an accented eighth note line



Figure 9 exemplifies this concept in context by demonstrating how Rollins implements accents to provide rhythmic interest throughout eighth note lines consisting of mostly eighth notes. The underlying rhythm, notated below the staff, portrays the rhythm that is implied by accents within the line.

Figure 9. Sonny Rollins' improvisation on "Moritat" (mm. 124-127)



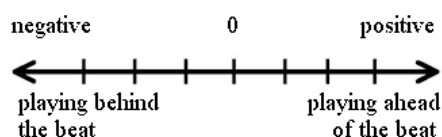
### Time Feel and Beat Placement

Paul Berliner suggested that musicians “must strive to develop an unwavering sense of beat to serve as the conceptual anchor for the flexible use of their (rhythmic) vocabulary.”<sup>55</sup> In musical terms, “beat” is referred to as the rhythmic pulse that continuously progresses forward through time. “Beat placement” refers to the manner in which each beat is placed in time and can be visualized by imagining a number line from negative ten to positive ten, such that zero is precisely at the line’s half-way point. Negative numbers (left side) represent playing behind the beat, positive numbers (right

<sup>55</sup> Paul Berliner, *Thinking in Jazz*, 150.

side) represent playing in front of the beat, and zero (in the middle) represents playing directly in the middle of the beat (see figure 10). Although consistent beat placement is a desired element of jazz performance, flexibility is also important and enables performers to create further rhythmic interest.

Figure 10. Beat placement number line



Among the challenges jazz musicians face, playing with a confident time feel and solid beat placement remains a difficult task, but there is no single conformity to accomplish this task. Beat placement can be varied depending on tempo, mood, and personal style. Additionally, musicians can choose to play behind, in the middle, or in front of the beat. For example, Dexter Gordon exuded a very laid-back time feel and often played far behind the beat, which opposes the aggressive, in-front-of-the-beat time feel imposed by John Coltrane. Fred Hersch, as quoted by Berliner, offered his thoughts on beat placement:

There should be ten, fifteen different kinds of time. There's a kind of time that has an edge on it for a while and then lays back for a while. Sometimes it rolls over the bar, and sometimes it sits more on the beats. That's what makes it interesting. You can set a metronome here and, by playing with an edge or playing behind it or right in the center, you can get all kinds of different feelings. That's what makes it come alive. People are human, and rhythmic energy has an ebb and flow.<sup>56</sup>

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<sup>56</sup> Berliner, *Thinking in Jazz*, 151.

Playing in front or behind the beat is a personal and musical choice, and “good” time feels are not necessarily established by which part of the beat musicians choose to play in, but rather their continuous consistency and evenness between beats. Inconsistent beat placement creates ambiguity within the pulse and causes difficulty for accompanying musicians.

Without debate, jazz musicians, educators, and researchers agree that swing is a defining component of jazz style and that the swing element distinguishes jazz from other styles of music. However, when asked to define swing, each of these communities may offer a contrasting response. Louis Armstrong was once asked to define swing and responded, “If you have to ask, you’ll never know.”<sup>57</sup> While Armstrong may seem slightly cynical, his response portrays much truth surrounding the mystification of jazz swing feel. The basic definition of swing alludes to its rhythmic properties. Figure 11 displays what is referred to as the “swing rhythm.” Swing, as a rhythm, is characterized by eighth note downbeats being longer than offbeats and is usually driven by a triplet subdivision. Offbeats are also slightly accented which offers a basic sense of syncopation.

Figure 11. Swing rhythm

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<sup>57</sup> Richard J. Lawn and Jeffrey L. Hellmer, *Jazz: Theory and Practice* (Belmont, CS: Wadsworth Publishing Company, 1993), 153.





It is important to note that references to the term *swing* should not be confused with the Swing Era of the 1930's. In this chapter the term is referring to the rhythmic and stylistic properties of jazz music and not the historical genre.

Swing, in the literal sense, is a rhythmic phenomenon, as well as a defining keystone between African culture and American jazz; however, its meaning to the community of impassioned jazz musicians goes beyond rhythmic confinement. Longtime drummer for the Count Basie Orchestra, “Papa” Jo Jones stated, “swing is not just a rhythm, but also a feeling”.<sup>58</sup> Researcher and musician Mark Gridley attempted to define swing, in the stylistic sense, by stating it needed to exhibit the following properties: (a) constant tempo, (b) cohesive group playing, (c) rhythmic lilt, and (d) spirit.<sup>59</sup> Swing is not just a rhythm, nor is it just an articulation, but rather a stylistic inclusion of rhythm and articulation. Therefore, the most accurate definitions of swing are those that incorporate facets of rhythm, articulation, and style.

While swing has struggled to be definitively identified<sup>60</sup>, jazz researchers such as Rose (1989), Collier (2002), and Belfiglio (2008) have addressed finer details of swing

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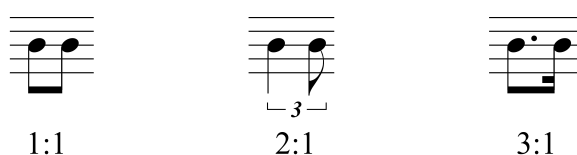
<sup>58</sup> Lawn and Hellmer, *Jazz: Theory and Practice*, 153.

<sup>59</sup> Mark Gridley, *Jazz Styles: History and Analysis* (New Jersey: Pearson Education, Inc., 2012), 9-10.

<sup>60</sup> Lawn and Hellmer, *Jazz: Theory and Practice*, 153.

by studying timing elements within the swing feel such as rhythmic ratios and asynchronies. Asynchronies are the differences between attack times among simultaneously playing instruments and are usually measured in milliseconds.<sup>61</sup> *Swing ratio* is determined by the differential between downbeat and offbeat eighth note durations. Figure 12 shows the flexibility of swing ratio in relation to eighth note durations. Two eighth notes, placed evenly apart, have a ratio of 1:1 (even eighths or straight eighth notes), “swung” eighth notes have a ratio of 2:1 (moderate swing), and dotted eighth note followed by sixteenth note has a ratio of 3:1 (heavy swing). Swing ratios can also fall in between the notated ratios. For example, a swing ratio of 1.5:1 would be more swung than even eighths, but less swung than eighth notes subdivided by triplets.

Figure 12. Examples of different swing ratios



### Syncopation

Syncopation is an occurrence of emphasizing weak beats and is a direct derivation of traditional West African music. In jazz, the elemental rhythmic unit is the eighth note;

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<sup>61</sup> Belfiglio, “Fundamental Rhythmic Characteristics of Improvised Straight-Ahead Jazz,” 16.





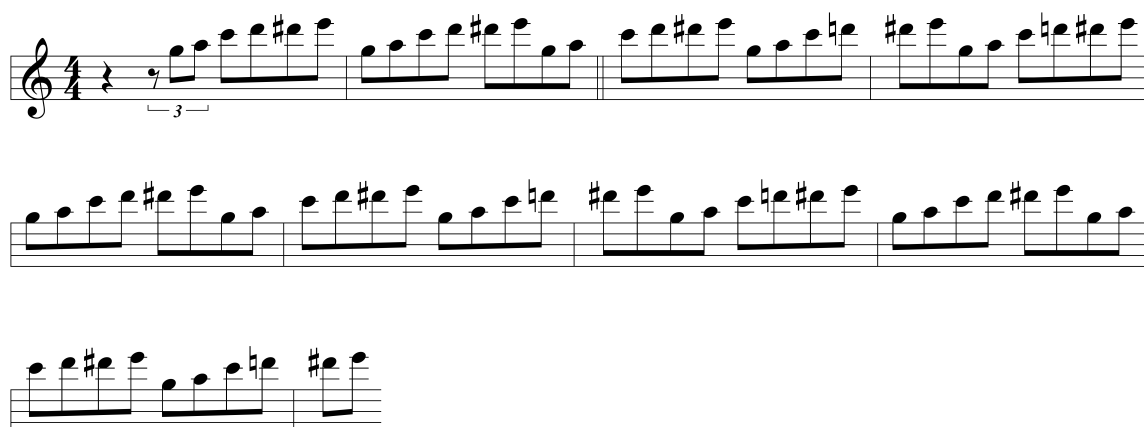
### Polyrhythm

Early forms of polyrhythm were an important characteristic of 14<sup>th</sup> century French secular songs.<sup>62</sup> It was later discovered that polyrhythm was also a musical characteristic of West African culture. However, polyrhythm has further evolved through Western conceptualization and found its place in jazz improvisation as a common rhythmic device. The Western conception of polyrhythm is defined as multiple rhythmic strands occurring simultaneously, which often line up at recurring rhythmic landmarks. Although the use of polyrhythm in jazz performance was predominantly derived from West African musical culture, it also shares some relation to Western conception. In both cultures, rhythmic structures often align and are commonly grounded by rhythmic denomination. A very basic example of polyrhythm can be found in the “swing rhythm” exemplified in

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<sup>62</sup> *Oxford Music Online*, s.v. “polyrhythm” (Oxford University Press: 2015)  
<http://www.oxfordmusiconline.com/subscriber/article/grove/music/22059> (accessed on April 6, 2015)



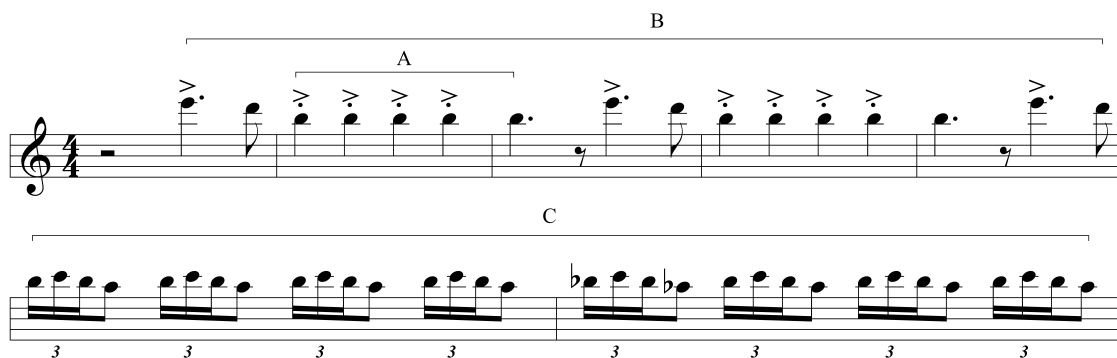


### Rhythmic Repetition

Rhythmic repetition has played an important role in jazz performance since the music's origin and defines the character of the jazz rhythm-section. Walking bass lines and ride cymbal patterns may render as an archetype for rhythmic repetition; however, repetition is also a common improvisational device for jazz soloists.

Figure 17 captures a simplistic use of rhythmic repetition during an improvised solo by Ahmad Jamal. During the first two bars of the example, he constructed a basic phrase that is characterized by repeated quarter notes (A). The following three measures serve as restatement of the first phrase (B). It is also important to note that the pickup notes to each phrase (beats three and four in mm. 1, 3, and 5) are identical, and the final two measures of the example consist of a one-beat rhythmic motive, which is repeated over the following seven beats (C).

Figure 17. Ahmad Jamal's improvisation on "But Not For Me" (mm. 49-55)



In the above example, rhythmic repetition occurs independent of other elements of rhythm. It is, however, fairly common for rhythmic repetition to occur conjunctively with other elements of jazz rhythm. For instance, repetition naturally occurs during instances of polyrhythm because repetition is a required characteristic of polyrhythm. Repetition is also a common element of motivic improvisation because, by definition, motivic development requires more than one repetition of the original motive. Figure 16 demonstrates an example of repetition and polyrhythm coexisting. The three-beat rhythmic figure is repeated twelve times, which creates polyrhythm.

### **Rhythmic Tension and Release**

Tension and release is most often associated with harmonic aspects of jazz improvisation. A common example, which should be very familiar jazz musicians, is the II-V-I progression. Tension progressively develops through the II and V chords, followed by resolution upon reaching the I chord. Another example is found within the vocal twelve-bar blues form. Bruce Benward explained:

Blues lyrics are divided into three sections of four measure each: (1) *relaxation* – the establishment of a mood around which the completed idea will be reflected

(I), (2) *growth of tension* – the repetition of the same material to provide emphasis (IV-I), and (3) *tension peak* – the completion of the idea with a statement or “punch line” that brings the problem into focus (V-I).<sup>63</sup>

The principles remain constant in both examples; tension is created and followed by resolution. The same principles apply to the rhythmic aspect of jazz improvisation. Tension and release, in regards to rhythm, refers to creating a rhythmic conflict followed by a resolution of that conflict.<sup>64</sup>

The key to understanding tension and release within the rhythmic realm of jazz improvisation is to identify what causes tension and how it becomes resolved. Both consonances *and* dissonances are present within rhythm, which is similar to the consonant and dissonant principles of harmony. Rhythmic consonance is established by emphasizing strong downbeats that reinforce the continuity and forward momentum of time. Rhythmic dissonance occurs when the continuity and forward momentum of time is disrupted.

### **Rhythmic Motivic Improvisation**

A musical motive is most often associated with melody, but is defined as “the smallest identifiable musical idea; it can consist of a pitch pattern, a rhythmic idea, or both.”<sup>65</sup> Improvisations based on musical ideas, or motives, are often referred to as “thematic improvisation.” However, this term is somewhat misleading because it is

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<sup>63</sup> Bruce Benward and Joan Wildman, *Jazz Improvisation: In Theory and Practice* (Dubuque, IA: Wm. C. Brown Publishers, 1984), 33.

<sup>64</sup> Belfiglio, “Fundamental Rhythmic Characteristics of Improvised Straight-Ahead Jazz,” 23.

<sup>65</sup> Stefan Kostka, Dorothy Payne, and Byron Almen, *Tonal Harmony with an Introduction to Twentieth-Century Music* (New York: McGraw-Hill Companies, 2013), 650.



referring to improvisation structured around themes, not motives – themes are generally associated with longer melodic phrases, not short musical ideas. For the purpose of this study, improvisation based on small musical ideas will be referred to as “motivic improvisation.”

Although much attention has been drawn to the melodic side of motivic improvisation, jazz practitioners also structure solos around rhythmic motives. Figure 18 demonstrates Jim Hall’s use of rhythmic motivic improvisation on “You’d Be So Nice to Come Home to.” The original rhythmic motive is introduced in the first measure and serves as the primary motivic device for the succeeding eleven measures. As previously stated, motives can be comprised of rhythmic and/or melodic material, but in Hall’s example the intervallic shapes change throughout each occurrence of the rhythmic motive. Therefore, rhythm, not pitch, serves as the primary component throughout Hall’s use of motivic improvisation.

Figure 18. Jim Hall’s improvisation on “You’d Be So Nice to Come Home to” (mm. 1-11)



It is important to recognize the relationship between motivic improvisation and other elements of rhythm such as syncopation and rhythmic repetition. The nature of motivic improvisation encompasses a certain degree of repetition. That is to say, it is not possible to develop a motive without restating it in some form. However, it is possible for rhythmic repetition to occur independently and exclusive from a motivic approach. This is determined by usage of the rhythmic motive – if a rhythmic unit is simply repeated and not developed in a motivic fashion, then it is only labeled as rhythmic repetition.

### **Rhythmic relationships between Jazz Performance and West African Culture**

Throughout the course of a century jazz has evolved into a remarkable musical art form, which was cultivated through New Orleans-based group improvisation and musical desire for self-expression. Venturing through several eras of advancement and experimentation, jazz has become a unique musical art form absorbed with tradition, yet balanced by progression. Throughout the entire evolution of jazz, rhythm has remained as

one of its defining qualities. To further identify and address rhythmic concepts adherent in current jazz improvisation, it is important to investigate how rhythm has functioned throughout jazz performance history. It is also important to note that not all rhythmic elements of jazz improvisation are derived from African culture. The following section addressed rhythmic elements that are exclusively derived from African musical culture.

Historians and musicologists have established the relational importance between the origination of jazz in New Orleans and traditional West African culture. An influx of African slaves, approximately ten million in total, were forced to relocate to the United States between the 15<sup>th</sup> and 19<sup>th</sup> century – the majority of these slaves arrived from Western regions of African such as Ghana, Togo, Benin, and Dahomey. Transplanted slaves were stripped of freedom and torn from their social structures, yet their musical heritage proved to be resilient. In contrast to the notated tradition of Western music, musical traditions of West African culture were aurally passed through generations, which enabled slaves to preserve their musical heritage despite being forcibly taken away from their homeland.<sup>66</sup> While most of African musical culture shared similar oral traditions, West African cultures were specifically known for their immersion in rhythmic drumming.<sup>67</sup> Rhythmic conceptualities have remained as an integral stylistic component throughout the development of jazz performance, because of the preservation and transcendence of West African musical culture.

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<sup>66</sup> Ted Gioia, *The History of Jazz* (New York: Oxford University Press, 1997), 7.

<sup>67</sup> Paulla A. Ebron, *Performing Africa* (New Jersey: Princeton University Press, 2002), 33-36.

Researchers also agree that jazz originated from a steady process of musical assimilation. The developmental path to jazz was not a direct one but rather an array of musical style derived from: (a) traditional West African music, (b) blues, (c) ragtime, (d) European dance music, (e) marching band traditions, and (f) minstrelsy.<sup>68</sup> Each of these musical styles was absolutely necessary for jazz to develop in the manner that it did. Though each of the previously listed styles provided equal importance towards the origination of jazz performance, they were not equal in their rhythmic contributions. In regards to rhythmic characteristics, ragtime and traditional West African styles offered more towards the development of jazz. With the exception of syncopation, which was also filtered through the traditions of ragtime, rhythmic characteristics found in jazz performance are essentially African in background. Polyrhythm, call and response, repetition, and beat democratization are all rhythmic concepts found within the jazz style and are all derivations of African musical tradition.

#### Beat Democratization

During the introduction of his monumental contribution to jazz research, Gunther Schuller thoroughly analyzed the musical elements found within jazz performance. During his examinations he claimed that the uniqueness sustained in jazz performance was derived from two primary sources: “a quality that jazz musicians call “swing,” and the consistent “democratization” of rhythmic values.” He later clarified:

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<sup>68</sup> Schuller, *Early Jazz*, 18-19.

By “democratization” of rhythmic values, I mean very simply that in jazz so-called weak beats (or weak parts of rhythmic units) are *not* underplayed as in “classical” music. Instead they are brought up to the level of the strong beat. The jazz musician does this not only by maintaining an equality of dynamics among “weak” and “strong” elements, but also by preserving the full sonority of notes.<sup>69</sup>

This concept was first suggest by Schuller in 1968, but has since been discussed by several other researchers and musicians (Belfigio 2008, Galper 2005, Liebman 1997). Schuller also stressed that both of these rhythmic concepts (swing feel and democratization of rhythmic values) were strictly derived from musical characteristics prominent in West African culture.

Unlike Western musical concepts, jazz performance was initially characterized by the idea of equalization of strong and weak beats within rhythmic substructures. Schuller implied that this rhythmic notion was not only unique to jazz, but also prevalent throughout traditional West African music. Schuller proposed several novel theories about the relationship between African music and jazz, but he was not the first to address the topic. His findings were influenced by the previous work of Arthur Morris Jones who authored *Studies in African Music*, a two-volume study and analysis of traditional African music.

There are significant differences when comparing beat prioritization between Western and West African musical practices. In the general sense, Western music prioritizes the strong beats of each measure or phrase.<sup>70</sup> For example, in 4/4 meter (4/4 will be used as the standard meter to further discuss “beat democratization”) it is common

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<sup>69</sup> Ibid., 7-8.

<sup>70</sup> Schuller, *Early Jazz*, 8.

practice for Western practitioners to emphasize the first and third quarter notes of each measure, with the first beat slightly more accented than the rest. The importance of this example is that the second and fourth quarter notes are *not* stressed. The prioritization of beat is significantly different among traditional African musical cultures, and it is also different in jazz.

Jazz, in its initial form, had adopted the concept of beat equalization from the traditions of West African musical culture by homogenizing the dynamic between strong and weak beats. As jazz evolved in the early portion of the 20<sup>th</sup> century, there became a tendency to emphasize beats two and four. Common with most Western forms of music, jazz also commonly changed, harmonically or structurally, on beats one and/or three. Jazz achieved beat equality by emphasizing, in some manner, all four beats (beats one and three are stressed by harmonic or structure changes while beats two and four are stressed rhythmically).

Thus far, discussion of rhythmic prioritization has concentrated on beat division on the quarter note level, but a crucial characteristic of the overall jazz style is also found within the eighth note level. Much of jazz improvisation is motored by eighth note subdivisions, which naturally leads to an emphasis on offbeat eighth notes. Figure 19 exemplifies how jazz musicians commonly accent the weak eighth note beats, a rhythmic concept pedagogues refer to as “back accenting.”

Figure 19. Sonny Stitt's improvisation on "On Green Dolphin Street" (mm. 58-60)



Back accenting is often subtle, depending on the era and musician, but has remained a widespread characteristic throughout jazz style and performance. Although it is more difficult to detect in the improvisations of early jazz musicians, back accenting became a common stylistic element throughout jazz performance. This rhythmic trait became more apparent in the improvisation style of late swing era musicians, such as Lester Young and Roy Eldridge, and was a fundamental stylistic quality of bebop soloists such as Charlie Parker and Dizzy Gillespie.

### Polyrhythm

The African perception of polyrhythm differs from that of Western conception and was conceived on a different degree, in which simultaneous rhythmic strands may never line up.<sup>71</sup> In *Studies in African Music*, Jones produces several musical examples that attest the differences between African and Western conceptions of polyrhythm and beat prioritization. He also suggested that traditional African music was not established on "divisive" principles. Originally exemplified in the second volume of *Studies in African Music*, but later reproduced in Schuller's *Early Jazz*, figure 20 illustrates the complexity of polyrhythm found in African music.

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<sup>71</sup> Schuller, *Early Jazz*, 11.

Figure 20. *Nayayito* Dance, mm. 38-39<sup>72</sup>

The musical score for Figure 20, titled "Nayayito Dance, mm. 38-39", consists of eight staves. The first three staves (Gankogui, Axatse, and Claps) are in 12/8 meter. The Gankogui staff shows a complex rhythmic pattern with groupings of 3+3+3+3. The Axatse staff shows a similar pattern. The Claps staff shows a simple 12/8 pattern. The Song staff shows a vocal line. The Atsimevu staff shows a complex rhythmic pattern. The Sogo staff shows a complex rhythmic pattern. The Kidi staff shows a complex rhythmic pattern. The Kagan staff shows a complex rhythmic pattern.

The top three staves of the example shown above appear in 12/8 meter and rhythmically coincide at the beginning of each measure. Although these voices periodically line up, there is much rhythmic complexity within the 12/8 measure because of the contrasting rhythmic groupings. The gankogui is grouped in 3+3+3+3, the Axatse

<sup>72</sup> Schuller, *Early Jazz*, 12.



is grouped in 2+3+4+3, and the clapping is grouped in 2+2+2+2+2+2. As Schuller pointed out, “When we leave the top three lines, we also leave all vertical coincidence of bar lines and phrasing.”<sup>73</sup> Not only are there no vertical coincidences throughout the bottom five voices (song, *atsimevu*, *sogo*, *kidi*, and *kagan*), but two of these voices change meter. In the short duration of this example, the *song* changes between 6/8, 3/8, and 4/8, while the *atsimevu* transitions through 4/8 and 3/8. Schuller pointed out the extraordinary complexities within West African culture:

Thus, out of a total of twenty-eight measures, vertical coincidence occurs only at five points. Another way of evaluating this remarkable feat is to realize that in a segment of music lasting only some six seconds, it is extremely difficult to avoid metric coincidence. When one remembers that this example of African music is improvised within a highly disciplined framework, one can only wonder at the connotation of “primitive” usually given to African music.<sup>74</sup>

The rhythmic and polyrhythmic complexities portrayed throughout this example are astonishing idiomatic characteristics of the West African musical culture.

Prior to the 20<sup>th</sup> century polyrhythm was not an integral rhythmic concept of classical music; however, several 20<sup>th</sup> century classical composers used polyrhythm in their compositions, but this is most likely a derivative of rhythmic concepts apparent in jazz performance. Although there were contrasting conceptions of polyrhythm between African and classical practices, early jazz musicians in New Orleans were mostly of African heritage and were more likely to be influenced by polyrhythmic characteristics related to African musical traditions.<sup>75</sup>

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<sup>73</sup> Schuller, *Early Jazz*, 13.

<sup>74</sup> Ibid.

<sup>75</sup> Gridley, *Jazz Styles*, 48.

## Syncopation

Differences between jazz and Western music are vividly apparent when addressing beat prioritization and polyrhythm, but both forms of music share similar conceptions of continual pulse. However, a defining stylistic characteristic of jazz occurs when this beat continuum becomes indistinguishable. Syncopation occurs when evenness between beats is distorted, which creates a certain ambiguity within beat prioritization.

Syncopation is generally defined as a temporary displacement of the regular metrical accent in music typically caused by stressing the weak beat.<sup>76</sup> Although it is not necessary to “stress the weak beat” to achieve syncopation, this portion of the definition is important because of its relation to jazz performance. “Back accenting,” a common performance practice in jazz, causes certain amounts of constant syncopation because stress is removed from strong beats and placed onto weak eighth note beats (offbeats).

Syncopation was a common compositional device in several forms of Western music by composers such as Bach, Brahms, and Beethoven, and the earliest examples of syncopation can be found in compositions of the 13<sup>th</sup> century.<sup>77</sup> Syncopation is also an essential characteristic of African music and ragtime. Similar to polyrhythm, syncopation is found in Western, African, and ragtime musical idioms, but its function in jazz is most similar to African and ragtime usage of syncopation.<sup>78</sup>

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<sup>76</sup>*Merriam-Webster Online*, s.v. “Syncopation,” accessed July 2, 2014, <http://www.merriam-webster.com/dictionary/syncopation>.

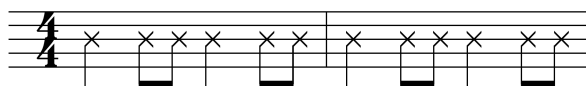
<sup>77</sup>*Oxford Music Online*, “Syncopation,” by Judith Nagley and Percy Scholes, accessed July 2, 2014, <http://www.oxfordmusiconline.com>

<sup>78</sup> Gridley, *Jazz Styles*, 45.

## Rhythmic Repetition

Rhythmic repetition is another essential feature throughout jazz performance and is easily identifiable throughout all of its eras. Through examination of the rhythm section, specifically drums and bass, several occurrences of rhythmic repetition are recognized. A primary responsibility for drummers is to provide rhythmic support for soloists, which usually involves a high amount of rhythmic repetition. One example, illustrated in figure 21, is the rhythm played on the ride cymbal during swing styles and is often referred to as the “ride rhythm” or “ride pattern.”

Figure 21. Ride cymbal pattern



Bassists most often complement ride patterns by “walking” a bass line that is achieved by playing quarter notes on every single beat. Although “walking” bass lines can be harmonically and melodically interesting, a high degree of rhythmic monotony exists. Other examples of rhythmic repetition can be found in the left hand figures of boogie-woogie pianists, rhythm section vamps of the hard bop era, and groove based music of jazz-fusion. Prior to the emergence of jazz, rhythmic repetition was found in several varieties of music ranging from ragtime, folk, marching, and African styles.

However, musicologists believe the desire for rhythmic repetition was retained in jazz performance because of the relationship between jazz's origins and African culture.<sup>79</sup>

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<sup>79</sup> Gridley, *Jazz Styles*, 48.

## CHAPTER V

### RHYTHMIC ANALYSIS

The following section of research presents rhythmic analyses of four selected improvisations. Each analysis addresses the following rhythmic elements of jazz improvisation: (a) rhythmic variety, (b) syncopation, (c) polyrhythm, (d) rhythmic repetition, (e) rhythmic tension and release, and (f) rhythmic motives. Minor instances of rhythmic elements are not identified. For example, syncopation was previously defined as an emphasis of weak beats, but the analyses do not label each time a weak beat was emphasized. Additionally, occurrences of polyrhythm create rhythmic tension and require a certain degree of repetition. In these instances, only polyrhythm is labeled, not the additional implied rhythmic elements.

Rhythmic motives serve as a major element throughout the selected improvisations, but there is some difficulty in identifying individual motives and their subsequent occurrences. For instance, the first rhythmic motive identified in Sonny Rollins' improvisation on "Moritat" is comprised of two consecutive eighth notes starting on beat one (m. 3). There are several instances where Rollins plays two consecutive eighth notes; however, only instances that function as rhythmic focal points for motivic improvisation are labeled – these distinctions were made at the author's discretion.

Rhythmic motives are labeled in chronological order of occurrence within each solo. For example, the first motive to appear is labeled as "motive (a)," the second to

appear is labeled as “motive (b),” and so forth. Motive identification and labeling is inclusive to single improvisations. Only rhythmic motives that are deemed substantial by the author, and developed in a motivic manner, are identified. Instances where motives are slightly rhythmically altered, but the alteration remained an obvious element of the development, are labeled as “variations.”

Typical jazz style has a certain degree of natural syncopation because of slight emphasis on offbeat eighth notes. Because of this encompassing performance practice, one could argue that the majority of all jazz solos – in the swing style – are somewhat syncopated. However, only the notable examples of syncopation are labeled in the following rhythmic analyses.

Analysis of rhythmic repetition focuses on instances that occur outside of continuous eighth note lines. Four measures of consistent eighth notes could be considered an example of rhythmic repetition; however, the rhythmic analyses presented below only address unique instances of repetition. In several occurrences eighth notes are identified as examples of rhythmic repetition, but they are not in the form of continuous eighth note lines. There is also an amount of uncertainty in regards to how many repetitions are required to create rhythmic repetition. For the purposes of this research, all instances that contain two or more repetitions within a single phrase are identified as examples of rhythmic repetition.

As previously discussed, rhythmic tension and release occurs when rhythmic dissonance is followed by a return to rhythmic consonance. This process can take place in a rather short duration (i.e. a single measure) or it can extend throughout a longer period

of time (i.e. several measures). Therefore, only extended examples of rhythmic tension and release are identified in the following analyses.

### **Sonny Rollins' Improvisation on "Moritat"**

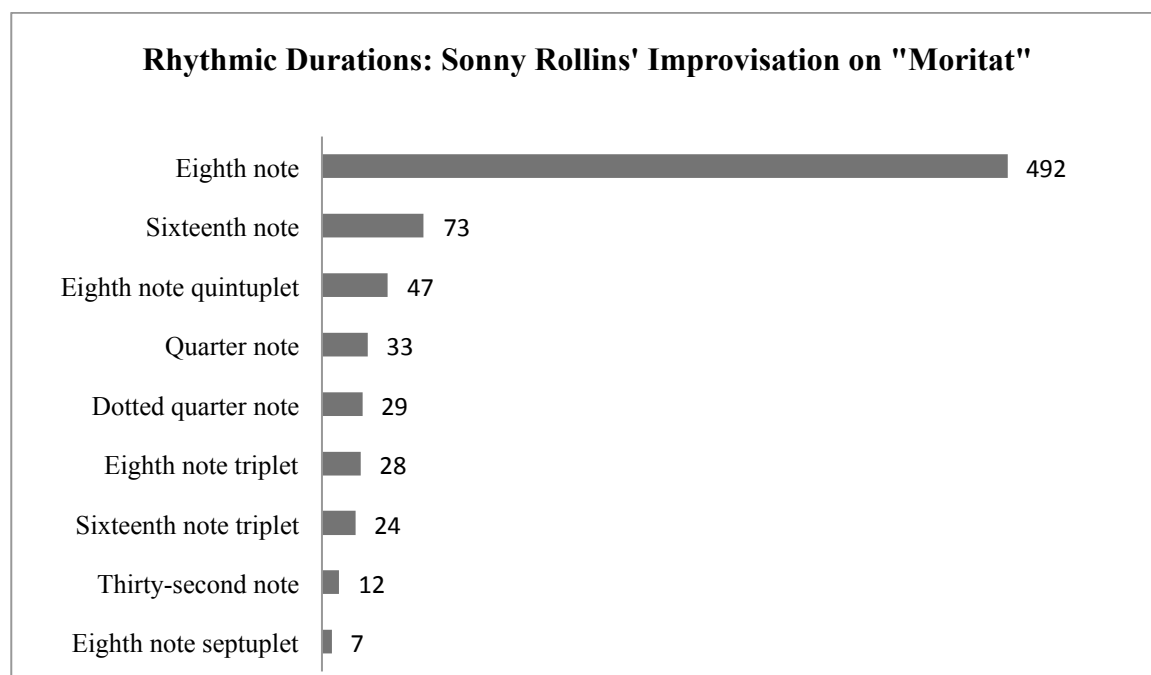
"Moritat," originally titled "Die Moritat von Mackie Messer" and commonly known as "Mack the Knife," was a musical selection from Bertolt Brecht and Kurt Weill's *The Threepenny Opera*. The song became increasingly popular in the United States during the 1950's and was recorded by several jazz musicians such as Louis Armstrong, Lionel Hampton, Kenny Dorham, Ella Fitzgerald, Bobby Darin, and Frank Sinatra. Sonny Rollins recorded "Moritat" on his iconic 1956 album *Saxophone Colossus*, which features Wynton Kelly on piano, Doug Watkins on bass, and Philly Joe Jones on drum set.

"Moritat" is a 32-bar form (ABAB) and each section is eight bars in length. Over his four choruses (128 measures) of improvisation, Rollins incorporates several elements of jazz rhythm, but his application and development of rhythmic motives are highly notable throughout this solo. Motivic improvisation is a defining quality of his improvisational style. Gunther Schuller even declared that Rollins' most significant contribution to jazz was his unique approach to thematic improvisation. Rollins' improvisation on "Moritat" is an exemplar demonstration of motivic development and validates the claim made by Schuller.

### Rhythmic Variety

Rollins incorporates over eleven different rhythmic values, but the eighth note serves as the primary value throughout all four choruses. Although the eighth note was his most used rhythmic duration, he rarely plays more than twelve consecutive eighth notes in succession, and the longest string of consecutive eighth notes was twenty successions. Rollins also uses a variety of other rhythmic values to break up longer strings of eighth notes. The longest rhythmic duration was a half note, which occurs four times, and the shortest rhythmic duration was the thirty-second note. The following chart displays the distribution of rhythmic durations throughout Rollins' improvisation.

Figure 22. Approximate instances of rhythmic durations in Sonny Rollins' improvisation on "Moritat"





Applications of specific rhythmic durations are often habitual throughout Rollins' improvisation. For instance, Rollins uses sixteenth note triplets in the form of a *turn*<sup>80</sup> for all but one occurrence (see figure 23).

Figure 23. Sonny Rollins' improvisation on "Moritat" (mm. 14-15): Example sixteenth note triplet *turn*



This type of sixteenth note triplet grouping appears in mm. 9, 14, 15, 38, 41, and 94. The single deviating occurrence appears in m. 69 where all three sixteenth note triplets succeed in descending motion. Rollins uses twenty-four sixteenth note triplets in total, but there are only eight different occurrences since he always grouped them into three.

With the exception of mm. 35-39, Rollins often uses sixteenth notes in a similar manner as he did with sixteenth note triplets. In mm. 5, 59, 60, 82, 100, and 106 he plays sixteenth notes, in groups of four, that also functioned as a *turn*. An example of this is portrayed in figure 24.

Figure 24. Sonny Rollins' improvisation on "Moritat" (mm. 59-60): Example of sixteenth note *turn*



<sup>80</sup> A "turn" is a type of ornament commonly found in jazz performance practice in which a main note alternates with two auxiliary notes above and below.

## Syncopation

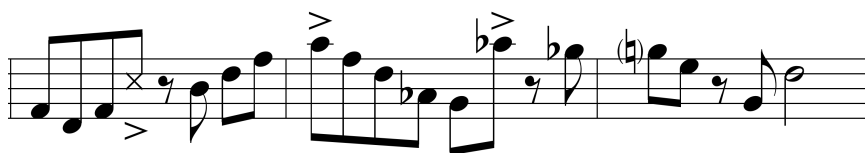
Opposed to breaking up lines with rests and oddly placed rhythmic durations, the majority of Rollins' syncopation is caused by strategically placed accents within his eighth note lines. By placing accents on beats two and four, and/or eighth note offbeats, Rollins causes syncopation while maintaining some continuity throughout his lines. Figure 25 is an example of how Rollins accents weak beats to create syncopation. In measure 47 Rollins accents beat three and the offbeat of four, and in measure 48 he accents beat three and four. Of the four accented notes, three of them are on weak divisions of the 4/4 metric structure. Further examples of syncopation, similar to that found in figure 25, occur in mm. 49-51, 60-61, 110-111, and 127-129.

Figure 25. Sonny Rollins' improvisation on "Moritat" (mm. 47-48)



On three occasions Rollins merges the use of accents with the use of rests to create syncopated lines. Figure 26 exemplifies an instance where Rollins implemented this approach. Accents occur on the offbeat of two in m. 65 and beats one and the offbeat of three in m. 66. Although only two offbeat accents occur throughout these three measures, there remains a strong sense of syncopation due to the eighth rests intermingled within the line. Additional examples of similar syncopated lines occur in mm. 79-81 and 118-120.

Figure 26. Sonny Rollins' improvisation on "Moritat" (mm. 65-67)



A third type of syncopated structure occurs in Rollins' solo, in which he implements longer durations of rest to create syncopation. Figure 27 differs from the previously displayed examples of syncopation because Rollins uses less notes and longer spaces of rest. In this example he uses a two and one-half beat space in m. 123 and a one and one-half space in m. 124. The two spaces are separated by a single accented eighth note occurring on the offbeat of four in m. 123. This was the only instance where Rollins uses space longer than an eighth rest to create syncopation.

Figure 27. Sonny Rollins' improvisation on "Moritat" (mm. 123-124)



Of the nine examples of syncopation in Rollins' improvisation, five of them are continuous lines in which the syncopation was caused by accents placed on weak beats. The remaining four instances of syncopation exhibit lines that are broken by the use of rests. This discontinuity in the line adds a degree of syncopation by creating a stronger emphasis towards weak beats.

It is also important to mention the lengths of each example where Rollins applies syncopation. Five of the examples are approximately two measures in length, three

examples are three measures in length, and one example was only a single measure in length. Syncopation can be extended across several measures, but the examples created in Rollins' improvisation most often last between two and three measures.

### Polyrhythm

Rollins does not apply a significant amount of polyrhythm throughout his improvisation. However, his most significant application of polyrhythm, starting in m. 88, extends through four measures (see figure 28). By fitting five eighth notes in the space of four, Rollins creates a polyrhythm with the ratio of five to four (5:4). The polyrhythm is not completely evenly spaced because of the sixteenth note quintuplet and dotted eighth note quintuplet in the beginning of m. 91, and it is uncertain if this was a musical choice by Rollins. It is also interesting that Rollins uses quintuplets for exactly five measures. Whether or not this was derived from chance or design, Rollins demonstrates a remarkable command of polyrhythm by creating a complex, yet creative, string of quintuplets over five measures.

Figure 28. Sonny Rollins' improvisation on "Moritat" (mm. 88-92)



Prior to the example of polyrhythm in mm. 88-92, Rollins prepares the listener by implementing a series of unique rhythms in the preceding four measures (see figure 29). Although it is not quite an example of polyrhythm, Rollins does implement a group of

eighth note septuplets in m. 86. He also implies a triplet subdivision in m. 85. It is most likely not a coincidence that this occurs in the measures preceding his string of quintuplets.

Figure 29. Sonny Rollins' improvisation on "Moritat" (mm. 84-87)



### Rhythmic Repetition

The notable instances of rhythmic repetition throughout Rollins' improvisation are delivered through a variety of methods and durations, but there are no noticeable tendencies related to how Rollins applied rhythmic repetition. Most of Rollins' applications of rhythmic repetition are fairly short in duration and only occupy one to three measures. A very brief example of rhythmic repetition is shown in figure 30. The repetition in this example occurs, very briefly, when the sixteenth note triplet figure from m. 14 is restated in m. 15. While this example may seem elementary, and could arguably not be an occurrence of rhythmic repetition, further examination reveals the repetitive nature within the line. Figure 30 can essentially be broken into two phrases, the first phrase in m. 14 and the second phrase in m. 15. Each phrase consists of similar line contour, equal length, and identical beginning and ending rhythms. Although the example is short in duration and contains only two repetitions, Rollins clearly restates the rhythmic material from m. 14. A similar example of rhythmic repetition is found in m. 41.

Figure 30. Sonny Rollins improvisation on “Moritat” (mm. 14-15)



There are several examples where Rollins extends the use of rhythmic repetition beyond two repetitions. One of these, shown in figure 31, spans three measures and contains five repetitions. The first four repetitions consist of two consecutive eighth notes (mm. 77 and 78, and the first beat of m. 79), but the fifth repetition (the three eighth notes beginning on the offbeat of two in m. 79) is a varied rhythm of the previous repetitions. Examples of rhythmic repetition containing more than two repetitions can be seen in mm. 40-41, 69-70, 73-75, and 127-129. The examples in mm. 69-70 and 73-75 also involve a varied repetition.

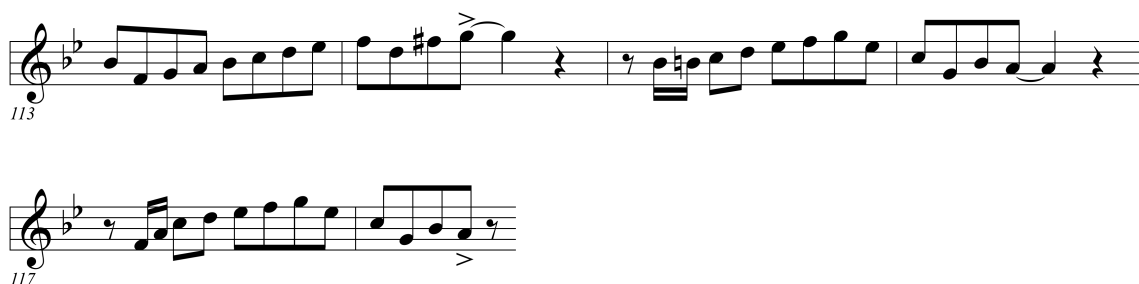
Figure 31. Sonny Rollins' improvisation on “Moritat” (mm. 77-79)



Lastly, there is a unique example of rhythmic repetition that contains three repetitions, but each repetition is approximately two measures in length. Figure 32 differs from the previously shown examples of rhythmic repetition because Rollins repeats rhythmic units that are nearly two measures in length. The first repetition, in mm. 113-

114, is slightly varied. This example encompasses five and one-half measures, which is Rollins' longest example of rhythmic repetition.

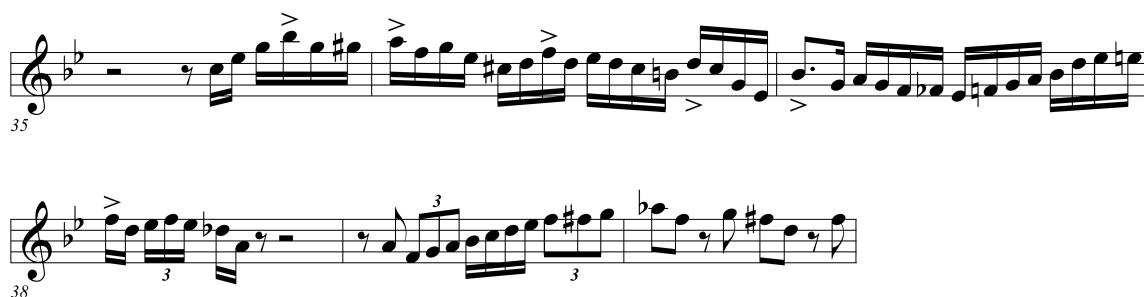
Figure 32. Sonny Rollins' improvisation on "Moritat" (mm. 113-118)



### Rhythmic Tension and Release

There are two main examples of rhythmic tension and release throughout Rollins' improvisation, the first is displayed in figure 33. In mm. 35-39 Rollins creates rhythmic tension by using sixteenth notes to create a *double-time feel*. Since eighth notes serve as the primary, and expected subdivision, sixteenths notes cause disruption to the time feel and create a sense of urgency within the rhythmic line. Rollins' use of accents, specifically on the second sixteenth note of beat four in m. 35 and the third sixteenth note of beat two in m. 36, add a subtle amount of syncopation. Rollins returns to rhythmic consonance in m. 40 by emphasizing beat one and three.

Figure 33. Sonny Rollins' improvisation on "Moritat" (mm. 35-40)



Rollins' second example of rhythmic tension and release occurs in mm. 84-95 (see figure 34). In this example Rollins' exhibits two factors that are responsible for tension, use of tuplets (triplets, quintuplets, and septuplets) and the lengthy use of polyrhythm in mm. 88-92. Rhythmic tension is released in m. 94 when Rollins returns to a consonant eighth note line.

Figure 34. Sonny Rollins' improvisation on "Moritat" (mm. 84-95)





### Motivic Rhythmic Improvisation

Motivic development is an integral characteristic of Rollins' improvisational style. Examples of his ingenious approach to manufacturing and developing motives are heard throughout some of his most celebrated solos such as "St. Thomas," "Blue 7," and "Way Out West." Rollins' improvisation on "Moritat" proves to be yet another model of exemplary motivic development.

Of the four choruses of improvisation on "Moritat," Rollins induces three primary rhythmic motives (shown in figure 35). Motive (a) is the most used and occurs twelve different times (mm. 3, 19, 21, 73-75, and 77-79).

Figure 35. Rhythmic motives used in Sonny Rollins' improvisation on "Moritat"



Though it is the least complex, Rollins develops motive (a) to a greater extent when compared to the remaining two motives. The first occurrence appears in m. 3 as part of Rollins' opening line (see figure 36) and is not used until sixteen measures after. Rollins solidifies this rhythmic figure as a motive by restating the rhythm in m. 19 (see figure 37). The relationship between the motive (a) occurrences in m. 3 and 19 is twofold. First, the motive statements both occur on beat one and are the final two notes of melodic lines. Secondly, the melodic shapes preceding the motives are similar. Rhythmic motives can be identified exclusively from other elements of music, but in this instance, the melodic shaping verifies Rollins' use of motive (a). Both motives are approached by

similar downward intervals (perfect 4<sup>th</sup> on beat three of m. 2 and perfect 5<sup>th</sup> on beat three of m. 18), followed by an upward perfect 4<sup>th</sup> that leads into the motive.

Figure 36. Sonny Rollins' improvisation on "Moritat" (mm. 1-3)



Figure 37. Sonny Rollins' improvisation on "Moritat" (mm. 18-19)



Upon first listen, the importance of mm. 3 and 19 may seem vague, but the third chorus of Rollins' improvisation reveals their motivic value. Motive (a) appears at nine different points throughout the nine measures displayed in figure 38, which also exemplifies Rollins' lengthiest use of motivic development, and six of nine instances occur with a pickup rhythm prior to the motive statement. Although the pickup rhythms are different and create several different overall rhythmic units, motive (a) provides rhythmic cohesiveness throughout all nine measures. Similar to the relationships between mm. 1-3 and 18-19, motive statements in figure 38 occur mostly on beat one (the exceptions are in mm. 78 and 79 where the motive statements also occur on beat three) and have similar melodic shapes. There are also several similarities between the pickup rhythms. For instance, the pickup rhythms in mm. 71, 75, and 76 are all identical.

Figure 38. Sonny Rollins' improvisation on "Moritat" (mm. 71-79)



Motive (b) is the least developed of the three and only appears in three different instances (mm. 11, 31, and 45). Each occurrence appears as an ending to a melodic line and always begins on beat one. Although all three occurrences occur fairly far apart from one another and there is no apparent development that connects them together, Rollins' particular use of this rhythmic motive confirms that it is a component of his rhythmic language.

In mm. 113-118 (shown in figure 39) Rollins cleverly juxtaposes rhythmic variety, repetition, and motivic development. There are six measures in the example, which is divided into three two-bar phrases. The motive statements occur on the second half of each phrase and are preceded by a one-measure pickup (the pickup in m. 113 is part of a longer line that begins in m. 111). Each phrase has a slightly varied rhythm, but Rollins maintains cohesion throughout the line by keeping the motive statement, or pickup, constant in the following phrase. The first and second phrase (mm. 113-114 and mm. 115-116) are unified by the same rhythmic motive statement, and the second and third phrases (mm. 115-116 and mm. 117-118) consist of the same pickup rhythm.

Figure 39. Sonny Rollins' improvisation on "Moritat" (mm. 113-118)

The figure displays two staves of musical notation in G-flat major (two flats). The first staff, labeled 113, contains measures 113 through 116. It features a 'pickup' of four eighth notes (B-flat, D-flat, F, G-flat) in measure 113, followed by a 'motive (c)' of four eighth notes (F, G-flat, A-flat, B-flat) in measure 114, which is accented. Measure 115 begins with a 'pickup' of a quarter rest followed by a quarter note (B-flat), then continues with eighth notes (D-flat, F, G-flat, A-flat, B-flat). Measure 116 contains a 'c)' motif of four eighth notes (B-flat, A-flat, G-flat, F) followed by a quarter rest. The second staff, labeled 117, contains measures 117 and 118. Measure 117 starts with a 'pickup' of a quarter rest followed by a quarter note (B-flat), then continues with eighth notes (D-flat, F, G-flat, A-flat, B-flat). Measure 118 contains a '(c) var.' motif of four eighth notes (B-flat, A-flat, G-flat, F) followed by a quarter rest, with an accent mark over the final note.

Figure 40. Rhythmic analysis of Sonny Rollins' improvisation on "Moritat"

Sonny Rollins' improvisation on  
Moritat (Mack the Knife)

I (0:46)

1 5 9 13 17 21 25 29

motive (a)

motive (b)

repetition

(a)

(a)

(b)

II (1:31)

tension...

release

repetition

repetition

(b)

syncopation

syncopation and repetition

syncopation

33

37

41

45

49

53

57

61

## III (2:18)

65 syncopation

69 repetition (a)

73 (a) (a) (a) repetition

77 (a) (a) (a) (a) (a) repetition syncopation

81 tension...

85 polyrhythm

89 release 3

93

## IV (3:04)

97

101

105

109

113

117

121

125

syncopation

motive (c)

(c)

(c) var.

repetition

syncopation

syncopation

syncopation

repetition

Detailed description of the musical score: The score is written in G minor (two flats) and 3/4 time. It consists of eight staves of music. Measure numbers 97, 101, 105, 109, 113, 117, 121, and 125 are indicated at the start of their respective staves. The notation includes various rhythmic values: eighth notes, sixteenth notes, and dotted notes. There are several instances of syncopation, where notes are placed on off-beats. A specific rhythmic pattern is identified as 'motive (c)' and is repeated in various forms, including a variation '(c) var.'. Some measures contain triplets, indicated by a '3' over the notes. The score concludes with a double bar line at the end of the eighth staff.



### Ahmad Jamal's Improvisation on "But Not For Me"

On January 16, 1958 sound recording equipment had been set up in the Chicago music club, Pershing Lounge. The resulting recording, *At the Pershing: But Not For Me*, quickly became one of Ahmad Jamal's most celebrated albums. The recording featured Jamal's trio at the time, which included Isreal Crosby on bass and Vernel Fournier on drum set. In addition to "But Not For Me," the recording session also included "Poinciana," which became popular enough to remain on the jazz music charts for nearly two years. Jazz writer and researcher, Ted Gioia, praised the finesse and command of Jamal's piano playing:

The recording deserved its extraordinary success. Jamal had a fresh conception of the jazz keyboard that stood out from the pack in 1958, and still sounds invigorating in 2008. His playing revolutionized the use of space and time in jazz; Jamal knew when to hold back and when to go for the big effect and he took chances on both extremes. He is usually (and rightly) praised for the subtlety of his playing, but Jamal also deserves recognition for his ability to hit the home run, his knack for pulling out some grand, dramatic effect at just the right moment in a performance.<sup>81</sup>

"But Not For Me" was first introduced as a song in the 1930 Gershwin musical, *Girl Crazy*. The song has since become a standard in the jazz repertoire, and has been recorded by several jazz artists and bandleaders such as Benny Goodman, Glenn Miller, Billie Holiday, Ella Fitzgerald, Miles Davis and John Coltrane. "But Not For Me" is a 32-bar form (ABAB') and each section is eighth bars in length. The rhythmic analysis of Jamal's improvisation includes his melody statement, since much of it is improvised, as

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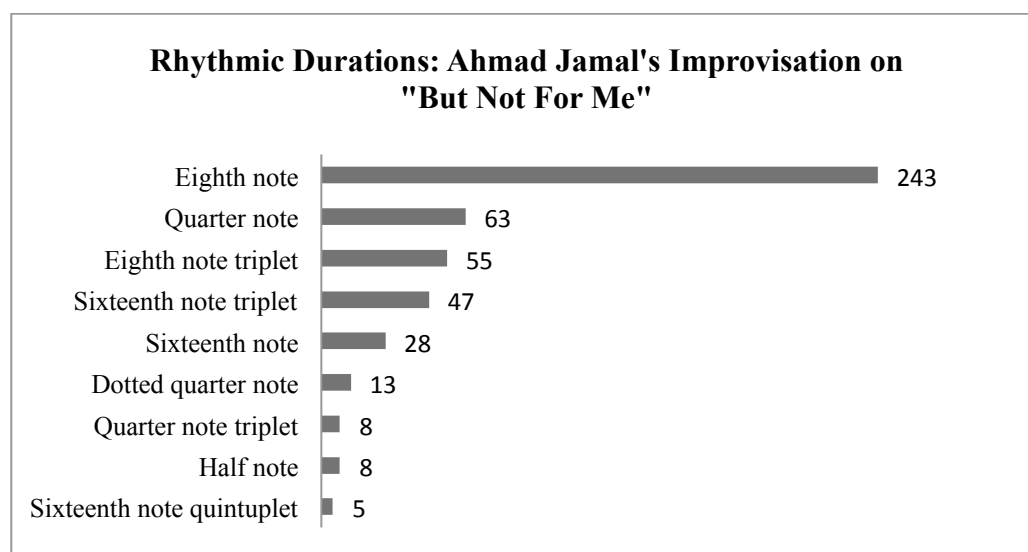
<sup>81</sup> *The Jazz.com Blog* s.v. "Ahmad Jamal's Poinciana Turns 50 Today," by Ted Gioia, accessed January 14, 2015, <http://www.jazz.com>.

well as two choruses of improvisation. His last chorus of improvisation transitions into a four-measure extension that ends the piece.

### Rhythmic Variety

Jamal incorporates over nine different rhythmic durations throughout his improvisation and mixes them together rather well. Eighth notes serve as his most used rhythmic value, which only account for approximately 51% of his total notes used (eighth notes account for 62% of Sonny Rollins' improvisation and 63% of Lee Morgan's improvisation). With the exception of mm. 32-42 when he repeats a lengthy string of eighth notes to create polyrhythm, Jamal uses consecutive eighth note lines that are rather short in length. This is due to the steady variety of rhythms mixed in with his use of eighth notes. Jamal's longest string of eighth notes is found in mm. 67-68 and only consists of fourteen consecutive eighth notes.

Figure 41. Approximate instances of rhythmic durations in Ahmad Jamal's improvisation on "But Not For Me"



## Syncopation

There are five significant examples of syncopation throughout Jamal's improvisation (mm. 46-48, 56-57, 70-72, 88, and 100). The shortest example takes place in a single measure, and the longest example occurs over three measures. Three different rhythmic strategies are used to create syncopation among the examples.

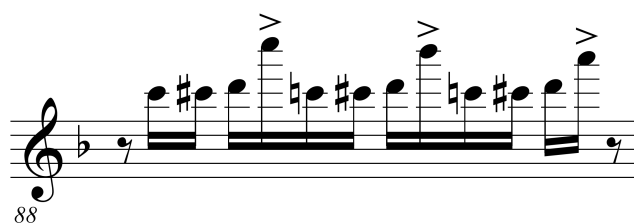
Figure 42 displays an example of syncopation derived from rhythmic variety. In this example, Jamal combines eighth note triplets, eighth notes, sixteenth notes, and sixteenth note triplets to create a two-measure state of rhythmic disarray. The rhythmic durations switch rapidly – nearly every beat – between duple and triple subdivisions, which causes a strong sense of rhythmic dissonance. Jamal uses similar methods to cause syncopation in mm. 46-47 and 70-72.

Figure 42. Ahmad Jamal's improvisation on "But Not For Me" (mm. 56-57)



The strategy used in m. 88 is slightly different than the previous example. Rather than using a variety of rhythmic values to disturb the rhythmic consonance as Jamal did in mm. 56-57, he implements carefully placed accents to create syncopation. Displayed in figure 43, Jamal accents the second sixteenth note of beats two, three, and four.

Figure 43. Ahmad Jamal's improvisation on "But Not For Me" (m. 88)



The third category of syncopated rhythmic figures occurs, briefly, in mm. 99-101. In figure 44, shown below, Jamal uses rests to create a sense of syncopation. Eighth rests placed on beats one, two, three, and four, etch a rhythmic structure into m. 100 that emphasizes the offbeats.

Figure 44. Ahmad Jamal's improvisation on "But Not For Me" (mm. 99-101)



### Polyrhythm

Of the three primary examples of polyrhythm throughout Jamal's improvisation (mm. 22-23, 32-40, and 79-80), none are caused by triplets. The lengthiest, and most significant, example of polyrhythm occurs in mm. 32-40 (see figure 45) and is caused by eighth note groupings. With the exception of two triplets in count two of m. 32, the entire example consists of only eighth notes. Jamal creates a dramatic sense of polyrhythm by repeating the six-note pattern (G5-A5-C6-D6-D#6-E6), which repeats every three beats and implements a 3/4 meter.

Figure 45. Ahmad Jamal's improvisation on "But Not For Me" (mm. 32-40)

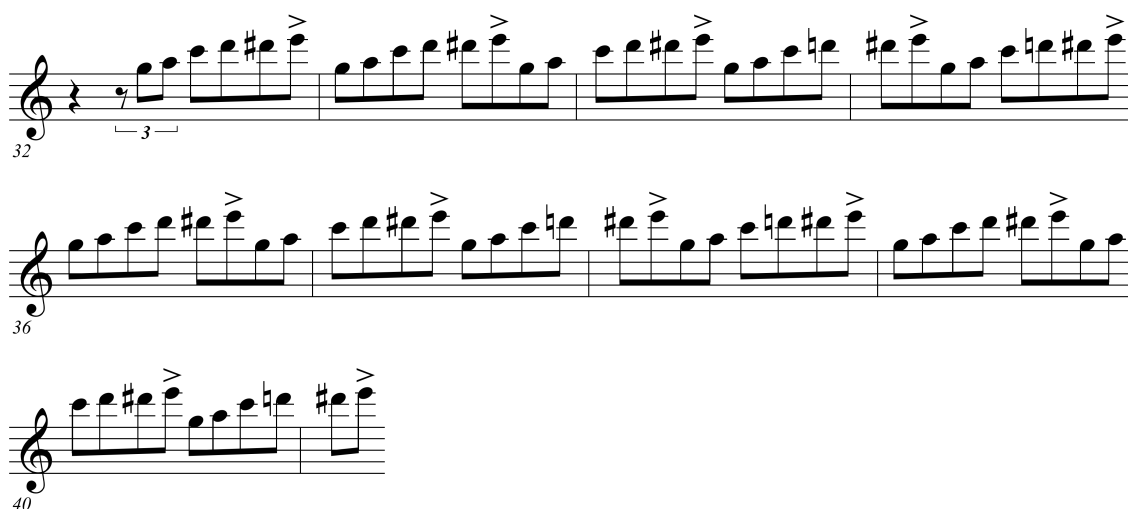
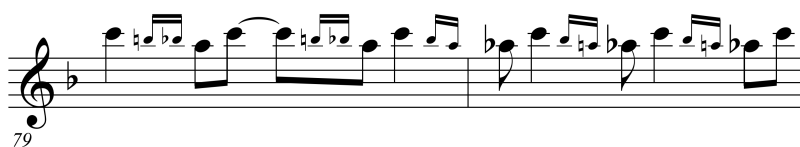


Figure 46 displays another example of polyrhythm created by rhythmic groups. In mm. 79-80 Jamal creates another three-against-four feel by playing a rhythmic figure that is grouped into three eighth notes. There are five repetitions of the rhythmic figure in two measures. The last eighth note in m. 80 would become the first note of a sixth repetition if Jamal had chosen to continue the polyrhythm. Instead, this note acts as the end of the phrase and is not part of the polyrhythm.

Figure 46. Ahmad Jamal's improvisation on "But Not For Me" (mm. 79-80)



## Rhythmic Repetition

Rhythmic repetition becomes a frequent occurrence throughout Jamal's solo. Within his three choruses of improvisation, there are seven different examples of rhythmic repetition. The longest example occurs in mm. 32-40 (see figure 45), where Jamal exhibits a repeated eighth note rhythmic figure.

Three sixteenth note triplets followed by an eighth note is a rhythmic figure that appears often in jazz improvisation. This figure is typically embedded within an eighth note line, as shown in Sonny Rollins' improvisation, and rarely involves multiple successions. Shown below, in figure 47, is an example of Jamal using eight repetitions of the sixteenth-note-triplet/eighth-note figure to create rhythmic repetition. This figure does appear in Jamal's improvisation outside of the example shown below, but never in a repetitive nature.

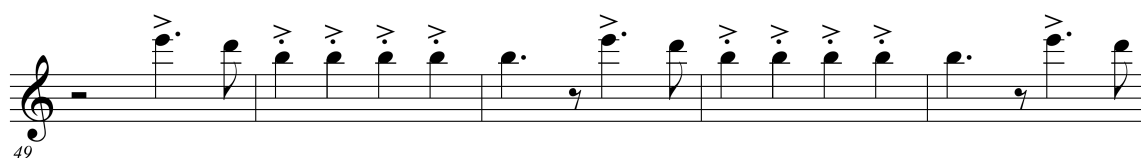
Figure 47. Ahmad Jamal's improvisation on "But Not For Me" (mm. 54-55)



Figure 48 displays a contrasting example of rhythmic repetition in which Jamal repeats an eight beat phrase that begins on count two of m. 49. There are only two complete repetitions of the phrase, but Jamal uses the first portion of the phrase (beats three and four in m. 53) to continue his improvisation into m. 54. In the analytical sense, this phrase consists of two repetitive components, the first two beats which are repeated three times (beats three and four of mm. 49, 51, and 53) and the remaining six beats

which are only repeated twice (beat one of m. 50 through beat two of m. 51, and beat one of m. 52 through beat two of m. 53). It is also worth noting Jamal's simplistic means of creating repetition in this example. His use of quarter notes in mm. 50 and 52 is similar to the basic repetition found in walking bass lines or ride cymbal patterns. Jamal uses quarter notes to create repetition on two other instances during his solo, mm. 64-65 and mm. 74-77.

Figure 48. Ahmad Jamal's improvisation on "But Not For Me" (mm. 49-53)



The two previously discussed examples of rhythmic repetition show mostly continuous rhythms consisting of no, or very little, use of rests. In the following example (see figure 49), Jamal creates rhythmic repetition by implementing more rests, and fewer notes. Compared to the thirty-two notes compacted into two measures (mm. 54-55), the example shown below only consists of ten notes spread over five measures.

Figure 49. Ahmad Jamal's improvisation on "But Not For Me"



### Rhythmic Tension and Release

Figure 50 displays an example of rhythmic tension and release that is caused by polyrhythm and rhythmic repetition. Jamal uses these two rhythmic elements to create tension over ten measures (mm. 32-41). This extended duration of polyrhythm and repetition adds to the overall sense of tension. Jamal reestablishes rhythmic consonance in mm. 42-44.

Figure 50. Ahmad Jamal's improvisation on "But Not for Me" (mm. 32-44)

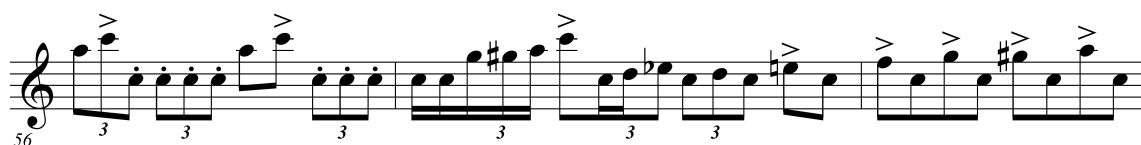


A much shorter example of rhythmic tension and release occurs in mm. 56-58 (see figure 51). In the first two measures of the example Jamal uses a triplet subdivision to disrupt the eighth note rhythmic flow. Rhythmic consonance is regained on beat four of m. 57 when Jamal's eighth note line clearly emphasizes the downbeats. Further



examples, that are also short in length and incorporate triplet subdivisions, can be seen in mm. 46-48, 69-74, and 79-81.

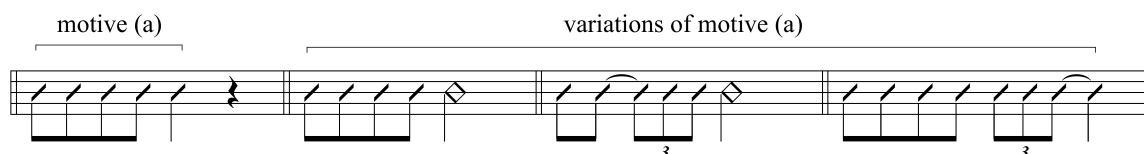
Figure 51. Ahmad Jamal's improvisation on "But Not for Me" (mm. 56-58)



### Rhythmic Motivic Improvisation

Throughout his three choruses of improvisation, Jamal only establishes a single rhythmic motive, shown in figure 52. Jamal solidifies the significance of the rhythmic motive by frequently working it into his improvisation, and he uses three different variations of the original motive rhythm, also shown in figure 52. The variations may seem slightly disconnected to the original rhythmic motive, but the melodic context in which they are used assures relation to the original motive.

Figure 52. Rhythmic motive and variations used in Ahmad Jamal's improvisation on "But Not For Me"



The first statement of motive (a) appears in mm. 6-7 and is approached with an eighth note pickup on the offbeat of two in m. 6 (see figure 53). There are three other occurrences of the original motive (mm. 11, 42, and 61-62) and five occurrences of motive (a) variations (mm. 12, 29, 30, 44, 60, and 92).

Figure 53. Ahmad Jamal's improvisation on "But Not For Me" (mm. 6-8)



The rhythmic component of motive (a) does occur several times outside of the identified examples, but these instances are not labeled because of their lack of development and connection to the original motive statement. For example, m. 74 contains the exact rhythm exemplified in motive (a); however, there is no reason to believe it has relation to the original motive statement.

Further identified examples of motive (a) often shared melodic connections with the original statement, which is key for recognizing their rhythmic relationship. Figure 54 illustrates multiple instances where melodic shape confirms Jamal was intently implementing the rhythmic component from motive (a). There are four intervals involved with motive (a): minor 9<sup>th</sup> (E6-D#5), minor 2<sup>nd</sup> (D#5-E5), minor 7<sup>th</sup> (E5-D6), and major 2<sup>nd</sup> (D6-C6). All of the examples in figure X contain a minor 2<sup>nd</sup>, and the variation in m. 44 contains all four intervals from the original motive statement. It is also important to

note that both examples shown below are similar in regards to phrasing. In mm. 10-12 and mm. 42-44, Jamal states the original motive (a), shortly followed by a variation.

Figure 54. Ahmad Jamal's improvisation on "But Not For Me" (mm. 10-12 and 42-44)

The figure displays two musical staves in treble clef, illustrating Ahmad Jamal's improvisation on "But Not For Me".

The first staff, labeled with the measure number 10 at the beginning, shows a melodic line. It begins with a whole rest, followed by an eighth note G4, an eighth note A4, and a quarter note B4. Above the B4 note is an *8va* marking. This is followed by a triplet of eighth notes: C#5, D5, and E5, with an accent (>) over the C#5. The staff then continues with a quarter note D5, a quarter note C#5, and a quarter note B4. The final measure contains a triplet of eighth notes: A4, G4, and F#4, with an accent (>) over the A4. Brackets below the staff identify the first four measures as the original motive (a) and the last two measures as the variation (a) var.

The second staff, labeled with the measure number 42 at the beginning, shows a similar phrasing. It starts with a triplet of eighth notes: C#5, D5, and E5, with an accent (>) over the C#5. This is followed by a quarter note D5, a quarter note C#5, and a quarter note B4. The staff then continues with a quarter note A4, a quarter note G4, and a quarter note F#4. The final measure contains a triplet of eighth notes: E5, D5, and C#5, with an accent (>) over the E5. Brackets below the staff identify the first four measures as the original motive (a) and the last two measures as the variation (a) var.

Figure 55. Rhythmic Analysis of Ahmad Jamal's improvisation on "But Not For Me"

Ahmad Jamal's improvisation on  
**But Not For Me**

The musical score is written in 4/4 time and consists of eight staves. The analysis labels are as follows:

- Staff 1 (Measures 1-5):** No specific labels.
- Staff 2 (Measures 6-9):**
  - Measure 6: **motive 1** (indicated by a bracket under the first four notes).
  - Measures 7-9: **repetition** (indicated by a bracket under the eighth and ninth notes, which are marked with a '3' for triplet).
- Staff 3 (Measures 10-13):**
  - Measure 10: **8<sup>va</sup>** (octave marking).
  - Measures 11-12: **m1** (indicated by a bracket under the eighth and ninth notes).
  - Measures 12-13: **m1 variation** (indicated by a bracket under the eighth and ninth notes, which are marked with a '3' for triplet).
- Staff 4 (Measures 14-17):**
  - Measure 14: **loco** (octave marking).
  - Measures 15-17: **repetition** (indicated by a bracket under the eighth and ninth notes, which are marked with a '3' for triplet).
- Staff 5 (Measures 18-21):** No specific labels.
- Staff 6 (Measures 22-25):**
  - Measures 22-25: **polyrhythm** (indicated by a bracket under the eighth and ninth notes).
- Staff 7 (Measures 26-29):**
  - Measure 26: **8<sup>va</sup>** (octave marking).
  - Measures 28-29: **m1 variation** (indicated by a bracket under the eighth and ninth notes).
- Staff 8 (Measures 30-33):**
  - Measures 32-33: **polyrhythm and rhythmic repetition** (indicated by a bracket under the eighth and ninth notes).

**I** (1:10)

34

38

42 (a) (a) var.

46 loco tension... release syncopation

50 rhythmic repetition rhythmic repetition

55 tension... syncopation

58 release (a) var. (a) 8<sup>va</sup>

62 loco rhythmic repetition

**II** (2:10)

66 loco tension...

Detailed description: This musical score for section I (1:10) consists of nine staves of music in treble clef. The first staff (measures 34-37) features a continuous eighth-note melody with various accidentals and accents. The second staff (measures 38-41) continues this pattern, ending with a five-measure rest. The third staff (measures 42-45) introduces a variation labeled '(a) var.' with a triplet and a 'release' instruction. The fourth staff (measures 46-49) includes a 'loco' section, 'tension...' markings, and a 'release' instruction. The fifth staff (measures 50-54) features 'rhythmic repetition' with eighth-note patterns. The sixth staff (measures 55-57) continues with 'tension...' and 'syncopation' markings. The seventh staff (measures 58-61) includes a 'release' instruction, a variation '(a) var.', and an octave marking '8<sup>va</sup>'. The eighth staff (measures 62-65) features a 'loco' section and 'rhythmic repetition'. The section concludes with section II (2:10) starting at measure 66, which includes a 'loco' section and 'tension...' markings.

70 syncopation

74 release  
rhythmic repetition

78 tension... polyrhythm release

82 8<sup>va</sup>

86 loco  
syncopation

90 (a) var.

94 rhythmic repetition

98 syncopation

### **Lee Morgan” Improvisation on “Mr. Kenyatta”**

Recorded nearly three months after the extremely popular album *The Sidewinder*, “Mr. Kenyatta” is an original composition by trumpeter Lee Morgan and featured on the 1964 album, *Search for the New Land*. Joining Morgan on the album is Wayne Shorter (tenor saxophone), Grant Green (guitar), Herbie Hancock (piano), Reggie Workman (bass), and Billy Higgins (drums).

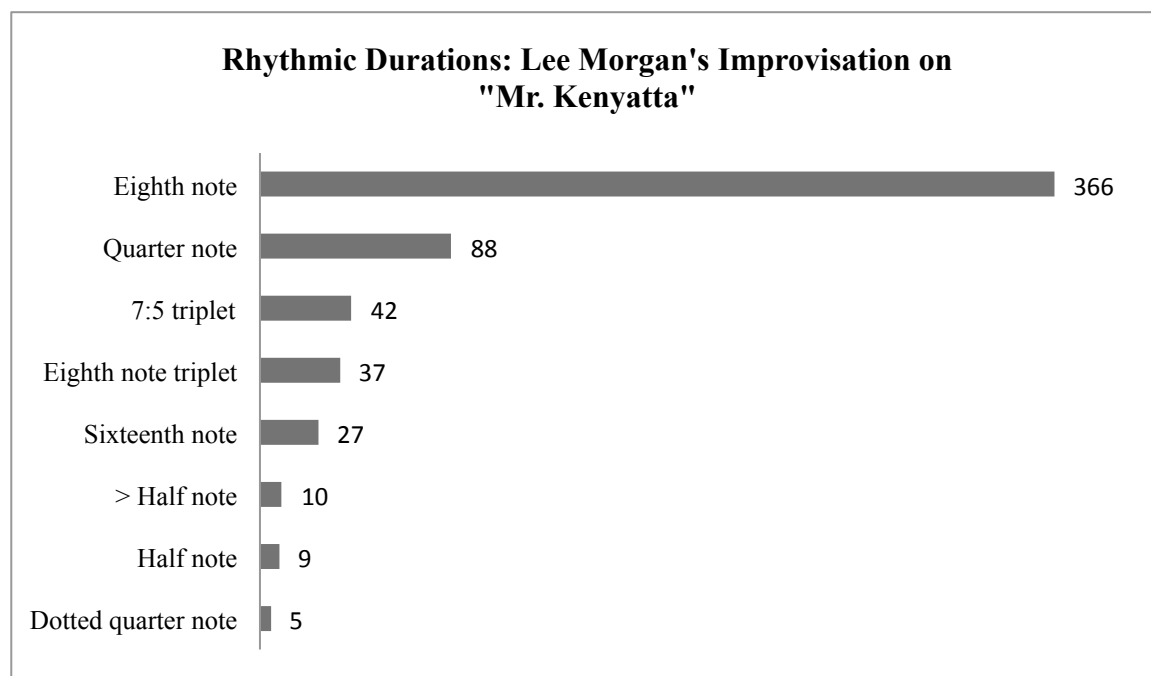
“Mr. Kenyatta” is a modal composition and structured over an AABA form. The A sections alternate between a measure of Gmin7 and Amin7, and bridge is comprised of eight measures of Bbmin7. Morgan plays two separate two-chorus improvisations on the tune, which combine to make four choruses of improvisation total. His first improvisation begins after the first melody statement, and his second improvisation occurs after the piano solo and directly prior to the second melody statement. It is not clear why Morgan plays two separate improvisations, but the implemented rhythmic elements are very similar in both instances.

#### **Rhythmic Variety**

Morgan implements seven primary rhythmic durations throughout his improvisation, but eighth notes are his most-used rhythmic duration (approximately 63%). Although eighth notes rhythmically dominate his solo, accents, rests, and ornamental rhythms commonly diffuse his longer eighth note lines. Figure 56 displays a summary of rhythmic durations that Morgan uses throughout his solo. It is important to mention the context of Morgan’s third most common rhythmic duration, the 7:5 triplet. For lack of better term, this rhythmic duration is identified as a triplet with the

polyrhythmic ratio of seven to five. All of the occurrences of this rhythm appear in mm. 25-28 and are later discussed in the section addressing Morgan's use of polyrhythm.

Figure 56. Approximate instances of rhythmic durations in Lee Morgan's improvisation on "Mr. Kenyatta"



Similar to Sonny Rollins and Ahmad Jamal, Morgan often uses the “three sixteenth note/eighth note” rhythmic figure as a *turn* imbedded within eighth note lines (see figure 57). This figure has proven to be a staple in jazz rhythmic language and is incorporated into several instances throughout Morgan's improvisation (mm. 49, 53, 55, 84, and 115).



Figure 57. Lee Morgan's improvisation on "Mr. Kenyatta" (mm. 41-42)



A rather unique aspect of Morgan's improvisation is his use of notes longer than a half note. There are ten occurrences of these longer rhythmic durations, most of which occur in mm. 66-80 (see figure 58). Based on the information previously displayed in the summaries of rhythmic durations for Rollins' and Jamal's improvisations – both Rollins and Jamal had less than five occurrences of rhythmic durations longer than a half note – Morgan employs a significant amount of longer rhythmic durations.

Figure 58. Lee Morgan's improvisation on "Mr. Kenyatta" (mm. 66-80)

## Syncopation

Morgan exhibits five different instances of syncopation throughout his four choruses of improvisation (mm. 30-31, 49-50, 43-44, 114-115, and 126-129). The first example appears in mm. 39-40 (see figure 59), where Morgan stresses a succession of upbeats to create syncopation. By accenting six continuous upbeats, Morgan demonstrates that rhythmic lines can be syncopated while maintaining a sense of forward motion. Syncopation in mm. 43-44 is also caused by six successive offbeats, but there is a stronger sense of continuity caused by the absence of eighth rests.

Figure 59. Lee Morgan's improvisation on "Mr. Kenyatta" (mm. 39-40 and 43-45)



A unique example of syncopation occurs during the final four measures of Morgan's improvisation (see figure 60). The first half of this syncopated example is caused by a three-beat polyrhythmic figure, which repeats twice – the first repetition begins on beat one in m. 126 and the second repetition begins on beat four in m. 126. Syncopation is created in the second half of this example because of strategically placed rhythms, which emphasize weak beats. Morgan also ghosts the downbeat eighth notes on

beat four of m. 127 and beats one and three of m. 128. This effect further accentuates the emphasis towards weak beats.

Figure 60. Lee Morgan's improvisation on "Mr. Kenyatta" (mm. 126-129)



### Polyrhythm

Compared to other rhythmic elements, polyrhythm did not bear as much importance throughout Morgan's solo. Of his four choruses of improvisation, there are only two separate instances of polyrhythm. The first instance appears in mm. 25-27, beginning on beat four of m. 25 and ending on beat one of mm. 27 (see figure 61). The rhythmic figure compresses twenty-one notes into the space of fifteen triplets. Additionally, it is grouped into five repetitions of three notes, which provides a triplet feel. Another way to conceptualize this rhythm is to view it as seven groups of triplets, compressed into five quarter note beats. Both conceptualizations – seven in the space of five, or twenty-one in the space of fifteen – yield the same rhythmic ratio, and are difficult to notate. Morgan begins this exact polyrhythmic structure again on beat four of m. 27.

Figure 61. Lee Morgan's improvisation on "Mr. Kenyatta" (mm. 25-27)



In mm. 51-53 and 86-87 (see figure 62), Morgan exhibits a more conventional approach to polyrhythm. Rather than using oddly spaced, and difficult to notate rhythmic durations, he finds polyrhythm through simple rhythmic groupings. Both of the examples shown below align within a 2:3 rhythmic ratio (two dotted quarter notes in the space of three quarter notes).

Figure 62. Lee Morgan's improvisation on "Mr. Kenyatta" (mm. 51-53 and 86-87)



### Rhythmic Repetition

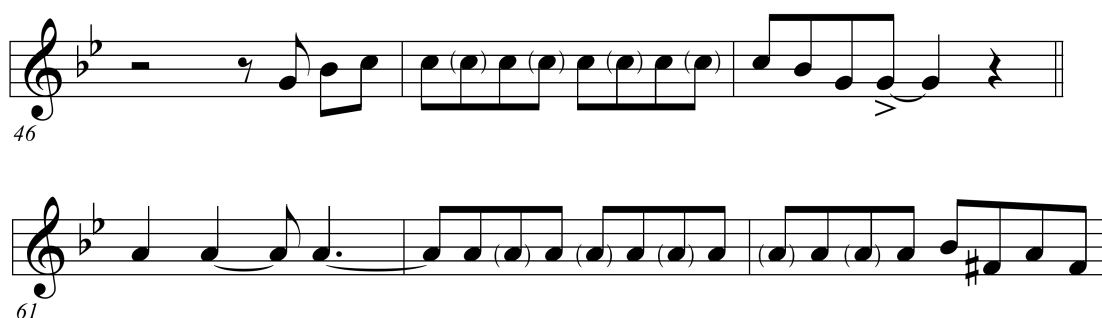
Morgan frequently relies on rhythmic repetition throughout his improvisation and as a result, fifteen instances of rhythmic repetition are identified. Repetition is often thought of as a short, single rhythmic unit that is repeated multiple times, similar to repetition that occurs from the ride pattern played by drummers. However, in the example shown below (see figure 63), Morgan uses a rhythmic unit that is two measures in length. There are three repetitions in total, but repetitions two and three contain (mm. 108-109 and 110-111) slight rhythmic variations. Additional examples of Morgan using phrases to create repetition can be seen in mm. 20-24, 58-61, 93-96, 98-100, and 122-125.

Figure 63. Lee Morgan's improvisation on "Mr. Kenyatta" (mm. 106-113)



Morgan also produces repetition through an alternative method. Rather than repeating entire rhythmic phrases, he repeats a single pitch. Figure 64 demonstrates two instances where Morgan uses smaller rhythmic units to create repetition. Beginning on the offbeat of four in m. 46, Morgan plays ten successive repetitions of the same pitch (C5). He also creates an emphasis towards downbeats by ghosting all of the offbeats in m. 47. In a similar example, Morgan successively repeats an A4 fourteen times between mm. 61-63. He also changes the beat emphasis by stressing the offbeats instead of downbeats.

Figure 64. Lee Morgan's improvisation on "Mr. Kenyatta" (mm. 46-48 and 61-63)



### Rhythmic Tension and Release

Of his four choruses of improvisation, Morgan exhibits six different instances of rhythmic tension and release, two of which are rather unique. His first example occurs in mm. 20-21 (see figure 65) and is created through the use of repetition, syncopation, and polyrhythm. Morgan initially builds tension in mm. 20-24 by repeating a slightly syncopated eighth note line. The line ends with a series of triplets (beats three and four of m. 24) that foreshadow the upcoming polyrhythmic figure in mm. 25-28. Instead of resolving the rhythmic tension on the downbeat of m. 25, Morgan continues with an increasing sense of tension and implements a complex polyrhythmic figure. This tension is finally resolved with his phrase that leads into mm. 30-31.

Figure 65. Lee Morgan's improvisation on "Mr. Kenyatta" (mm. 20-31)



Most examples of rhythmic tension occur through use of syncopation, polyrhythm, repetition, or complex rhythms. In mm. 66-85 (see figure 66) Morgan uniquely creates rhythmic tension by placing one to two measures of rest in between his

rhythmic phrases. These lengthy spaces of rest lead listeners to a sense of uncertainty and anticipation, which ultimately creates tension. This method of creating rhythmic tension lasts for seventeen measures before returning to an expected eighth note line in m. 83.

Figure 66. Lee Morgan's improvisation on "Mr. Kenyatta" (mm. 66-85)



### Rhythmic Motivic Improvisation

Four primary rhythmic motives are identified in Morgan's improvisation (see figure 67), and of the four, only motive (a) was significantly developed. Unlike motive (a), motives (b), (c), and (d) are isolated to a single occurrences and do not appear multiple times throughout Morgan's improvisation.





approximately three minutes and forty-five seconds later than his first two choruses. It is clear that Morgan was very aware of his rhythmic motivic choices throughout the entirety of his solos.

Figure 69. Lee Morgan's improvisation on "Mr. Kenyatta" (mm. 1-10)

The musical notation is presented in three staves, all in 4/4 time and B-flat major (two flats).  
 Staff 1 (measures 1-4): Measure 1 has a whole rest. Measure 2 contains a dotted quarter note (B-flat) and a quarter rest, bracketed as "motive (a)". Measure 3 has a quarter rest followed by an eighth note (B-flat), an eighth note (A), and a quarter note (G). Measure 4 contains a dotted half note (B-flat), bracketed as "variation 1".  
 Staff 2 (measures 5-8): Measure 5 starts with a measure rest, then a dotted quarter note (B-flat), bracketed as "(a)". Measure 6 has an eighth note (B-flat), an eighth note (A), and a quarter note (G), with an accent (>) over the eighth notes. Measure 7 has an eighth note (B-flat), an eighth note (A), and a quarter note (G), with an accent (>) over the eighth notes. Measure 8 contains a dotted half note (B-flat), bracketed as "variation 2".  
 Staff 3 (measures 9-10): Measure 9 contains an eighth note (B-flat), an eighth note (A), and a quarter note (G), with an accent (>) over the eighth notes, bracketed as "variation 3". Measure 10 contains a dotted half note (B-flat). Measure numbers 5, 9, and 10 are indicated at the beginning of their respective staves.

Figure 70. Rhythmic Analysis of Lee Morgan's improvisation on "Mr. Kenyatta"

Lee Morgan's Improvisations on  
**Mr. Kenyatta**

I (0:56) Improvisation 1

The musical score is written in 4/4 time and B-flat major. It consists of eight staves of music, with measures numbered 1 through 29. The score is annotated with various rhythmic and structural labels:

- Staff 1 (Measures 1-4):** Labeled "motive (a)" under measures 1-2 and "(a) var." under measures 3-4.
- Staff 2 (Measures 5-8):** Labeled "(a)" under measure 5 and "(a) var." under measures 7-8.
- Staff 3 (Measures 9-12):** Labeled "(a) var." under measures 9-10, "motive (b)" under measure 11, and "(b)" under measures 12-13. A bracket labeled "repetition" spans measures 11-13.
- Staff 4 (Measures 13-16):** Labeled "3" above measure 13, indicating a triplet.
- Staff 5 (Measures 17-20):** Labeled "tension..." above measure 19, indicating a period of increasing rhythmic intensity.
- Staff 6 (Measures 21-24):** Labeled "repetition" below the staff, indicating a return of a previous motif.
- Staff 7 (Measures 25-28):** Labeled "7:5" above measures 25-26 and 27-28, indicating a 7/5 time signature change. The label "repetition and polyrhythm" is placed below both groups of measures.
- Staff 8 (Measures 29-32):** Labeled "release" above measure 30, indicating a period of relaxation. A bracket labeled "syncopation" spans measures 29-30.

II (1:33)

33

motive (c)

repetition

37

(c)

tension...

syncopation

41

release

tension...

syncopation

45

release

repetition

49

polyrhythm

53

(a) var.

repetition

57

(a) var.

repetition

61

(a) var.

repetition

## III (5:56) Improvisation 2

tension...

(a) var. (a) var.

repetition

(a) var. (a) var.

repetition

release

3 3 3

tension... polyrhythm release

3 3 3

repetition (a) var.

(a) var. (a) var.

repetition

66 70 74 78 82 86 90 94

IV (6:33)

98 (a) var. repetition (a) var.

102

106 motive (d) repetition (d) var.

110 (d) var. (a) var.

114 tension... syncopation release

118

122 (a) var. repetition (a) var.

126 syncopation

### **Jim Hall's Improvisation on "You'd Be So Nice to Come Home To"**

Commenting on Jim Hall's improvisations from his 1975 album, *Concierto*, writer for *The New Yorker* Whitney Balliett pointed out, "Each solo is a masterpiece of construction, each phrase evolving logically from its predecessor, his rhythmic sense always in perfect balance and his harmonic and melodic concepts always subtle and oblique."<sup>82</sup> Balliett identified a characteristic aspect of Hall's playing, his brilliant ability to balance rhythmic, melodic, and harmonic elements of improvisation. Joining Hall on this recording is Paul Desmond on alto saxophone, Chet Baker on trumpet, Roland Hanna on piano, Ron Carter on bass, and Steve Gadd on drums.

The opening track on *Concierto* displays Hall's interpretation of the classic Cole Porter standard "You'd Be So Nice to Come Home To." Porter finished composing the song in April 1942 and it made its debut in the 1943 film *Something to Shout About*. After a disappointing initial reaction, Porter's composition became a familiar jazz standard when vocalist Helen Merrill featured it on her 1954 EmArcy album, along with trumpeter Clifford Brown. The tune continued to increase in popularity throughout the 1960's and was recorded by several iconic jazz artists such as Art Pepper, Cecil Taylor, Coleman Hawkins and Ben Webster, Al Cohn and Zoot Sims, and Lee Konitz.

"You'd Be So Nice to Come Home To" is a thirty-two measure, ABAB' composition and is most often performed in the key of G minor. Hall plays the first melody statement by himself and takes two full choruses of improvisation. Although his

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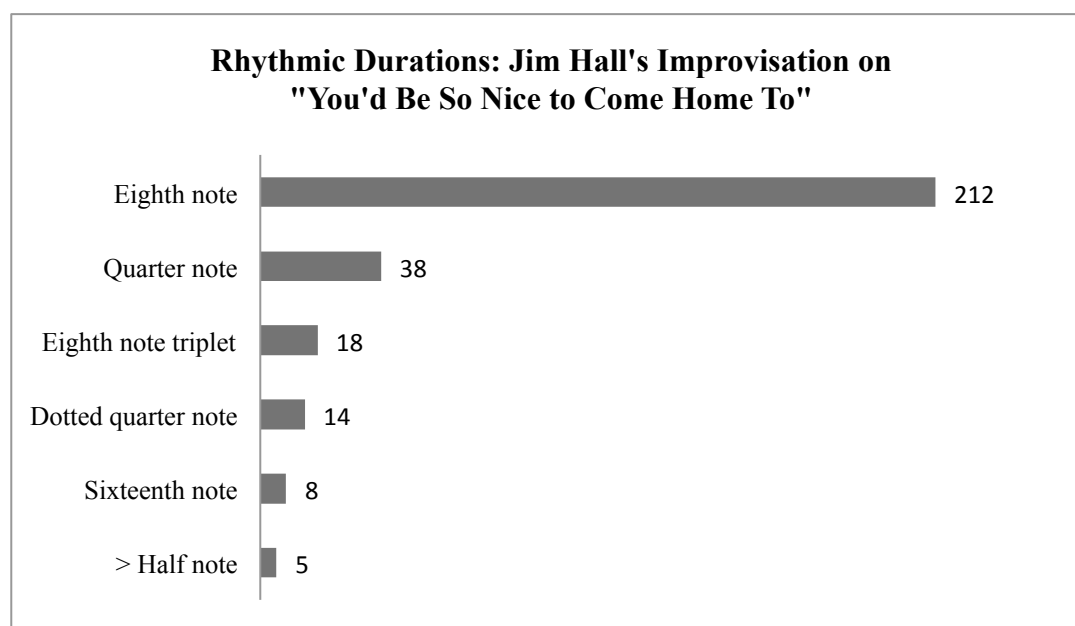
<sup>82</sup> Leonard Feather, notes to Jim Hall, *Concierto* (1975), LP, CTI Records CTI 6060 S1

solo is the shortest of the four selected improvisations for this study, his playing exhibits a sense of balance and command of the rhythmic aspects of improvisation.

### Rhythmic Variety

Compared to the previously analyzed improvisations, Hall uses the least amount of rhythmic durations throughout his solo, but that is not to say he lacks rhythmic variety. Hall constructs a rhythmically interesting improvisation by only implementing five different rhythmic durations (not counting rhythmic values longer than a half note). Of his five most-used rhythmic values, eighth note triplets and sixteenth notes are isolated in a single phrase (mm. 36-42) and do not occur throughout the remainder of his solo. This leaves only three rhythmic values that frequently appear throughout Hall's improvisation: eighth notes, quarter notes, and dotted quarter notes.

Figure 71. Approximate instances of rhythmic durations in Jim Hall's improvisation on "You'd Be So Nice to Come Home To"



### Syncopation

There are five different examples of syncopation throughout Hall's improvisation, the majority of which are very similar to syncopated examples found in the previously discussed improvisations. The examples of syncopation labeled in mm. 4-5, 42, 52-54, and 56-57 are caused by rather simple rhythms that create an emphasis towards weak beats and subdivision. However, a unique example of syncopation occurs in mm. 6-10 (see figure 72). Although the example also contains a significant amount of rhythmic repetition, Hall establishes a steady sense of syncopation by continually accenting the offbeat of four and the offbeat of two. This method of creating syncopation can easily deceive an unmindful listener's perception of downbeats.

Figure 72. Jim Hall's improvisation on "You'd Be So Nice to Come Home To" (mm. 6-10)



### Polyrhythm

Within his two choruses of improvisation, Hall implements two different instances of polyrhythm. Both instances (mm. 27-30 and 36-41) share the same rhythmic ratio of 4:3 and are displayed in figure 73. In mm. 27-30, Hall creates a sense of 3/4 meter by placing a short, two eighth note rhythmic unit on every third beat. The rhythmic unit begins on beat one of mm. 27, is repeated five times, and then resolves on the fifth repetition, which occurs on beat one of mm. 30. The polyrhythmic example in mm. 36-41



is unique because Hall displaces the rhythmic ratio by adding two extra eighth notes within the line (the eighth note on beat two of m. 37 and the eighth note on beat two of m. 39). Instead of a consistent 3+3 grouping, the extra eighth notes cause two groupings of four. Beginning on the offbeat of one in m. 36 and ending on beat one of m. 41, the eighth note groupings are 3+3+3+4+3+3+3+3+4+3+3+4.

Figure 73. Jim Hall's improvisation on "You'd Be So Nice to Come Home To" (mm. 27-30 and 36-41)



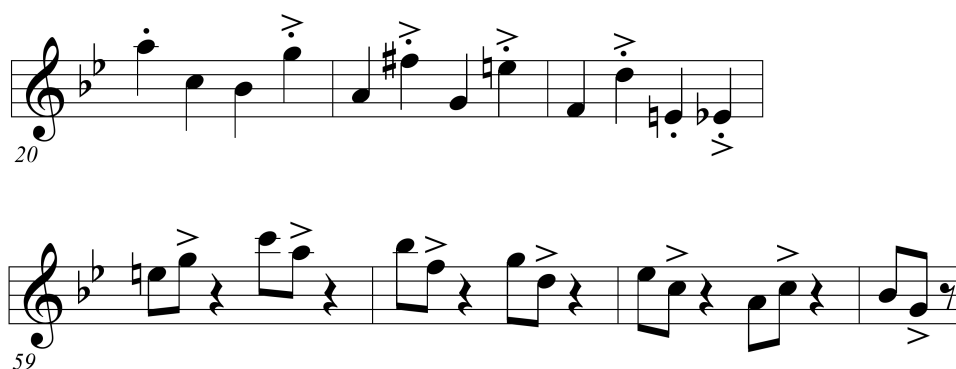
### Rhythmic Repetition

Hall's improvisation exhibits four main examples of rhythmic repetition (mm. 6-10, 20-22, 23-34, and 59-62), which are always used in conjunction with one of his rhythmic motives. In mm. 6-10, previously displayed in figure X, Hall repeats a two-beat rhythmic unit seven times over four and a half measures. This is Hall's longest example of rhythmic repetition and is derived from motive (a).

Figure 74 displays two further examples of rhythmic repetition imbedded in Hall's improvisation. In mm. 20-22, he uses a series of twelve successive quarter notes to

create a repetitive rhythmic structure that is similar to that of a walking bass line. Hall also adds a degree of syncopation within this line by accenting beats two and four, beginning on beat four of m. 20. The bottom example in figure X displays another example of rhythmic repetition in which he plays seven repetitions of a short rhythmic motive. Once again, Hall uses equal spacing between each repetition.

Figure 74. Jim Hall's improvisation on "You'd Be So Nice to Come Home To" (mm. 20-22 and 59-62)



### Rhythmic Tension and Release

There are three significant examples of rhythmic tension and release throughout Hall's improvisation. The first example, shown in figure 75, displays a syncopated rhythmic figure that extends over five measures (mm. 6-10). In this occurrence, tension is created by two rhythmic elements (repetition and syncopation), and the phrase beginning on beat three of m. 10 restores rhythmic consonance.

Figure 75. Jim Hall's improvisation on "You'd Be So Nice to Come Home To" (mm. 6-11)



The most significant example of rhythmic tension and release of Hall's improvisation occurs throughout mm. 23-41 (see figure 76). Hall begins to create rhythmic tension in mm. 23-24 by using a short syncopated rhythmic unit. After hinting at rhythmic consonance in m. 25 and the first half of m. 26, Hall proceeds to build tension again. Through the use of polyrhythm and syncopation he continues this build until m. 40 when rhythmic tension is finally resolved. This example demonstrates Hall's ability to gradually create tension, which can be divided into three parts: (a) the initial build in mm. 23-24, (b) a continuation that gradually builds in mm. 27-35, and (c) a final build of severe rhythmic tension in mm. 36-39.

Figure 76. Jim Hall's improvisation on "You'd Be So Nice to Come Home To" (mm. 23-41)



### Rhythmic Motivic Improvisation

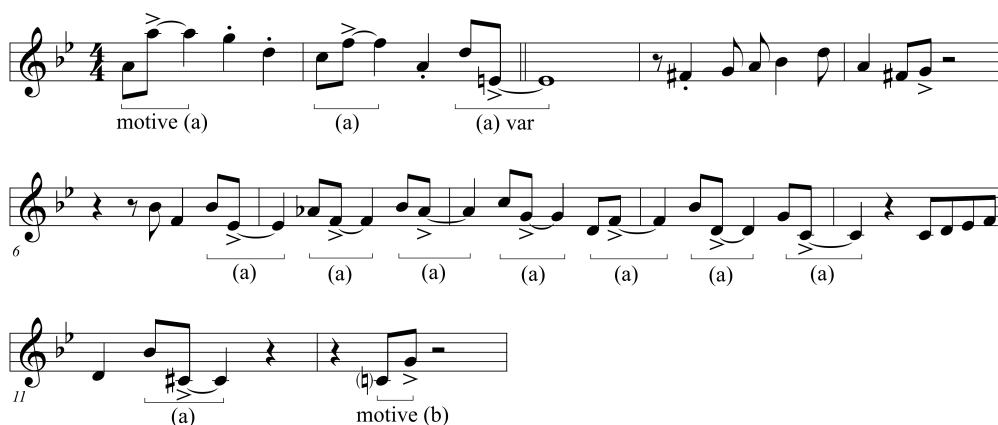
The majority of rhythmic content throughout Hall's improvisation is structured around one of four rhythmic motives (see figure 77). Including the two measure solo break preceding the first chorus and the very last measure, Hall's improvisation consists of sixty-seven total measures. Thirty-seven of these measures contain rhythmic vocabulary derived from his rhythmic motives.

Figure 77. Rhythmic motives used during Jim Hall's improvisation on "You'd Be So Nice to Come Home To"



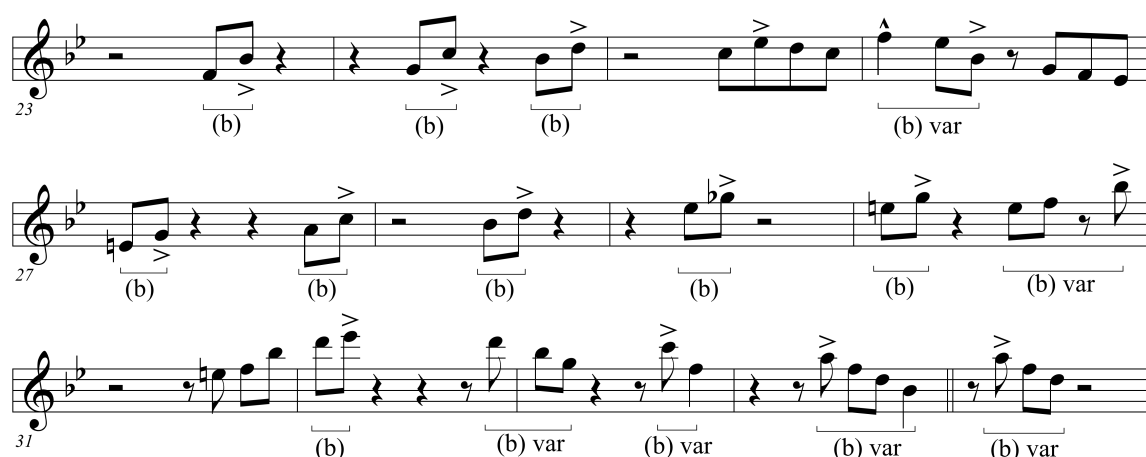
Hall quickly establishes command of motivic improvisation by embodying motive (a) in the first two measures of his improvisation. Shown in figure 78, the first eleven measures of his improvisation are structured around motive (a). In mm. 1-11 Hall exhibits a thoughtful balance between rhythmic content related to motive (a) and non-motivic rhythmic content. It is also important to recognize the importance of relation between mm. 11 and 12. These two measures display the transition between motive (a) and motive (b). Motive (b), which is essentially a rhythmically truncated variation of motive (a), shares a similar intervallic shape to previous applications of motive (a). This relationship is important because of the dominating presence motive (b) entails throughout the remainder of Hall's improvisation.

Figure 78. Jim Hall's improvisation on "You'd Be So Nice to Come Home To" (mm. 1-12)



Measures 23-35 exhibit a masterful example of Hall's ability to develop rhythmic motives. Motive (b) first appears in m. 12, and reappears in mm. 23-35 as the primary source for rhythmic content. Hall also provides an added sense of escalating tension by implementing polyrhythm over mm. 27-30 and causing syncopation in mm. 31-35.

Figure 79. Jim Hall's improvisation on "You'd Be So Nice to Come Home To" (mm. 23-35)



As shown in figure 80, Hall is brilliantly proficient at mending rhythmic motives together. After an extended progression of motivic development in mm. 23-34, he uses a variation of motive (b) to seamlessly transition into motive (d), which is essentially a further variation of motive (b) and shares similar intervallic shaping. To cause rhythmic tension throughout mm. 36-40, Hall juxtaposes motivic development and polyrhythm.



Figure 81. Rhythmic analysis of Jim Hall's improvisation on "You'd Be So Nice to Come Home To"

Jim Hall's improvisation on  
You'd Be So Nice To Come Home To

I (0:38)

The musical score is written in treble clef, 4/4 time, and B-flat major. It is divided into eight staves, each containing measures of music with various annotations. The first staff (measures 1-4) includes 'motive (a)', '(a)', '(a) var', and 'syncopation'. The second staff (measures 5-10) includes '(a)', '(a)', '(a)', '(a)', '(a)', '(a)', and '(a)'. The third staff (measures 11-14) includes '(a)', 'motive (b)', and 'syncopation'. The fourth staff (measures 15-18) includes 'motive (c)' and 'repetition'. The fifth staff (measures 19-22) includes '(c) var', 'repetition', and '(c) var'. The sixth staff (measures 23-26) includes '(b)', '(b)', '(b)', and '(b) var'. The seventh staff (measures 27-30) includes '(b)', '(b)', '(b)', '(b)', '(b)', and '(b) var'. The eighth staff (measures 31-38) includes '(b)', '(b) var', '(b) var', and '(b) var'.



II (1:12)

35 (b) var

37 motive (d) (d) var

39 (d)

41 (d)

42 polyrhythm

43 (d)

44 (d) var

45 polyrhythm

46 (d)

47 (d) var

48 syncopation

49 (d)

50 syncopation

51 (d)

52 syncopation

53 (d)

54 syncopation

55 (d)

56 syncopation

57 (d)

58 (d)

59 repetition

60 (b)

61 (b)

62 (b)

63 (b)

64 (b)

## CHAPTER VI

### RHYTHMIC EXERCISES

The following section provides a series of pedagogical exercises intended to strengthen the application of rhythmic elements within jazz improvisation. The exercise series is organized in correlation to rhythmic elements presented earlier in the chapter: (a) rhythmic variety, (b) time feel and beat placement, (c) syncopation, (d) polyrhythm, (e) rhythmic repetition, (f) rhythmic tension and release, and (g) rhythmic motivic improvisation.

All exercises should be synchronously practiced with a metronome at a variety of tempos. Additionally, each exercise should be practiced in progression through the following limitations:

1. no pitch, harmony, or form (clapping)
2. pitch, but no harmony or form
3. pitch and harmony, but no form
4. pitch, harmony, and form

The first limitation completely directs focus towards rhythm by removing the musical elements of pitch, harmony, and form. Since pitch is removed, exercises need to be executed through clapping or another percussive method.

The second limitation introduces pitch, but still excludes harmony and form. Because of the exclusion of harmony, pitches can be freely improvised, without regard to

any specific harmonic structure. The focus throughout this limitation should still be directed toward rhythm.

The third limitation is very similar to the second limitation, but the difference is harmony must be considered. Since pitch *and* harmony are implemented during the third limitation, specific harmonic structures will need to be selected. For example, pitches could be improvised over a harmonic structure such as Dmin7, which gives D, E, F, G, A, B, and C as available pitches to use while playing through an exercise. Although it is now necessary to be mindful of which pitches are being played, focus must still be on rhythm.

Lastly, the fourth limitation implements pitch, harmony, and form. Forms can be as simple as a few repeated chord changes, or they can be extended to cover the chord changes for an entire jazz standard. For instance, using the fourth limitation may consist of imposing an exercise over 12-bar blues, the bridge of “Cherokee,” or an entire 32-bar standard. Primary focus should remain towards rhythm, but secondary focus will need to be divided among several musical elements to effectively navigate through harmonic structures and form.

The purpose of practicing in sequential order through each limitation is to maintain focus on rhythm, while gradually introducing harmonic elements of improvisation. Each limitation introduces a new element of improvisation and requires a different allocation of focus.

## Rhythmic Variety

### Exercise 1.1 Rhythmic durations on downbeats and offbeats

Play specific rhythmic durations on every down beat and offbeat. Only three basic durations are addressed in this exercise, but there are an infinite number of rhythmic durations that can be applied to this exercise (i.e. eighth notes, dotted quarter notes, dotted half notes, and notes longer than a whole note).

*Purpose:* To become familiar with a wide variety of rhythmic durations and their application on each basic subdivision.

Figure 82. Whole notes on downbeats and offbeats

The figure consists of four musical staves, each representing a different beat. Each staff is divided into two sections by a double bar line. The first section shows whole notes on downbeats, and the second section shows whole notes on offbeats. The exercises are for beats 1, 2, 3, and 4.

- Staff 1: whole notes on beat 1** (left) and **whole notes on offbeat of 1** (right). The left section shows a whole note on the first downbeat. The right section shows a whole note on the first offbeat, followed by a whole note on the second downbeat.
- Staff 2: whole notes on beat 2** (left) and **whole notes on offbeat of 2** (right). The left section shows a whole note on the second downbeat. The right section shows a whole note on the second offbeat, followed by a whole note on the third downbeat.
- Staff 3: whole notes on beat 3** (left) and **whole notes on offbeat of 3** (right). The left section shows a whole note on the third downbeat. The right section shows a whole note on the third offbeat, followed by a whole note on the fourth downbeat.
- Staff 4: whole notes on beat 4** (left) and **whole notes on offbeat of 4** (right). The left section shows a whole note on the fourth downbeat. The right section shows a whole note on the fourth offbeat, followed by a whole note on the first downbeat of the next measure.

Figure 83. Half notes on downbeats and offbeats

whole notes on beat 1                      whole notes on offbeat of 1

half notes on beat 2                      half notes on offbeat of 2

half notes on beat 3                      half notes on offbeat of 3

half notes on beat 4                      half notes on offbeat of 4

Detailed description: This figure shows four rows of musical notation in 4/4 time. Each row consists of two measures, each with a repeat sign at the end. The first measure of each row shows a half note on a specific beat (1, 2, 3, or 4), with rests on the other beats. The second measure shows a half note on the corresponding offbeat (between beats 1-2, 2-3, 3-4, or 4-1), with rests on the other offbeats. The notes are on a single staff line, and the time signature is 4/4.

Figure 84. Quarter notes on downbeats and offbeats

quarter notes on beat 1                      quarter notes on offbeat of 1

quarter notes on beat 2                      quarter notes on offbeat of 2

quarter notes on beat 3                      quarter notes on offbeat of 3

quarter notes on beat 4                      quarter notes on offbeat of 4

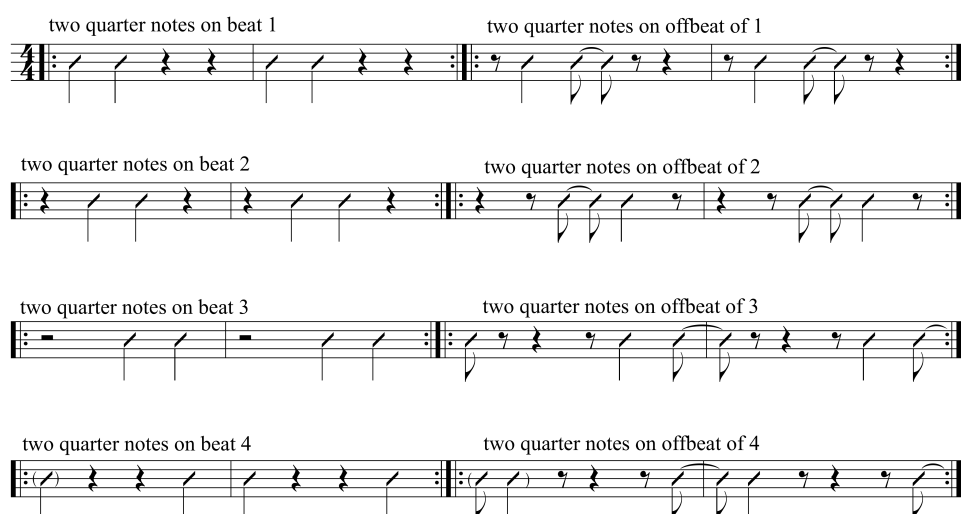
Detailed description: This figure shows four rows of musical notation in 4/4 time. Each row consists of two measures, each with a repeat sign at the end. The first measure of each row shows a quarter note on a specific beat (1, 2, 3, or 4), with rests on the other beats. The second measure shows a quarter note on the corresponding offbeat (between beats 1-2, 2-3, 3-4, or 4-1), with rests on the other offbeats. The notes are on a single staff line, and the time signature is 4/4.

### Exercise 1.2 Varied repetitions of rhythmic durations on downbeats and offbeats

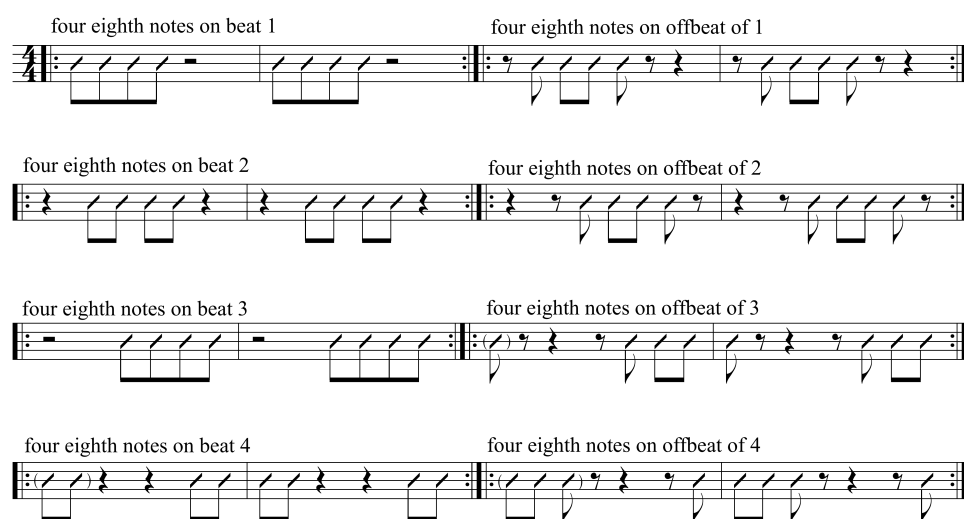
This exercise is similar to 1.1, with a slight variation. Instead of playing a single repetition of specific rhythmic durations on each basic subdivision, vary the amount of repetitions. All combinations of rhythmic durations and amount of repetition should be applied to this exercise. For example, play two consecutive quarter notes on each downbeat and offbeat.

*Purpose:* To become comfortable playing multiple repetitions of rhythmic durations and their application on downbeats and offbeats.

Figure 85. Two consecutive quarter notes on downbeats and offbeats



### 1.2b Example of four eighth notes on downbeats and offbeats



### Exercise 1.3 Improvisation limited to a single rhythmic duration

Improvise using only a single rhythmic duration. This should be applied to several different rhythmic durations (quarter notes, eighth notes, dotted quarter notes, etc.) and a variety of consecutive repetitions. Figure 86 displays an example improvisation while using only eighth notes.

*Purpose:* To become comfortable creating rhythms constructed from a single rhythmic duration.

Figure 86. Eight bar improvisation limited to only eighth notes



### Exercise 1.4 Improvisation with combinations of rhythmic durations

Improvise rhythms while using combinations of multiple rhythmic durations. This exercise is similar to exercise 1.3, except multiple rhythmic durations are to be used (opposed to a single rhythmic duration). Rhythms can be repeated any number of times and placed on any downbeat or offbeat. Figure 87, shown below, lists possible combinations of two and three basic rhythmic durations. Also shown below, figure 88 provides an example improvisation using half notes and eighth notes.

*Purpose:* To become comfortable improvising while using more than one rhythmic duration.

Figure 87. Combinations of two, and three rhythmic durations

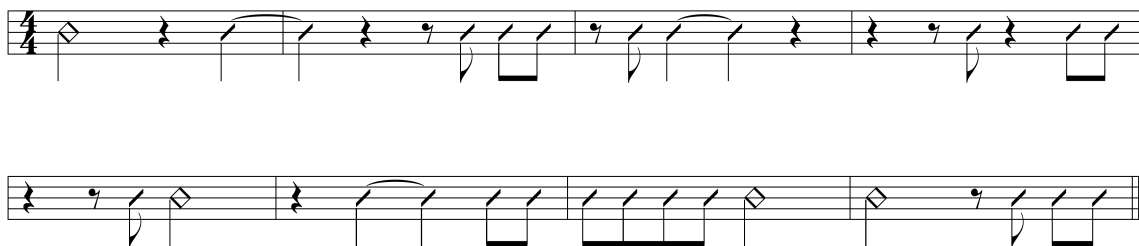
#### Two Rhythmic Durations

Whole and half notes  
Whole and quarter notes  
Whole and eighth notes  
Half and quarter notes  
Half and eighth notes  
Quarter and eighth notes

#### Three Rhythmic Durations

Whole, half, and quarter notes (no eighths notes)  
Whole, half, and eighth notes (no quarter notes)  
Whole, quarter, and eighth notes (no half notes)  
Half, quarter, and eighth notes (no whole notes)

Figure 88. Eight measure improvisation using half notes and eighth notes







## **Time Feel and Beat Placement**

### **Exercise 2.1 Consistent beat subdivisions**

With a metronome set between 40 and 70 beats per minute (BPM), play/clap through the following subdivisions:

1. Quarter notes (one subdivision per beat)
2. Eighth notes (two subdivisions per beat)
3. Triplets (three subdivisions per beat)
4. Sixteenth notes (four subdivisions per beat)
5. Quintuplets (five subdivisions per beat)
6. Sextuplets (six subdivisions per beat)
7. Septuplets (seven subdivisions per beat)
8. Thirty-second notes (eight subdivisions per beat)

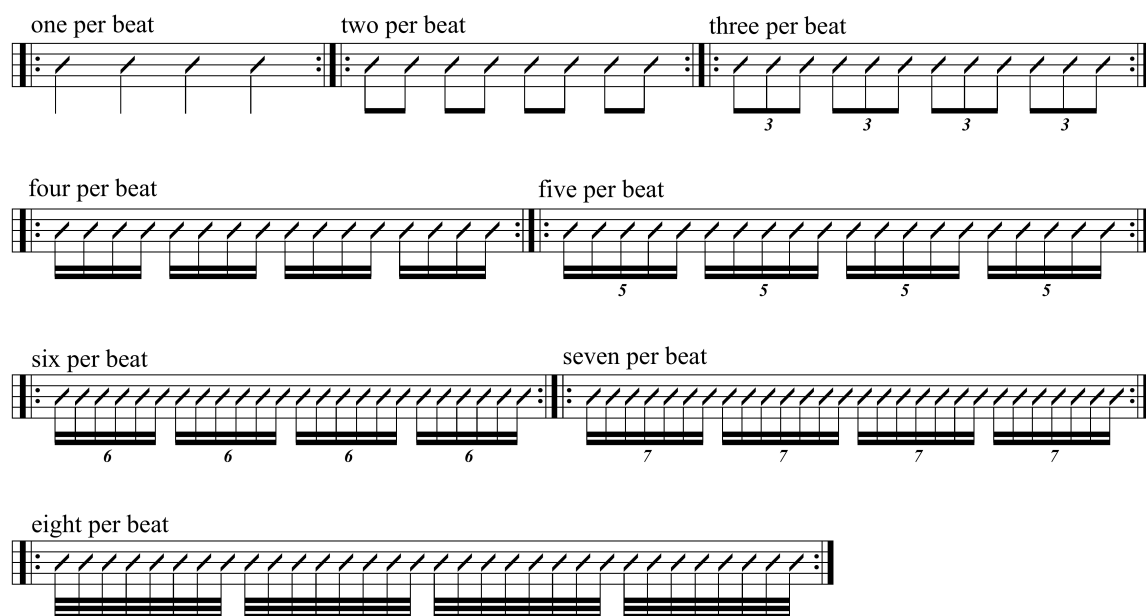
Gain familiarity with each subdivision by working through them individually. Once comfort is gained with each subdivision on their own, begin to transition between subdivision in ascending (quarter notes to thirty-second notes) and descending (thirty-second notes to quarter notes) order. At this point, the focus should be on smooth, glitch-free transitions. If transitions are not seamless, revisit each subdivision individually.

This exercise should be executed at different tempos and becomes more difficult as the tempo is slowed. There are two focuses during this exercise. First, complete confidence and comfort should be obtained with individual subdivision before approaching preceding subdivisions. For example, before proceeding to eighth notes, quarter notes should feel completely comfortable. Placement of subdivision should be precise and exactly aligned with the metronome. Additionally, spacing between each subdivision(s) should be even and consistent. The second focus should be toward transitions between each subdivision. Transitions between subdivisions should accurate

and robotic. There should be no glitches or adjustments upon arrival of the new subdivision.

*Purpose:* To become comfortable playing all beat subdivisions and transitioning between them.

Figure 90. Beat subdivisions (quarter notes through thirty-second notes)



### Exercise 2.2 Varying subdivision transitions

This exercise is essentially an additive step to Exercise 2.1. Instead of working through each subdivision in sequential order (i.e. quarter notes, eighth notes, triplets etc.), practice every possible transition combination. The diagram in figure 91, shown below, demonstrates a systemic manner to achieve this (rhythmic values are referred to by their corresponding subdivision, quarter notes = ones, eighth notes = twos, triplets = threes, etc.).

Figure 91. All possibilities of subdivision transitions




- a. Ones to twos, ones to threes, ones to fours, ones to fives, ones to sixes, ones to sevens, and ones to eights
- b. Twos to ones, twos to threes, twos to fours, twos to fives, twos to sixes, twos to sevens, and twos to eights
- c. Threes to ones, threes to twos, threes to fours, threes to fives, threes to sixes, threes to sevens, and threes to eights
- d. Fours to ones, fours to twos, fours to threes, fours to fives, fours to sixes, fours to sevens, and fours to eights
- e. Fives to ones, fives to twos, fives to threes, fives to fours, fives to sixes, fives to sevens, and fives to eights
- f. Sixes to ones, sixes to twos, sixes to threes, sixes to fours, sixes to fives, sixes to sevens, and sixes to eights
- g. Sevens to ones, sevens to twos, sevens to threes, sevens to fours, sevens to fives, sevens to sixes, and sevens to eights
- h. Eights to ones, eights to twos, eights to threes, eights to fours, eights to fives, eights to sixes, and eights to sevens

### Exercise 2.3 Varied swing ratios

Play eighth note lines while applying the following swing ratios: (1) straight eighth notes, (2) more swung than straight eighth notes, but less swung than triplet eighth notes, (3) triplet eighth notes – triplet quarter note followed by a triplet eighth note, (4) more swung than triplet eighth notes, but less swung than dotted eighth/sixteenth, and (5) dotted eighth note followed by sixteenth (see figure 92).

*Purpose:* To become aware and familiar with all levels of swing feel.

Figure 92. Swing ratios

1. Straight	2. More swung than straight eighth notes, but less swung than triplet eighth notes	3. Triplet eighth notes	4. More swung than triplet eighths, but less swung than dotted eighth/sixteenth	5. Dotted eighth/sixteenth
				

## Syncopation

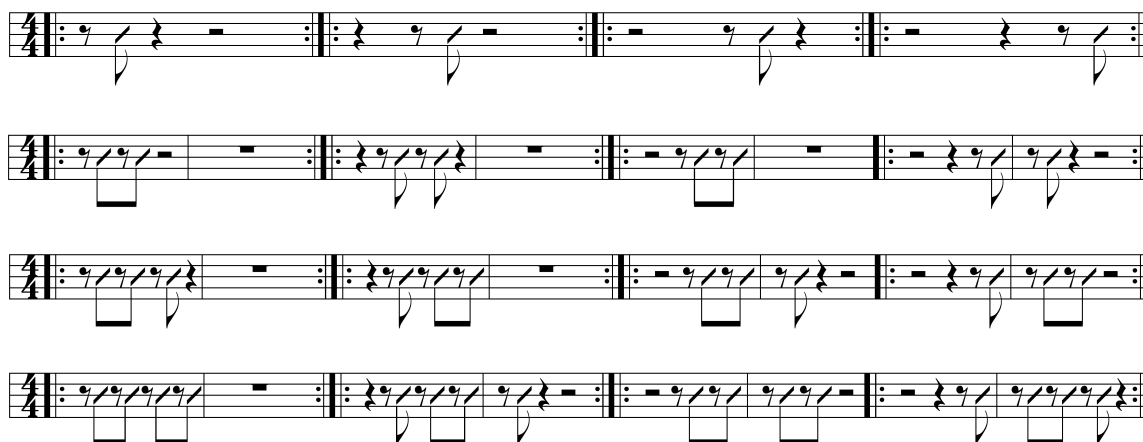
### Exercise 3.1 Single and multiple repetitions of eighth notes on offbeats

Play through the following groupings of eighth notes on all offbeats (displayed in figure 93):

1. A single repetition on all offbeats
2. Two repetitions on all offbeats
3. Three repetitions on all offbeats
4. Four repetitions on all offbeats

*Purpose:* To become comfortable playing single and multiple rhythmic repetitions on all offbeats.

Figure 93. Groups of one, two, three and four eighth notes on all offbeats



### Exercise 3.2 Single and multiple repetitions of quarter notes on offbeats

This exercise is similar to exercise 3.1, except quarter notes are used instead of eighth notes. Play through the following groupings of quarter notes in all offbeats:

1. A Single repetition on all offbeats
2. Two repetitions on all offbeats
3. Three repetitions on all offbeats
4. Four repetitions on all offbeats

By using quarter notes instead of eighth notes, syncopation is perceived in a legato fashion. Figure 94 displays groupings of two quarter notes on all offbeats. Also note that it is recommended to practice using groups larger than four repetitions.

*Purpose:* To achieve and become comfortable emphasizing offbeats in a legato manner

Figure 94. Groups of two quarter notes on all offbeats



### Exercise 3.3 Offbeat improvisation

Improvise while playing only the offbeats. An effort should be made to achieve rhythmic variety throughout this exercise by using both eighth notes and quarter notes, and a variety of repetition groupings. Figure 95 demonstrates an example improvisation.

*Purpose:* To become comfortable improvising while limited to only offbeats

Figure 95. Example improvisation using only offbeats



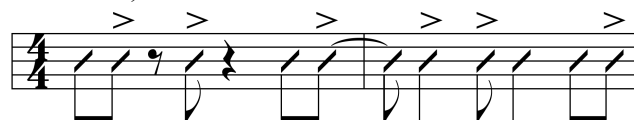
### Exercise 3.4 Mixing offbeats and downbeats

Use the following steps to produce syncopated rhythmic lines that combine downbeats and offbeats:

1. Construct a syncopated rhythmic figure using only offbeats (eighth notes and quarter notes can be used)



2. Accent the offbeats and fill in the syncopated rhythmic with downbeats (there will be multiple outcomes of this step because it is not necessary to add in every downbeat)



A strategic approach to this exercise is to focus on offbeats while thinking of downbeats as supplemental rhythms. That is to say, downbeats should not draw attention away from offbeats. The following example, figure 96, demonstrates this concept by placing the original syncopated rhythm above the rhythmic line containing supplemental downbeats.

Figure 96. Syncopated rhythms using downbeats and offbeats



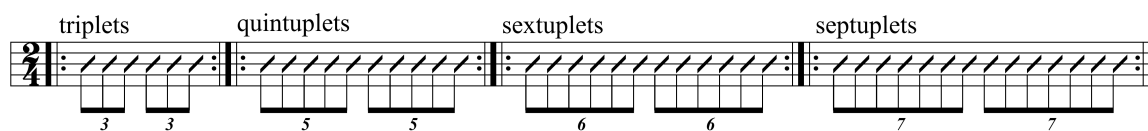
## Polyrhythm

### Exercise 4.1 Eighth note tuplets

Play through the following eighth note tuplets: triplets, quintuplets, sextuplets, and septuplets (see figure 97). Similar to exercise 2.1, focus should be towards maintaining evenness between each note.

*Purpose:* To become comfortable playing and feeling eighth note tuplets and subdivisions of three, five, six, and seven.

Figure 97. Eighth note Triplets, quintuplets, sextuplets, and septuplets



### Exercise 4.2 Quarter note tuplets

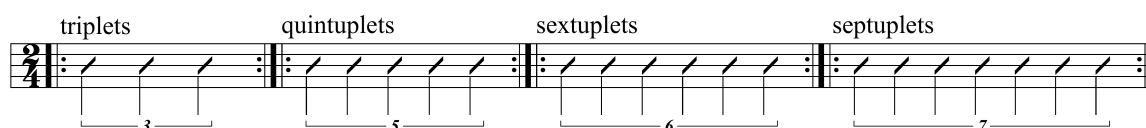
Play through the following quarter note tuplets: triplets, quintuplets, sextuplets, and septuplets (see figure 98). This exercise is similar to exercise 4.1, but now the half



note will be subdivided into triplets, quintuplets, sextuplets, and septuplets. The metronome can be set to the half note, quarter note, or eighth note pulse.

*Purpose:* To become comfortable playing and feeling quarter note tuplets and subdivisions of three, five, six, and seven.

Figure 98. Quarter note triplets, quintuplets, sextuplets, and septuplets



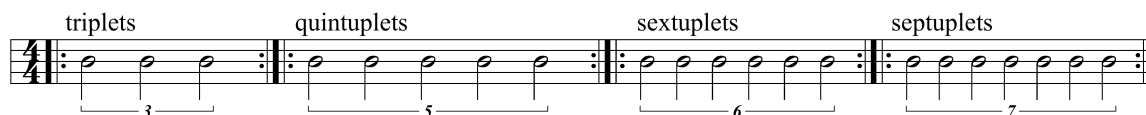
### Exercise 4.3 Half note tuplets

Play through the following half note tuplets: triplets, quintuplets, sextuplets, and septuplets (see figure 99). This exercise is similar to the previous two exercises, but now the whole note will be subdivided into triplets, quintuplets, sextuplets, and septuplets.

The metronome should be set to the whole note, half note, or quarter note pulse.

*Purpose:* To become comfortable playing and feeling half note tuplets and subdivisions of three, five, six, and seven.

Figure 99. Half note triplets, quintuplets, sextuplets, and septuplets



### Exercise 4.4 Groupings of continuous tuplets


Play all possible groupings of continuous tuplets. The example below, figure 101, only demonstrates this exercise for quarter note quintuplets, but it should be applied to the previously discussed quarter note, half note, dotted half note, and whole note tuplets.

Practice of each exercise should begin at very slow tempos (60-80 bpm), and the metronome should be set to the quarter note pulse. As comfort and familiarity develops, tempos can be increased and the metronome can be set to the eighth note pulse.

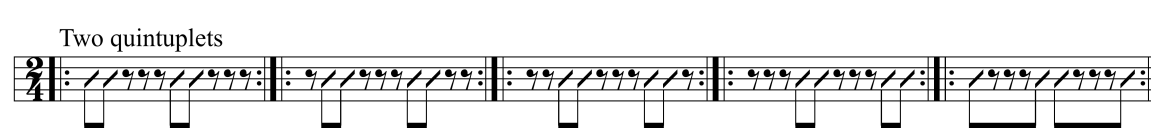
*Purpose:* To become comfortable placing varied groups of continuous tuplets on any quarter note subdivision.

Figure 100. Groups of one, two, three, four, and five quintuplets on each quarter note subdivision


One quintuplet



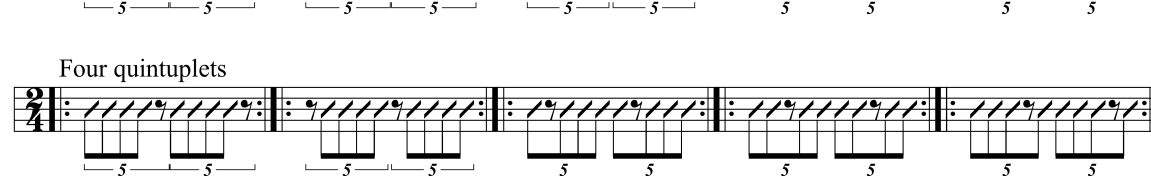
Two quintuplets



Three quintuplets



Four quintuplets



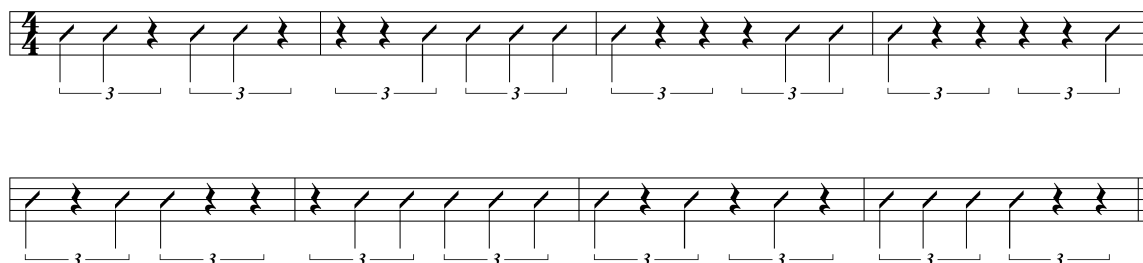
### Exercise 4.6 Improvising with tuplets

Improvise while only using a specific tuplet. This exercise should be applied to all of the following tuplets:

1. Quarter note triplets, quintuplets, sextuplets, and septuplets
2. Half note triplets, quintuplets, sextuplets, and septuplets
3. Dotted half note duplets, quadruplets, quintuplets, and septuplets
4. Whole note triplets, quintuplets, sextuplets, and septuplets

Figure 102 exhibits an eight-measure example improvisation containing only quarter note triplets. An attempt should be made to maintain rhythmic variety by implementing several different tuplet groupings.

Figure 101. Eighth measure improvisation with quarter note triplets



### Exercise 4.7 Rhythmic grouping

Apply rhythmic groupings of three, five, and seven to sixteenth notes, eighth notes, and quarter notes. Rhythmic groupings should be applied to several rhythmic durations, but eighth notes are most common within jazz performance. Figure 103 exemplifies eighth notes grouped into three, five, and seven.

*Purpose:* To become comfortable placing rhythmic durations into groups of three, five and seven.

Figure 102. Eighth note rhythmic groupings

Eighth notes grouped into three



Eighth notes grouped into five



Eighth notes grouped into seven



## Rhythmic Repetition

### Exercise 5.1 Repeating rhythmic units

Incorporate rhythmic repetition by repeating rhythmic units during improvisations. Rhythmic units can be varied in length, but they are typically shorter in length (one to two beats). Additionally, the space between repetitions can be varied as shown below in figure 104.

*Purpose:* To create rhythmic repetition while varying the spacing between repetitions.

Figure 103. Varied space durations between rhythmic units

No space between rhythmic units



One beat between rhythmic units



Three beats between rhythmic units



Varied space between repetitions

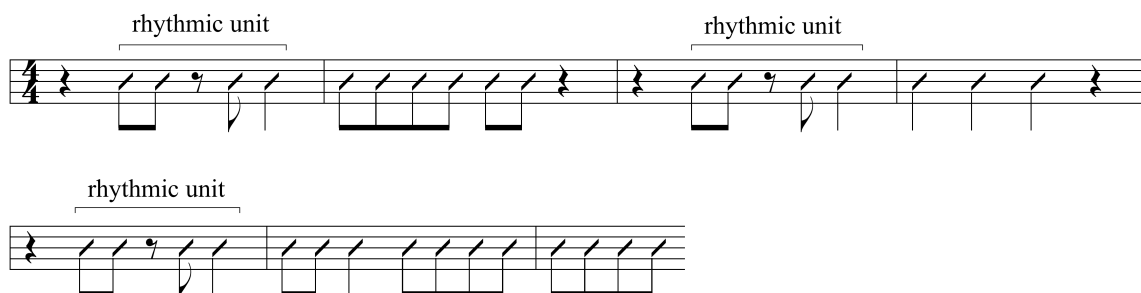


### Exercise 5.2 Rhythmic repetition within phrases

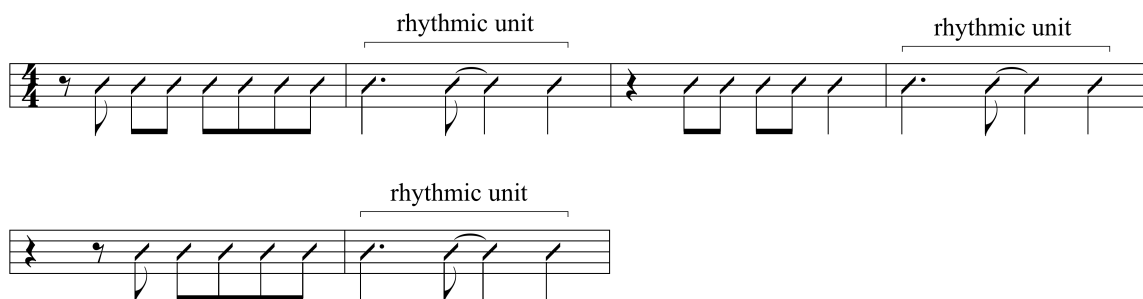
Create rhythmic repetition by using phrase beginnings and/or endings as the rhythmic unit. As identified in the rhythmic analyses, rhythmic units within phrases are typically longer in length. Figure 105, shown below, displays three examples of rhythmic repetition of this nature: (a) the beginning of a phrase functioning as the rhythmic unit, and (b) the ending of a phrase functioning as the rhythmic unit. Rhythmic material before or after repetitions of rhythmic units needs not remain consistent and can be varied. However, rhythmic units must be consistent to establish rhythmic repetition.

Figure 104. Examples of rhythmic repetition within phrases

Rhythmic unit at beginning of phrase



Rhythmic unit at ending of phrase

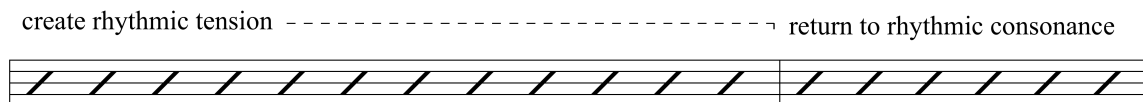


## Tension and Release

### Exercise 6.1 Creating and releasing rhythmic tension

As previously discussed, disturbing the consonant sense of pulse causes rhythmic tension. The basic framework for this exercise is seen in figure 106 – create rhythmic tension over a given duration and then resolve the tension by returning to rhythmic consonance.

Figure 105. Tension and release diagram



Each of the following rhythmic elements can effectively cause tension: (a) syncopation, (b) polyrhythm, and (c) repetition. Practice using each device to build and resolve tension. Attention should also be given to the amount of time it takes to create tension, which can be a short duration (one measure or less) or a longer duration (eight bars or more).

## Rhythmic Motivic Improvisation

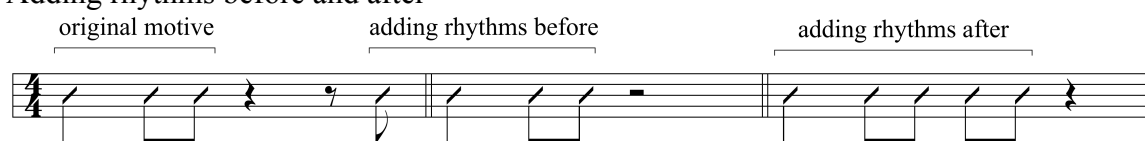
### Exercise 7.1 Varying rhythmic motives

Choose any rhythmic motive and practice improvising variations of that motive.

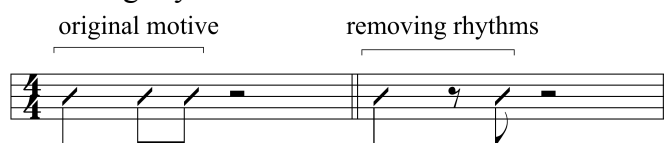
These can be pre-conceived at first, but the goal is to create motivic variations while improvising. Variations should be unique while maintaining rhythmic characteristics from the original motive. The following list exemplifies four different methods to create motivic variations:

*Purpose:* To create multiple variations of a rhythmic motive while improvising

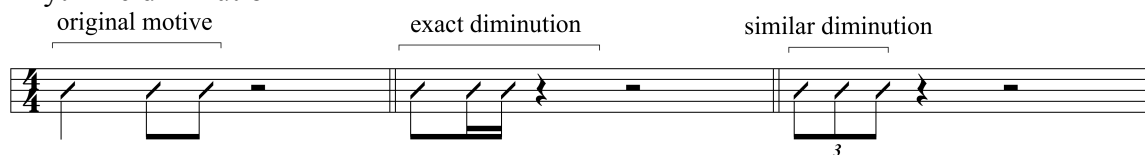
#### 1. Adding rhythms before and after



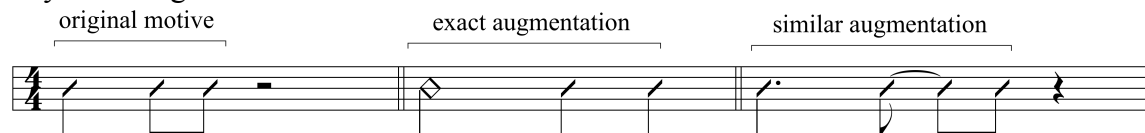
#### 2. Removing rhythms



#### 3. Rhythmic diminution



#### 4. Rhythmic augmentation



### Exercise 7.2 Displacing rhythmic motives

Choose a rhythmic motive and start it on each downbeat and offbeat. Motives played on the offbeats may feel slightly uncomfortable at first, but it is important to become familiar with the sound and feel of displacing rhythms.

*Purpose:* To become comfortable placing a rhythmic motive on any beat/offbeat

Figure 106. Rhythmic motive placed on each basic beat division



### Exercise 7.3 Getting in and out of rhythmic motives

Choose a rhythmic motive and use the following three steps to naturally imbed the motive within improvisation (see figure 108):

1. Improvise prior to the motive statement (pickup)
2. Improvise after the motive statement (extension)
3. Improvise before *and* after the motive statement

*Purpose:* To become comfortable inserting motives throughout improvisations in a natural and unforced manner.



Figure 107. Three steps of getting in and out of rhythmic motives

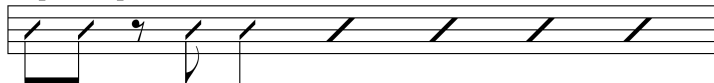
rhythmic motive



step 1. improvise prior to the motive statement



step 2. improvise after the motive statement

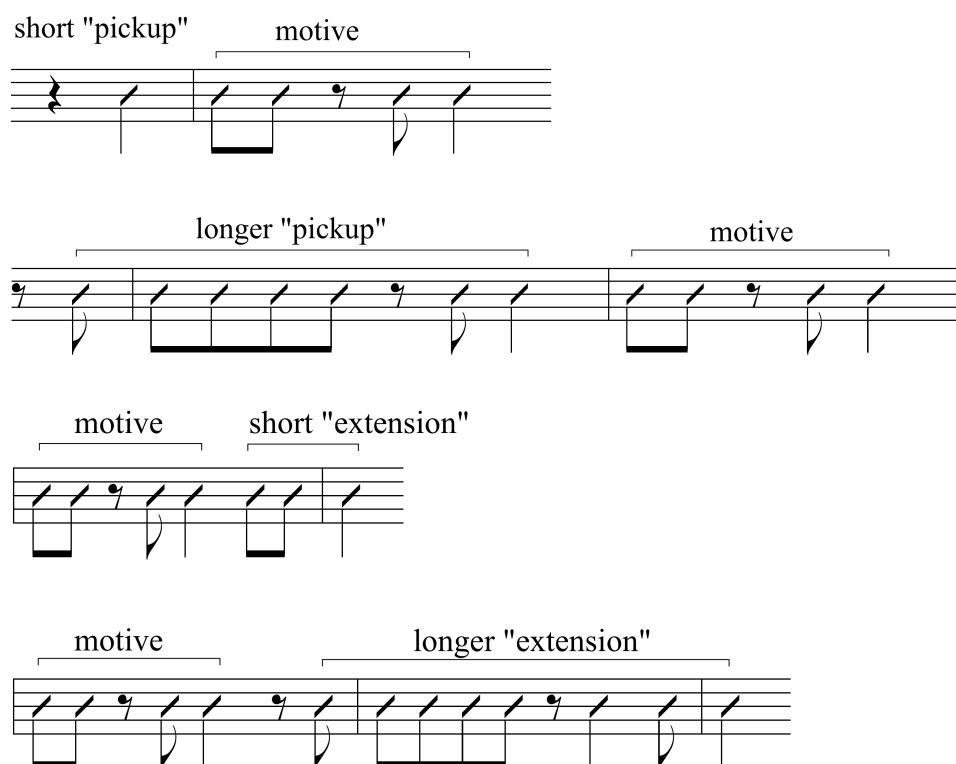


step 3. improvise before and after the motive statement



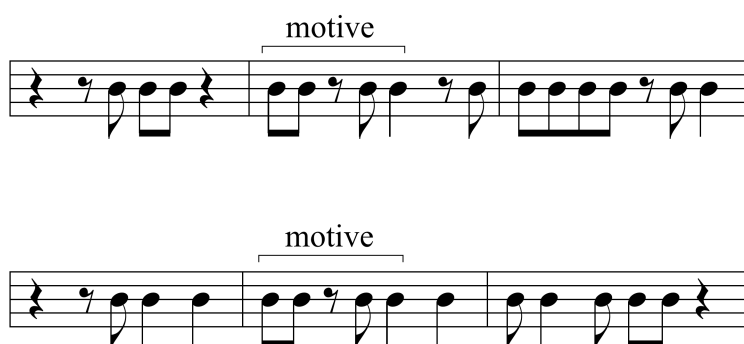
Rhythms that are improvised before and after the motive statement do not need to be complex; rather, they should feel like a natural *pickup* or *extension* to the motive.

Additionally, these additive rhythms can be varied in length (see figure 109).

Figure 108. Varied lengths of motive *pickups* and *extensions*

The final step in this exercise, which combines steps one and two, is to improvise supportive rhythmic material before *and* after the motive statement. Figure 110, shown below, provides two examples of step three.

Figure 109. Two examples of improvising before and after the motive statement



### Exercise 7.4 Improvisations based on a single rhythmic motive

Choose a rhythmic motive and create an improvisation based upon the chosen motive. Concepts from exercises 7.1, 7.2, and 7.3 should be incorporated into the improvisation to enhance rhythmic variety and interest. The following example (figure 111) demonstrates a sixteen bar improvisation that derived from a single rhythmic motive.

*Purpose:* To create rhythmic cohesiveness by deriving an entire improvisation from a single rhythmic motive.

Figure 110. Example of improvisation derived from a single rhythmic motive

The musical score is written in 4/4 time and consists of 16 bars. The rhythmic motive is a quarter note, eighth note, quarter note, eighth note, quarter note, eighth note, quarter note, eighth note. The improvisation uses various techniques to create variety while maintaining cohesiveness:

- Line 1:**
  - Bar 1: motive
  - Bar 2: pickup
  - Bar 3: motive
  - Bar 4: pickup
- Line 2:**
  - Bar 5: motive
  - Bar 6: displaced motive
  - Bar 7: variation
  - Bar 8: displaced variation
- Line 3:**
  - Bar 9: displaced motive
  - Bar 10: extension
  - Bar 11: extension
  - Bar 12: pickup
- Line 4:**
  - Bar 13: variation
  - Bar 14: pickup
  - Bar 15: variation
  - Bar 16: pickup
  - Bar 17: displaced motive

## CHAPTER VII

### CONCLUSIONS

In nearly fifty years, college jazz programs have legitimized themselves within the infrastructures of formal institutions and will presumably remain as the primary source of jazz education. As the discipline expands, jazz curricula and pedagogy will need to be frequently revisited in order to maintain academic integrity – particularly the pedagogical methods that surround core jazz courses, such as jazz improvisation sequences.

Of the primary elements of music (melody, harmony, and rhythm), jazz musicians and educators agree that rhythm is perhaps the most important musical element within jazz improvisation. Historically speaking, rhythm has been a defining characteristic of jazz performance and remains to be a musical element that delineates jazz performance from other genres of music. Although rhythm has been identified as a crucial and characteristic component of jazz improvisation, it is often neglected within jazz improvisation course sequences. Collegiate jazz improvisation curricula and pedagogical methods are dominated by topics of harmonic nature and rarely address rhythmic elements of jazz improvisation. Of the reviewed jazz improvisation course syllabi and current jazz improvisation method materials, only a small percentage is devoted to rhythmic elements.

The primary rhythmic elements of jazz improvisation are: (a) rhythmic variety, (b) time feel and beat placement, (c) syncopation, (d) polyrhythm, (e) rhythmic repetition, (f) rhythmic tension and release, and (g) rhythmic motivic improvisation. Each one of these elements can be identified through rhythmic transcription and analysis. Similar to the development of harmonic vocabularies, it is clear that jazz improvisers develop rhythmic vocabularies and tendencies. Additionally, musicians wishing to acquire the rhythmic language of great improvisers must thoroughly investigate how rhythmic elements were implemented throughout jazz performance.

Because of the innovative contributions to jazz improvisation pedagogical materials by jazz education pioneers such as Jamey Aebersold, David Baker, and Jerry Coker, there is a wealth of resources that address harmonic components of jazz improvisation. The research in this dissertation demonstrates that rhythmic analysis of great jazz improvisers can also lead to pedagogical models that address rhythmic elements of jazz improvisation. However, jazz educators and researchers must approach the rhythmic side of jazz improvisation with the same methodological detail that has been given to the harmonic side of jazz performance.

### **Suggestions for Further Research**

Several jazz researchers and musicians, past and present, have claimed that there is a void of jazz improvisation materials that addresses rhythm. This void will never be filled until the community of jazz educators, researchers, and musicians begins to incorporate rhythmic elements of improvisation into curriculum and pedagogy. The rhythmic analyses in the present research addresses improvisation between 1956 and

1975, but it would be beneficial to also rhythmically analyze recordings throughout other time periods of jazz performance, such as early jazz, swing, bebop, free jazz, and modern/current jazz. There is also a substantial need for research addressing the pedagogical side of jazz rhythm and its relation to other music disciplines such as percussion studies, drum set studies, and other world music studies.

In addition to the need for further research addressing rhythmic components of jazz improvisation, there is also a need for investigations toward other non-harmonic elements such as phrasing, interaction, individuality and creativity, emotion, and texture. A larger pool of research addressing non-harmonic elements of jazz improvisation will eventually lead to more versatile pedagogical models, which can be implemented into jazz curricula.

Lastly, there is a need for research that identifies current scopes and trends of jazz education. Surveys of jazz curricula that are currently available are outdated and do not reflect modern trends within jazz education. It is important to create awareness of what is currently being taught in jazz programs around the world – if jazz education is changing, education communities must be informed.

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