

Defining the Role of Drumset Performance in Contemporary Music

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Abstract

Traditionally considered an instrument used primarily for improvisation in popular music, the drumset has emerged in contemporary music as a solo instrument with prescribed notation. While there is a growing interest in this repertoire today, composers have drawn inspiration from the drumset since the early developmental stages of the instrument itself in the early twentieth century.

In the context of popular music, generations of drummers have explored new musical and technical possibilities of drumset performance. It is this history that remains linked to the drumset even when crossing over into the context of contemporary composition. Drummers in popular music have influenced the musical content, the approach to performance, and even our preconceived ideas of the musical and technical potential of this instrument when it is used in contemporary art music.

This thesis presents four unique approaches to composition identified and defined as the Tourist, the Snapshot, the Non-idiomatic and the Confluent. Although many works are discussed, the chapters focus on Darius Milhaud's *La Création du Monde*, Christopher Rouse's *Bonham*, James Dillon's *Ti.Re.Ti.Ke.Dha* and Nicole Lizée's *The Man with the Golden Arms*.

The purpose is to highlight new performance techniques and musical possibilities for drumset performance used in contemporary art music, while identifying the composed repertoire's links to traditional and fundamental drumset practices. This will show that an awareness of the drumset's roots in popular music styles has a significant effect on both composer and performer.

Abrégé

Considérée traditionnellement comme un instrument utilisé principalement pour l'improvisation et la musique populaire, la batterie a fait son apparition dans la musique contemporaine comme un instrument soliste, avec des partitions entièrement notées. Alors que l'intérêt pour ce nouveau répertoire connaît un succès grandissant, il est à noter que les compositeurs se sont inspirés de la batterie dès ses débuts, à l'aube du vingtième siècle.

Dans le contexte des musiques populaires, les générations successives de batteurs ont continuellement exploré le potentiel musical et technique du jeu de la batterie, et c'est cette histoire même qui crée un lien fondamental avec son utilisation dans le contexte de la composition contemporaine. Les batteurs populaires ont eu une influence déterminante sur le contenu musical et sur l'approche de l'interprétation, et en fin de compte sur l'idée préconçue que nous avons du potentiel musical et technique de la batterie lorsqu'elle est utilisée dans le domaine de la musique contemporaine.

Cette thèse présente quatre types d'approche compositionnelle : le Touriste, l'Instantané, le Non Idiomatique et le Confluent. Parmi les œuvres discutées, on s'intéresse plus particulièrement à *La Création du Monde* de Dairus Milhaud, à *Bonham* de Christopher Rouse, à *Ti.Re.Ti.Ke.Dha* de James Dillon et à *The Man with the Golden Arms* de Nicole Lizée.

L'objectif est de mettre en exergue l'existence de nouvelles techniques d'interprétations et de possibilités artistiques pour le jeu de la batterie dans la musique d'art contemporaine, tout en identifiant les liens qui unissent le répertoire actuel aux pratiques instrumentales traditionnelles. On démontrera ainsi que la sensibilité des compositeurs et interprètes aux racines de la batterie dans les styles de musique populaire, a une influence tangible sur leur approche artistique.

Acknowledgements

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I have been inspired by the many players with whom I have collaborated in recent years such as David Cossin, Sixtrum Percussion Ensemble, Architek Percussion Ensemble, Steve Raegele, Edwin Outwater and the Kitchener-Waterloo Symphony.

Special thanks to my mentor and friend David Schneider who is the reason for my strong musical foundation, love of the drumset and of Tower of Power. Thanks to Pat Carrabré who supported me professionally in the early years of my musical career. To my best friend, and personal in-house designer, Lucas Pauls, you have been a source of encouragement and inspiration for many years.

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DVD Content

The following performances by Ben Reimer were recorded live during his doctoral lecture-recital. This took place on September 5, 2013 in Tanna Hall, at the Schulich School of Music, McGill University, Montreal, Québec, Canada.

- | | |
|--|---|
| 1. <i>Spooky Drums No. 1</i> | Baby Dodds (1898-1959)
Transcribed by Ben Reimer |
| 2. <i>La Création du Monde</i> , Movements III, IV and V
(Dana Nigrim and Pamela Reimer, piano) | Darius Milhaud (1892-1974) |
| 3. <i>Ti.Re-Ti.Ke-Dha</i> | James Dillon (1950) |
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(Architek Quartet with Zachary Hale, percussion; Steve Raegele and Jonathan Barriault, electric guitar) | Nicole Lizée (1973) |

Introduction

The drumset is an instrument deeply rooted in popular music traditions and is a defining element of most popular music styles. Since the rise of jazz in the early twentieth century through to today's extreme metal, generations of drummers have explored new musical and technical possibilities of the instrument. In recent years, the drumset, traditionally considered an improvised instrument, has emerged in Western art music as a solo instrument with prescribed notation. As the drumset crosses over to this new musical context, its rich traditions, iconic players, grooves and styles, form the platform through which composers of this new repertoire navigate. This influences the musical content, the approach to performance, and even the preconceived ideas of the musical and technical potential of the drumset.

Background

Since I was the age of ten, the drumset and its rich history of players has inspired me to listen to, to learn about and to perform music. Between 1996 and 2001 I trained to be an orchestral and contemporary percussion performer. I received a Bachelor of Music degree from McGill University and a Master of Music degree from the State University of New York in Stony Brook, both in classical, contemporary percussion performance. During this time, my first love, the drumset, took a secondary role. No longer receiving drumset instruction, and with little time for playing in bands, I was quickly distinguishing myself as a percussionist or a multiple percussionist, rather than a drummer.

After my Master degree, I returned to Winnipeg, Manitoba where I began teaching classical percussion at Brandon University and playing regularly with the Winnipeg Symphony Orchestra. While I continued to teach drumset in my private studio, most opportunities to

perform drumset live became limited to the occasional studio session and symphony “Pops” concert.

Around this time, I began to wonder if the drumset, traditionally an improvised instrument in popular music, could have a greater role in my world of contemporary percussion performance. I knew the potential of exciting composition for the instrument ever since having been introduced to Frank Zappa’s *The Black Page*. The solo, composed for drummer Terry Bozzio in 1976, was the most popular composed work for drumset that I knew of at the time. I was also drawn to Louis Cauberghs’ *Halasana*, a duet for drumset and piano recorded by Evelyn Glennie and a solo called *Improvisation I* by Thierry d’Astous.

In 2006 I commissioned my first drumset solo, *Train Set*, by composer Eliot Britton. The work was funded by the Manitoba Arts Council and premiered at the Winnipeg Art Gallery in the GroundSwell new music series. Encouraged by the success of this work, the repeat performances and interest from other performers, I continued to search for composers interested in drumset composition. I met composer Nicole Lizée while performing her chamber work *This Will Not Be Televised* with members of the Winnipeg Symphony Orchestra in 2007. Soon after, I played drumset for various works on her recording *This Will Not Be Televised*, released by Centrediscs in 2008. That year, with the support of the Canada Council for the Arts, I commissioned Nicole Lizée’s first solo for drumset, *Ringer*. This work not only challenged me technically but redefined my musical path. It propelled my exploration into defining the role of drumset performance in contemporary music, resulting in the writing of this thesis.

Purpose

The purpose of this thesis is to present an overview of significant composed works for the drumset including orchestral, chamber, quartet, duo and solo formats. The approaches, which I will define, reflect upon individual composers from a wide range of social, cultural and geographical contexts. My aim is to highlight resulting new performance techniques and musical possibilities, while identifying the repertoire's links to traditional, fundamental drumset practices. I will show that an awareness of the drumset's roots in popular music styles has a significant effect on both composer and performer.

Through this discussion it is my hope that more composers will find inspiration and excitement in composing new music for the drumset. For drummers, I will draw on my personal experiences in performing the above works to provide valuable insight and introduction to others interested in pursuing this repertoire.

Finally, the purpose of this thesis is to suggest that the role of drumset performance in contemporary music is to stimulate new repertoire that adds to, or further expands the history of the instrument. The following chapters will present several individuals, who, with their unique relationships with the drumset over time, have done just that.

Drumset Performer vs. Multiple Percussionist

There is a common practice of referring to the drumset performer as a multiple percussion instrumentalist. Multiple Percussion has become associated with a body of repertoire for the solo, classical, percussionist which incorporates several percussion instruments played by a single performer. Classic works such as *Rebonds* (1988) by Iannis Xenakis, *Zyklus* (1959) by Karlheinz Stockhausen, *Janissary Music* (1966) by Charles Wuorinen and *Anvil Chorus* (1991)

by David Lang fit this profile. This is considered ‘serious’ concert repertoire for advanced percussion soloists. Jazz drummer Max Roach was one of the first to refer to himself as a multiple percussionist. This highly educated, groundbreaking drummer earned the reputation as a soloist who elevated and brought “dignity to an instrument long misunderstood and assaulted by the ignorant.”¹ For Max and his admirers, the label of multiple percussionist reflected his elevation of drumset performance in the 1950s and 60s and the desire to be considered an equal to the other instrumentalists.

In more recent years, this term has been used in drumset performance to encourage or justify the inclusion of drumset in college percussion pedagogy and performance evaluations. Murray Houllif’s “Benefits of Written-Out Drumset Solos” encourages solo repertoire for students as “an effective means to learning improvisation.”² Dennis Rogers’ “Drum Set’s Struggle for Legitimacy” argues that written recital pieces can demonstrate that the “drumset is a legitimate instrument that is quite acceptable in the percussion curriculum.”³

With the existing repertoire for drumset in a contemporary music context (such as those included in this paper), it is common, once again, to assume the label of multiple percussion rather than drumset performance. The 2012 dissertation by Kevin Nichols called “Important Works for Drum Set as a Multiple Percussion Instrument” is a valuable addition to this discussion. Nichols provides an introduction and unique performance perspective to composed drumset solos such as *The Sky is Waiting...* (1977) by Robert Cucinotta, *One for Solo Drummer* (1990) by John Cage, *Brush* (2001) by Stuart Saunders Smith and others. He notes the lack of studies or method books which “investigate the literature for drum set as a multi-percussion

¹ Burt Korall, *Drummin' Men, The Heartbeat of Jazz: The Bebop Years* (New York: Oxford University Press, 2002). 104.

² Murray Houllif, "Benefits of Written-Out Drumset Solos," *Percussive Notes* February(2006): 12.

³ Dennis G. Rogers, "Drum Set's Struggle for Legitimacy," *Percussive Notes* 32, no. 3 (1994): 28.

instrument” and expresses his “desire to encourage solo drum set performance and composition by making this music and these concepts more widely known and understood.”⁴ Nichols successfully presents repertoire for drumset in contemporary music today, and affirms the drumset’s place as a multi-percussion instrument and valuable addition to classical percussion repertoire.

In this thesis, I choose not to associate the drumset with multiple percussion. This is because:

1. The heightened level of technical and musical expression found with drummers around the world today eliminates the need to further legitimize or justify drumset performance as a true art form.

2. This thesis does not consider works composed for pedagogical reasons. Rather, the works included will identify how and why each composer (identified in the four approaches) has been drawn to, and has drawn inspiration from, the drumset.

3. I believe the drumset’s link to popular music styles and the associated players, techniques and instruments illuminates our approach to drumset performance in the context of contemporary music. The label of multiple percussion places a shadow over the elements related to popular music performance which I am endeavoring to highlight.

Defining Drumset Performance

As discussed previously, the term multiple percussion references a contemporary, classical context separate from that of the drumset. What, then, clearly distinguishes drumset from other contemporary or multiple percussion performance apart from context? To answer this, we must define what drumset performance is. The *Encyclopedia of Percussion* says that the drumset is “a set of drums, usually bass drum, snare drum, tom-toms, hi-hat, and cymbals.”⁵

James Blades in *Percussion Instruments and Their History* describes drumset performance as

⁴ Kevin Arthur Nichols, "Important Works for Drum Set as a Multiple Percussion Instrument" (PhD dissertation, University of Iowa, 2012), 3.

⁵ John H. Beck, "Alphabetical Listing of Percussion Instruments and Terms," in *The Encyclopedia of Percussion* (New York; London: Taylor Francis Group, 1995), 34.

“the advancement of counter rhythms and independence.”⁶ As I will discuss later, drummer Kenny Clarke would describe his use of multiple limbs as “coordinated independence.”⁷ Through my research and by combining these ideas, I have come to define drumset performance as

The use of coordinated independence with both hands and feet on a collection of drums and cymbals, including but not limited to, bass drum with pedal, snare drum and hi-hat, set up for convenient playing by one person.

The fundamental aspect is the “coordinated independence of both hands and feet.” The early development of this capability began a movement away from the role of strictly timekeeping and allowed drummers to become more expressive. This capability combined with the associated instruments mentioned above, is the main identifier of drumset performance.

Outline and Methodology

Acknowledging the drumset’s strong roots in popular music and culture, this thesis will begin by forming an understanding of the defining elements and rich history of drumset performance. In Chapter 1, this will be presented under the following headings:

1.1 Creating a Language: Rudimental Drumming - Beginning in the 18th and 19th Century a military, rudimental language formed that remains at the core of drumset performance today.

1.2 Establishing Time: Double Drumming - The art of double drumming established the drummer’s role of timekeeping in early popular music styles.

1.3 Inventing Independence - This describes the evolution of drumset fundamentals. The most important event is the development of coordinated independence and the devices, invented in parallel with groundbreaking performances, which made this practice possible. Key individuals included in this chapter are William F. Ludwig, ‘Papa’ Jo Jones and Kenny Clarke.

1.4 Exploring Artistry - This describes the introduction and evolution of the drum solo, and the exploration of new sound possibilities on the drumset. Key individuals included in this chapter are Baby Dodds, Gene Krupa, Max Roach and Louie Bellson.

⁶ James Blades, *Percussion Instruments and their History* (London: Faber and Faber Limited, 1970). 462.

⁷ Mike Hennessey, *Klook: The Story of Kenny Clarke* (London: Quartet Books Limited, 1990). 27.

1.5 Blurring the Boundaries - This refers to new approaches to drumset performance that occurred in the late sixties and seventies through musical styles such as progressive rock and fusion. Key individuals identified in this chapter are Carl Palmer, Neil Peart and Billy Cobham.

1.6 Pushing the Limits - This addresses new levels of virtuosity, complexity and speed that evolved through the development of the heavy metal style and associated drumming techniques.

The remaining chapters will present specific composers who have crossed over from a contemporary composition context, to include the drumset, an instrument whose performance practices are rooted in popular music styles and traditions. My research shows that composers have drawn inspiration from the drumset since the early developmental stages of the instrument itself. I will identify and define four unique approaches to drumset composition. My exploration of each approach will include background information of significant works and will discuss how each composer navigates through the complexities of drumset performance. This will focus on a variety of elements including: score analysis and comparison, technical demands, performance preparation challenges, and the relation to popular music traditions. These approaches do not represent every existing work but rather facilitate a discussion of significant additions to drumset repertoire over the past one hundred years. The four approaches and associated compositions are:

Chapter 2: The Tourist Approach

L'Histoire du Soldat (1918) by Igor Stravinsky
La Création du Monde (1923) by Darius Milhaud

Chapter 3: The Snapshot Approach

Rhapsody in Blue (1924) by George Gershwin
Bonham (1989/1996) by Christopher Rouse

Chapter 4: The Non-Idiomatic Approach

The Black Page (1976) by Frank Zappa
Nasenflugeltanz (1988) by Karlheinz Stockhausen
Elusive Peace (2001) by Rand Steiger
Ti.Re-Te.Ke-Dha (1979) by James Dillon

Chapter 5: The Confluent Approach

Blue Too (1983) by Stuart Saunders Smith
Drum Dances (1993) by John Psathas
Lakoni in Kazonnde (2013) by Lukas Ligeti
Dark Full Ride (2002) by Julia Wolfe
The Man with the Golden Arms (2012) by Nicole Lizée

Chapter 1: Historical Background

The drumset evolved to satisfy the demands of rapidly changing popular music styles and performance practices of the early twentieth century. Throughout this period, groundbreaking players, in various musical contexts, expanded the techniques and musical potential of the instrument. As a result, the role of the drummer transitioned from its early place as simply a timekeeper to the artistry and expressiveness of a soloist. This history, closely linked, first to jazz then to rock, progressive rock and beyond, illuminates key artists, innovative techniques and unique instrument designs that have formed the deep roots of the drumset.

Although this is not a complete history, the individuals in this chapter are a representation of the generations of pioneers who have made the drumset what it is today. This thesis is significantly influenced by the following resources, which document various eras of the drumset's evolution:

Brown, Theodore Dennis. "A History and Analysis of Jazz Drumming to 1942." The University of Michigan, 1976.

Glass, Daniel. *The Century Project: 100 Years of American Music from Behind the Drums (1865-1965)*. Drum Channel, 2012. DVD.

Korall, Burt. *Drummin' Men, the Heartbeat of Jazz: The Bebop Years*. New York: Oxford University Press, 2002.

Korall, Burt. *Drummin' Men, the Heartbeat of Jazz: The Swing Years*. 2nd ed. New York: Oxford University Press, 2002. 1990.

Ludwig-Jr., Bill, Calvin Bolton, Ray E. Benjamin, and John Aldridge. "The Ludwig Drummer: April 1926 to Spring 1948." Anaheim Hills: Centerbrook Publishing, 1999.

Nicholls, Geoff. *The Drum Book: A History of the Rock Drum Kit*. 2nd ed. New York: Backbeat Book, 2008.

Paczynski, Georges. *Une Histoire De La Batterie De Jazz*, 3 volumes, Paris: Outre Mesure, 1999.

Pinksterboer, Hugo. *The Cymbal Book*. edited by Rick Mattingly Milwaukee: Hal Leonard Corporation, 1992.

Visser, Joop. *The Engine Room: A History of Jazz Drumming from Storyville to 52nd Street*. London: Proper Records P1105-P1108, 1999. Liner Notes.

The individuals in this chapter have also been chosen because of the personal significance they have to me as author and performer. Their backgrounds, experiences, performances and creations have had an impact on my appreciation of and approach to drumset performance today. This will enhance the discussion of the four approaches to drumset composition in future chapters.

1.1 Creating a Language: Rudimental Drumming

Drummers developed their hands first through early European and American military drumming traditions. The resulting rudimental language of rolls, ruffs, flams, etc., remains at the core of drumset performance today. The musical military units in Europe during the eighteenth century were known as Fife and Drums. During the Revolutionary War of the late eighteenth century and the War of 1812, European and French armies brought the Fife and Drum rudimental style to America. Publication of traditional repertoire appears as early as 1803 with tunes such as “The Three Camps”, “Slow Scotch” and “The Downfall of Paris.”⁸ Throughout the nineteenth century in Europe and America, this repertoire laid the foundation for a rudimental drumming language.

The rudimental performance practices blended into African, African American and French Creole traditions in New Orleans. Until the end of slavery in 1865, the famous Congo

⁸ Theodore Dennis Brown, "A History and Analysis of Jazz Drumming to 1942." (The University of Michigan, 1976), 60-63.

Square was a place where slaves could congregate once a week to dance, sing and play their traditional instruments. These traditions merged with the military, rudimental language to establish a unique New Orleans style. New Orleans marching bands played in celebrations such as Mardi Gras and other social functions. These bands generally featured one drummer playing snare drum and another playing bass drum with mounted cymbal.

1.2 Establishing Time: Double Drumming

1.2.1 Background

In the late nineteenth and early twentieth century, dance bands, New Orleans marching bands and theatre orchestras grew in popularity in America. Touring and performing in small, indoor venues, the New Orleans band leader “Papa Jack” Laine (1873-1966) downsized to what would be the popular setup for dance bands from around 1890 to 1910.⁹ Either for economic reasons, or due to venues without enough space, Laine hired only one drummer to play all the percussion instruments. This was the beginning of double drumming – one player, coordinating hands to simultaneously perform with a bass drum (usually on the floor to the right), and snare drum (resting on a chair, tilted at an angle). Theatre drummers expanded this technique adding keyboard percussion (such as glockenspiel and xylophone), timpani, and various other traps (the common term for added sound effects¹⁰) such as whistles, cowbells, woodblocks and temple blocks.

A notable invention that advanced double drumming was the adjustable snare stand in 1898. The tripod shaped stand was designed by percussionist Ulysses Grant Leedy and was a

⁹ Georges Paczynski, *Une Histoire de la Batterie de Jazz*, 3 vols., vol. 1 (Paris: Outre Mesure, 1999). 44.

¹⁰ Robert B. Breithaupt, "The Drum Set: A History," in *Encyclopedia of Percussion*, ed. John H. Beck (New York; London: Taylor Francis Group, 1995), 173.

major improvement to the old system of placing the snare drum on a chair.¹¹ Also, by 1900, the wooden drum hoops that held drum skins with rope-tension were starting to be replaced by sturdier metal rims that made drum tuning easier. Designed by the Duplex drum company, these were flattened circles of brass or steel with threaded tension bolts and hooks that pulled down on the rim.¹²

1.2.2 Timekeeping

The double drummers established the role of timekeeper in popular music. The standard rhythms at this time were still closely tied to a military and marching tradition. Double drummers maintained a steady pulse on beat one and three in the bass drum and emphasized beat two and four with eighth notes, and variations on the snare (Figure 1). Ragtime drumming increased in speed and difficulty, as did the skill of the double drummers. Their ability to perform fast and complex rhythms on the snare drum was considered innovative and virtuosic. The following rhythms are based on what James Blades said, “was to the competent double-drummer ‘all in a day’s work’.”¹³

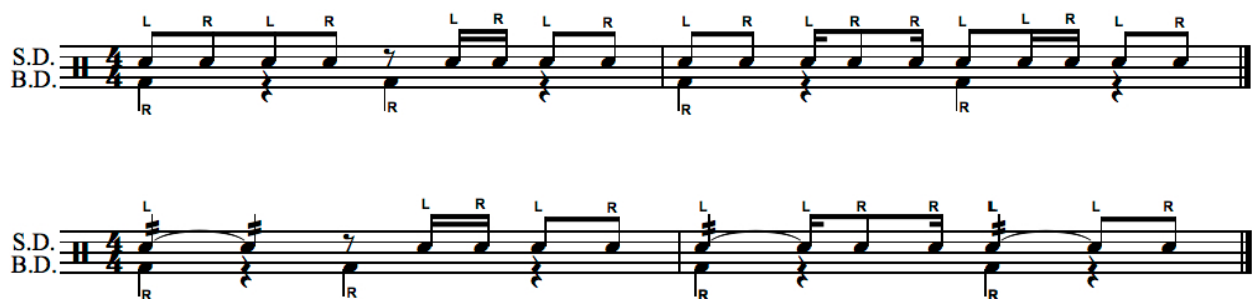


Figure 1: Examples of double drumming rhythms.

¹¹ Geoff Nicholls, *The Drum Book: A History of the Rock Drum Kit*, 2nd ed. (New York: Backbeat Book, 2008). 12.

¹² Ibid., 16.

¹³ Blades, *Percussion Instruments and their History*: 460.

The first recorded example of double drumming was by drummer Tony Sbarbaro (1897-1969) in the song “Dixie Jazz Band One-Step” by The Original Dixieland Jazz Band in 1917¹⁴. Double drumming went out of style by the 1920s as a new generation of players explored the full potential of new pedal devices that would define drumset performance.

1.3 Inventing Independence

With coordinated independence of both hands and feet, drummers began to improvise, explore complex polyrhythms, and move away from the role of strictly timekeeper. These new performance practices evolved in parallel with the invention of new devices, most significantly the bass drum pedal, the hi-hat and ride cymbal, that extended the capabilities of the players.

1.3.1 William F. Ludwig: The Bass Drum Pedal

Throughout the nineteenth century examples can be found of bass drum pedal designs that allowed a performer to play the bass drum with their foot, freeing the hands. In the mid-nineteenth century, George Olney designed a pedal called the “swing” or “overhanging bass-drum pedal.”¹⁵ Other devices like this existed, but were generally slow and inefficient. Chicago-based drummer, William F. Ludwig described his need for a more effective pedal while performing in the musical comedy, *The Follies*, in 1908, saying:

When *The Follies* opened at Auditorium Theatre, in Chicago, it was evident that the old-fashioned swing foot pedal was not capable of maintaining the pronounced drum rhythm demanded by the director, Morris Levi, for the newly developed form of ragtime which had come into vogue. A new type of pedal had to be devised to satisfy this director’s exacting demands for syncopation and volume.¹⁶

¹⁴ The Original Dixieland Jazz Band, *The First Jazz Recordings, 1917-1921* (Timeless Records B001CKE6MK, 2008), MP3 Music. Track 2.

¹⁵ John Aldridge, *Guide to Vintage Drums* (Anaheim Hills: Centerstream Publishing, 1994). 5.

¹⁶ Bill Ludwig-Jr. et al., “The Ludwig Drummer: April 1926 to Spring 1948,” (Anaheim Hills: Centerbrook Publishing, 1999), 330.

In reaction to the musical demands, Ludwig patented the first metal, spring-based pedal in 1909 that allowed the beater of the pedal to spring back to a ready position after each hit. This became the standardized model of bass drum pedal design.

The bass drum pedal inspired drummers to become more expressive with their hands, to interact more with the other musicians and to play faster than the double drummers ever could. It introduced the first step towards coordinated independence and lay the foundation for drumset performance. By the 1920s a new generation of drummers such as Baby Dodds (1898-1958) and Zutty Singleton (1898-1975) were adding new complexities with syncopation and polyrhythms that would be the foundation for America's popular music called jazz. This was only made possible by the basic model of William F. Ludwig's 1909 bass drum pedal; a design that still remains at the core of bass drum pedals today.

1.3.2 Sonny Greer and 'Papa' Jo Jones: The Hi-hat

Another device gave the drummer greater freedom and independence, this time enabling the cymbals to be played by the foot. The hi-hat is "a pair of cymbals mounted on a vertical rod controlled by a foot-operated pedal."¹⁷ The development of the modern hi-hat was a process that evolved over a twenty-year, period resulting in a large and varied number of designs such as:

a) The Clanger (around 1907) - An attached secondary beater on a bass drum pedal simultaneously struck a cymbal mounted vertically to the bass drum hoop. The Clanger could be disengaged to allow for only the bass drum to be struck. The Clanger can be seen in the following chapter 2.4.5, Figure 16 (page 47).

b) The Snow-Shoe (pre-1920) - Two wooden boards were hinged together with cymbals attached to the end. With springs separating the boards, the player's foot was placed in a strap, enabling the foot to press the two cymbals together. This is called the "Ludwig Left-foot Cymbal Pedal" shown in Figure 2 (page 16).

¹⁷ "Beck, "Alphabetical Listing of Percussion Instruments and Terms," in *The Encyclopedia of Percussion*, 45.

c) The Lowboy, also called a Sock Cymbal or Low-Hat (1925) - The first pair of cymbals mounted on a vertical rod controlled by a foot-operated pedal.¹⁸ The Lowboy was similar to the modern hi-hat except only about nine inches from the ground. At this time drummers began to emphasize the weak beats of the music (beats two and four) with greater ease. Previously this was done by hitting a cymbal then immediately “choking” it; a technique that required two hands. This is called the “Ludwig Sock Cymbal Pedal” shown in Figure 2.

d) The Hi-Hat (around 1927) - The Ludwig¹⁹, Leedy and Slingerland companies raised the Lowboy with an added metal pipe and introduced the hi-hat. This is called the “Ludwig High Hat Cymbal Pedal” shown in Figure 2.

Drummer ‘Papa’ Jo Jones (1911-1985) who was frustrated with the limitations of the Lowboy, embraced the hi-hat design saying, “I couldn’t reach down there and play the sock cymbal on the floor.”²⁰ Drummers such as Jones and his predecessor, Sonny Greer (1898 - 1982) developed a wide range of sounds and techniques still common today, moving between loud foot attacks that splashed the hi-hat cymbals together, quiet ‘chick’ sounds or playing the hi-hat with his sticks. Greer implemented these sounds in the late twenties with the Duke Ellington Orchestra.²¹ Playing in the Count Basie Band during the thirties, Jo Jones further involved the hi-hat as the main timekeeper.

In reaction to this, the strong emphasis of the bass drum on beats one and three moved to a smoother four beat pulse. In doing so “the drummer increasingly became a cymbal player and not a performer who used only the drums... The bass drum, the key time center, began to assume a lesser role.”²² This placed a greater role on the hi-hat which drove the bands of the swing era.

¹⁸ Chet Falzerano, "The Evolution of the Hi-Hat," *Modern Drummer*, September 1990, 76.

¹⁹ An add for the “Ludwig High-Hat” is found in the May, 1927 in *The Ludwig Drummer* (April 1926 to Spring 1948), 65.

²⁰ Chip Stern, "Papa Jo Jones," *Modern Drummer*, 8, no. 1 (1984): 44.

²¹ Early footage of Greer can be seen on *At the Jazz Band Ball: Early Hot Jazz, Song and Dance 1925-1933*. Yazoo Video 514, 2000. DVD.

²² Korall, *Drummin' Men, The Heartbeat of Jazz: The Bebop Years*: 149.

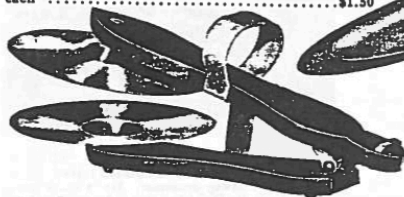
Cymbal Stunts Make You More Popular Get in the Spotlight

Here's a New Cymbal Effect!
Ludwig Oriental Jazz Cymbal

The cymbal at the right is made in China and resembles the Chinese Crash, but is smaller in size. You'll be surprised at the sustaining power and sharpness of tone from this little cymbal. Drummers like Ralph Smith use it for complete strains of cymbal solo or rhythmic beats. You can't have too many cymbals. The greater variety you give to your playing the better you will enjoy your work and the more comments your playing will bring to you and your orchestra. No orchestra is better than its drummer. Be the first one to use this in your territory. If your Ludwig dealer hasn't one write us direct. Your cymbal collection isn't complete without one of these new Oriental Jazz Cymbals. No. 409 \$.....\$2.25

Ludwig Deep Cup Cymbals

For sock and squash effect use this cymbal. Spun from American brass of a heavy gauge. Use the Ludwig Deep Cup cymbal on the HIGH Hat and Sock Pedals and the Simplex holder. Similar to cymbals shown at right, cup to cup, on Simplex cymbal holder, No. 347 \$, but with deeper cups. No. 410 Ludwig 10-inch Deep Cup Cymbal, each\$1.50



Ludwig Left-foot Cymbal Pedal

Affectionately called by drummers the "Snowshoe" cymbal. There are more of these wooden pedals in use than all other cymbal pedal models combined. Complete with cymbals, as illustrated above, No. 940.....\$5.00

Ludwig "Sock" Cymbal Pedal

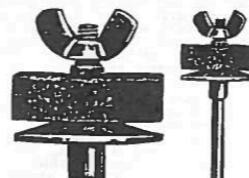
This strap is not merely a passing fancy. It will remain as a standard part of the drummer's kit. In addition to its importance in popular music, it serves a long felt want for concert and pit playing. Helps accent certain beats, and increases an "fz" crescendo to a greater volume and with less effort than is possible by the old method. The use of this cymbal permits the drummer to keep both hands playing snare drum or other effects. In imitating military band drumming use this pedal. For alternate cymbal and bass drum alone beats, so often written in the finale of concert numbers, while snare drum rolls in solo, a hitherto impossible score is played with ease. No. 941 \$ illustrated below, without cymbals.....\$5.00



Ralph Smith is here shown playing some of his famous cymbal rhythm solos on a pair of Ludwig brass cymbals tied together, cup to cup. Notice the small cymbals atop the cymbal suspending arm held by Ludwig "Suspenders."

Ludwig "Simplex" Cymbal Holders

Here are two of the rigid type cymbal holders. This is the holder drummers have been talking about so much of late. One holds two cymbals, cup to cup, loosely for sock work. The other holds one but has a unique little clamping device which is fastened independently to cymbal. Lifting cymbal off upright, takes clamp along. No need to unscrew every time. Convenient. No. 347 \$ Illustrated at left...\$2.50 No. 346 \$ Illustrated at right... 2.00



Enlarged Rocking Cup Detached



The below cymbal rhythm is again published because of the many requests we have had for extra copies of back numbers to get this particular score.

Cymbal and Bass Drum Beats



Ludwig Spring Hand Cymbals



Used in pairs or single. When used in left hand only, right hand plays stick beats in connection with open and closed "Clinks." No. 431.....\$2.50 No. 343 Clamp, extra.....40c

Figure 2: Ludwig's snowshoe, sock pedal and hi-hat, 1927.²³

²³ Ludwig-Jr. et al., "The Ludwig Drummer: April 1926 to Spring 1948," 87. Permission from Centerstream Pub.

1.3.3 Kenny Clarke: The Ride Cymbal

Playing the hi-hat requires crossing the right hand (typically the strong hand) over the left hand which is playing the snare drum. This was the driving pulse of the big band swing in the thirties. Feeling restricted by this arrangement, drummer Kenny Clarke (1914 - 1985) moved the swing pattern over to a mounted cymbal on his right side, which would eventually be known as the Ride cymbal.²⁴ This opened up the possibility of four unique voices for the drummer, and with control now on the mounted cymbal, Clarke began to experiment with these voices. While playing in the Teddy Hill band along with trumpeter Dizzy Gillespie, Clarke was the first to define his playing as “coordinated independence.”²⁵

With the density of Dizzy Gillespie’s playing combined with the increased speed in the Teddy Hill band, Clarke began to leave the steady four-beat pulse in the bass drum, most common in the Swing era. He started to increase accents (at the time called *bombs* and *klook-mops*) and explore rhythmic variations more than ever before. Dizzy Gillespie described Clark’s playing, saying:

Kenny was modifying the concept of rhythm in jazz, making it a much more fluid thing, and changing the entire role of the drummer, from just a man [sic] who kept time for dancers to a true accompanist who provided accents for soloists and constant inspiration to the jazz band as a whole. Kenny’s style of drumming, with ‘bombs’ and ‘klook-mops’ in the bass drum and regular rhythm in the cymbals, was ideal for me...These were important changes. A lotta people didn’t like them. Kenny had to suffer a lot to make those changes, but in the end, he turned out to be right... He infused a new conception, a new language, into the dialogue of the drum, which is now the dialogue.²⁶

Kenny Clarke was appointed musical director of Minton’s in 1941 where he assembled a group that included Thelonious Monk on piano. With the accented, rhythmic playing of Monk,

²⁴ The Zildjian company only made cymbals with indications like “Ride” by the early 1950s, along with the invention of the first tilting cymbal stands. *The Cymbal Book* (Milwaukee: Hal Leonard, 1992), 20.

²⁵ Hennessey, *Klook: The Story of Kenny Clarke*: 27.

²⁶ Dizzy Gillespie, *To Be, or Not... to Bop*, ed. Al Fraser (New York: Doubleday & Company Inc., 1979). 98-99.

Clarke accented more on the bass drum. The use of the lighter ride cymbal, rather than the hi-hat, complemented the more irregular rhythms of the other musicians. Minton's was considered to be the "bebop laboratory" where Kenny Clarke along with guest musicians such as Charlie Parker, Dizzy Gillespie and others, would define the be-bop style.

1.4 Exploring Artistry: Drumset Soloing

The development of coordinated independence not only changed the drummer's approach to timekeeping and interaction with the other musicians, but it introduced a new level of musical expression. With greater independence, drummers began to explore the expressive elements of the drumset such as texture, colour and dynamics along with the melodic potential of the instrument. This evolution also began in New Orleans, with the early drumming styles of individuals such as Baby Dodds.

1.4.1 Baby Dodds: Cowbells, Woodblocks, Rims and Shells

African American, and New Orleans born drummer Warren 'Baby' Dodds (1898 - 1959) is a key figure in the development of early Ragtime drumming. His development is reflective of the early traditions, beginning as a bass drum player in a New Orleans marching band, then learning rudimental snare drum, double drumming and finally drumset. In 1918, Dodds took a job with the Fate Marable band aboard the S.S. Sidney, a steamboat on the Mississippi River. In 1921 he was asked to join the King Oliver band in San Francisco. The band moved to Chicago in 1922 and included trumpeter Louis Armstrong. Dodds made his first recording with the Oliver

band in April of 1923²⁷ and went on to record with Jelly Roll Morton in 1927²⁸ and Louis Armstrong's Hot Sevens by 1928.²⁹

During this time, Dodds influenced a young generation of drummers in Chicago, helping to define the early jazz style. This style was rooted in the traditional role of timekeeper, while also being more expressive than any other drummer at the time. Dodds explained his method of laying a foundation with the drumset:

It was my job to study each musician and give a different background for each instrument. When a man is playing it's up to the drummer to give him something to make him feel the music and make him work. That's the drummer's job... The drummer should give the music expression, shading, and the right accompaniment.³⁰

His unique expressive approach was to move the pulse around the drumset, from the snare drum or snare rim to the shell of drums, woodblocks, cowbells and cymbals, creating a wide variety of textures. Reinventing the drummer's role, Dodds created a new awareness of the instrument's melodic potential.

In 1946, and well into his career, Dodds recorded the first album of drum solos for Folkways Records. These solos were to document the early drumming styles rooted in rudiments, ragtime and early Chicago jazz that Dodds pioneered in the twenties. Frederic Ramsey Jr. in the original 1946 record sleeve states,

It has taken a lifetime to produce this album of drum solos. Into it has gone all of Baby Dodds' own work and experience. This includes all that his early teachers, the pioneer New Orleans drummers...could pass on to him. Perhaps it goes back beyond one lifetime; for Baby remembers that his grandfather drummed in Congo Square, in the days before any jazzbands had been formed.³¹

²⁷ Various Artists, *The Engine Room: A History of Jazz Drumming from Storyville to 52nd Street* (London: Proper Records P1105-P1108, 1999), 4 compact discs. Disc 1, Track 2.

²⁸ Ibid., Disc 1, Track 5.

²⁹ Brown, "A History and Analysis of Jazz Drumming to 1942.," 223.

³⁰ Larry Gara, *The Baby Dodds Story as told by Larry Gara* (Alma: Rebeats Publication, 2002; repr., 1992). 39.

³¹ Generously donated by Owen Clarke, *Baby Dodds Drum Solos* (Folkways Records, 1946).

The included transcription of the solo *Spooky Drums No. 1* (Appendix 1) demonstrates how Dodds remains true to his techniques. Having never seen the use for the hi-hat, Dodds places the pulse solidly on all four beats with the bass drum. The opening measures' "marching call" references the close link with military drumming that dominated early performance practices. Dodds then moves through a variety of melodic motifs, focusing in particularly on the cowbells, rims, drum shells, woodblock and the three toms. All of these unique sounds have been given their own distinct notation in the transcription. Since recording technology of the twenties lacked the ability to properly capture the full array of instruments in the drumset, these Dodds solos act as the only existing record of a mostly abandoned, early drumset performance style.

1.4.2 The Snare drum: Rim Shots, Stick Shots and Double-Flange Rims

Chicago drummer Bob Conselman and others expanded Baby Dodds' experiments with the snare drum and rim. Conselman recorded the earliest example of the rim shot in 1927 with Benny Goodman's first trio, on the song "That's a Plenty."³² The rim shot (causing a sharp "crack" sound) occurs when the stick hits both the rim and snare drum head at the same time. The stick shot (a warmer sound than rim shot) was also developed in Chicago around that time. This is achieved by holding one stick tip on the head of the snare drum around thirty degrees and hitting that stick with the opposite stick. These exciting, accented "pops" caused drumsticks to break sooner due to the impact on the sharp metal rim (called a double-flange). In response to this issue, Cecil Strupe, an engineer from the Ludwig Company, turned the top edge of the metal rim over and out, allowing for a smoother, less abrasive edge. This established the "Triple-Flange" rim common on many drums today.³³

³² Brown, "A History and Analysis of Jazz Drumming to 1942.," 309.

³³ Nicholls, *The Drum Book: A History of the Rock Drum Kit*: 16.

1.4.3 Gene Krupa: Tom-Toms and the Modern Drumset

Gene Krupa (1909 - 1973) rose to fame with the Benny Goodman big band, most notably with the 1937 recording of “Sing, Sing, Sing.” The opening, iconic tom-tom solo brought the drumset to the forefront of the band and established Krupa as the most popular drummer of the Swing era. It also helped the drum solo to be a regular part of most bands’ set and a major audience attraction. Eventually leaving Goodman to lead his own band, Krupa began starring in movies, becoming a common name in popular culture.

Up until the early thirties, the standard tom-toms on the drumset were imported from China or made in the United States and were based on the small, non-tunable Chinese designs. By 1924 examples of up to five of these tom-toms, mounted in descending pitch order on the bass drum, can be seen.³⁴ In the late thirties, Gene Krupa suggested to the Slingerland drum company that they create double-sided toms with independent tuning allowing controllable pitch and greater resonance and projection. This met the needs of the heavier playing in the big band Swing era and the wider use of toms in Krupa’s playing.

Featured on the cover of the Slingerland catalogue for almost thirty years, Krupa’s popularity helped standardize the four-piece (bass drum, snare drum, mounted tom and floor tom) modern drumset. His Slingerland Radio King with white pearl finish became the most popular drumset in America. Krupa also helped the progress of drumset performance by writing drum instructional books and even formed the Gene Krupa drum contest (whose first winner was a young drummer named Louie Bellson [Chapter 1.4.5]).

³⁴ Aldridge, *Guide to Vintage Drums*: 27.

1.4.4 Max Roach: Melodic Drumming and Ostinato Solos

At the age of seventeen Max Roach (1924 - 2007) was asked to sit in with the Duke Ellington band at the Paramount Theatre in New York. By the next year he was playing with the inventive saxophone player Charlie Parker. His playing in the forties, particularly with Parker, demonstrates the redefined role of the drummer in the new be-bop era. Like his predecessor Kenny Clarke, Roach explored the potential of coordinated independence, adding an even higher level of freedom and complexity. As Korall writes in *Drumming' Men*:

The drums no longer played just a limited, circumscribed, timekeeping role in the rhythm section. The drummer became a major participant, much more of a partner in what was done in the small group and big band. Expressing time and a variety of rhythms, color, and personality, Roach and Kenny Clarke before him related more directly to the music and musicians than their predecessors. The instrument was reborn.³⁵

In the 1950s Roach attended the Manhattan School of Music to study composition and theory. Applying these skills to his drumming, particularly with trumpeter Clifford Brown, Roach increasingly used the drums to produce melodic lines and phrases integral to the songs' compositional structure. He introduced drum solos throughout the fifties and sixties that merged composition with improvisation. The most popular solo, "The Drum Also Waltzes" from the 1966 album *Drums Unlimited*, explored rhythmical complex drum melodies over a 3/4 ostinato played between both feet. While a highly influential work for jazz drummers, the solo has also been duplicated by some of the world's most influential rock drummers such as John Bonham, Neil Peart, Steve Smith and Bill Bruford.

Max Roach's playing proved that the drumset was a melodic instrument and an integral part of the musical composition. He raised the status of the drummer to that of an equal in complexity and musicality to that of the other musicians, at a time when drumset performance

³⁵ Korall, *Drummin' Men, The Heartbeat of Jazz: The Bebop Years*: 98.

was not always perceived as such. As a result of this heightened reputation and new mentality, Roach called himself a multiple percussionist, rather than simply a drummer. However Max Roach is labeled, he is undoubtably one of the most important contributors to establishing the drumset as a solo instrument.

1.4.5 Louie Bellson: Double Bass Drum and Double Pedals

Louie Bellson (1924 - 2009), at the age of fourteen, is said to have drawn the first picture of a double bass drumset while at school, and is later credited for suggesting the concept to the Gretsch drum company.³⁶ Using essentially two drumsets placed side-by-side and a snare drum in between, the player had the left foot on one bass drum pedal and the right foot on the other. Bellson played with this setup throughout his entire career, recording with such greats as Duke Ellington, Count Basie, Tommy Dorsey, Art Tatum and many others. His composition “Skin Deep”³⁷ (1953) written for the Duke Ellington band, features one of his most well-known drum solos and is the first recorded example of the fast and thunderous sound of double bass drum technique.³⁸

By the late sixties and seventies the use of double bass drums was almost the standard for drummers of popular rock groups. The potential for greater speed and power enticed drummers such as Ginger Baker (1939-) of the band Cream, Carmine Appice (1946-) of Vanilla Fudge and Keith Moon (1946-1978) of The Who – all of whom played with two bass drums. Not only sonically powerful and technically impressive, the double bass drums also made a visual statement of grandeur and excess in a rock music industry where “bigger was better.”

³⁶ Matt Dean, *The Drum: A History* (Lanham: Scarecrow Press, Inc., 2012). 203.

³⁷ Louie Bellson, "Skin Deep," <http://www.youtube.com/watch?v=feF0DzZiwzQ>. Accessed May 7, 2013

³⁸ Mike Haid, "Top 25 Drum Solos Of All Time," *Modern Drummer* 30, no. 4 (2006): 104.

This was also a time when a new generation of drummers was beginning to perform with heightened complexity, exploring new creative paths through the progressive rock and fusion styles.

1.5 Blurring the Boundaries: Progressive Drumming

In the late sixties and seventies some rock musicians explored large musical forms and concepts, and drew influence from various elements of classical, jazz and world music. Styles like progressive rock and fusion placed a heightened emphasis on composition and arrangement. This not only guided the compositional aspect of the music but also the performance practices, soloing and instrument set-ups of many drummers.

1.5.1 Carl Palmer: Orchestrated Drumming

In 1971, Carl Palmer's (1950 -) band Emerson, Lake & Palmer reinterpreted Modest Mussorgsky's *Pictures at an Exhibition*.³⁹ Influenced by the original symphonic work, Palmer began what he called "the rock/classical drummer crossover period."⁴⁰ His playing essentially re-orchestrated elements of Mussorgsky's percussion section while reinforcing parts being played by the rest of the band.

Having studied classical percussion with both James Blades at the Royal Academy and Gilbert Webster at the Guild Hall of Music, Palmer had a natural interest in bringing elements of these performance practices into his rock drumming. This was most reflective in his drumset. For the recording of *Brain Salad Surgery* in 1973, Palmer introduced his stainless steel drumset that included nine individually engraved toms, a snare drum, and an enormous 28" x 20" bass drum.

³⁹ Emerson Lake & Palmer, *Pictures at an Exhibition* (Island Records, 1971), LP.

⁴⁰ Ken Micallef, "Carl Palmer: From The Beginning," *Modern Drummer*, June 2005, 123.

Palmer also included approximately twelve cymbals, two large symphonic gongs (38" and 50") two timpani, a church bell, tubular bells, temple blocks, triangle, ratchet and vibraslap.⁴¹

1.5.2 Neil Peart: Compositional Drumming

Neil Peart (1952 -) joined the Canadian band, Rush, in 1974, quickly establishing himself as one of the world's most creative and technically advanced drummers. Still performing over forty years later, Rush's substantial catalogue along with Neil Peart's own DVDs and countless interviews, provide details on a unique approach to drumset performance and the drumset itself.

Traditionally, drumset performance has involved various degrees of improvisation. In jazz, improvisation is the defining element. While players such as Max Roach would repeat solos, themes, motifs and forms throughout their career, this was always balanced against improvisation and experimentation. In rock, drummers have established iconic drum fills, rhythms and solos but generally have approached them with a sense of freedom and flexibility. For example, John Bonham of the band Led Zeppelin, played the drum solo "Moby Dick" (first released on *Led Zeppelin II*) for most of his career, but with often drastically different content, form and length.

One of the most distinct aspects of Peart's approach is his method of composition and emphasis on accurate repetition of drum parts throughout his career. This is a practice he established in the seventies and continues today.

[I] think of myself as a compositional drummer, and not so much improvisational. It is much more my strength to be able to organize a part musically. Take a song like 'Tom Sawyer,' it's still right to me. I'm still quite so happy to play it exactly like that. It's always hard. It's always challenging, if I get it right. So, that's been my kind of *modus operandi* all these years - make up a really good part then try to play it as well as I can every time.⁴²

⁴¹ "Carl Palmer's gear," http://www.brain-salad-surgery.de/carl_palmers_gear.html.

⁴² Jonathan Mover, "A Conversation with Neil Peart," *Drumhead Magazine* September/October, no. 4 (2007): 21.

Peart incorporated a large setup during the seventies that, along with double bass drum, included tubular bells, glockenspiel, temple blocks and cowbells. Today many of the extra percussion instruments have been replaced with the MIDI percussion keyboard called the Malletkat. A current photograph of his drumset can be seen in Figure 3. He composed drum parts that supported the band, controlling odd time signatures in a way that felt comfortable and grooved. At the same time he added melodic motifs and thematic material that gave the music a greater sense of orchestration. For example, the song “Xanadu” from *A Farewell to Kings* in 1977 includes melodic temple blocks, reoccurring tubular bells (typically emphasizing the tonic or dominant of the key), cowbells that form a contrapuntal melody with Alex Lifeson’s guitar line (3:49), and playing the melody on glockenspiel in unison with Geddy Lee’s synthesizer (6:09 and 8:20).

Neil Peart’s drum solos, while not recorded on any studio album, have been a regular part of the live Rush show. They explore the melodic possibilities of his drumset, technical concepts and musical styles, and are composed ahead of time and repeated in each concert of a tour. With titles such as “O Baterista,” “Der Trommler,” “De Slagwerker,” and “Moto Perpetuo,” Peart, through his use of Spanish, German and Dutch, hints at classical European tradition.

Neil Peart’s drumming is a uniquely formal and consistent approach in music that has typically had more freedom. Combining this consistency with the melodic elements of his playing and elaborate setups, Peart creates a link between rock and classical performance style, thereby forming a model for the potential of through-composed works for drumset.



Figure 3: Neil Peart's drumset.⁴³

1.5.3 Billy Cobham: Ambidextrous Drumming

Billy Cobham (1944 -) established himself as a leading drumset performer in the early seventies, playing with John McLaughlin in the Mahavishnu Orchestra. A left-handed player, Cobham played “open-handed” and was the first drummer to introduce the concept of complete

⁴³ Photo generously created and provided by John Arrowsmith and Rush.com. For this thesis only and not for reproduction.

independence through an ambidextrous technique. His 1973 album *Spectrum* showed a new level of speed, dynamic sensitivity and double bass drum skills: it bridged a musical gap between the rock and jazz fusion of the time. For example, the song “Quadrant 4” combined a rock-shuffle, played with two bass drums, with the typical jazz ride cymbal pattern (Figure 4). Cobham’s complexity, aggressiveness and virtuosity paved the way for a future generation of extreme drummers.



Figure 4: Billy Cobham’s shuffle groove from “Quadrant 4.”⁴⁴

1.6 Pushing the Limits: Heavy Metal and Extreme Drumming

The growth of the heavy metal and more recently the extreme metal genres has pushed drumset performance to new levels of skill. The extreme speeds, complex meter and the addition of new techniques such as the blast beat have brought a new level of popularity and legitimacy to the genre and the drummers who play the music.

Metal is a progressive genre, and over time the main elements that define the genre have been stretched in an ongoing search to take the music beyond its current state.⁴⁵

The following four waves of heavy metal styles introduce the resulting drumset techniques that have found their way into a broader range of styles today.

⁴⁴ Transcription created by the author.

⁴⁵ Dean, *The Drum: A History*: 274.

1.6.1 British Heavy Metal: Rhythmic Unison

Drummer Bill Ward of the British band Black Sabbath introduced a playing style that was not only aggressive on its own, but that, by interacting and copying the rhythms of the guitar, established a unique sense of ensemble playing and power. A clear example of this is in the song “Iron Man” from the 1970 album *Paranoid*. Each time the guitarist plays, the now, famous guitar riff, Ward plays a pattern in rhythmic unison (Figure 5).



Figure 5: Unison guitar and drums in “Iron Man” by Black Sabbath.⁴⁶

Many drummers of the genre continued to use large drumsets and began suspending the multiple, and often large, tom-toms. This resulted in the manufacturing of new and stronger hardware and the introduction of the drum rack – a square structure of aluminum that held all hardware, toms and cymbals.

1.6.2 American West Coast Glam Metal

Tommy Lee of the band Motley Crue continued to popularize the drum solo with flare and the showmanship signature of the Glam Metal genre. His elaborate drumset could spin 360 degrees while he played. Alex Van Halen of the band Van Halen pushed the speed and complexity of double bass drumming with the song “Hot for Teacher” on the album *1984*. The

⁴⁶ Transcription created by the author.

shuffle bass drum pattern mirrors the Billy Cobham groove on “Quadrant 4” (page 28) while adding a new of the heavy metal drive.

1.6.3 Thrash: The Skank Beat, The Blast Beat and Double Kick Pedals

Drummer Lars Ulrich of Metallica combined the British heaviness with the fast, uptempo punk rock beats to define the thrash style. The thrash beat, also called the “skank beat” (Figure 6) can be heard in songs such as “Battery” from *Master of Puppets* in 1986.⁴⁷ Drummer Dave Lombardo of Slayer pushed the speed of thrash drumming beyond the technical abilities of Ulrich and many drummers in the late eighties, most notably with his playing on the 1986 *Reign in Blood*.



Figure 6: The Skank or Thrash Beat.⁴⁸

Within Thrash, the “blast beat” evolved from the increased speed of drumming around this time. The blast beat (Figure 7) is a single stroke roll (alternating between right and left hand) with one hand on a ride cymbal or hi-hat and the other on the snare drum. The bass drum plays in unison with the cymbal and is generally played at speeds of over two hundred beats per minute.

⁴⁷ Derek Roddy, *The Evolution of Blast Beats* (Hudson Music Limited, 2007). 14.

⁴⁸ Transcription created by the author.



Figure 7: The Blast Beat.⁴⁹

The extreme speed of this music has resulted in drummers favouring a setup focused on efficiency rather than excess. In 1983, the company Drum Workshop (DW) helped make this possible by releasing the first double kick pedal (DW5002) which allowed drummers to achieve the double bass drum performance on a single bass drum. Since then, various companies have created their own unique versions of this design (Figure 8).



Figure 8: “Demon Drive” Double Pedals by Pearl.⁵⁰

⁴⁹ Transcription created by the author.

⁵⁰ Photo used with permission from Mike Farriss, Director of Artist Relations, Pearl Corporation, October, 2013.

1.6.4 Death Metal: The Hammer Blast

The Death Metal genre developed in the early nineties and its drummers introduced a more extreme version of the blast beat called the “hammer blast.”⁵¹ This involved the snare drum and hi-hat playing together on all beats with the bass drum in unison or double speed of the hands (Figure 9). The notable technique of this beat is the speed of repeated strokes in the drummers’ individual hands. Pioneers of this beat include drummers Derek Roddy (with bands such as Nile, and Hate Eternal) and Gene Hoglan (with bands such as Death, Fear Factory and Strapping Young Lad).



Figure 9: The Hammer Blast.⁵²

This chapter introduced key artists, groundbreaking techniques and unique instrument designs that have formed the deep roots of current drumset performance practices. The heightened awareness of history and traditions will prove fundamental to the exploration of drumset performance in the context of contemporary music. The following chapters present four unique approaches to composition and the various composers, repertoire and resulting performance practices for drumset in contemporary music.

⁵¹ Derek Roddy, *The Evolution of Blast Beats* (Hudson Music Limited, 2007). 18.

⁵² Transcription created by the author.

Chapter 2. The Tourist Approach

2.1 Definition

The earliest approaches to drumset composition were created by assimilating existing drumset techniques and instruments into a composer's personal style to create something new and exotic. The idea of a composer as a "tourist" is based on Bernard Gendron's description of Igor Stravinsky and Darius Milhaud, who drew upon popular culture as a means for new creative expression. As Gendron puts it, in a "growing pursuit of, and absorption in, the exotica of foreign lands... [the tourist composer is] substantially enriched by what he picks up along the way."⁵³

The earliest examples of compositions including drumset developed from this movement and during the 1910s and 1920s when European composers were infatuated with a new popular music style from America called jazz. Stravinsky, while not using the drumset specifically, spearheaded this approach by incorporating double drumming techniques in his work for small ensemble, *L'Histoire du Soldat*. Next, Milhaud's *La Création du Monde* infused idiomatic drumset performance practices and authentic drumset devices into a chamber orchestra setting. The Tourist Approach acts as an introduction to, and acknowledgement of this important and unique time in history.

2.2 Early Jazz in Europe

World War I opened France and surrounding European areas to British, African and African American soldiers and workers.⁵⁴ Many soldiers who survived the war, in particular Africans and African-Americans, stayed in Paris, preferring the conditions and lifestyle there to

⁵³ Bernard Gendron, *Between Montmartre and the Mudd Club: Popular Music and the Avant-Garde* (Chicago; London: The University of Chicago Press, 2002). 92.

⁵⁴ Jeffrey H. Jackson, *Making Jazz French: Music and Modern Life in Interwar Paris* (Durham; London: Duke University Press, 2003). 13.

those back home. Post War France was a country in transition – economically, sociologically and artistically. The city of Paris was a place of revival, modernization and growth. Representing a model for the future, the United States was regarded by France as being at the forefront of the modern age. This association between a vision of the future and the United States also generated an interest in the sounds of jazz.

Radios and phonographs helped bring the new style of music into homes throughout Europe. One of the first recordings was “Livery Blues” recorded in 1917 by the Original Dixieland Jazz Band (with drummer Tony Sbarbaro, Chapter 1.2.2). In 1918 James Reese Europe, leader of a famous black society dance band in the US, was stationed in France and assigned to form a brass band for the US Army. The band, called the Hellfighters, which toured throughout France, could play everything - Brahms overtures, marches, popular songs, dance numbers and “plantation melodies” and toured throughout France.⁵⁵

Around the same time in the United States, music that had been developing in the early twentieth century in New Orleans with roots in African, African-American and Creole culture was just beginning to migrate North, influencing a new generation of musicians in Chicago. With a foundation in improvisation, this music, considered today the foundation of jazz, took time to spread to other parts of the world. In the meantime, Europe’s limited understanding of what jazz really was, assumed the term to include a variety of styles and techniques including blues, ragtime, the Original Dixieland Jazz Band’s popular take on ragtime known as Dixieland, Tin Pan Alley songs from New York City and, generally, any music played by dance bands at the time.

⁵⁵ Gendron, *Between Montmartre and the Mudd Club: Popular Music and the Avant-Garde*, 108-09.

Stravinsky's *L'Histoire du Soldat* and Milhaud's *La Création du Monde* received inspiration from this early awareness and understanding of jazz. As they incorporated musical elements of jazz, this naturally included the drumset. As Jackson writes in *Making Jazz French*:

Despite the confusion during these early days, there was at least one common musical meaning when people in France invoked the term *jazz*: it meant rhythm and the instruments used to make it. Above all, the drums - *la batterie* - were not only the most prominent instrument but their mere presence, many believed, made any band into a jazz band.⁵⁶

At this time, performance practices were still transitioning from the early double drumming to seated drumset independence. Drummers like Baby Dodds were exploring new levels of creativity and establishing the instrument as a central figure in popular music.

2.3 *L'Histoire du Soldat* (1918) by Igor Stravinsky

2.3.1 Background

By the end of 1917, the ongoing war was beginning to take a toll on Stravinsky and his family. Living in Morges, Switzerland, they were cut off from the family estate in Russia, and Stravinsky was even unable to collect royalties from his publishers. "The Communist Revolution, which had just triumphed in Russia, deprived me of the last resources... and I found myself, so to speak, face to face with nothing, in a foreign land and right in the middle of the war."⁵⁷

During this time, Swiss author C.F. Ramuz, a good friend of Stravinsky, was seeing the sales of his recent novel decline and he too, was in need of work. Since Ramuz lived near Stravinsky, just outside of Lausanne, the two men agreed to use their limited resources to write a

⁵⁶ Jackson, *Making Jazz French: Music and Modern Life in Interwar Paris*: 29.

⁵⁷ Igor Stravinsky, *An Autobiography* (New York: W.W. Norton & Company, 1962). 70.

simple work for a small theatre, cast and orchestra, all with minimal cost.⁵⁸ The resulting musical theatre work, *L'Histoire du Soldat*, was premiered in Lausanne on September 28, 1918.

L'Histoire included only three elements: a narrator, two actors and a small orchestra. All three elements interacted together on stage, keeping production simple and portable. This arrangement made it necessary for Stravinsky to use a small, seven-piece ensemble (one percussionist, trombone, cornet, bassoon, clarinet, double bass and violin). Stravinsky tells of looking to jazz bands for inspiration:

My choice of instruments was influenced by a very important event in my life at that time, the discovery of American jazz... The *Histoire* ensemble resembles the jazz band in that each instrumental category—strings, woodwinds, brass, percussion—is represented by both treble and bass components. The instruments themselves are jazz legitimates, too, except the bassoon, which is my substitution for the saxophone.⁵⁹

The exact degree of influence that jazz, and jazz drumming had on *L'Histoire* is difficult to decipher. This is due to Stravinsky's contradictory writings, which include the previous quote, that mentions the influence of jazz band sonorities and range: yet in a separate quote, Stravinsky admits that at the time of writing the piece, he had not heard jazz:

My knowledge of jazz was derived exclusively from copies of sheet music, and as I had never actually heard any of the music performed, I borrowed its rhythmic style not as played, but as written. I could imagine jazz sound, however, or so I liked to think.⁶⁰

The popular practice of double drumming in theaters, vaudeville and dance halls around the world in the early twentieth century does make it likely that while Stravinsky may not have heard or seen a jazz band, he would have been introduced to this popular drumming practice.

After all, by 1918 Stravinsky's fame as a composer had brought him throughout Europe and, in

⁵⁸ Eric Walter White, *Stravinsky: The Composer and his Works* (Berkeley, Los Angeles: University of California Press, 1966). 226-227.

⁵⁹ Glenn Watkins, *Pyramids at the Louvre: Music, Culture, and Collage from Stravinsky to the Postmodernists* (London: The Belknap Press of Harvard University Press, 1994). 102.

⁶⁰ White, *Stravinsky: The Composer and his Works*. 232.

particular, Paris, where double drumming in theaters would have been prominent.⁶¹ The solo percussion part of *L'Histoire du Soldat* demonstrates Stravinsky's very basic awareness of the jazz style and his attempt to incorporate it into his composition. With similarities to double drumming techniques, it has impacted the existence of solo percussion repertoire today and the birth of what is now called the multiple percussionist.

2.3.2 Relation to Double Drumming: Setup, Rhythm and Soloing

Setup

In double drumming the foundation of the pulse was laid by the low pitch of the bass drum, while the snare drum provided rhythmic interest in the upper register (demonstrated in Chapter 1.2.2). Each of these instruments had a role in the patterns played and in providing consistent timekeeping. Stravinsky included these instruments in *L'Histoire du Soldat*, and surrounded them with cymbal, three tuned drums, tambourine and triangle.

Rhythm

In the “Three Dances” of *L'Histoire du Soldat*, Stravinsky referenced the double drummer's traditional role of timekeeper while adding to it a new degree of sonic and rhythmic complexity. With the double drumming setup, Stravinsky maintains the typical voicing of the bass drum (replaced at times by low tom-tom) as rhythmic foundation, with higher pitched instruments adding various degrees of syncopation. For example, in the “Tango,” shown in Figure 10, an idiomatic tango rhythm is displaced within a 2/4 or 3/4 time signature with interjections of 3/8, 5/8, and 5/16. Mallets (different in each hand) are specified for each attack,

⁶¹ Stephen Walsh, *Stravinsky: A Creative Spring: Russia and France* (Berkeley: University of California Press, 2002). 282-284.

resulting in varied textures and unusual sticking for the player. In the “Ragtime” we see basic, common syncopations related to the ragtime style which then distort and turn overtly complex within the changing time signatures. At the center of this music, simple dance rhythms are submerged into Stravinsky’s compositional style.



Figure 10: Tango Rhythm from “Tango,” *L’Histoire du Soldat*, mm. 42 - 59.⁶²

Soloist

As previously mentioned, the drums were considered to be at the centre of, and to be an identifier of, the early jazz style. It seems a natural fit for Stravinsky to be drawn to this emphasis considering his interest in complex percussion established through his earlier ballets such as *Petrushka* (1911) and *The Rite of Spring* (1913). In *L’Histoire du Soldat* the percussionist moves beyond timekeeper and becomes a soloist with an equal role in adding thematic material. There

⁶² Igor Stravinsky, *L’Histoire Du Soldat*, ed. Frank Epstein, Percussion Part (1995).

is a heightened level of interaction with the other musicians that draws attention to a more soloistic role for the percussionist. This comes to full fruition in the virtuosic final movement and percussion solo that ends the entire work (Rehearsal no. 17 in “Triumphal March of the Devil”⁶³).

This music indicates that Stravinsky was continuing to explore complexities in percussion writing (as he had begun with his ballets) but on a new platform and with a new set of tools. Stravinsky was not the only composer in Europe drawing inspiration from jazz. Others such as Francis Poulenc, Georges Auric and Erik Satie (members of the group called *Les Six*) added to this repertoire. Yet it was composer Darius Milhaud who set out to discover what he felt these composers did not – authenticity. This would result in the first composed, and notated music for the drumset in a classical, orchestral context.

2.4 *La Création du Monde* (1923) by Darius Milhaud

2.4.1 Background

Milhaud, like other composers in Paris, drew inspiration from the words of the artist Jean Cocteau. In his manifesto, *Le Coq et l'Arlequin* (1918), Cocteau called for a new sound in French music, dismissing the more “Russian-inspired impressionism” of past composers such as Claude Debussy.⁶⁴ “Enough of clouds, waves, aquariums, waterspirits, and nocturnal scents; what we need is a music of the earth, every-day music.”⁶⁵ Cocteau encouraged composers to draw inspiration from the new sounds of jazz, bringing together the “low-art” of the cafés and dance halls and exoticism of African culture into a new French modernist approach.

⁶³ Ibid.

⁶⁴ Barbara L. Kelly, *Tradition and Style in the Works of Darius Milhaud 1912-1939* (Aldershot: Ashgate Publishing Limited, 2003). 5.

⁶⁵ Jean Cocteau, *A Call To Order*, trans. Rollo H. Myers (London: Faber and Gwyer, 1918-1926). 19.

Dissatisfied with most European interpretations of American jazz, Milhaud toured through the United States in 1922 where he searched for what he called the “authentic” elements of jazz.⁶⁶ It was while visiting Harlem that Milhaud claims to have discovered the “pure tradition of New Orleans jazz.”⁶⁷ While difficult to know exactly what Milhaud heard that night, his romanticized description conveys his enthusiasm:

The music I heard was absolutely different from anything I had ever heard before, and was a revelation to me. Against the beat of the drums, the melodic lines criss-crossed in a breathless patter of broken and twisted rhythms. A Negress whose grating voice seemed to come from the depths of the centuries, sang in front of the various tables. With despairing pathos and dramatic feeling, she sang over and over again, to the point of exhaustion, the same refrain to which the constantly changing melodic pattern of the orchestra wove a kaleidoscopic background. This authentic music had its roots in the darkest corners of the Negro soul, the vestigial traces of Africa no doubt. Its effect on me was so overwhelming that I could not tear myself away.⁶⁸

Milhaud most likely heard a woman singing blues and spirituals rooted in New Orleans and African American traditions. The current “rage” for women blues singers was initiated by the success of Mamie Smith’s recording of “Crazy Blues” in 1920.⁶⁹

Immediately upon returning to Paris, Milhaud began to work on the music for the ballet, *La Création du Monde*, which was premiered on October 19, 1923. The ensemble was based on the orchestras he had seen in Harlem, featuring seventeen instruments: 2 flutes, 1 oboe, 2 clarinets, 1 bassoon, 1 horn, 2 trumpets, 1 trombone, piano, 2 violins, 1 saxophone, 1 cello, 1 double bass and 1 percussion.

In this percussion part, Milhaud displays an impressive ability to incorporate the idiomatic drumset techniques and rhythms of the time into the European classical setting. For the

⁶⁶ Darius Milhaud, *Notes Without Music*, ed. Rollo H. Myers, trans. Donald Evans (London: Dennis Dobson Ltd., 1952). 118.

⁶⁷ ———, *My Happy Life*, trans. Donald Evans, George Hall, and Christopher Palmer (London, New York: Marion Boyars, 1987, 1995). 109.

⁶⁸ ———, *Notes Without Music*: 118.

⁶⁹ Gendron, *Between Montmartre and the Mudd Club: Popular Music and the Avant-Garde*: 88.

drumset performer in the 21st Century, it is essential to recognize Milhaud's importance as the first composer for the instrument in contemporary music.

2.4.2 Jazz Drumset Instrumentation

The instruments that form the drumset in *La Création du Monde* combine those common to both the European percussionist and the drumset performer. This jazz drumset instrumentation, similar to the early setups of drummers like Baby Dodds (see transcription in Appendix 1), includes snare drum (*Caisse Claire*), bass drum with foot pedal (*Grosse Caisse à pied*), woodblock (*Bloc de bois*) and cowbell (*Bloc de métal*). Included with the foot pedal is the description, *Grosse Caisse à pied, avec cymbale*, or, “with cymbal”. This is referring to the “clanger,” which is described in Chapter 1.3.2 as a predecessor of the hi-hat. Milhaud indicates to the player when to activate or deactivate the clanger against the mounted cymbal (for example in Movement III). Milhaud's use of the clanger reminds us today of a unique time in the early development of drumset devices.

The more traditional European instruments along with the Tambourine (*Tambour de Basque*) include the Tenor Drum (*Caisse Roulante*), a drum lower in pitch than the snare drum, and the lowest pitched drum, often called the tambourin provençal (*Tambourin*).⁷⁰

While Gene Krupa wouldn't standardize the modern four-piece drumset (snare drum, bass drum, medium tom, floor tom) for another ten years or so, journals such as the *Ludwig Drummer* (as mentioned in Chapter 1.4.3) contain photos of multiple Chinese toms mounted in descending pitch on bass drums in the early twenties. Knowing Milhaud's exposure to the jazz band of the twenties, it is not surprising that he followed a similar setup. Although not as obvious

⁷⁰ Michael Rosen, "The Tambourin Provençal," in *The Encyclopedia of Percussion*, ed. John H. Beck (New York; London: Taylor Francis Group, 1995), 335.

because of the added European variations, the drumset for *La Création du Monde* is essentially based around the similar four-piece setup. A possible reason for not using authentic Chinese toms at the time was due to their inaccessibility compared to the common tenor drum and tambourin in French orchestras. For example, Georges Bizet wrote for the tambourin in the “Farandole” of his 1872 *L’Arlésienne*. Another possibility is that Milhaud may have purposefully blended the authentic elements of the drumset with that of the orchestral percussionist as a compositional tool.

It appears generally unknown or just forgotten that Milhaud’s original part for one percussionist not only included the drumset described above, but also timpani. He specifically stated that only seventeen players form the orchestra, which, when considering the other instruments, leaves room for only one percussionist. No original score exists of *La Création*, which Miller, in his dissertation *La Création du Monde: A Conductor’s Guide to Performance*, suggests were burnt in a fire during a Nazi raid of Milhaud’s apartment.⁷¹ In all available versions of the score, timpani and the drumset have been made into separate parts.

It is not surprising that Milhaud implemented such a large setup for one player. The most common setup in theatre orchestras at the time not only included drumset but timpani, keyboard percussion and much more. We also know that only a few years later, Milhaud would expand on this setup for his *Concerto pour Batterie et Petit Orchestre*, in 1929. This historical, first concerto for percussion included: four timpani, tam-tam, cymbals, tambourine, woodblock, metal block (cowbell), ratchet, castanets, triangle, bass drum with clanger and cymbal attachment, snare drum, field drum and tenor drum.

⁷¹ Robert Ward Miller, "Darius Milhaud's *La Création du Monde*: the conductor's guide to performance" (Dissertation, University of Iowa, 2011), 24.

2.4.3 Ragtime Rhythm

In *La Création du Monde*, Milhaud drew inspiration from the fundamental ragtime rhythms during this era of history when ragtime and jazz were considered to be the same, or similar, genres. This rhythm features groupings of three eighth notes, repeated over top of a quarter note pulse. These rhythms were commonly played on the drumset, often with the first note of each grouping played on the snare drum (with the left hand) and the other two notes played on the cowbell, woodblock, rims or tom-toms (with the right hand). In Figure 11 and 12, an excerpt from Baby Dodds' solo *Spooky Drums* shows a classic example of these stickings and voicings.

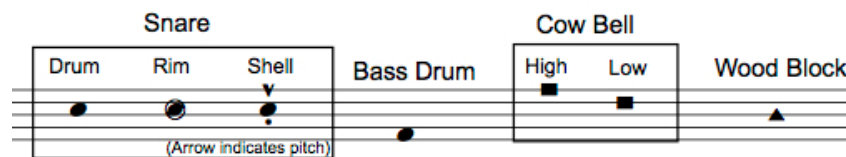


Figure 11: *Spooky Drums No. 1* - Drumset key.⁷²



Figure 12: *Spooky Drums No. 1* - Ragtime rhythm, mm. 100 to 101.⁷³

The following excerpt from *La Création* represents the remarkable similarity to, and understanding of, this approach to ragtime drumming that dominates the percussion part. Figure 13 is the exact pattern and sticking as in the Dodds above.

⁷² Transcribed by the author, digitized by Zachary Hale. See appendix #1.

⁷³ Ibid.

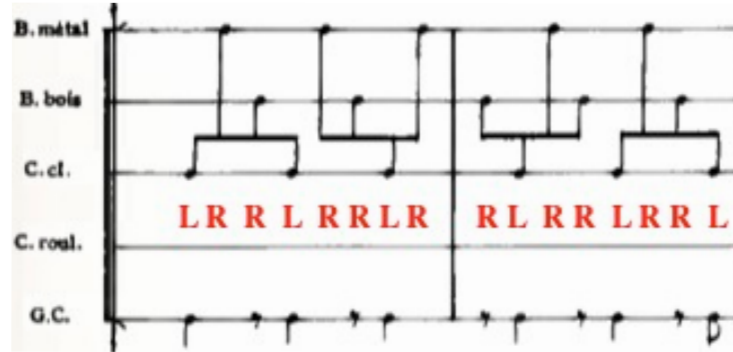


Figure 13: Drumset ragtime rhythm in *La Création du Monde*, No. 30, mm. 5 to 6.⁷⁴

2.4.4 Jazz Fills and Colours

Drummers of the early twenties, like Baby Dodds, performed fills, or added rhythmic activity, with quick movements across the various instruments of the drumset. As shown in Figure 14, Milhaud notates a similar looking fill played on the cowbell (B. métal), woodblock (B. bois), cymbal, snare drum (C.cl) and bass drum (G.C.), extending this material throughout the fourth movement. The fill becomes a repeating motif that drives the music to its concluding moments.

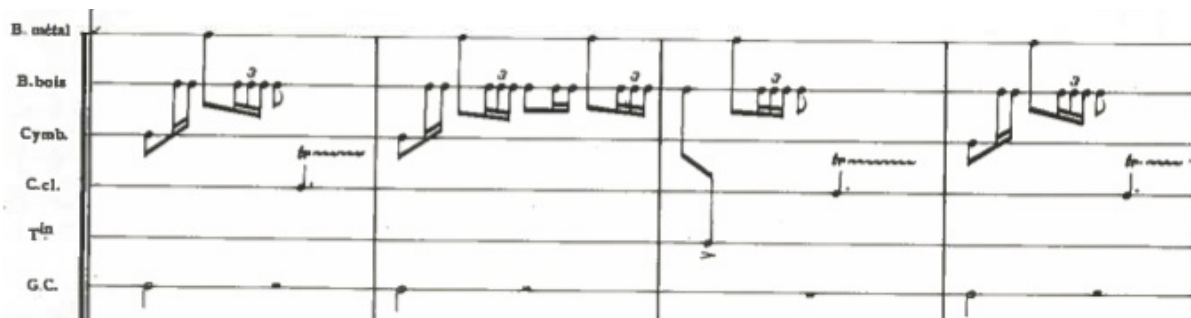


Figure 14: Drumset fills in *La Création du Monde*, throughout No. 46.⁷⁵

⁷⁴ Darius Milhaud, *La Création Du Monde* (Paris: Éditions Max Eschig, 1929).

⁷⁵ Ibid.

Along with the woodblocks, cowbells and previously mentioned clanger, Milhaud adds a distinct colour with the use of the “stick shot.” At Rehearsal No. 27, he instructs the player to “appuyer une bagette sur la peau et frapper sur cette bagette avec l’autre” clearly referencing the jazz technique developed in the twenties (described in Chapter 1.4.2).

2.4.5 Performance Preparation

While materials now exist that approach this music through the perspective of the classical percussionist, recognizing its inspiration rooted in early jazz drumset performance will guide a new approach to the setup, performance and appreciation of the work. Most percussionists performing *La Création du Monde* approach the music with more of a multiple percussion setup. This approach is supported by the classic article *The Percussionist’s Guide to Darius Milhaud’s La Création du Monde* (1979) by Warren Howe, the more recent thesis *Darius Milhaud’s La Création du Monde: A Conductors Guide to Performance* (2011) by Robert Miller and the various online video performances. As seen in Figure 15, the instruments are set in a reverse order, with drums descending in pitch to the left of the bass drum (snare being highest, tenor medium and tambourin lowest). The clanger, as is common practice, has been replaced with hi-hat. This setup has been considered the “functional instrument arrangement” due to improved efficiency of movement and sticking patterns throughout the work.⁷⁶

⁷⁶ Warren Howe, "The Percussionist's Guide To Darius Milhaud's La Création Du Monde," *Percussive Notes* 17, no. 1 (1979): 39.

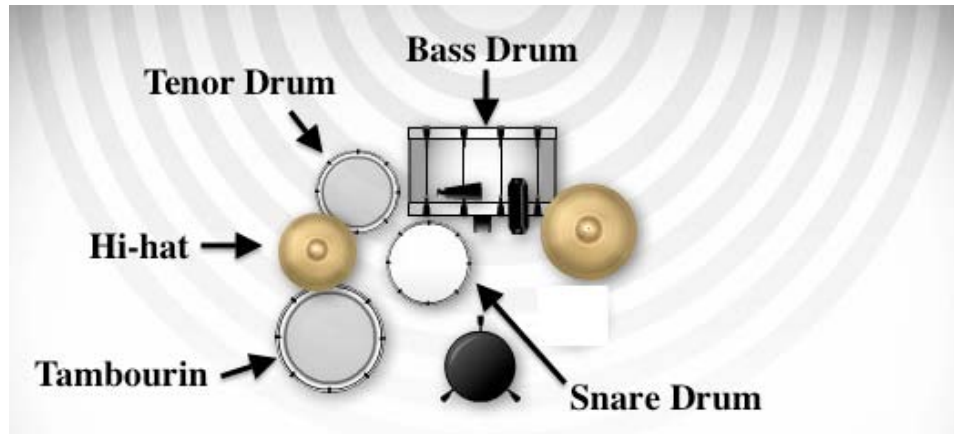


Figure 15: Common percussion instrument arrangement for *La Création du Monde*.⁷⁷

As a drumset performer, interested in experiencing the similarities and distinct references to early popular drumset techniques, I recommend a new approach to setup. For my performance of *La Création du Monde*, I played along with Milhaud's arrangement for piano with four hands (1923). This was simply to make the performance possible in a lecture-recital context. To experience the music's links to drumset performance, I set up the instruments in the identical fashion to Baby Dodd's *Spooky Drums No. 1*, which incorporates a similar instrumentation (Figure 16). The use of a medium tom-tom and floor tom instead of tenor drum and tambourin, placed in the traditional drumset manner, combined with the authentic clanger mechanism, brought Milhaud's music into new light.

⁷⁷ Image created by the author with the Sabian Cymbal "Set-up Builder," <http://community.sabian.com/en/setupbuilder>.



Figure 16: 1920s-era setup for *La Création du Monde* with clanger pedal.⁷⁸

In many cases, the performance felt as idiomatic in movement as *Spooky Drums No. 1* or any ragtime music. There is an overall improvement on natural balance when sitting at this drumset with the bass drum foot as the central anchor. In the multiple percussion setup, with all drums to the left, the bass drum feels secondary to the rest of the performance. In other instances, the positioning of the tenor drum (medium tom) and tambourin (floor tom) on the Dodds drumset did make the performance more difficult. Figure 17 shows a pattern most naturally played with a sticking of right-left-right, but the arrangement of the Dodds drumset demanded the opposite, left-right-left.

⁷⁸ Photo taken by the author. Instruments generously provided by Mr. Owen Clarke, Winnipeg, Manitoba, Canada.

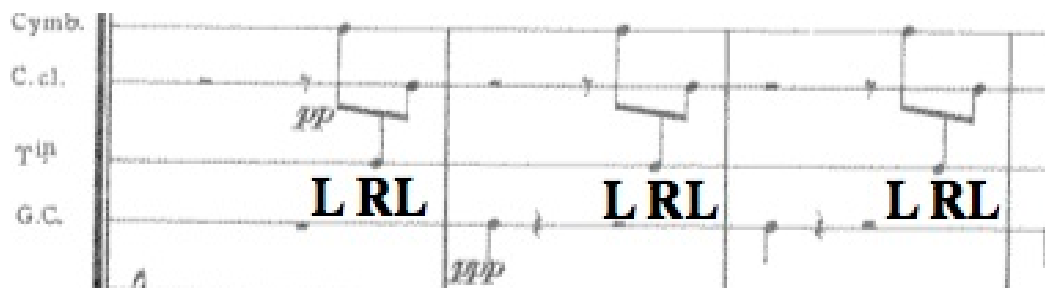


Figure 17: Awkward sticking with Dodds drumset in *La Création du Monde*, Mov. IV, No. 35.

Overall, implementing the ragtime rhythms and exploring the various drumset colours of *La Création du Monde* in this way revealed Milhaud's impressive blend of popular drumset aesthetics with clearly classical orchestral form.

A performance of *La Création du Monde* on a drumset with a 1920s-era setup recalls the youthfulness of the instrument and the unique sounds that have grown along the way. Blending the instruments, rhythms, expressions and colours of early jazz drumming, Milhaud shows his infatuation with the American style. Unlike the less familiar use of these practices by Stravinsky, Milhaud's search for authenticity results in a composition that feels inspired and informed.

The Tourist Approach summarizes this early use of elements of popular style in classical music, driven by curiosity, excitement and a desire to create something new.

Chapter 3: The Snapshot Approach

3.1 Definition

In the years following *L'Histoire du Soldat*, Stravinsky recognized that improvisation was the main identifier of the jazz style. As a result, he composed a series of non-metrical works for piano and clarinet that he described as a “snapshot of the genre... [or] written-out portraits of improvisation.”⁷⁹ For this thesis, the Snapshot Approach refers to repertoire that captures or imitates an existing popular music or performance style. This is different from the Tourist model in that the latter infuses ingredients of a style as the source material for composing in a modernist classical style, while the former presents the style in its original form. This chapter will present George Gershwin’s *Rhapsody in Blue* as an early example of this approach. A study of Christopher Rouse’s *Bonham* will show how this style remains a popular addition to the drumset repertoire today.

3.2 *Rhapsody in Blue* (1924) by George Gershwin

3.2.1 Background

One year after *La Création du Monde*, New York City bandleader, Paul Whiteman programmed his concert as an “Experiment in Modern Music.” The purpose: to elevate jazz to the concert hall stage. Whiteman commissioned George Gershwin’s work, *Rhapsody in Blue* to demonstrate the potential of a new American musical form achieved through the legitimate scoring of symphonic jazz. In America, the term “jazz” still broadly referred to most popular songs and dance music, and Gershwin had established his craft and reputation as a leading popular songwriter of New York’s Tin Pan Alley.

⁷⁹ Igor Stravinsky and Robert Craft, *Dialogues and a Diary* (London: Faber and Faber, 1968), 54.

Borrowing from his own songbook, Gershwin essentially placed existing popular melodies into the new context of the piano concerto format to create *Rhapsody in Blue*. Originally orchestrated for the Paul Whiteman Jazz Orchestra (as reflected in the *50th Anniversary Edition/Commemorative Facsimile Edition*⁸⁰), with significant assistance of arranger Ferd Grofé, *Rhapsody in Blue* captured the familiar sounds of popular dance bands at the time.

3.2.2 The Relation to Early Jazz Drumming

Setup

The percussion part of *Rhapsody in Blue*, like *La Création du Monde*, was originally written for one percussionist, George Marsh, of the Paul Whiteman Jazz Orchestra.⁸¹ Gershwin stays true to what is known of the standard setup of the dance band or theatre drummer and includes snare drum, bass drum, a collection of cymbals, gong, triangle, glockenspiel and two timpani (the score simply says “Drums, Timpani and Traps”). Unlike the percussion parts in the available scores of Milhaud’s *La Création du Monde*, this part appears playable by a single person. The interplay between bass drum and snare drum leaves the question of whether or not Marsh played this seated with bass drum pedal, or standing as a double drummer.

Rhythm

Figure 18 is an example of the basic timekeeping patterns found in *Rhapsody in Blue*. From what we know of double drumming practice (Chapter 1.2.2), these patterns were common. Additional evidence comes from video footage of Marsh with the Whiteman Orchestra in 1928

⁸⁰ George Gershwin, *Rhapsody In Blue: 50th Anniversary Edition/Commemorative Facsimile Edition*, ed. scored by Ferde Grofé (Warner Bros. Publication, 1987).

⁸¹ Ibid. 8.

shows him standing while playing snare drum, glockenspiel and what appears to be a bass drum.⁸²



Figure 18: Bass/snare drum pattern in *Rhapsody in Blue*, pg. 26.⁸³

We also know from other publications dating from this period, such as Figure 19, that patterns like these were played by seated drumset performers as well. In either case, both practices were still common in the dance bands and theatre orchestras of the early twenties. *Rhapsody* is one such snapshot.

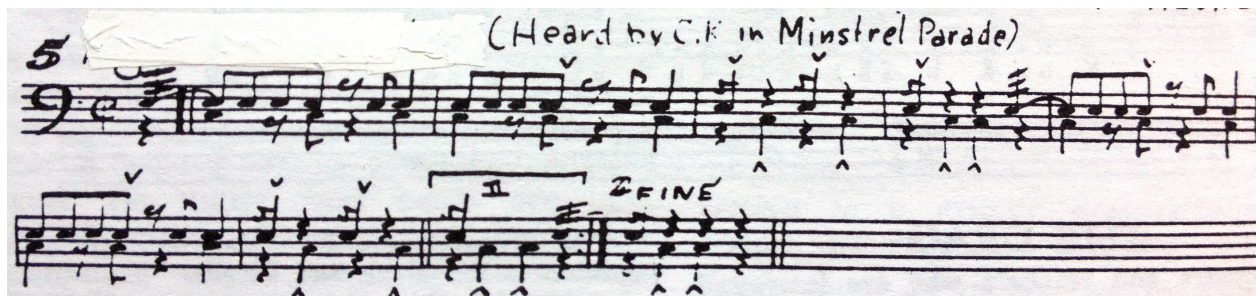


Figure 19: Early drumset pattern, *The Ludwig Drummer*, 1927.⁸⁴

Colour (Brushes)

The score also calls for a variety of common colours, such as the indication to “play on the shell of snare drum.”⁸⁵ We are, again, reminded of this technique as having been explored by

⁸² Various Artists, *At the Jazz Band Ball: Early Hot Jazz, Song and Dance 1925-1933*, (Yazoo Video 514, 2000), DVD. Chapter 6

⁸³ No measure numbers are included in the Gershwin, *Rhapsody In Blue: 50th Anniversary Edition/Commemorative Facsimile Edition*.

⁸⁴ Ludwig-Jr. et al., "The Ludwig Drummer: April 1926 to Spring 1948," 50.

early pioneers such as Baby Dodds. Also specified are the “Brushes or Fly Swatter on Snare Drum.”⁸⁶ Patented by Louis Allis and Adolph R. Wiens of Wisconsin in 1912, as *fly-killers*, but also called *fly-swatters*, *jazz-sticks* and today, brushes, these “consisted of a fan arrangement of numerous wire strands which could be telescoped into a short, hollow, handle when not in use.”⁸⁷ Brushes allowed for quieter dynamics and the “swooshing” of the brush became a distinct sound of the jazz drummer. By the time of Gershwin’s *Rhapsody*, they had become a popular tool and it is not surprising to find them in this work.

In *Rhapsody*, the drumset serves the purpose of underlying the early jazz and popular songs of George Gershwin. In this way, it remains a snapshot of the theatre and dance band traditions of the early 1920s. While not moving drumset performance forward technically, it did place it into a new context, exposing it to a new audience.

3.3 Other Examples of the Snapshot Approach

Paul Whiteman’s programming of the “Experiment in Modern Music” created excitement, curiosity and even tension by demonstrating parallels of these popular and classical music settings. Other composers followed and created their own snapshot of jazz and related drumset techniques, including the following:

Mátyás Seiber - *Jazzolettes* (1928)

Igor Stravinsky - *Preludium for Jazz Band* (1936/37)

William Walton - *Façade*, Second Suite (1938)

Gunther Schuller - *Studies on Themes by Paul Klee* (1959)

Leonard Bernstein - *Symphonic Dances from West Side Story* (1960)

⁸⁵ Gershwin, *Rhapsody In Blue: 50th Anniversary Edition/Commemorative Facsimile Edition*: 29.

⁸⁶ Ibid., 22.

⁸⁷ Brown, "A History and Analysis of Jazz Drumming to 1942." 119-20.

In more recent years, this approach has contributed to a large body of work for high school, college percussion ensembles, wind symphonies and orchestras. Drawing from other popular styles like rock or funk, this type of cross-pollination often leads to entertaining, groove oriented material, such as

John Beck - *Concerto for Drumset and Percussion Ensemble* (1979): This was written for and premiered by the famous “Tonight Show” drummer Ed Shaughnessy (1929-2013).⁸⁸

David Mancini - *Suite for Drumset* (1985) - Written for “at least” 8 percussionists and drumset solo, the music features Latin and Afro-Cuban grooves and moments of improvisation.

Larry Neeck - *Concerto for Drumset and Concert Band* (2005): The three movements feature a rock groove in the style of Sandy Nelson, a jazz-waltz influenced by Joe Morello and a Gene Krupa, up-tempo swing groove.

Stewart Copeland - *Genepool* (1994/2009) - Copeland was the drummer for the legendary rock band, The Police. *Genepool* is for drumset and four percussionists featuring rock grooves with rapid sixteenth notes, which are reminiscent of Copeland’s own signature playing.

3.4 *Bonham* (1989/1996) by Christopher Rouse

3.4.1 Background

One of the most popular works for drumset and percussion ensemble is *Bonham* by American composer Christopher Rouse. He describes this work as “an ode to rock drumming and drummers, most particularly Led Zeppelin’s legendary drummer, the late John (‘Bonzo’) Bonham.”⁸⁹ The work is for eight players: one drumset and seven other varied percussion setups. It was premiered in 1989 by the Conservatory Percussion Ensemble, conducted by Frank Epstein, at the New England Conservatory of Music in Boston.

⁸⁸ Wesley Brant Parker, "The History and Development of the Percussion Orchestra" (Florida State University, 2012), 25.

⁸⁹ Christopher Rouse, *Bonham* (Hendon Music Inc., a Boosey & Hawkes Company, 1989;1996), Score. Program Notes.

3.4.2 The John Bonham Groove: “When the Levee Breaks”

In *Bonham*, the drumset opens, and continues throughout much of the piece with an ostinato, repeating pattern that quotes the iconic John Bonham groove (Figure 20) from the song “When the Levee Breaks” from Led Zeppelin *IV* (1971). Not only identifiable from the original Led Zeppelin recording, the “Levee” groove has been highly sampled by other popular artists such as Bjork, The Beastie Boys, Depeche Mode, Dr. Dre, Coldcut and Eminem. In *Bonham*, fragments of other Led Zeppelin songs such as “Custard Pie,” “Royal Orleans,” and “Bonzo’s Montreaux” appear in aspects of the drumset music as well as throughout the entire ensemble, but it is the “Levee” groove that defines this piece.



Figure 20: “When the Levee Breaks,” John Bonham groove.⁹⁰

3.4.3 The John Bonham Sound

Power

The benefit of recognizing the Snapshot Approach is that it encourages the performer to find and learn from the source of the material. In the case of *Bonham*, the performer must become familiar with the elements that made John Bonham's sound iconic. Rouse hints at one step in achieving this by recommending in the score that the drummer "use the fattest possible sticks to reproduce as closely as possible throughout the entire work the beginning of 'When the

⁹⁰ Transcribed by the author.

Levee Breaks,’ recorded by Led Zeppelin.”⁹¹ This is referencing the legendary drummer’s reputation for being a powerful, dynamic player – so powerful, in fact, that he is often credited for being an early influence on the heavy metal drumming that would follow him.

No drummer ever created such a monstrous sound, and in Bonham’s force field of rhythm there ranks the basis of the sound now called heavy metal.⁹²

Instrument

The drumset performer should not only adhere to Rouse’s suggestion of heavy sticks, but must look further into the characteristics of John Bonham that resulted in such a powerful sound. Bonham played on large size drums usually including: a large 12”x15” mounted tom, 16” and 18” floor toms, a 6.5”x14” snare drum and a massive 14”x26” bass drum. He is associated mostly with his Ludwig Amber Vistalite set made from acrylic which was being commercially produced as “Plexiglas” in the seventies. In preparing for *Bonham*, the drummer, when possible, should aim to perform on drums similar to these sizes in order to achieve the sonic power and resulting deep tone characteristic of John Bonham.

Studio Techniques

The other contribution to Bonham’s unique sound in “When the Levee Breaks” are the experimental recording techniques used by engineer Andy Jones and the band. While some variations on specifics exist, the basic concept was that the drums were placed at the bottom of a staircase, with microphones placed above, one or two floors up. This was “distant from the Beatlesque, cloth-covered drumhead sound that was de rigueur at the time,” which produced

⁹¹ Ibid.

⁹² Jon Bream, *Whole Lotta Led Zeppelin: The Illustrated History of the Heaviest Band of All Time*, (Minneapolis: Voyageur Press, 2008), 42-43.

clarity and articulation.⁹³ Instead, the drums were given room to breathe, to resonate, while the microphones captured the natural power of John Bonham's performance style.

The John Bonham sound on "When the Levee Breaks" is a combination of the drummer's distinct power and feel combined with his choice of instrument and the groundbreaking recording techniques that captured it all. It becomes apparent that Christopher Rouse's suggestion for the "fattest possible sticks" cannot alone reproduce this complex sound. In fact, this is an impossible task. The drummer approaching *Bonham* should rather be educated in the important elements described above that formed the Bonham sound. By so doing, the drummer will discover new personal meaning, significance and inspiration in performing this iconic groove.

3.4.4 The Bo Diddley Beat

Beginning at Rehearsal No. 24, Rouse borrows rhythmic material from the influential late nineteen-fifties and sixties rhythm of Bo Diddley, commonly called "The Bo Diddley Beat." Guitarist Bo Diddley is attributed with aiding the transition from blues into rock and roll. His guitar playing was fast paced and full of flare. As shown in Figure 21, The Bo Diddley rhythm became a regular part of his song writing and, essentially, was the latin clave rhythm, placed into a straighter rock context.

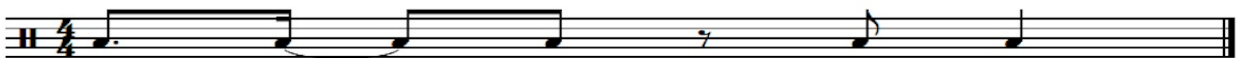


Figure 21: The Bo Diddley Beat⁹⁴

⁹³ Aaron Liu-Rosenbaum, "The Meaning in the Mix: Tracing A Sonic Narrative in 'When the Levee Breaks'," *Journal of the Art of Record Production* November, no. 7 (2012).

⁹⁴ Transcribed by the author.

The classic song “Bo Diddley” from 1955 is a perfect example of not only Diddley’s use of the clave rhythm, but the drummer’s tom-tom pattern which mimicked that of the guitar. This became known as the “Bo Diddley Beat” and inspired a new generation of drummers in the sixties and beyond. While there is an endless list of bands that brought the beat into their music, significant examples include The Rolling Stones’ “Not Fade Away” (1964 and originally written and recorded by Buddy Holly in 1957), The Who’s “Magic Bus” (1971), Bow Wow Wow’s “I Want Candy” (1982), Guns N’Roses’ “Mr. Brownstone” (1987) and U2’s “Desire” (1988).

3.4.5 General Discussion

The popularity and success of Rouse’s work, *Bonham*, is rooted in the adoration and even idolization of a drumming icon that is common among generations of musicians. Placing Bonham grooves within the classical percussion ensemble context celebrates the widespread influence of this drummer and the music of Led Zeppelin.

Bonham also demonstrates why the snapshot method of composition is popular, particularly within the classical percussion ensemble setting. This repertoire allows the classical percussionist to explore an instrument that for the most part has been separated from the typical focus in Western art music. Often, a formally trained percussionist, at some point, has made a decision to focus on Western classical percussion instruments rather than, for example, jazz or rock drumset. It is also common that their interest in percussion grew out of initially playing the drumset and popular music styles. The snapshot method resonates with many percussionists because it reminds them of their “first love.” It presents an opportunity to approach the drumset within the context of their classical training, and to explore other musical styles.

A similar analysis as that presented in this chapter with *Bonham*, could well be applied with other snapshot compositions. For example, in *Genepool* by Stewart Copeland, one would recognize the distinct hi-hat sound that Copeland obtained during his time drumming for the rock band The Police. Insight into his fluid use of sixteenth note hi-hat grooves, blended with the unique influence of both punk and reggae rhythms could greatly impact the performer and inform their approach to the drumset solo of *Genepool*.

This approach to drumset composition, because of its appeal, will continue to be present within the classical percussion repertoire. With the aim of staying true to an original source, the drumset in this music will remain a snapshot of the past, reflecting iconic drummers and popular music styles.

Chapter 4: The Non-Idiomatic Approach

4.1 Definition

The Oxford Dictionary defines idiomatic as being “appropriate to the style of art or music associated with a particular period, individual, or group.”⁹⁵ This can include appropriate techniques and performance practices associated with an instrument. In striking contrast with the previous chapters, the Non-Idiomatic Approach to drumset composition defies what has been considered as “appropriate” by applying contemporary music complexity that results in a highly uncharacteristic performance style.

These works often involve extended instrumental techniques with complex notational systems. The result is a repertoire that appears more closely related to the performance styles of contemporary, multiple percussion. This chapter focuses mostly on unaccompanied drumset solos, including *The Black Page* by rock icon, Frank Zappa, *Nasenflugeltanz* by Karlheinz Stockhausen, *Elusive Peace* (duet with cello) by Rand Steiger, and the definitive work of this approach, *Ti.Re-Ti.Ke-Dha* by the New Complexity composer James Dillon.

It will be argued that each work remains linked to the fundamental roles of drumset performance: time, groove and coordinated independence. For the performer and listener, this relationship is often hidden or buried in the overt complexity of each work. It is this relationship, the balance between the familiar and the complex, that is at the core of the unique drumset repertoire identified here as the Non-Idiomatic Approach.

⁹⁵ "Oxford Reference," in *Oxford Dictionary of English*, ed. Angus Stevenson (Oxford University Press, 2012).

4.2 *The Black Page* (1976) by Frank Zappa

The Black Page, by the legendary rock bandleader and composer, Frank Zappa (1940-1993), is probably the first notated solo for drumset. Written for drummer Terry Bozzio, the title refers to the actual density of notation (black) that fills the page. Featuring an excessive use of nested polyrhythms and complex patterns for the era, *The Black Page* is far removed from standard groove-based material.

Performing these lengthy patterns and what Bozzio calls “melodic curves”⁹⁶ demands unusual crossing of limbs and rapid movement around the drumset. While not indicated in the score, Bozzio adds a constant quarter note pulse with the hi-hat foot in the original recording,⁹⁷ a feature adopted by all future performances, and one that has remained standard practice today. This simple addition creates a stable, familiar framework for the rhythmic complexity.

The ambitious solo expresses the melodic potential of the drumset, as previously explored by drummers like Max Roach, yet this is done so through modern notated composition. Through this process the defined function of the bass drum foot is changed. No longer the timekeeper and foundation, the bass drum is equally involved with the hands in the thematic and melodic material.

Terry Bozzio describes how the work evolved from the original solo to include the accompanied instruments of the Zappa band:

I fooled around with it for a couple of weeks, just about 20 minutes a day before rehearsal, and in a couple of weeks I had it mastered and I could play it for him [Frank Zappa]. So he took the music back and wrote the rest of the melody and harmony, and soon after that we began playing it with the band.⁹⁸

⁹⁶ David Aldridge, "Terry Bozzio & Chad Wackerman," *Drum! Magazine*, <http://www.drummagazine.com/features/post/terry-bozzio-chad-wackerman-united-by-the-black-page>. Accessed October 3, 2013.

⁹⁷ First released on *Zappa in New York* (Discreet, 1978).

⁹⁸ Ibid.

The added instrumentation kept *The Black Page* within the rock context, as the piece uses various combinations of drumset with synthesizer, electric guitar, bass etc. The work has taken on a legendary status whose overt complexity makes it a right of passage for the advanced rock drummer. A true cross-over work, *The Black Page* is also frequently performed by the contemporary percussionist who is drawn to such notational complexity. Various arrangements exist for duet with keyboard percussion or as soloist with an entire percussion ensemble.

The Black Page set the stage for the new potential of notated solos for the drumset and introduced a new level of complexity, as well as a new level of performer like Bozzio, who, to this day strives, as he says

to apply theory, harmony, and melody orchestration...to the modern drumset, because it has evolved to the point where we can do those things. I see no difference between an organist who plays lines with his feet and four different voices with his two hands and the contrapuntal possibilities that are extant on the modern drum set.⁹⁹

Since *The Black Page*, other composers have imposed even greater compositional complexity that has lead to a body of repertoire identifiable as the Non-Idiomatic Approach.

4.3 Other Examples of the Non-Idiomatic Approach

4.3.1 *Nasenflugeltanz* (1988) by Karlheinz Stockhausen

Originally part of Stockhausen's 1983 opera *Samstag aus Licht* (Saturday from Light), the composer reworked the content to create a solo for percussionist with or without synthesizer accompaniment called *Nasenflugeltanz* (Wings-of-the-Nose-Dance).¹⁰⁰ The extended drumset, with each drum specifically pitched, includes a large metal bell plate and gong. The drummer is to add thirty-three "additional timbres," stored in a sampler and triggered during the

⁹⁹ Ibid.

¹⁰⁰ Stuart W. Gerber, "Karlheinz Stockhausen's Solo Percussion Music: A Comprehensive Study" (University of Cincinnati, 2003), 119.

performance.¹⁰¹ Along with specified physical gestures the drummer must sing highly chromatic melodies, large leaps and difficult rhythms that interlock with the drumset. The vocal text is also in German, and although the English translation is provided in the score, many performers choose the original text.¹⁰² This work combines the role of drummer, actor, singer and electronic processor to form something far from idiomatic drumset performance.

4.3.2 *Elusive Peace* (2001) by Rand Steiger

Rand Steiger's *Elusive Peace* (2001) is a duet for drumset and amplified cello. The work was premiered by percussionist Steven Schick and cellist Maya Beiser, and recorded for the composer in 2012 by myself and cellist Leanne Zacharias. The required five-piece drumset also includes bongos, metal pipe, opera gong, vibraslap, temple block, and cowbell. Steiger calls for a variety of attacks using sticks, brushes, metal scrapes (achieved by wearing metal finger picks) and hands. For the drummer, *Elusive Peace* is a "tour-de-force" requiring fifteen minutes of almost constant, dense and complex performance. Never playing anything close to a typical groove, repeating pulse or pattern, the often quintuplet-based rhythms are spread across the wide range of instruments and sonic possibilities of the drumset. This, combined with the precise interlocking with the cello, places the performance of *Elusive Peace* in a truly non-idiomatic context.

With a reliance on both advanced drumset technique and the comprehension of contemporary music complexities, works like *Elusive Peace* and *Nasenflugeltanz* are not performed very often. While still the case for the following work, composer James Dillon can be said to have contributed the most popular work of the Non-Idiomatic Approach to date.

¹⁰¹ Karlheinz Stockhausen, *Nasenflugeltanz*, 1 ed. (Kürten: Stockhausen-Verlag, 1983), Musical Score.

¹⁰² Gerber, "Karlheinz Stockhausen's Solo Percussion Music: A Comprehensive Study," 154.

4.4 *Ti.Re-Ti.Ke-Dha* (1979) by James Dillon (1950)

4.4.1 Background

James Dillon was born in Glasgow, Scotland in 1950, and then spent considerable time living in London. As a teenager in the sixties, he was drawn to rock and played in a rhythm-and-blues band called Influx. His interest in popular music quickly shifted into higher levels of learning. Dillon was drawn to post-modern composition, but also to subjects such as physics, linguistics, philosophy and acoustics. He began to find a place in the music world by the mid-seventies and soon was considered a part of the New Complexity school of composition. Dillon's composition has been described as

firmly committed... to a music of dense surface, close to if not beyond the limits of performability, justified by reference to the fearsome intellectual discourse which is said to lie behind those torrents of notes.¹⁰³

In 1979, Dillon wrote *Ti.Re.Ti.Ke.Dha*. in celebration of the "International Year of the Child."¹⁰⁴ It was premiered by percussionist Simon Limbrick in South Bank, London, 1982.¹⁰⁵ The work calls for an extended drumset, including instruments not usually associated with the instrument. Dillon imposes his complex compositional techniques onto the drumset, using a notational system to push the possibilities of the instrument and abilities of the performer.

¹⁰³ Keith Potter, "Contemporary British Composers 3: James Dillon: Currents of Development," *The Musical Times* 131, no. 1767 (1990): 253.

¹⁰⁴ James Dillon, *Ti.Re-Ti.Ke-Dha*, 2 ed. (London: Hinrichsen Edition, Peters Edition Ltd., 1979, 1982), Musical Score.

¹⁰⁵ "James Dillon - Percussion," Edition Peters, https://www.edition-peters.de/cms/front_content.php?composer_id=81&changelang=2&lang=2&idcatart=259. Accessed September 16, 2013.

4.4.2 Extended Drumset Instrumentation: Performer Challenges and Solutions

As demonstrated in Chapter 2, large drum setups have been common throughout the history of the instrument (from early theatre orchestras to progressive rock to heavy metal). The complete list of instruments (some familiar to the drumset and others not) Dillon specifies in *Ti.Re.Ti.Ke.Dha.* is as follows:

- 2 suspended cymbals (Cymbal number 2 screwed tightly and struck only at the dome)
- 2 Cowbells
- Hi-hat (with a collection of sleigh-bells attached to top)
- 2 Log Drums
- Snare Drum
- 3 Timbales
- 5 Tom-toms
- Bass Drum with pedal
- Tam-tam
- Bellstick (“cluster of small bells attached to a length of ‘hard’ wood - suspended and played by striking wood.”¹⁰⁶)

Balancing efficiency and playability with the musical specifications given by Dillon in the score presents the performer with technical and musical challenges. How each individual interprets and solves these challenges is part of what makes a performance unique. To illustrate, the following section presents two examples of setup challenges and recommended solutions of incorporating the timbales and log drums in the drumset of *Ti.Re.Ti.Ke.Dha.*

Challenge: Timbales and Musical Dialogue

Dillon’s suggested lay-out, drawn in the score, places the three timbales directly in front of the player with the five tom-toms to the right. The timbales have a far greater involvement in the music than the tom-toms (which only enter at m. 82) and the lay-out shows that Dillon recognizes that they need to be easily reached. In fact, the timbales are often in dialogue with the

¹⁰⁶ James Dillon, *Ti.Re-Ti.Ke-Dha.*

other voices in the drumset including the tom-toms once they enter. Through these dialogues, Dillon forms a type of sonic multiplicity, causing musical ideas to be brought to the forefront or pushed back. Figure 22 shows this dialogue through abrupt interjections of tom-toms amongst the dense timbale figure.

Figure 22: Tom-tom/timbale dialogue in *Ti.Re.Ti.Ke.Dha*, mm. 113-116.¹⁰⁷

I determined through personal preparation of the piece and discussions with my advisor, Professor Aiyun Huang, that within the dialogue, the three timbales are, sonically, too similar to the tom-toms. Also, placement of these three drums within the drumset is a challenge due to their size and inability to be mounted on traditional drumset hardware. As shown in Figure 23, I replaced the three timbales with a set of bongos and a conga. The “skin drums” (bongos and conga) were tuned in high, descending pitches while the toms, also descending, were tuned at a distinctly lower, overall, range. In this way, the skin drums presented a bright, short attack and tone, distinct from the thunderous, resonant tom-toms. The conga fit easily onto a Pearl adjustable stand to the left of the pair of bongos, which were mounted above the bass drum. Not

¹⁰⁷ James Dillon, *Ti.Re.Ti.Ke.Dha*, 2 ed. (London: Hinrichsen Edition, Peters Edition Ltd., 1979, 1982), Musical Score.

only sonically effective, they are compact and fit efficiently into the drumset, allowing for the fast movement between instruments that *Ti.Re.Ti.Ke.Dha*. demands.



Figure 23: Recommended *Ti.Re.Ti.Ke.Dha* setup with bongos, conga and purpleheart.

Challenge: Log Drums and Balance

Dillon also specifies two log drums (also called slit drums), each producing a single pitch. Again, efficiency is the key to the setup and these are extremely unorthodox within the performance practice of the drumset. Generally placed on a flat surface, such as a trap table, the log drums do not attach to any type of hardware. Balance is also a problem since the log drum features a “warm sonority with limited carrying power and is struck with toy super ball beaters, hard felt or rubber mallets.”¹⁰⁸ Dillon specifies the use of snare drum sticks throughout the piece. The resulting sound produced from attacking the log drum is lacking in tone and volume.

Shown in the previous Figure 23, a solution for these challenges is:

¹⁰⁸ John H. Beck, "Alphabetical Listing of Percussion Instruments and Terms," 55.

1. Attach a piece of resonant “purpleheart” wood onto, and extending beyond, each log drum, for greater response from sticks, resulting in improved tone and volume. Purpleheart is a dense, resonant wood that can be cut to produce a desired pitch.

2. The extended purpleheart edge is an easier, more forgiving target at fast speeds. When indicated to move from the edge to centre, change the attack point of the stick, moving from tip to mid-way down the stick.

3. Mount each log drum on a snare drum stand, to allow for both height and angle adjustment.

The timbales and log drums are just two examples of how each player must find workable solutions to the elaborate instrumentation specified by Dillon in the score. Choice and treatment of cymbals are endless and types of sleigh-bells and bellsticks vary, while tuning, size and resonance of drums can drastically alter the effects of the music. Performance of this work and discussions with other musicians who have performed it reveal that these challenges, resulting from strict, formally structured composition are actually what give each performance personality.

A carefully chosen setup will not only aid in the efficiency of motion around the drumset, but it will clarify some of the dense layers of complexity which Dillon places into his work. Most importantly, with this clarity comes greater musicality and expression during performance.

4.4.3 Extended Role of the Feet: Hi-hat and Bass Drum Pedals

When listening to this music, and in particular, seeing a performance of this work, we are drawn naturally to the intense movement and involvement of the hands of the performer. These upper layers of the musical content are often hiding what is, for the performer, one the most intense aspects of *Ti.Re.Ti.Ke.Dha*. This is the role of the feet, or the lower layers of the music.

Execution of the following musical passages demands advanced foot techniques linked to drumset fundamentals while simultaneously being removed far from any links to this foundation.

Throughout the work, Dillon employs three common hi-hat practices. The notation, shown in Figure 24, specifies the hi-hat to be played with an open foot splash, closed foot, and the standard stick attack. In particular, the foot techniques are commonly associated with jazz drumset. For example, legendary jazz drummer Tony Williams made these expressive sounds regular parts of his playing as drummer for Miles Davis in the sixties and then later with his own ensemble. For example, Williams used them to add colour and texture in the solo of “Walkin’” on *Miles Davis - The Complete Concert, 1964: My Funny Valentine and Four & More* (solo begins at 1:55). Also the opening to William’s solo “Liberty” from the *Mosaic Select* collection features the driving pulse of open splashes which then reappear in the driving groove mid-way through (2:30).

In Figure 24 we can see how Dillon extends these techniques through rhythmic complexity. No longer simply adding colour or pulse, the hi-hat, like the bass drum in Zappa’s *The Black Page*, takes on a heightened involvement. Equal to the role of the hands, the hi-hat foot is part of the upper layers of thematic material and linear movement. The constant execution of these foot techniques not only demands advanced coordination and mental focus, but the movement itself can be physically draining.

 Closed hi-hat with foot
  Open hi-hat with foot
  Hi-hat with stick

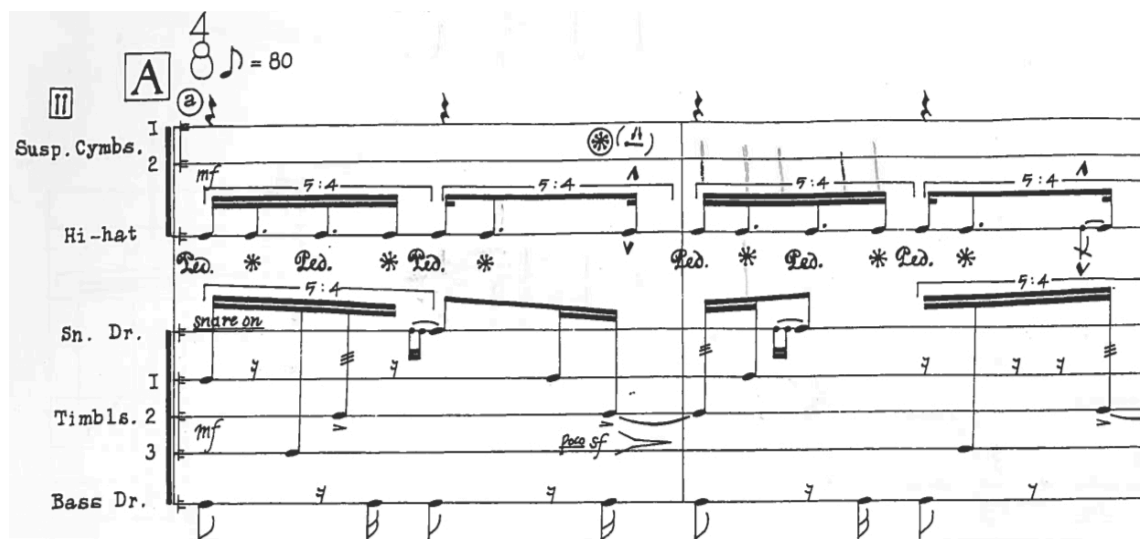


Figure 24: Complex hi-hat foot techniques and repeating bass drum pulse, mm. 1-3.¹⁰⁹

In other instances these techniques appear in a more traditional form. The previous Figure 22 shows the foot maintaining a basic quarter note pulse with open and closed hi-hats. Yet, while the hi-hat appears to be an anchor and regular pulse, it is buried deep in the layers of rhythmic complexity and, as previously quoted, “torrent of notes.”

This concept extends to the bass drum pedal as well. The opening measures in the above Figure 24 show a repeating, common bass drum pulse, with a sixteenth-note pick-up followed by a downbeat. This pattern continues for most of the first seven measures. In this example, the overall slow tempo creates distance between each bass drum occurrence. Combined with the complex activity of the hi-hat foot and hands, the listener and performer become less focused on this lower foundational, timekeeping layer.

¹⁰⁹ James Dillon, *Ti.Re-Ti.Ke-Dha*, 2 ed. (London: Hinrichsen Edition, Peters Edition Ltd., 1979, 1982), Musical Score.

4.4.4 General Discussion

In these examples, the traditional timekeepers, such as bass drum and hi-hat, in the score, appear to be serving their role. In reality the foundations are flipped, due to the overtly complex rhythms that disguise any regularity or consistency of the pace, feel and time of the music. This treatment of time is the common denominator of the repertoire representing the Non-Idiomatic Approach in this chapter. Typically, an idiomatic drumset performance is the execution and expression of musical ideas, rhythms and groove through a linear flow of time. This sense of moving forward is obstructed in the previous examples. Even if the composer implies a pulse with common drumset functions (such as the bass drum or hi-hat in *Ti.Re.Ti.Ke.Dha*), the listeners' attention will be uncharacteristically focused, as previously quoted "on music of dense surface."

A performance of this repertoire straddles a line between drummer and multiple percussionist. The combination of extended setups, layers of musical complexity and notational formality in the Non-Idiomatic Approach, imposes contemporary percussion performance practices onto the drumset. This chapter has shown that hidden under this complexity, advanced drumset techniques, rooted in popular tradition remain essential for the successful performance of this music.

Chapter 5: The Confluent Approach

5.1 Definition

The Oxford dictionary defines confluence as “an act or process of merging.” In nature, it specifically refers to the junction, or meeting point, of two rivers. In the context of this discussion, the Confluent Approach will be used to signify the flowing together of new and individualized compositional ideas with the rich history of drumset styles, techniques and performance practices. As the definition suggests, this repertoire employs elements of the previously defined approaches.

My personal preparation and performance of these works has uncovered a unique sense of fluidity, comfort and style balanced with musical and technical complexity. This repertoire has led to exciting new techniques, musical expression and the development of the confluent drummer. This chapter will begin with brief descriptions of Stuart Saunders Smith’s *Blue Too*, John Psathas’ *Drum Dances*, Julia Wolfe’s *Dark Full Ride* and Lukas Ligeti’s *Lakoni in Kazonnde*. This will be followed by a detailed discussion of Nicole Lizée’s “*Man with the Golden Arms*”: *Concerto for Drumset and Chamber Orchestra*.

5.2 *Blue Too* (1983) by Stuart Saunders Smith

American composer Stuart Saunders Smith (1948) wrote his first solo for drumset, *Blue Too*, in 1983. With a background in jazz drumming, Smith draws upon the language of jazz improvisation for the musical material. Smith described his interest not only in jazz but in the process of realizing rhythms through vocalization: “Rhythmic scat singing among jazz drummers

is often the primary method of notation and the means of transmission of traditions and styles.”¹¹⁰

The notation of *Blue Too*, while rhythmically precise and complex, gives the impression of a composed improvisation. This translates into music that is often abrupt and spontaneous, achieved through sudden bursts of rhythmic complexity, sudden contrast in musical density and wide ranges in dynamic expression. The latter, being an element of many Smith compositions, again reflects his improvisational background, and interest in mimicking vocal expression: “The drummer must be able to have a very wide dynamic range... We must be able to whisper very softly, talk, and shout to fully understand.”¹¹¹

Blue too merges Smith’s unique compositional techniques, specifically the vocal transmission of rhythm, with the language of jazz drumset improvisation. Most significantly, this work and others that followed in the confluent approach give the performer a feeling of the familiar (connected to past traditions) while challenging these traditions with new compositional ideas.

5.3 Other Examples of the Confluent Approach

Drum Dances (1993) by New Zealand composer John Psathas explores 1980’s and early 1990’s jazz and rock music. He cited jazz-fusion, master drummer Dave Weckl, and jazz icons, pianists Keith Jarrett and Chick Corea as influences. This duet for drumset and amplified piano was commissioned by classical percussionist Evelyn Glennie. It explores popular drumset grooves, particularly in the third and fourth movements, together with the piano in a “tight

¹¹⁰ Stuart Saunders Smith, "Percussion in Discussion (Language, Percussion, and My Speech Songs)," *Percussive Notes* 31, no. 8 (1993): 71.

¹¹¹ Nichols, "Important Works for Drum Set as a Multiple Percussion Instrument," 79.

rhythmic interaction...driven by syncopation occurring simultaneously on several levels.”¹¹²

This is in contrast to the first two movements which feature a contemporary classical, multiple percussion approach to the drumset. The first movement includes driving tom-tom motifs, mostly devoid of regular groove-based material (reminiscent of Zappa’s *The Black Page*). In the second movement, the extended drumset combines hi-hat and bass drum (with pedal) with glockenspiel figures that focus the attention on the melodic interaction between the two players. In *Drum Dances*, precise notation of each accent, grace note and musical inflection (open-closed hi-hats for example) along with extreme fast tempos pushes the drumset solo to virtuosic heights.

Lakoni in Kazonnde (2013) by Lukas Ligeti was commissioned and premiered by the author and percussionist David Cossin at the Bang On a Can Marathon in New York City, June 16, 2013. Lukas, who lives in both Brooklyn, NY and Johannesburg, South Africa, flows through a series of melodies, grooves and polyrhythms that share roots in jazz improvisation and African traditions, expressed through contemporary composition.

Dark Full Ride (2002) quartet, by Julia Wolfe deconstructs the drumset, with an opening movement focused only on the hi-hat. Sixteenth note patterns flow in and out through waves of dynamic changes, accents and syncopation. We are simultaneously drawn to the obvious foundation of groove and time, while being transported through new textures and sonic experiences.

Stuart Saunders Smith, John Psathas, Lukas Ligeti and Julia Wolfe have all contributed to the repertoire identified here as the Confluent Approach. Each work demonstrates the flowing together of new and individualized compositional ideas with the rich history of drumset styles,

¹¹² John Psathas, "John Psathas - Drum Dances," Promethean Editions, <http://www.promethean-editions.com/php/PubDetail.php?pubID=10&SSID=1&Composer=John%20Psathas&SSID=5>.

techniques and performance practices. It is the next, and final work in this chapter that represents, at this time, the latest addition to this repertoire.

5.4 *The Man with the Golden Arms* (2012) by Nicole Lizée

5.4.1 Background

Montreal-based composer, Nicole Lizée, has been commissioned by a wide range of artists and ensembles such as Kronos Quartet, So Percussion, BBC Proms, Eve Egoyan, SMCQ and Kitchener-Waterloo Symphony. Her music often involves unorthodox instruments such as the Atari 2600 video game console, omnichords, stylophone and karaoke tapes. She established a unique musical and notational approach to the turntables in 2000 with her work *RPM* for large ensemble and solo turntablist. *This Will Not Be Televised* for turntable soloist and orchestra was nominated for the Jules-Léger Prize in 2007.¹¹³

Lizée's music has shown her pervasive interest in the drumset and its connection to time, groove, popular music styles and iconic performers. As a drummer and teacher of the drums, she is able to merge and expand upon traditional performance practices of the instrument. In 2008, I commissioned and premiered her first solo work for drumset called *Ringer*, a work that not only challenged me technically but redefined my musical path. Our working relationship and friendship has encouraged me to explore the full potential of the drumset in contemporary music.

5.4.2 Instrumentation and Program Notes

"The Man with the Golden Arms": Concerto for Drum Kit and Chamber Orchestra, was written for myself with the Société de Musique Contemporaine du Québec and Sixtrum

¹¹³ Nicole Lizée, "Biography," <http://www.nicolelizee.com/biography/#.Ujm8MGTEZgI>.

percussion sextet with conductor Walter Boudreau. The chamber orchestra requires: two violins, viola, cello, double bass, flute, oboe, clarinet, french horn, trumpet, trombone, and piano. The program notes are as follows:

Inspired by groundbreaking film titlist and graphic designer Saul Bass, *The Man With the Golden Arms* was written for a drummer with appropriately gilded limbs and a flair for shape and form. Bass drew his cues for a new graphic language from the mathematical shapes known as Lissajous curves, which are visual depictions of complex harmonic motion within rectangular boundaries - prominently on display in the title sequences of Hitchcock's *Vertigo*.

Bass' groundbreaking film title sequences were studies in an aesthetic of bold lines, silhouette, stark contrast and pure colours. This concerto is a musical work that seeks to capture the geometry, motion, timing, rhythm, texture, and spirit present in Bass' art. A parallel iconography extends into the drum writing as several classic drum kit paradigms are used as starting points. What may begin as a trope is transformed into something at once familiar and alien. Steve Gadd's clinically grooving paradiddle, The Purdie Shuffle (a studio drummer's rite of passage), jazz as filtered through the classical soundtrack music of Elmer Bernstein (Bernstein West to Leonard's Bernstein East) as well as the modern athletic drumming known as 'blast beats' are all points of departure. Filtered through the gauze of collective memory, the grooves are twisted and stretched beyond their already considerable difficulty into a model of sleek complexity, all the while being rendered with the casual virtuosity of *The Man With The Golden Arms*.¹¹⁴

5.4.3 Recontextualizing Drumset Paradigms

Throughout the history of the drumset, drummers have become known for a unique technique, sound, feel or rhythm. Some of these players have helped define a particular era, or genre of music. Through various recordings, videos, and instructional materials, drummers have left a history or legacy of grooves, to which Lizée refers above as “classic drumset paradigms.” These iconic grooves and techniques associated with influential players and musical styles appear in *Golden Arms*, most notably:

Bernard Purdie and “The Purdie Shuffle.”

Steve Gadd and “The Gadd Paradiddles.”

¹¹⁴ Nicole Lizée, *The Man with the Golden Arms, program notes* (Montreal, 2012).

The modern Death Metal groove called “The Blast Beat.”

Lizée draws from these paradigms to form much of the main material for the drumset through a process she describes as recontextualization, or reconstruction:

Referring to the past (or other contexts) but twisting, manipulating to create something new, vital, and meaningful to me (and to the ‘now’), without losing trace of its origins, place in history, functions, etc. but reinterpreting, filtering and distorting all of these - and placing it in a new context.¹¹⁵

Through this process, Lizée both celebrates and challenges popular drumset traditions. For the soloist, *Golden Arms* demands an understanding of the root of each paradigm in order to achieve the associated feel and groove:

It is essential for the initial material to groove in order for the manipulations and mutations to work. The groove should keep its shape as it is 'shapeshifting' - and the player has to have absolute control over what is going on, shifting and mutating in sync with the groove. So as the groove melts, the listener can fully grasp this and is led on the journey, feeling this the whole way.¹¹⁶

Once this material becomes manipulated, as will be shown in the following section, the soloist is presented with new technical and musical demands.

Bernard Purdie and “The Purdie Shuffle”

Golden Arms explores the classic drumset pattern, known as the “Purdie Shuffle,” by legendary studio drummer Bernard Purdie. Purdie earned the title “World’s Most Recorded Drummer” during his career recording with such artists as King Curtis, Aretha Franklin, Donny Hathaway, Miles Davis, B.B. King, Cat Stevens, Steely Dan and many more. With a style rooted

¹¹⁵ Nicole Lizée, email conversation, April 24, 2013.

¹¹⁶ Nicole Lizée, email conversation, July 3, 2013.

in jazz, funk and soul, Purdie's shuffle became his signature groove, instantly identifiable in his recordings. The essential elements of the Purdie Shuffle (notated in Figure 25) are:

1. A 12/8 pattern with the hi-hat on the first and third eighth note of each dotted quarter.
2. Half-time feel is created by the snare drum playing an accented beat three instead of two and four.
3. Grace notes played on snare between the first and third eighth note of each dotted quarter. These grace notes traditionally are played extremely lightly, with an almost "felt, not heard" approach. The natural physical execution of these notes, especially the ones following an accented snare attack (after beat two or four), as Purdie described, "ain't nothin but rebound."¹¹⁷
4. Bass drum (with some variations) plays the downbeat of each measure and on the "back-end" of the second and fourth dotted quarter.



Figure 25: The Purdie Shuffle.¹¹⁸

The Purdie Shuffle Recontextualized

The Purdie Shuffle is gradually introduced in *Golden Arms* through an *accelerando* and rhythmic modulation coming to a stable tempo three measures after letter G. As the Shuffle in letter G mutates into different variations, the grace note becomes a prominent and intricate element, whose execution demands advanced hand control. For example, the third measure of Figure 26 shows four snare attacks in a row: two grace notes, an accented note, then another grace note. The player must bounce the first two grace notes lightly, snap the wrist and stick up quickly to accent, then allow the stick to bounce lightly again.

¹¹⁷ "The Real "Purdie" Shuffle," <http://www.youtube.com/watch?v=J8DsNo4KB6Y>. 4 min. 10 sec.

¹¹⁸ Jim Payne, "The Purdie Shuffle: Revisiting a Classic," *Modern Drummer* (2010), http://www.funkydrummer.com/JPpages/MD_articles/IN_THE_POCKET_JULY_2010.pdf.

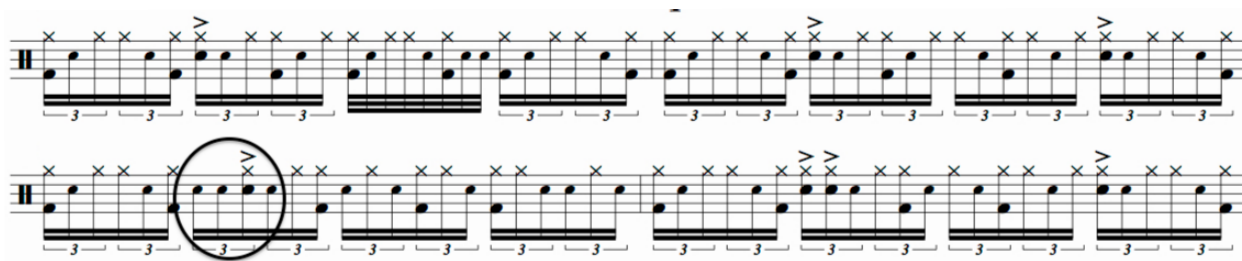


Figure 26: Advanced snare drum in *Golden Arms*, mm. 141-144.¹¹⁹

The most important aspect of Section G is that the drummer captures the groove and feel that is the foundation of Bernard Purdie’s Shuffle. This comes both from a technical grasp of the essential elements (listed above) and exposure and internalization of the Purdie sound, easily found in the lengthy catalogue of Bernard Purdie recordings. When the basic pattern appears in *Golden Arms*, the drummer must take advantage of these moments to replicate and reinstate this original and familiar feel. Then when the pattern deviates, a greater contrast can be made. For example, in measure 141 (shown in the above Figure 26), the shuffle gets condensed into thirty-second notes on beat three. By playing this figure without hi-hat accents, and uncharacteristically straight, the return, or “snap back” to the shuffle will effectively emphasize the original groove and feel.¹²⁰ It is this contrast and pushing and pulling of the groove that is at the core of this section and others in *Golden Arms*.

The Purdy Shuffle acts as a reference to the impeccable skill and artistry of not just Bernard Purdie but of studio session drummers in general. Great session drummers, like Purdie, establish themselves not only because of technical skill, but also because of their ability to play many styles, to create a unique feel and to adjust to each musical situation. This is a fitting comparison to the role of the drummer in *Golden Arms* – balancing multiple styles, references,

¹¹⁹ Lizée. *The Man with the Golden Arms*. 2012.

¹²⁰ I also play each of the straight figures on a remote hi-hat, set tighter than the regular hi-hat.

Steve Gadd and “The Gadd Paradiddles”

Gadd also established a signature funk groove commonly referred to as the “Gadd Paradiddle” based around the sticking of the paradiddle rudiment (R-L-R-R, L-R-L-L) and its multiple variations. Also referred to as “linear sticking,” usually no two notes are played at the same time.¹²² See Figure 27 for an example.



Figure 27: The Steve Gadd Paradiddle and linear sticking.¹²³

¹²³ Terry Branam, "Gadd's Paradiddle Groove," *Drummer World*, <http://www.drummerworld.com/Videos/stevegaddbasic.html>.

The Gadd Paradiddle Recontextualized

Nicole Lizée first used the Gadd Paradiddles in the drumset solo *Ringer* in 2008. In this work, she moved the left hand of the groove, the snare drum, onto an orchestral glockenspiel.

This introduced the duality of a drummer as both controller of time and melody:

[*Ringer*] reflects a fusing of roles: groove and melody synthesize and become one. The brain is split: one player is responsible for both melody and rhythm. Under usual circumstances there are two players, each assigned to a particular instrument or function. This situation reflects electronica, where both are taken care of by one player or DJ, overseeing a multitude of machines.¹²⁴

Similarly in *Golden Arms*, the groove is first manipulated at Letter I, with the left hand playing an acoustic guitar (tuned to open E-A-D-A-D-E) amplified, with delay pedal. Positioned to the player's left, the acoustic guitar can mount onto a snare drum stand, easily adjustable for height and angle. As shown in Figure 28, the drummer hits the guitar (notated as a black square on the top system) with a drumstick at random points along the strings. As the guitar becomes more involved with the drumset rhythms, the delay builds and creates a unique sonic texture.

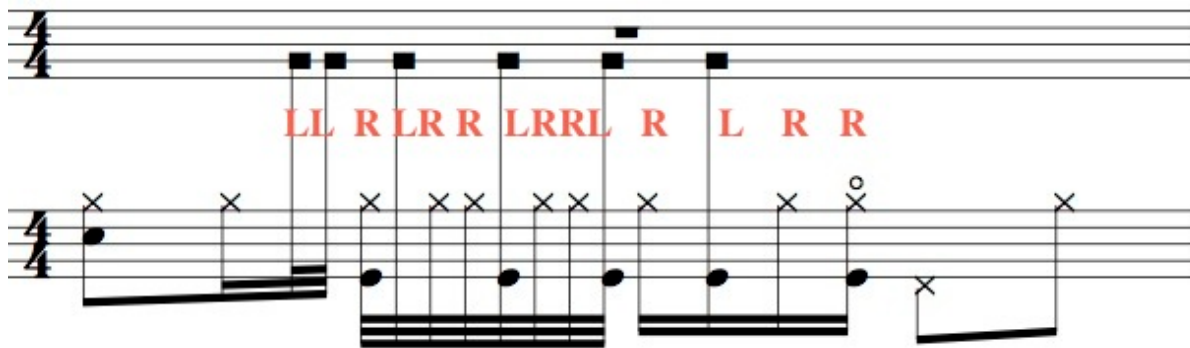


Figure 28: Identical Gadd Paradiddle in *Golden Arms*, mm. 192¹²⁵

¹²⁴ Nicole Lizée, *Ringer*, 2008. Program Notes.

¹²⁵ Lizée. *The Man with the Golden Arms*. 2012.

The Gadd Paradiddle groove appears again in the finale, with the snare replaced by a portable turntable (playing the record *Autumn* by George Winston, at a speed of 78 rpm). The turntable is best placed on a secure music stand, raised and tilted on the left, above the guitar. When called for in the notation, the drummer hits the surface of the record causing the stylus to jump. With the record playing through an amplifier, the sped up and obscured music becomes abruptly skipped, sounding a sharp “pop.” As the drummer hits the record more frequently, the acoustic drumset begins to get washed over by the harshness of the sounds. The final measures of playing are simply bass drum and turntable, merging to create something alien, something unknown. As the rest of the ensemble play their final measures, the drummer presses on the record, winding it down slowly, pulling the needle off with a scratch.

The Blast Beat

As described in Chapter 1.6.2, the Blast Beat is an alternating single-stroke roll broken up between the bass drum and snare. This beat has become the standard for today’s extreme metal drummers, whose speed and physical endurance is as notable as the music itself.

The Blast Beat Recontextualized

Section D of *Golden Arms* introduces what Derek Roddy’s book *The Evolution of the Blast Beats* calls the “Traditional Blast Triplet” (shown in Figure 29).¹²⁶ As shown in Figure 30, Lizée also includes 32nd-note double kick flourishes and accents placed on the bell of the ride cymbal to form a recontextualized blast beat pattern. Also familiar to heavy rock and metal drumming, the brightness, clarity and volume of the cymbal bell traditionally allows unique rhythms of the drummer to cut through the density of the metal sound (for examples of this,

¹²⁶ Roddy, *The Evolution of Blast Beats*: 19.

listen to “Explosia” by Gojira, “Zero Tolerance” by Death or “Pinball Map” by In Flames). In the context of *Golden Arms*, the most striking aspect of the blast beat is the uncharacteristically quiet *mp* dynamic that demands extreme control. The following section will expand on the issues of balance and dynamics and the resulting new techniques that emerge.



Figure 29: Derek Roddy’s Traditional Blast Triplet¹²⁷

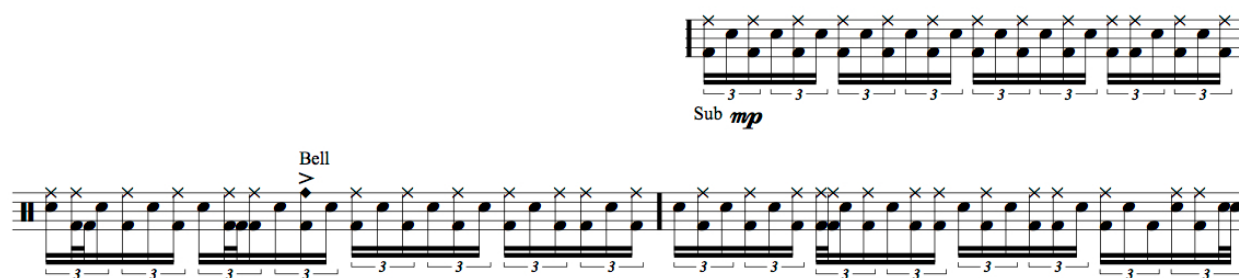


Figure 30: The Blast Triplet in *Golden Arms*, mm. 74-76¹²⁸

5.4.4 Amplification versus Acoustic

The drumset is naturally a loud instrument and *Golden Arms* provides numerous examples where quiet dynamics are exploited. The overall challenge is that within the acoustic chamber ensemble setting, the drumset must balance with instruments of generally less volume potential. Combining speed with both physical and musical complexity, *Golden Arms* demands of the soloist a balance between the role of expressive virtuosity and ensemble unity. This

¹²⁷ Ibid.

¹²⁸ Lizée. *The Man with the Golden Arms*. 2012.

warrants a discussion of the special care and preparation necessary to meet the unique technical challenges.

This ability to express, to “say something” without “smothering,” is a topic that Max Roach identified in 1958:

One of the prime functions of the drums is to serve as an accompanying instrument...This can be developed by listening to everything around you and by fitting yourself in without being smothered, or smothering others. It's difficult to do, due to the timbre of the instrument. You can't help smothering the horns unless you're very careful. And if you're too delicate you can't say anything. You need proper balance and respect.¹²⁹

In the traditional settings of a rock or jazz band, the drummer is not only amplified, but the other musicians are as well. This allows the drumset to blend with the range of instruments in the ensemble whose dynamic potential may vary drastically. With an acoustic orchestra or small chamber ensemble it is a considerably different situation. Most orchestral and chamber musicians and production crews would rather not amplify the ensemble. Whether it is due to the effects on the orchestra's acoustic sound or the musicians' concern for loud volume, it is rarely encouraged. This means that the drumset soloist must play within the dynamic range of the acoustic ensemble and the resonance of the concert hall. This will also establish a positive working relationship with orchestral musicians, who are often wary or even hostile towards an “alien” instrument such as the drumset which produces what others fear will be a threatening level of high volume.

In this acoustic context, what a drummer will perceive as a natural, quiet dynamic during independent rehearsal, will need to be even quieter. If not sensitive towards this reality, the drummer will be caught off-guard in a rehearsal or performance situation. There are tools for the

¹²⁹ Don Gold, "Max Roach: A Great Drummer Looks Back at Some Influences," *Down Beat*, May 20 1958, 14.

drummer to achieve a lower dynamic such as soft mallets, brushes and a variety of sticks often known as “hot rods” or “blast sticks” (like the brushes described in Chapter 3.2.2). The disadvantage is that these tools change the quality of the sound. In particular, they reduce the articulation and precision that is required in *Golden Arms*.

The performer’s ability to achieve the balance and subtle dynamics in *Golden Arms* is a skill that must be learned through independent practice and re-learning the physical movements around the instrument that have come to seem natural. It involves reducing force and minimizing movement of not only the hands, but also of the feet, which have a heightened emphasis in the rhythms of *Golden Arms*.

5.4.5 Extended Foot Techniques

As discussed in Chapter 1.6.2, the double bass pedal allows for increased speed and rhythmic complexity on a single bass drum. These developed in the context of rock and heavy metal traditions and rely upon a certain degree of momentum and force to execute clearly and articulately. We will see how the specified dynamics for both the ensemble and drumset have significant implications upon the performance and resulting techniques.

Quiet Double Kicks

Figure 31 is an example of the required double kick performance in *Golden Arms*. In this example, the drummer plays a pattern that moves between triplets in the bass drum and snare drum, with a variety of open and closed hi-hat attacks. These open hi-hats also require the player to be constantly moving the left foot, back and forth, between the hi-hat pedal and left kick pedal.

Figure 31 is a musical score for a double kick and quick left foot movement. It is in 4/4 time, marked 'mp' (mezzo piano), and includes a '3' indicating a triplet. The notation shows a sequence of notes with 'R' and 'L' foot indicators, and a circled 'L' with an arrow pointing to the left bass drum pedal. A note above the staff says 'In sync with vibraphone'. A box labeled 'A' is at the top right. The score is divided into two systems, with the second system starting at measure 5. The first system ends with a circled 'C' and an arrow pointing to the right.

Figure 31: Double kick and quick left foot movement in *Golden Arms*, mm. 4-6.¹³⁰

With this pattern, the drumset, in rhythmic unison with the piano, enters at *mezzo piano* dynamic. With all the motion required to execute both hi-hat and double kick pedals, special care must be taken to avoid excessive force and unwanted loud attacks. Quiet dynamics can be achieved and applied throughout *Golden Arms* in the following way:

1. Keep the beaters close to the head (even resting on it) before an attack. This is similar to how some percussionists prepare to begin a quiet snare drum excerpt (such as Ravel's *Bolero*).

2. After the beater strikes, dig into the head rather than bouncing off. This dampens the resonance to minimize sound and keeps the beaters close to the head for the next attack. This can also add articulation.

3. Use a “beater impact pad” which attaches onto the bass drum head where the beaters attack. The “EQ Bass Drumhead Patch” by the Evans company, made from nylon, not only softens the attack, but controls the beater to allow for greater clarity at quiet dynamics.

4. Minimize movement between hi-hat pedal and left bass drum pedal by placing the two pedals as closely together as possible with the pedal boards at the same height. This allows the foot to slide over, which is a more efficient motion and reduces the force and dynamic of the initial stroke.

¹³⁰ Lizée. *The Man with the Golden Arms*. 2012.

These techniques can be applied to other quiet double kick patterns throughout the work, such as in Figure 32 and 33.

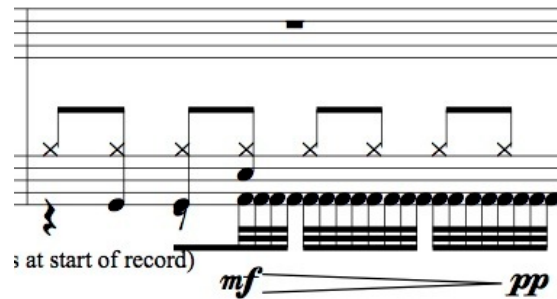


Figure 32: Double pedal technique with decrescendo in *Golden Arms*, mm. 565.

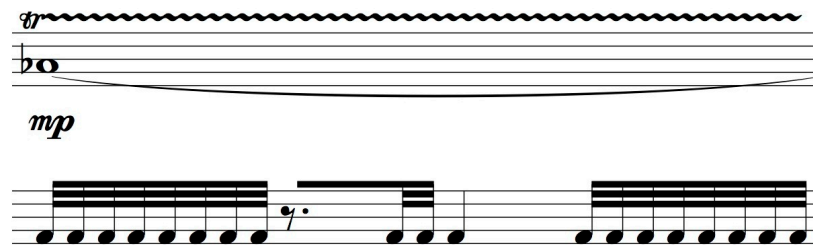


Figure 33: Double pedal technique at *mp* in *Golden Arms*, mm. 450.

5.4.6 The Confluent Drummer

Some drummers would find this type of performance constraining or restrictive. This is because the techniques go against our ingrained tendencies and comfort level of simply hitting the drums hard. Traditionally, drummers are used to achieving speed and rhythmic complexity in their playing by using a certain degree of force. For this reason, it should be recognized that some sacrifices for the drummer must be accepted in the performance of this music. There is a degree of discomfort that accompanies these extreme conditions, owing to the physical demands placed on the performer due to dynamic restraint.

Even the characteristic sound of the drums changes when simply hit with less force. Every drummer develops a personal attachment to, and an “ear” for, their own drumset. This music, which explores a lower dynamic platform, produces a different spectrum of sound from that to which we are accustomed.

The question may then be, “Why continue to perform music which demands these sacrifices?” I believe these only remain sacrifices when considered as taking away from one’s performance. Approaching this music as a **confluent drummer** suggests an openness to new paths of creativity. In this way, techniques are not restrictive, rather simply new, and we are not just playing quiet dynamics, but creating new colours, textures and expanding the expressive range of our instrument. Through thoughtful practice and contemplation, these new techniques can feel natural, fluid and expressive.

5.4.7 The Drumset as an Orchestra

Through this expansion of technique in *Golden Arms*, we realize that the drumset has its own orchestral range of musical expression. Stravinsky spoke of this when assembling the percussion setup of *L’Histoire du Soldat*. He described the percussion instrumentation as representing the entire range of the jazz orchestra, from the lows of the bass drum, melodic mids of the tom-toms to the highs of the cymbals and triangle. This way of thinking can also be associated with Max Roach who called his setup a multiple percussion drumset as if to highlight the expressive range of the instruments and his performance. We can also associate this idea with the elaborate setups and sonic range of “orchestral” and “compositionally” infused drumming of progressive rock drummers like Carl Palmer and Neil Peart (Chapter 1.5).

Nicole Lizée draws our attention to this orchestral range of the drumset through virtuosic performance in *The Man with the Golden Arms*. We are drawn, for example, to the bass drum because of the extreme and impressive use of the double kicks. Consistently a part of the motivic material, the bass drum and feet solidify its place in the lower register of the ensemble. Unique sound choices also establish this range: the high-pitched, shimmering Sizzle Cymbal; the mid-ranged, distorted sound of one stick hitting the snare and hi-hat together; and the “other-worldly” range of the extended instruments – acoustic guitar, record player and glockenspiel.

5.4.8 The Drumset as Foundation

For the soloist, a successful performance of *Golden Arms* comes from navigating the technical and rhythmic complexities while maintaining the feel, groove and emotion. By doing so we achieve what the composer desires: to lead the listener on a musical journey. Yet, unlike the traditional structure of classical, or orchestral music, this journey is not primarily experienced through melody and harmony. Rather, we return to the very foundation of the drumset itself: time. It is time and groove that not only establish the foundation of the drumset material in *Golden Arms*, but, most strikingly, form the basis of the sonic material for the entire ensemble as well. The result is an orchestration that appears to be an extension of the drumset’s rich orchestra of sound, and palette of groove. This is apparent through the unique connection and interaction between soloist and ensemble throughout the concerto. The three primary modes of interaction in *Golden Arms* can be identified as Unison, Triggered and Resonant. Through these, we discover how the drumset remains the foundation of the ensemble performance of *Golden Arms*. While an example of each is presented below, a complete outline of the interactions throughout *Golden Arms* has been included in Appendix 2.

Unison Interaction

As discussed in Chapter 1.6.2, unison interaction between the drummer and other musicians has been a common occurrence, particularly since the introduction of early heavy metal styles. This occurs first (Section A) and most often with the piano (unisons establishing significant material for nine of twenty-one sections in *Golden Arms*). Most notably, Lizée brings this approach to a new level of intricacy in Section G. Here, the drumset introduces the Purdie Shuffle with the piano in rhythmic unison. Most notable is that the pianist is replicating the hi-hat and snare drum stickings of the soloist's shuffle, including all complex manipulations and variations. The pianist plays two low-registered, cluster chords (Left hand, E-F-G and Right hand, F-G flat-A flat) that blend with the drumset. Less of a melodic impact, the two instruments merge to form a completely new sound. Through unison interaction, the drumset is transformed into something more resonant, with new timbres and frequencies: in effect, a new instrument is produced.

Triggered Interaction

Neil Peart, introduced in Chapter 1.5.2, plays a drumset that includes electronic triggers on select drums within his setup. When struck, a signal is sent, via MIDI, that plays an electronic sample. For example, in the finale of his solo "Moto Perpetuo," Peart strikes a tom which triggers a big band brass section, playing either a single note, chord or short phrase. Reminiscent of these electronic triggers or added samples, the drumset in *Golden Arms* appears to trigger other voices in the ensemble. These are often single notes or short bursts of material. For example, Lizée has instructed the vibraphone, playing single notes, in Letter B to "sync with the drumkit soloist's accented hi-hat." This is also notable in Letter I, as Percussion 1 and 6 play rapid pairs of sixteenths synchronized with the soloist's bass drum pedal attacks (page 59 of the

score). In this way, the ensemble in *Golden Arms* takes on the role of the drummer's live, acoustic, sampler, extending the instrument to new sound sources.

Resonant Interaction

In a recording studio setting, the resonance of the drumset can be altered using a variety of techniques. As discussed in Chapter 3.4.3, John Bonham's sound for "When the Levee Breaks" was magnified and increased in resonance through specific microphone placements and room selection. In more recent years, simply altering settings of digital recording software will produce similar results. Again, in *Golden Arms*, Lizée achieves this through acoustic interaction between drumset and the ensemble. For example, Letter I introduces the Gadd Paradiddle groove played by the soloist. Most of the ensemble underlies this groove with prodding eighth-note material. With the percussion playing low, thunderous tom-toms, the deep piano chord clusters (chromatic clusters and hints of 7th chords) combine the same low pitches individually played by the other instruments in the ensemble. The orchestra does not accompany to support the melody or harmony. Instead, pitch appears to be chosen to complement and thus magnify the frequencies of the drumset. The drumset expands in this instance to encompass the entire stage and become one massive orchestra and, once again, the foundation of the entire ensemble.

In *The Man with the Golden Arms*, orchestral music's traditional foundation of harmony and melody are turned upside down. This music deconstructs the orchestra as we know it and establishes a new order. It is the drumset that guides the music and it is rhythm, time and groove that inspire the sonic material. As if an extension of the drumset itself, the orchestral instruments interact and react to the soloist in ways that challenge the very nature of their own performance. In this confluent work, the rich history of drumset styles, techniques and performance practices flow together with chamber orchestral traditions. Mixed up and re-formed through Nicole

Lizée's unique compositional style, *The Man with the Golden Arms* elevates the sonic range and musical and technical potential of the drumset.

5.5 General Discussion

There is a flowing together of elements from all previous approaches in the Confluent Approach. A Tourist's inspiration from the jazz drumming language is heard in John Psathas' *Drum Dances*. High levels of rhythmic complexity, similar to the Non-Idiomatic Approach, create Stuart Smith's notated improvisation in *Blue Too*. Nicole Lizée creates a Snapshot of iconic grooves throughout *The Man with the Golden Arms*. What is unique about the Confluent Approach is that these elements intertwine, and become the source for new inspiration, musical expression and exciting new techniques for the drumset. In doing so, we discover new directions for how the drumset can be incorporated in the Western art music tradition.

Conclusion

This thesis began by presenting the history of the drumset, an instrument deeply rooted in popular music traditions and styles. This not only reflected the development of various devices that formed the instrument, but also presented the individuals that explored new musical and technical possibilities.

Today, the drummer's early role as foundation and timekeeper has expanded to that of a soloist with potential for musical complexity and depth in styles ranging from jazz, to rock, to heavy metal. Publications like *Drum!*, *Modern Drummer*, *Drummer's Journal* and *Percussive Notes* regularly discuss these musical and technical innovations of past drumming icons as well as today's new generation of drummers.

The approaches to drumset composition in this thesis were identified in order to highlight the lesser known influence that drumset performance has had on contemporary music composers since the early development of the instrument itself. The body of work identified by the four approaches reflects the wide musical and technical range of this influence. This discussion began with Stravinsky and Milhaud who were drawn to the early sounds of jazz, resulting in the infusion of idiomatic double drumming and basic drumset techniques, defined in the Tourist Approach. Christopher Rouse's *Bonham* and the music of the Snapshot approach recreates a particular groove, style or artists' signature sound to celebrate this influence. The Non-Idiomatic Approach of James Dillon surprises the listener by surpassing the common expectations of drumset performance practices through overtly complex musical material. Finally, the Confluent Approach, such as of Nicole Lizée, is a flowing together of influences that challenge our assumptions regarding the technical and musical possibilities of the drumset. It does so while

remaining linked to the drumset's place in popular music, and for this reason presents an exciting new avenue for today's composers and performers of Western art music.

As I perform this repertoire, it is the drumset's link to iconic players, grooves and musical styles that remains at the core of my interpretation, appreciation and, ultimately, performance. It is why I am drawn to the music and concept of the Confluent Approach, in particular. It celebrates the evolution of the drumset, the expressive potential that is possible today, and, most importantly, suggests that new ideas are still to come. Working with composers of this repertoire, I have experienced new musical fulfillment. I am encouraged to further develop my own technical skill on the drumset as it motivates and inspires those writing for me. Conversely, each composer brings their own appreciation, interpretation and motivation for working with the drumset that influences my personal performance practices.

In the past, drumset performance has been considered a separate path from that of the contemporary percussionist. The term multiple percussion is used to bridge a gap, or establish acceptance when the two paths interlock. It is my belief that the individuals in this thesis – the players, inventors and composers, each in their own way, remain linked to the same fundamental drumset performance practices. In recognizing the link to popular music traditions we see how each has challenged what was considered normal, traditional and even possible with drumset performance. Through various social, cultural and geographical contexts these individuals have built the rich history of the drumset that exists today. These were not isolated events. Instead, flowing over time, they have occurred in reaction to or along side each other.

I see myself as part of this flow today as I commission and premiere new works for the drumset. I have built relationships with various composers who not only share my interest in the past, but look with me to the future and say, "What is next?" Through these experiences I have

determined that the role of drumset performance in contemporary music is to stimulate new repertoire that adds to, or further expands, the history of the instrument. As a drummer, like generations before me, I, too want to contribute to this history. With this new repertoire, resulting techniques and performance practices, I have found my way.

Appendixes

Appendix 1 - *Spooky Drums No. 1* by Baby Dodds¹³¹

Drumset

Spooky Drums no.1

Baby Dodds
trans. Ben Reimer

Legend:

- Toms: High, Med, Low
- Snare: Drum, Rim, Shell
- Bass Drum
- Cow Bell: High, Low
- Wood Block
- Cymbals: High, Low

Measure numbers: 4, 10, 15, 20, 25, 30, 35

¹³¹ Digitized by Zachary Hale.

Spooky Drums no.1

The musical score for 'Spooky Drums no.1' is written for a drum set, indicated by the double bar line with two vertical strokes at the beginning of each staff. The score consists of eight staves, each containing a line of music. The notation includes various drum symbols: eighth and sixteenth notes for snare and tom patterns, and rests for cymbal or other drum parts. The music is in 4/4 time and features a variety of rhythmic patterns, including syncopation and complex groupings. The staves are numbered 40, 45, 50, 54, 59, 64, 69, and 74, indicating the measure numbers. The overall style is a rhythmic, spooky-themed drum solo.

Spooky Drums no.1

The musical score for 'Spooky Drums no.1' is written for a drum set, indicated by the double bar line with two vertical strokes at the beginning of each staff. The score is divided into eight systems, each starting with a measure number. The first system (measures 78-81) is in 2/4 time. The second system (measures 82-86) is also in 2/4 time. The third system (measures 87-92) changes to 4/4 time. The fourth system (measures 93-96) is in 2/4 time. The fifth system (measures 97-101) is in 2/4 time. The sixth system (measures 102-106) is in 2/4 time. The seventh system (measures 107-111) is in 2/4 time. The eighth system (measures 112-116) is in 2/4 time. The notation includes various drum symbols: a vertical line for the snare drum, a vertical line with a cross for the hi-hat, and a vertical line with a triangle for the cymbal. The rhythm is complex, featuring many eighth and sixteenth notes, as well as rests and dynamic markings like 'x' for accents.

Spooky Drums no.1

The musical score for 'Spooky Drums no.1' is written on six staves, each beginning with a double bar line and a key signature of one flat (B-flat). The notation is as follows:

- Staff 1 (Measures 117-121):** Features a series of eighth and sixteenth notes, often beamed together, with occasional rests. Measure 117 starts with a treble clef and a key signature change to one flat.
- Staff 2 (Measures 122-126):** Continues the rhythmic pattern with eighth and sixteenth notes, including some triplet-like groupings.
- Staff 3 (Measures 127-131):** Shows a more complex rhythmic structure with eighth and sixteenth notes, some with beams, and occasional rests.
- Staff 4 (Measures 132-136):** Features a series of eighth and sixteenth notes, with some measures containing beamed eighth notes.
- Staff 5 (Measures 137-141):** Continues the rhythmic pattern with eighth and sixteenth notes, including some triplet-like groupings.
- Staff 6 (Measures 142-146):** Ends with a series of eighth and sixteenth notes, followed by a final measure with a treble clef and a key signature change to one flat.

Appendix 2 - Overview of Interactions in *The Man with the Golden Arms*

UI - Unison Interaction, RI - Resonant Interaction, TI - Triggered Interaction

Section	Drumset Points of Interest	Ensemble Interaction with Drumset
A	Alternating bass drum/snare drum triplets, <i>mp</i> .	UI: Piano is in rhythmic unison. Others play quiet accompaniment rhythm and texture.
B	16th note groove with varied hi-hat accents, snare drum rims, <i>mp</i> .	TI: Vibraphone attacks are triggered by drumset hi-hat accents.
C	32nd note groove, <i>mf/ff</i> .	Similar rhythms played in orchestra.
D	The Traditional Blast Triplet, <i>mp</i> .	UI: Piano is in rhythmic unison.
E	Sparse, choppy pattern, <i>mp</i> .	UI: Rhythmic unison figures of drumset past around orchestra, while others play in between spaces.
F	Quarter note triplet ride cymbal with accelerando, <i>mf</i> .	UI: Percussion 2 is in rhythmic unison, while others create a contrasting rhythmic foundation.
G	The Purdy Shuffle and variations, <i>mp</i> .	UI and TI: Piano is in rhythmic unison, with the same right and left hand pattern as the soloist. Percussion is triggered by the drumset.
H	New 32nd note groove, <i>mf/f</i> .	UI: Piano, winds, brass and percussion are often in rhythmic unison.
I	The Gadd Paradiddle with acoustic guitar, <i>f/ff</i> .	RI and TI: Ensemble underlines the pulse and merges with the drumset becoming sonically interlocked. Some percussion triggered by drumset.
J	Tacet	Typewriters and celeste create an echo effect.
K	Tacet	Strings create a similar echo effect.
L	5:2 groove, <i>mf</i> .	UI: Piano is in rhythmic unison, and at times, so is percussion and brass. Strings play a counter rhythm that emphasizes the time manipulation.

Section	Drumset Points of Interest	Ensemble Interaction with Drumset
M	New 16th note groove, <i>p</i> .	UI: Piano is in rhythmic unison. Others play fragments of the groove and come in and out of unison.
N	The Purdy Shuffle and variations, <i>mp</i> .	UI and TI: Piano is in rhythmic unison. Percussion is triggered by drumset.
O	Tacet	6/8 rhythmic unison patterns are played by strings and percussion.
P	6/8 groove increases in complexity and disguises downbeats, <i>f</i> .	UI: Strings are in rhythmic unison with percussion forming a counter rhythm.
Q	Triplet and 32nd note groove, alternating between tempos quarter=60 and 80, <i>mp/mf</i> . Ends with double kick bursts.	UI: Vibraphone is in rhythmic unison. The rest of percussion play fragments of the groove. Other instruments mostly play, straight forward pulse.
R	Glockenspiel, 32nd note groove. This begins as a loop then turns to changing melodic and rhythmic material, with accelerando. <i>p</i> gradually crescendos to <i>ff</i> .	UI: Piano is sometime in rhythmic unison, but mostly the orchestra is background and support to the extremely complex drumset material.
S	Complex triplet and eighth note groove with displaced downbeats and time manipulation, <i>mp</i> .	TI: The percussion form a counter rhythm and are also triggered by drumset.
T	5:2 groove with sudden tempo changes between quarter= 88 and 136, <i>mf</i> .	UI: Piano is in rhythmic unison. Others have short moments of unison but mostly establish a counter rhythm that draws accentuates the polyrhythms and time manipulation.
U	The Gadd Paradiddle with turntable, <i>mf</i> . This also features a 32nd notes double kick decrescendo from <i>mf</i> to <i>pp</i> . In the last measures the soloist gradually slows down the record player and lifts the needle to stop.	RI and TI: Like Section I, the ensemble underlines the pulse and merges with the drumset becoming sonically interlocked. The ensemble magnifies, echoes, dissolves and resonates as if an extension of the drumset.

Bibliography

- Aldridge, David. "Terry Bozzio & Chad Wackerman." *Drum! Magazine*,
<http://www.drummagazine.com/features/post/terry-bozzio-chad-wackerman-united-by-the-black-page>.
- Aldridge, John. *Guide to Vintage Drums*. Anaheim Hills: Centerstream Publishing, 1994.
- Beck, John H. "Alphabetical Listing of Percussion Instruments and Terms." In *The Encyclopedia of Percussion*, 3-111. New York; London: Taylor Francis Group, 1995.
- Blades, James. *Percussion Instruments and Their History*. London: Faber and Faber Limited, 1970.
- Breithaupt, Robert B. "The Drum Set: A History." In *Encyclopedia of Percussion*, edited by John H. Beck, 173-89. New York; London: Taylor Francis Group, 1995.
- Brown, Theodore Dennis. "A History and Analysis of Jazz Drumming to 1942.", The University of Michigan, 1976.
- "Carl Palmer's Gear." http://www.brain-salad-surgery.de/carl_palmers_gear.html.
- Cocteau, Jean. *A Call to Order*. Translated by Rollo H. Myers. London: Faber and Gwyer, 1918-1926.
- Dean, Matt. *The Drum: A History*. Lanham: Scarecrow Press, Inc., 2012.
- Falzerano, Chet. "The Evolution of the Hi-Hat." *Modern Drummer*, September 1990: 76-77.
- Frederic Ramsey, Jr. "Baby Dodds Drum Solos." Original 1946 Record Booklet: Folkways Records, 1946. Liner Notes.
- Gara, Larry. *The Baby Dodds Story as Told by Larry Gara*. Alma: Rebeats Publication, 2002. 1992. 1959.

- Gendron, Bernard. *Between Montmartre and the Mudd Club: Popular Music and the Avant-Garde*. Chicago; London: The University of Chicago Press, 2002.
- Gerber, Stuart W. "Karlheinz Stockhausen's Solo Percussion Music: A Comprehensive Study." University of Cincinnati, 2003.
- Gillespie, Dizzy. *To Be, or Not... to Bop*. edited by Al Fraser New York: Doubleday & Company Inc., 1979.
- Gold, Don. "Max Roach: A Great Drummer Looks Back at Some Influences." *Down Beat*, May 20, 1958.
- Haid, Mike. "Top 25 Drum Solos of All Time." *Modern Drummer*, vol. 30, no. 4, 2006: 94-105.
- Hennessey, Mike. *Klook: The Story of Kenny Clarke*. London: Quartet Books Limited, 1990.
- Houllif, Murray. "Benefits of Written-out Drumset Solos." *Percussive Notes* February, 2006: 12-14.
- Howe, Warren. "The Percussionist's Guide to Darius Milhaud's La Création Du Monde." *Percussive Notes*, vol. 17, no. 1, 1979: 37-48.
- Jackson, Jeffrey H. *Making Jazz French: Music and Modern Life in Interwar Paris*. Durham; London: Duke University Press, 2003.
- "James Dillon - Percussion." Edition Peters, https://www.edition-peters.de/cms/front_content.php?composer_id=81&changelang=2&lang=2&idcatart=259.
- Kelly, Barbara L. *Tradition and Style in the Works of Darius Milhaud 1912-1939*. Aldershot: Ashgate Publishing Limited, 2003.
- Korall, Burt. *Drummin' Men, the Heartbeat of Jazz: The Bebop Years*. New York: Oxford University Press, 2002.

- Liu-Rosenbaum, Aaron. "The Meaning in the Mix: Tracing a Sonic Narrative in 'When the Levee Breaks'." *Journal of the Art of Record Production* November, no. 7. 2012.
- Lizée, Nicole. "Biography." <http://www.nicolelizee.com/biography/#.Ujm8MGTEZgI>.
- — —. *The Man with the Golden Arms*. Program Notes, 2012.
- — —. *Ringer*. Program Notes, 2008.
- Ludwig-Jr., Bill, Calvin Bolton, Ray E. Benjamin, and John Aldridge. "The Ludwig Drummer: April 1926 to Spring 1948." Anaheim Hills: Centerbrook Publishing, 1999.
- Micallef, Ken. "Carl Palmer: From the Beginning." *Modern Drummer*, June 2005: 120-27.
- Milhaud, Darius. *My Happy Life*. Translated by Donald Evans, George Hall and Christopher Palmer. London, New York: Marion Boyars, 1987, 1995.
- — —. *Notes without Music*. Translated by Donald Evans. edited by Rollo H. Myers London: Dennis Dobson Ltd., 1952.
- Miller, Robert Ward. "Darius Milhaud's La Création Du Monde: The Conductor's Guide to Performance." Dissertation, University of Iowa, 2011.
- Mover, Jonathan. "A Conversation with Neil Peart." *Drumhead Magazine*, September/October, no. 4, 2007: 10-27.
- Nicholls, Geoff. *The Drum Book: A History of the Rock Drum Kit*. 2nd ed. New York: Backbeat Book, 2008.
- Nichols, Kevin Arthur. "Important Works for Drum Set as a Multiple Percussion Instrument." PhD dissertation, University of Iowa, 2012.
- Oxford Dictionary of English*. 3rd ed. Oxford University Press, 2012.
- Paczynski, Georges. *Une Histoire De La Batterie De Jazz*. Vol. 1, Paris: Outre Mesure, 1999.

- Parker, Wesley Brant. "The History and Development of the Percussion Orchestra." Florida State University, 2012.
- Payne, Jim. "The Purdie Shuffle: Revisiting a Classic." *Modern Drummer*, 2010.
http://www.funkydrummer.com/JPpages/MD_articles/IN_THE_POCKET_JULY_2010.pdf.
- Potter, Keith. "Contemporary British Composers 3: James Dillon: Currents of Development." *The Musical Times*, vol. 131, no. 1767, 1990: 253-60.
- Psathas, John. "John Psathas - Drum Dances." Promethean Editions, <http://www.promethean-editions.com/php/PubDetail.php?pubID=10&SSID=1&Composer=John%20Psathas&SSID=5>.
- Roddy, Derek. *The Evolution of Blast Beats*. Hudson Music Limited, 2007.
- Rogers, Dennis G. "Drum Set's Struggle for Legitimacy." *Percussive Notes*, vol. 32, no. 3, 1994: 28.
- Rosen, Michael. "The Tambourin Provençal." In *The Encyclopedia of Percussion*, edited by John H. Beck, 335. New York; London: Taylor Francis Group, 1995.
- Schluetter, Brad. "On a Mission from Gadd."
<http://www.drummagazine.com/lessons/post/drum-masterclass-on-a-mission-from-gadd/>.
- Smith, Stuart Saunders. "Percussion in Discussion (Language, Percussion, and My Speech Songs)." *Percussive Notes*, vol. 31, no. 8, 1993: 71-73.
- Stern, Chip. "Papa Jo Jones." *Modern Drummer*, vol. 8, no. 1, 1984: 8-13; 38-48.
- Stravinsky, Igor. *An Autobiography*. New York: W.W. Norton & Company, 1962. 1936.
- Stravinsky, Igor, and Robert Craft. *Dialogues and a Diary*. London: Faber and Faber, 1968.

Walsh, Stephen. *Stravinsky: A Creative Spring: Russia and France*. Berkeley: University of California Press, 2002.

Watkins, Glenn. *Pyramids at the Louvre: Music, Culture, and Collage from Stravinsky to the Postmodernists*. London: The Belknap Press of Harvard University Press, 1994.

White, Eric Walter. *Stravinsky: The Composer and His Works*. Berkeley, Los Angeles: University of California Press, 1966.

Audio Recordings

Bebop Spoken Here. Beckenham, Kent: Proper Records Properbox 10, 2000. 4 Compact discs. 1941-1950.

Black Sabbath. *Paranoid*. Warner Bros./WEA B000002kHH, 1990. Compact disc. Originally released in 1970.

Clarke, Kenny. *Klook's the Man [Anthology]*. Proper Properbox 120, 2007. MP3 Music.

Clarke, Kenny. *Bohemia after Dark*. Savoy Jazz SVY17166, 2003. Compact disc. Originally released in 1955.

Cobham, Billy. *Spectrum*. Atlantic B0000002I77. compact disc. Originally released in 1973.

Dodds, Baby. *Talking and Drum Solos*. Unheard Music Series, 2009. Compact disc. Originally released in 1946.

Ebony Band. *La Création Du Monde*. Dancing: The Jazz Fever of Milhaud, Martinu, Seiber, Burian, Wolpe, Werner Herbers, Conductor. Herwijnen: Channel Classics CCS 30611, 2011. compact disc. 2007.

Ellington, Duke. *Ellington Uptown*. Sony Music Distribution 5129172. Compact disc. Originally released in 1953.

Emerson Lake & Palmer. *Brain Salad Surgery*. Manticore Records Limited MC66669, 1973. LP.

Emerson, Lake & Palmer. *Pictures at an Exhibition*. Island Records, 1971. LP.

The Engine Room: A History of Jazz Drumming from Storyville to 52nd Street. London: Proper Records P1105-P1108, 1999. 4 compact discs. 1917-1948.

Gershwin, George. *The Birth of Rhapsody in Blue: Paul Whiteman's Historic Aeolian Hall Concert of 1924*. Maurice Peress with Ivan Davis and Dick Hyman. Musicmasters MMD 60113T, 1986. Compact disc.

Gershwin, George. *Rhapsody in Blue (Orch. Grofé)*. Bernstein/Gershwin/Barber. Hamburg: Polydor International 427 806-2, 1985. Compact disc. 1982.

Goodman, Benny. *Benny Goodman 1927-29: Classic Jazz*. Music Theme Licensing, Vol. 81, MP3.

The Guild of Ancient Fifes and Drums. *Drum and Fife Through History from the 17th to the 20th Century*. Bandleader Recordings, 2000. MP3.

Led Zeppelin. *II [Remastered]*. Atlantic 82633, 1994. Compact disc. Originally released in 1969.

Metallica. *Master of Puppets*. Elektra. MP3, 2012. Originally released in 1986.

Milhaud, Darius. *Création Du Monde*. Ian Hobson, Sinfonia Da Camera. Arabesque Z6569, 1987. MP3.

The Original Dixieland Jazz Band. *The First Jazz Recordings, 1917-1921*. Timeless Records B001CKE6MK, 2008. MP3. 1917-1921.

Rhapsodies in Black: Music and Words from the Harlem Renaissance. Rhino 79874, 2000. 4 compact discs.

Roach, Max. *Drums Unlimited*. Warner Bros. 7411569. 2012. Compact disc. Originally released in 1966.

Rush. *2112 [Deluxe Edition]*. Mercury 3715015, 2012. Compact disc. Originally released in 1976.

Rush. *A Farewell to Kings*. Anthem Records, 2007. MP3. Originally released in 1977.

Slayer. *Reign in Blood*. American Recordings/Universal, 2013. MP3. Originally released in 1986.

Stravinsky, Igor. *The Soldier's Tale*. Sting, Vanessa Redgrave, Ian McKellen, Kent Nagano, London Sinfonietta. Pangea Records PANXD-6233, 1988. Compact disc.

Stravinsky, Igor. *Stravinsky Conducts Histoire Du Soldat Suite*. Stravinsky Conducts Stravinsky: The Original Jacket Collection: Columbia Chamber Ensemble. Sony Music Entertainment SX9K 64136, 1999. Disc 6 of 12 Compact discs. 1968.

Van Halen. *1984*. Warner Bros./WEA 9239851, 1983. LP.

Video Recordings

At the Jazz Band Ball: Early Hot Jazz, Song and Dance 1925-1933. Yazoo Video 514, 2000. DVD.

Bellson, Louie. "Skin Deep." <http://www.youtube.com/watch?v=feF0DzZiwzQ>.

Branam, Terry. "Gadd's Paradiddle Groove." Drummer World, <http://www.drummerworld.com/Videos/stevegaddbasic.html>.

"The Real 'Purdie' Shuffle." <http://www.youtube.com/watch?v=J8DsNo4KB6Y>.

Roddy, Derek. *The Evolution of Blast Beats*. Hudson Music Limited, 2007.

Scores

Dillon, James. *Ti.Re-Ti.Ke-Dha*. 2 ed. London: Hinrichsen Edition, Peters Edition Ltd., 1979, 1982. Musical Score.

Gershwin, George. *Rhapsody in Blue: 50th Anniversary Edition/Commemorative Facsimile Edition*. scored by Ferde Grofé: Warner Bros. Publication, 1987.

Lizée, Nicole. *The Man with the Golden Arms*. 2012.

Milhaud, Darius. *La Création Du Monde*. Paris: Éditions Max Eschig, 1929.

Psathas, John. *Drum Dances*. Wellington: Promethean Editions Ltd., 1993. Musical Score.

Rouse, Christopher. *Bonham*. Hendon Music Inc., Boosey & Hawkes Company, 1989;1996.

Stockhausen, Karlheinz. *Nasenflügeltanz*. 1st ed. Kürten: Stockhausen-Verlag, 1983.

Stravinsky, Igor. *L'Histoire Du Soldat*. Percussion Part. edited by Frank Epstein, 1995.