Noodling Changes: The Development of Xylophone Improvisation in New York City (1916-1942)

Jonathan D. Singer
The Graduate Center, City University of New York

How does access to this work benefit you? Let us know!
Follow this and additional works at: http://academicworks.cuny.edu/gc_etds
Part of the Music Performance Commons

Recommended Citation
http://academicworks.cuny.edu/gc_etds/2269

This Dissertation is brought to you by CUNY Academic Works. It has been accepted for inclusion in All Graduate Works by Year: Dissertations, Theses, and Capstone Projects by an authorized administrator of CUNY Academic Works. For more information, please contact deposit@gc.cuny.edu.
NOODLING CHANGES:
THE DEVELOPMENT OF XYLOPHONE IMPROVISATION
IN NEW YORK CITY (1916-1942)

by

JONATHAN SINGER

A dissertation submitted to the Graduate Faculty in Music
in partial fulfillment of the requirements for the degree of
Doctor of Musical Arts

The City University of New York
2017
This manuscript has been read and accepted by the Graduate Faculty in Music in satisfaction of the dissertation requirement for the degree of Doctor of Musical Arts.

Date
Prof. Norman Carey
Chair of Examining Committee

Date
Prof. Norman Carey
Executive Officer

Supervisory Committee:

Prof. Sylvia Kahan

Prof. Jeffrey Taylor

Ian Finkel

THE CITY UNIVERSITY OF NEW YORK
Abstract

NOODLING CHANGES:
THE DEVELOPMENT OF XYLOPHONE IMPROVISATION
IN NEW YORK CITY (1916-1942)

by

Jonathan Singer

Advisor: Prof. Sylvia Kahan

Red Norvo is cited as the xylophonist who took the instrument from the vaudeville stage to jazz. However, many xylophonists preceding Norvo were avid improvisers. There is an untapped history of xylophone improvisation on record and in pedagogical materials from a generation before Norvo’s appearance on the scene. The purpose of this dissertation is to examine evidence and the development of improvisation and improvisation-oriented music by xylophonists in New York City, the epicenter of recording and radio from the period of 1916-1942. This study includes xylophonists George Hamilton Green, Joseph Green, Harry Breuer, Sammy Herman, and Billy Gladstone, as well as Norvo’s own xylophone performance during the first two decades of his career.
Acknowledgements

I am indebted to my dissertation advisor, Professor Sylvia Kahan, for her guidance and dedication to this dissertation. I am grateful to my dissertation committee: Professor Norman Carey, for seeing the project through from its earliest stages to its completion; Professor Jeffrey Taylor, for invaluable feedback and enthusiasm for this project, and Ian Finkel for his continued encouragement, insight, and candor.

It is with the support of the Baisley Powell Elebash Dissertation Award that I have been able to complete this dissertation. I also gratefully acknowledge the faculty and staff at the following institutions: Professors Will Rapp and Frank Kumor at The Center for Mallet Instrument Research at Kutztown University, Richard Boursy at the Yale University Library, and Professor Harvey Price at the University of Delaware.

I am immeasurably grateful to Jackie Martelle of the Graduate Center for the years of assistance in navigating my graduate study, always in the most prompt and helpful manner imaginable. I am thankful to the faculty and my colleagues at the Graduate Center. Each class and interaction has been a transformative experience. I am also thankful to my friends and colleagues in the Xylopholks, bringing the music of the xylophonists in this study to life: Carmen Staaf, Steve Whipple, and Bridget Kearney.

This project has been made richer by the generosity of many experts in the field: Bob Becker, William Cahn, David Harvey, Vince Giordano, James Strain, Dana Kimble and Ryan Lewis.

Special thanks to my teachers for graciously sharing knowledge, inspiration, and patience: Professor Morris Lang during my years at the Graduate Center, and previous
teachers including Professors Michael Lipsey, Nancy Zeltsman, Abhijit Banerjee, Erode Nagaraj, Julie Spencer, and David Taylor. I am also grateful to Jamey Haddad and Dave Samuels, who believed in me as an improviser at a critical time in my education.

I would like to thank Lew Green, Jr., Robert Breuer, and Anthony Breuer, for sharing details of their families’ musical legacies and allowing me to include them in this document.

Finally, my deepest thanks go to my family: my parents who did everything to support my unpredictable choices in the pursuit of a life in music; my brother Ben, for setting the academic bar as high as possible; my daughter Magnolia, whose imminent arrival both encouraged progress on this dissertation and more reasons to celebrate; and my wife Margot, who bring me joy each and every day, and is a constant reminder of what is truly important.
Table of Contents

Introduction 1

Chapter 1 CONSIDERING IMPROVISATION 8
Twentieth Century Xylophone Improvisation before Red Norvo 8
Xylophonists Influenced by George Hamilton Green’s Variation Style 16
Attitudes Towards Improvisation and Spontaneity 18
Revival Era Approaches to Improvisation 24
Classical and Jazz Pedagogy 29

Chapter 2 ORIGINS, DESIGN, AND SOUND OF THE XYLOPHONE 34
Evolution: Nineteenth Century to Twentieth Century, Instruments and Repertoire 34
Instrument Design and Range 39
Bar Materials 46
Mallets 47
Shafts 43
The Challenge of Playing Legato 51
Technique 53
Grip 53
Execution of Stroke 54
Volume 57
Illusions of Sustaining Tone: Rolls, Tremolo, and Trills 58

Chapter 3 MUSIC INDUSTRY AND XYLOPHONISTS OF NEW YORK CITY 1916-1942 66
New York City 66
Vaudeville and Cabaret Entertainment 68
The Whiteman Connection 74
Publishers and Sheet Music 77
Xylophone in Acoustic Recording 81
Radio 85
Transcription Records and Depression Era Records 88

Chapter 4 STYLISTIC DEVELOPMENT OF IMPROVISATION 91
Development of Style 91
Ragtime Misnomer 91
George and Joe Green Xylophone Improvisation Methods 92
4.1. Variation Style 94
4.1.1 Castle Valse Classique (Recorded by George Hamilton Green, 1917-1918) 97
4.1.2 Watermelon Whispers (Recorded by George Hamilton Green and Joe Green, 1918) 101
4.1.3 Ida! Sweet as Apple Cider (Recorded by George Hamilton Green, 1917) 103
4.2 Hot Style 105
4.2.1 Chromatic Fox Trot (Recorded by George Hamilton Green, 1925) 107
4.2.2 Trick Rhythm in Triplets 110
4.2.3 On the Woodpile (Recorded by Harry Breuer, 1929) 111
4.2.4 Rhythmic Development 111
4.2.5 Outlining Chords with Chromatic Passing Tones 114
4.2.6 Ida/Some of These Days Medley (Recorded by Billy Gladstone, ca. 1927-1931) 115
4.2.7 Form 116
4.2.8 Concluding Lower Neighbor Passage 117
4.2.9 “Hot Licks” over Common Chords 118
4.2.10 More “Hot Licks” 120
4.2.11 Hole in the Wall (Recorded by Red Norvo, 1933) 121
4.2.12 “Xylophonia” Figuration 123
4.2.13 Al Fresco (Recorded by Sammy Herman, 1927) 125
4.2.14 Ya Vas Da-Ra-Ga-Ya Loo-Bloo (Recorded by Sammy Herman, 1941) 127
4.2.15 Bye Bye Blues (Recorded by Sammy Herman, 1959) 131
4.3 Blues 134
4.3.1 Log Cabin Blues (Recorded by George Hamilton Green, 1925) 137
4.3.2 Yodel Contour 139
4.3.3 Blues in E-Flat (Recorded by Red Norvo, 1935) 142
4.3.4 Rhythmic Displacement 143
4.3.5 Motivic Development 144
4.3.6 Blues in E-Flat (same session as Red Norvo; Teddy Wilson, piano) 146
4.3.7 St. Louis Blues (Recorded by Red Norvo, 1938) 147
4.4 Swing 149
4.4.1 I Got Rhythm (Recorded by Red Norvo, 1936) 150
4.4.2 Motivic Development 151
4.4.2 Phrase Structure 152
4.4.2 “Trumpet Style” Octaves 153

Conclusion 156

Appendix A: Discography of Transcribed Examples 158

Appendix B: Additional Transcriptions 162

Bibliography 180
List of Figures

Figure 1.1: Right hand of Toni Iordache, cimbalom virtuoso (left) and Teddy Brown’s technique with extended index fingers (right). (Source: Youtube.) .................................. 13

Figure 1.2: Instruction Course Lesson Four original 1925 cover (on left, scan by the author, courtesy the Center for Mallet Instrument Research, Kutztown University) and Instruction Course cover, 1984 reissued by Meredith Music (on right, scan by the author). Used by permission. ................................................................. 31

Figure 1.3: Advertisement in Jacobs’ Orchestral Monthly, February 1925, encouraging orchestral musicians (both professional and amateur) to improvise that reads “ATTENTION! XYLOPHONISTS!! Learn to Improvise. Learn to play REAL MODERN RAGTIME, Blues, etc. Learn to feature different melodies with VARIATIONS, FOUR HAMMERS, etc. and above all develop a REAL TECHNIQUE so that you can play anything before you and play AT SIGHT!” Scan by the author, courtesy of the New York Public Library ............................... 32

Figure 2.1: Hanging xylophone from the collection of Grand Duke Ferdinand, housed in the Museo degli Strumenti Musicali, Florence. The image appears in John A. Rice, Empress Marie Therese and Music at the Viennese Court, 1792-1807, New York: Cambridge University Press, 2003, 144.............................................. 36

Figure 2.2: Hans Holbein the Younger, Death and the Old Woman, 1538, woodcut. The image is reproduced in Hans Holbein the Younger, The Dance of Death, publication info. Accessed in ebooks@Adelaide, last updated December 17, 2014, https://ebooks.adelaide.edu.au/h/holbein/hans/dance/complete.html (accessed January 2, 2017)................................................................. 37

Figure 2.3: Charles P. Lowe and his diatonic single-row xylophone, with a European configuration, rounded bars, and large mallet heads. Photo courtesy of James Strain. Used by permission................................................................. 40

Figure 2.4: Harry Breuer in NBC studios performing on the custom Deagan combination marimba, vibraphone, and xylophone. Image housed in the Center for Mallet Instrument Research, Kutztown University, PA. Used by permission............. 42

Figure 2.5: Standard xylophone, 3.5 octave Deagan 870 (photo by author) ................. 44

Figure 2.6: Illustrations from George Hamilton Green’s pamphlet on “How to Hold the Hammers.” Courtesy of the Center for Mallet Instrument Research, Kutztown University, PA ................................................................. 53

Figure 2.7: Nacio Herb Brown, “The Doll Dance,” mm. 1-4 of the C strain, original vocal sheet music (above) and variations written out by Harry Breuer (below)……. 59
Figure 2.8: Transcription of Ford T. Dabney, “Castle Valse Classique” (Emerson 3290-1), mm. 111-113, as heard at the recorded speed…………………………………….. 61

Figure 2.9: Transcription of Ford T. Dabney, “Castle Valse Classique,” (Emerson 3290-1), mm. 111-113 at a slower speed…………………………………………….. 61

Figure 2.10: Nacio Herb Brown, “The Doll Dance,” mm. 1-4 of the C strain as recorded by Teddy Brown (Edison Bell Electron-0187)…………………………………….. 62

Figure 2.11: Red Norvo, “Hole in the Wall,” mm. 10-12, notated rolls performed with double stops struck together followed by rolls beginning with the upper voice...63

Figure 2.12: Red Norvo, “Knockin’ on Wood,” published sheet music and transcription of recorded performance of mm. 44-48……………………………………….. 63

Figure 2.13: Red Norvo, “Knockin’ on Wood,” measure 41, published sheet music and transcription of recorded performance ……………………………………….. 64

Figure 4.1: George Hamilton Green and Joe Green, “Variation on Stephen Foster's 'Swanee River,'” excerpted from “Hints for Improvising,” in the Green Brothers’ Advanced Instructor, p. 91. Melody notes circled by author…………………………………… 94

Figure 4.2: Lesson 14 from George Hamilton Green, Modern Improvising and Application of Ideas to Melody. Copyright Meredith Music. Used by permission..95

Figure 4.3: Ford T. Dabney, “Castle Valse Classique,” mm. 6-8 from Emerson 991 (1918)……………………………………………………………………………………100

Figure 4.4: Ford T. Dabney, “Castle Valse Classique,” m. 15 of Emerson 991 (1918)..101

Figure 4.5: George Hamilton Green, “Watermelon Whispers,” mm. 1-5 of the A strain, top line staff, piano sheet music; bottom line, Emerson 991 transcription……102

Figure 4.6: George Hamilton Green, “Watermelon Whispers,” mm. 14-15, Emerson 991 …………………………………………………………………………………102

Figure 4.7: Eddie Munson/Eddie Leonard, “Ida! Sweet as Apple Cider,” two takes from September 5, 1917, 77308-1 (upper line), and 77308-2 (lower line)…………103

Figure 4.8: George Hamilton Green, “Chromatic Fox Trot,” Improvisation on refrain of A strain with double neighbor tones circled (Edison 51527-L)………………..109

Figure 4.9: George Hamilton Green, “Chromatic Fox-Trot,” improvisation recorded with Frank Banta (Edison 51527-L), four-note groupings in triplets…………………..110

Figure 4.11: Eddie Munson/Eddie Leonard, “Ida! Sweet as Apple Cider,” m.6………..110
Figure 4.12: George Hamilton Green, “Triplets” tag ending from George Hamilton Green’s Jazz Classics for the Xylophone (1924, self-published)........................................ 111

Figure 4.13a: Harry Breuer, “On the Woodpile,” mm. 57-58........................................ 112

Figure 4.13b: Rhythmic grouping, “On the Woodpile,” mm. 57-58........................................ 112

Figure 4.13c: Harry Breuer, “On the Woodpile,” whole-tone break at the conclusion of the second A section................................................................. 112

Figure 4.14a: Harry Breuer, “On the Woodpile” variation, mm. 1-2............................... 113

Figure 4.14b: Thomas “Fats” Waller, “Handful of Keys,” mm. 47-48............................... 113

Figure 4.14c: Harry Breuer, “On the Woodpile” variation, mm. 5-6............................... 113

Figure 4.14d: Rhythmic grouping of “On the Woodpile” variation, mm. 1-2 and mm. 5-6.................................................................................................................... 113

Figure 4.15: Al Sherman/Al Lewis, ”Now’s the Time to Fall in Love,” excerpt of Sammy Herman’s chorus from Phil Spitalny’s Hit of the Week 1188 A-2-3.......................... 114

Figure 4.16: Harry Breuer, “On the Woodpile” variation, mm. 21-22, outlining an A-flat augmented triad, circled........................................................................................................ 114

Figure 4.17 Harry Breuer, “Joplin on Wood,” mm. 104-105, outlining an A-flat diminished seventh chord, circled........................................................................................................ 115

Figure 4.18a: Shelton Brooks, “Some of These Days,” mm. 117-118 in the key of A-flat. The lower notes are played as grace notes, an effect unique to Gladstone’s playing..... 118

Figure 4.18b: Shelton Brooks, “Some of These Days,” mm. 117-118 in the key G, a key in which this run can be played with a regular pattern between the upper and lower manuals........................................................................................................ 118

Figure 4.19: Eddie Munson/Eddie Leonard, “Ida! Sweet as Apple Cider,” mm. 23-24. 118

Figure 4.20: Eddie Munson/Eddie Leonard, “Ida! Sweet as Apple Cider” m. 33......... 119

Figure 4.21: Eddie Munson/Eddie Leonard, “Ida! Sweet as Apple Cider” mm. 47-48, high speed F7 arpeggiation.................................................................................. 119

Figure 4.22: Eddie Munson/Eddie Leonard, “Ida! Sweet as Apple Cider,” mm. 7-8..... 120

Figure 4.23: Eddie Munson/Eddie Leonard, “Ida! Sweet as Apple Cider,” mm. 21-22.. 121

Figure 4.24: Eddie Munson/Eddie Leonard, “Ida! Sweet as Apple Cider,” mm. 29-30.. 121
Figure 4.25: Eddie Munson/Eddie Leonard, “Ida! Sweet as Apple Cider,” mm. 67-70, B-flat 7 triplets, and descending chromatic Eb-flat hemiola figuration……………………121

Figure 4.26a: Red Norvo, “Hole in the Wall” sheet music, mm. 9-10… 122

Figure 4.26b: Red Norvo, “Hole in the Wall,” transcription of Frank McGrath’s performance of mm. 9-10…………………………………………………………………………………………………………………………122

Figure 4.27: Joe Green, “Xylophonia” rhythm, m. 9……………………………………123

Figure 4.28a: “Xylophonia” figuration as sixteenth-note doubling back, mm. 9-12….. 124

Figure 4.28b: Joe Green, “Xylophonia,” mm. 9-12……………………………………124

Figure 4.28c: Harry Akst et al. “Dinah,” mm. 17-19, from Sammy Herman, Modern Hot Xylophone Solos ………………………………………………………………………………………………………………………………………124

Figure 4.28d: Red Norvo, “Hole in the Wall,” m. 13……………………………………125

Figure 4.29: Victor Herbert, “Al Fresco,” piano solo (top staff), m. 31. Sammy Herman and Frank Banta arrangement, xylophone variation (lower staff), m. 31……………………126

Figure 4.30: Victor Herbert, “Al Fresco,” piano solo (top staff), mm. 64-65. Sammy Herman and Frank Banta arrangement, xylophone variation (lower staff), m. 64-65… 127

Figure 4.31: Victor Herbert, “Al Fresco,” Sammy Herman and Frank Banta arrangement, hot xylophone improvisation in Trio section……………………………………127

Figure 4.32: Ukrainian Dorian Scale …………………………………………………128

Figure 4.33a: Sano Marco/Jack Erickson, “Ya Vas Da-Ra-Ga-Ya Loo-Bloo,” m.2… 129

Figure 4.33b: Lou Singer/Nat Farber, “Bar Mitzvah Special,” m. 5… 129

Figure 4.33c: Traditional Klezmer: opening phrase from Harry Kandel’s Orchestra, “Doina and Hora,” Jacob Hoffman, xylophone………………………………………………………………………………………………………………………………………………130

Figure 4.34: Sano Marco/Jack Erickson, “Ya Vas Da-Ra-Ga-Ya Loo-Bloo,” sextuplet xylophone improvisation, mm. 45-53……………………………………………………………………………………………………………………………………130

Figure 4.35: Al Sherman/Al Lewis, “Now’s the Times to Fall in Love,” Sammy Herman’s hot xylophone chorus (Hit of the Week 1188 A-2-3)……………………………………131

Figure 4.36a: Dave Bennett et al. “Bye Bye Blues,” original melody of the chorus, mm. 1-8……………………………………………………………………………………………………132
Figure 4.36b: Dave Bennett et al. “Bye Bye Blues,” Sammy Herman’s chorus from *Something Old and Something New* (Everest SDBR 1034), transcribed by James Strain. Used by permission.

Figure 4.36c: Harry Akst et al. “Dinah,” mm. 21-22, from Sammy Herman, *Modern Hot Xylophone Solos* .......................................................... 133

Figure 4.36d: Andy Razaf/Thomas “Fats” Waller/Harry Brooks, “Ain’t Misbehavin’,” mm. 17-20, from Sammy Herman, *Modern Hot Xylophone Solos* ................. 134

Figure 4.37a: George Hamilton Green, “Log Cabin Blues,” 1925, m. 2, second A strain (Edison 51527).............................................................................. 138

Figure 4.37b: George Gershwin/Ira Gershwin, “Fascinating Rhythm,” 1925, Green Brothers’ Novelty Band, break at 1:38 (Edison 51497)...................................... 138

Figure 4.38: George Hamilton Green, “Log Cabin Blues,” xylophone sheet music, A strain, lower neighbors circled................................................................. 139

Figure 4.39: George Hamilton Green, “Log Cabin Blues,” three takes for Edison 51527, second A strain, recorded in 1925. Passing neighbor tones circled................ 139

Figure 4.40: John Avery Noble/Sunny Cunha, “The Hula Blues,” vocal melody, mm. 1-3 of the chorus .............................................................................................. 140

Figure 4.41a: George Hamilton Green, “Log Cabin Blues,” Edison 51527, second A strain, m. 8....................................................................................................... 140

Figure 4.41b: George Hamilton Green, “Log Cabin Blues,” mm. 13-14, Edison 51527, alternate take, second A strain, mm. 13-14 .............................................. 141

Figure 4.42: Harry Breuer, “On the Woodpile” variation, mm. 21-22.............................................................. 141

Figure 4.43a: George Gershwin/Ira Gershwin, “I Got Rhythm,” Red Norvo and his Swing Sextette, xylophone chorus (Decca 779), m. 6.............................................. 141

Figure 4.43b: Irving Berlin, “Remember,” as recorded by Red Norvo and his Orchestra, xylophone chorus (Decca 7896), m. 28......................................................... 141

Figure 4.44: George Gershwin/Ira Gershwin, “Fascinating Rhythm,” 7/8 grouping over 4/4 in the melody ................................................................. 143

Figure 4.45: Red Norvo, “Blues in E-Flat,” mm. 5-6................................................................. 144

Figure 4.46: W.C. Handy, “St. Louis Blues,” George Hamilton Green and Frank Banta, Vocalion 15307, displaced phrase, mm. 81-83.................................................. 144
List of Tables

Table 4.1: Form of “Ida/Some of These Days” medley........................................117

Table 4.2: Form of Frank Banta and Sammy Herman’s arrangement of Victor Herbert, “Al Fresco” (Columbia 20558).................................................................126
Introduction

Since the first xylophone recording in 1889,¹ the instrument’s popularity in acoustic recordings grew steadily through the 1920s, marking a “golden age” of the xylophone that spanned from approximately 1910-1940. The large number of recordings made during that period was partially due to the instrument’s tone and clarity as captured with acoustic recording technology of the era. In 1925, the electric microphone captured more subtle frequencies allowing for a wider range of recording instruments. The xylophone’s popularity then waned throughout the 1930s and eventually vanished as a solo instrument after xylophonist Red Norvo, one of the last xylophonists from the golden era of xylophone music, switched to the vibraphone in 1943. From that time, solo xylophone styles were considered passé and scarcely practiced for nearly thirty years. Then, in 1971 at the Eastman School of Music, percussionists Bob Becker and William Cahn resurrected the musical genre created by seminal xylophonist George Hamilton Green’s (1893-1970). They performed Green’s solo xylophone music, arranged with accompaniment of marimba ensemble, receiving an overwhelmingly positive reception.² Becker and Cahn’s arrangements eventually became ubiquitous in college percussion recital programs.

However, from the early period of this revival in the 1970s and 1980s, few performers of this resurrected xylophone repertoire improvised. Even to this day, improvisation is not part of solo xylophone performance practice. Since the 1940s, when xylophonist Red Norvo switched to performing the vibraphone, the keyboard percussion

---
¹ A.T. Van Winkle recorded what is thought to be the first xylophone recordings for the American Phonograph Company on August 26, 1889.
² The first program featuring one of Becker’s arrangements was November 24, 1971 in Hamilton, Ontario, Canada. For further discussion on the circumstances and reception, see: Lauren Weiss Vogel, “Bob Becker’s Ragtime Clinic,” Percussive Notes 42, no. 5 (2004): 35.
instrument of choice for improvised music has remained the vibraphone. Famed vibraphonist Gary Burton traces the advent of improvised vibraphone playing back to Lionel Hampton (1908-2002) and Red Norvo (1908-99). This study aims to explore the numerous improvising xylophonists in New York City who influenced Norvo as well as Norvo’s own xylophone performance during the first decades of his career.

Xylophonists Sammy Herman, Joe Green, Harry Breuer, Billy Gladstone, Red Norvo and numerous others had prolific recording and performing careers beginning in the 1920s that have received very little scholarly attention. By examining their work through recordings, sheet music, and pedagogical materials, this study will expand the singular and stigmatic association between George Hamilton Green and the narrow field of novelty ragtime xylophone music. Hopefully more information about this topic will result in greater improvisation in current xylophone performance practice. Some of the transcriptions to be discussed are performable as solo works and will also expand today’s concert catalog of the solo xylophone music from the early twentieth century.

The focus here will be on improvisation as an integral aspect of popular and jazz xylophone performance during the 1920s and 1930s. This critical role of improvisation has been neglected in the otherwise extensive research that has been conducted on the xylophone and its music from this era. Since George Hamilton Green’s retirement from the music business in 1940, a number of percussionists have demonstrated a discreet interest in his books and music. Michael Rosen, Principal Percussionist of the Milwaukee Symphony Orchestra from 1966 to 1972, contacted Green in 1969, eager to learn from

---

the master. However, Green curtly rejected offers for visits and also refused to talk about his music, encouraging Rosen to “let that stuff die.” Despite Green’s reticence to discuss his prior musical career, many short articles about his music were written during the twentieth century, as well as a comprehensive discography of the xylophone in acoustic recordings (1877-1929), and a number of dissertations on topics related to the xylophone. Valuable information can be found in early twentieth century “Hot Breaks” and “Hot Choruses” publications, in which well-known players published some idiomatic phrases unique to their playing, thereby giving insight into improvisational styles. However, the publisher’s staff arrangers -- and not the celebrated artists -- most likely composed at least some of these choruses. Nevertheless, these publications demonstrate and verify improvisation as a necessary and valuable component of popular xylophone performance practice. Transcribing recorded choruses of period performers provides the most accurate information about their playing.

---

5 Ibid., 204-205.
James Strain’s dissertation, “The Xylophone, ca. 1878-1930: Its Published Literature, Development as a Concert Instrument and Use in Musical Organizations” (1995), investigates sheet music and instrument catalogs.\textsuperscript{10} Strain’s work addresses the published xylophone music of 1877-1929 in particular, while touching on a wide range of related topics like manufacturing, music publishing companies, mallet designs, and various aspects of performance including a chapter on improvisation styles prior to 1930.

Ryan Lewis (2009) presents a detailed study focusing on the musical and personal lives of George Hamilton Green.\textsuperscript{11} Lewis’ dissertation includes an extensive ledger of all of Green’s recording engagements. The dissertation also made public numerous photos, letters, advertisements, and newspaper clippings from what the Green family refers to as the “George and Joe Book.” This is an extensive scrapbook mostly compiled by Minnie Green, the mother of George Hamilton Green and his brother, Joseph Green, also a noted xylophonist.

Randall Eyles’ dissertation, “Ragtime and Novelty Xylophone Performance Practices” (1989),\textsuperscript{12} defines performance practice of ragtime and novelty xylophone solo repertoire in order to establish what constitutes period or “authentic” performance of this repertoire. Eyles’ interviews with Sammy Herman, Harry Breuer, Hal Trommer, and Ollie Zinsmeister are invaluable contributions to our understanding of xylophone history. Some of Eyles’ claims and conclusions about improvisation in the novelty ragtime style may be challenged by a closer look at recorded examples from the era.

\textsuperscript{10} Strain, “The Xylophone”
\textsuperscript{11} Lewis, “Much More Than Ragtime”
\textsuperscript{12} Eyles, “Ragtime and Novelty Xylophone”
Gunther Schuller,\textsuperscript{13} Richard Sudhalter,\textsuperscript{14} Whitney Balliett,\textsuperscript{15} Rex Stewart,\textsuperscript{16} and Don DeMichael\textsuperscript{17} have written extensively about jazz musician Red Norvo. A 2007 National Public Radio program, \textit{Jazz Profiles}, hosted by Nancy Wilson,\textsuperscript{18} gives an hour-long synopsis of Norvo’s life and career, including insights from Schuller, Sudhalter, Gary Burton, and others.

\textbf{Collections and recorded media}

This study is based, in large part, on a number of archival collections, both privately held and those in public institutions.

David Harvey of Lowell, Massachusetts, has been a collector of xylophone recordings and phonographic memorabilia since 1979. Harvey’s extensive collection is not currently catalogued, but contains rare items, including one of the first surviving xylophone wax cylinder recordings dating from 1893.\textsuperscript{19} Harvey is the historical content advisor to a recent six-disc compilation of George Hamilton Green’s recordings,\textsuperscript{20} commercially released by Lew Green, George Hamilton Green’s nephew. Lew Green is

\begin{flushleft}
\textsuperscript{15} Whitney Balliett, \textit{American Musicians II: Seventy-one Portraits in Jazz} (Jackson: University Press of Mississippi, 2006).
\textsuperscript{16} Rex Stewart, \textit{Jazz Masters of the 30s} (Cambridge: Da Capo Press, 1982).
\textsuperscript{17} Don DeMichael, liner notes to \textit{Giants of Jazz: Red Norvo}, Red Norvo, Time Life Records, STL-J14, 1980, LP.
\textsuperscript{19} James Von Frey’s \textit{Concert Polka} is the earliest known existing recording to have survived, though earlier recordings were made.
\textsuperscript{20} George Green and Joseph Green, \textit{Green Brother’s Collection: Masters of the Xylophone}, 1916-39, Xylophonia Music Co., XMC007, 2010, CD.
\end{flushleft}
also the owner of a collection of memorabilia, including many of the phonograph recordings of George Hamilton Green and his brother Joe Green.

The record collection of William Cahn in Rochester, New York, is another important resource that has been digitally transferred by Cahn himself and percussionist Heather Thorn. Over 1,500 recordings are anticipated to be available by the end of 2017 as a digital library. In November 2015 Cahn donated his record collection to the Center for Mallet Instrument Research at Kutztown University in Pennsylvania.

Kutztown University is also the repository for Dana Kimble’s collection of xylophone-related source materials; acquired on October 24, 2014, the collection, now under the aegis of the Center for Mallet Instrument Research, which contains hundreds of recordings, several interviews, and the scrapbook and personal record collection of Sammy Herman. Kimble spent considerable time with Herman during the last decade of Herman’s life. Also found in this collection are several Hi8 video recordings from the 1990s of interviews with Sammy Herman and Milton Schlesinger by Dana Kimble, William Cahn, Bob Becker, James Strain, and Randall Eyles involving significant discussion of improvisation.

**Transcription Process**

All of the transcriptions in this paper, unless otherwise noted, are by the author. Most of the transcriptions were done using Transcribe!, a computer program that can manipulate digitally formatted recording files. By slowing down the speed to extreme degrees, an accurate transcription of pitches can be made if the source recording is clear.

---

In many cases rhythmic notation is approximate, as visual clarity has been chosen over hyper-precise rhythmic accuracy. Ultimately, in studying recorded music, it is most effective to make one’s own transcription. The subtleties discovered in doing so will be unique to each transcriber. These recordings are loaded with what we may presume to be mistakes. An effort has been made to keep the transcriptions true and accurate to the improvisations or performances on recording, not correcting notes that were likely mistakes. Accuracy aside, the expression, creativity, and output of the musicians in this study is staggering.

**Rationale for Choosing Selected Recordings**

The selected recordings were chosen to represent improvisational styles and outstanding examples by some of the most significant xylophonists of the period of this study. While there are hundreds of recordings that could have been used, most of the selected recordings are commercially or publically available, so that the reader may consult the original recording. The examples are also chosen for their use of the xylophone as a virtuosic solo instrument. An effort has been made to select the cleanest recordings, yielding a more complete and accurate transcription.

**Transposition**

The xylophone is a transposing instrument that sounds one octave higher than written, thus written F3-C7 and sounding F4-C8. Pitches will be referred to by the standard notational practice of their written position on the staff, not their sounding octave.
CHAPTER 1:
CONSIDERING IMPROVISATION

Twentieth Century Xylophone Improvisation before Red Norvo

One of the richest periods of xylophone history comes from the American 1920s and 1930s, when the names of its most popular performers could be seen on theater marquees and chart-topping record labels. An era encapsulated by the birth of the American songbook, booming record industry, rise of radio, and vibrant theater culture surrounding motion pictures, the interwar period saw great developments in musical styles. Eventually, beginning in the 1940s, new factors excluded the xylophone from standard instrumentation, in the recording and broadcasting industries in particular, and there has never been such demand for xylophonists since. This study, surveying recorded performances and instructional methods from the 1920s and 1930s, reveals the importance of improvisation by outstanding xylophone performers. It is difficult to categorize these creative musicians who improvised but were not necessarily jazz musicians. Not considered classical musicians, they nevertheless displayed great technical prowess and musical literacy.

Despite the popularity of xylophonists and their recordings and broadcasts in the early twentieth century, today they have been neglected. Our current ideas about the evolution of keyboard percussion improvisation are often related to claims made by famed vibraphonist Gary Burton, suggesting Red Norvo (1908-1999) and Lionel Hampton (1908-2002) were the first to improvise. In Burton’s autobiography, he writes about the lineage of jazz vibraphonists:
We think of Lionel Hampton as the “father of the vibes,” and for good reason: Hamp made the first vibraphone recordings in the early ‘30s, and by the end of that decade, had become a household name. But there’s another side to this story --- the history of jazz mallet playing, which actually began with xylophone players in the ‘20s, before the vibraphone had even been invented. The first popular xylophonists (such as George Hamilton Greene [sic]) were not exactly jazzers. They mostly performed ragtime-style pieces patterned after the early piano compositions of George Gershwin and the novelty composer Zez Confrey, and they didn’t improvise. (As a kid, I would mail-order sheet music for G.H. Greene’s songs, and play them on marimba.) Red Norvo was the first significant jazz improviser on mallet instruments, gaining fame for his innovative recordings on xylophone and marimba.22

Jazz trumpeter, scholar, and critic Richard Sudhalter cites Red Norvo as the first “hot” improviser on mallet instruments:

For him [Norvo] there was no precedent: mallet instruments were virgin territory as vehicles for “hot” improvisation. By what alchemic process, then, did he transform the xylophone (and shortly, the marimba) into an effective, often eloquent, solo voice?23

Despite these assertions, which are accepted among the jazz community, George Hamilton Green (1893-1970) and other xylophonists of the 1920s did in fact improvise. Recordings, interviews, publications, and method books suggest that not only was Green capable of improvising but, for his time, he was an improvising xylophonist of the highest order. The objective here is not to distinguish jazz and non-jazz forms of music, but rather to address the common element of improvisation and individualistic approaches that performers developed from a wide range of influences.

The terminology of improvisation has changed along with the connotations and value judgments associated with it. Terms beginning in the 1910s through the 1920s such as “faking,” “noodling,” and “jazzing,” demonstrate a more unfavorable view than

---

today’s idea of improvisation as spontaneous composition. Many critics have dismissed the music of highly arranged commercial and society bands as being non-improvised or derivative of “real” jazz, at best. However, a closer look at the development of improvisation on the xylophone will reveal that not only were these players improvising, but also that they took part in laying the groundwork for developments in jazz. This exploration also complicates the assumption that jazz and improvisation are synonymous.

To define improvisation within the context of jazz as a genre, separate from other types of improvisation, may be an impossible task. The vaudeville performers preceding the jazz era, and the early jazz era musicians discussed in this study, were largely non-specialists. The ability to be able to play in a multitude of styles was integral to a performer’s success or survival. The most iconic jazz figure of the 1920s, Louis Armstrong, is noted by Brian Harker for his versatility: “in the theaters and cabarets he played operatic melodies, show music, and society jazz, while in the recording studio he played polyphonic New Orleans jazz.” This recorded music exemplified a looser, more casual (and more disreputable) music compared with his evening repertory.24

Randall Eyles makes the distinction between novelty ragtime xylophone music and jazz: “one aspect is clear: ‘ragtime and novelty xylophone’ music is not jazz. It falls more into the category of ‘jazzy’ popular music.”25 Eyles’ claim that “true jazz” rarely achieved more than modest popularity suggests that the popularity of ragtime and novelty xylophone recordings disqualified them from being jazz. This implication is problematic in part because it compartmentalizes a large range of related performance practices (and

their receptions) into artificial categories of “jazz” and “popular” music. Additionally, this stance avoids the commercial interaction between jazz and popular music that had made it possible for early jazz musicians to survive.26

Such artificial categories are often assigned racial connotations: jazz -- and, by extension, improvisation -- are seen as African; composition and written music are seen as European. Gunther Schuller expresses one aspect of this dichotomy:

Improvisation is one element of jazz that does not fit into any of the aspects of jazz music so far discussed [rhythm, form, melody, harmony, timbre], although of course it is involved with all of them. The improvisation of many lines at the same time is a typically African concept, and is perpetuated in most forms of early jazz, a music marked above all by “collective improvisation.” With the advent of the arrangements (a decidedly “white” influence) and the incorporation of the solo in an otherwise arranged or at least partially prearranged context, the multi-linearity of early jazz was abandoned until the late 1950s.27

Historians often fail to recognize that jazz may also have been influenced by improvisational European music. New York City, the focus of this study, was and continues to be a hotbed for musicians and immigrants bringing with them musical folk traditions that involve improvisation to varying degrees. In the period that is the focus of this study, 1916-1942, there was significant interaction between these immigrants and established New York musicians, making it impossible to categorically segment styles according to their inclusion of improvisation. For example, the Eastern European Jewish roots of klezmer music, with improvisational ornamentation practices, permeated American styles and vice versa.

By the 1920s, Jewish dance music instrumentation had fallen more in line with typical American vaudeville or concert bands of the time [rather than strings, as in Eastern Europe]. The brass-laden sounds of these ensembles also reflected the

orientation of the popular bandleaders, several of whom also functioned as theater orchestra directors or as associate conductors for such mainstream American figures as John Phillip Sousa and Arthur Pryor.28

Benny Goodman’s 1939 hit tune “And the Angels Sing,” written by Ziggy Elman (born Henry Aaron Finkelman), son of a part-time cantor and klezmer violinist, is one example of foreign folk music filtered through an American sensibility. The tune was first recorded by Elman in 1938 under its original title, “Freilach in Swing.” Elman’s composition is based on a traditional klezmer melody called “Der Shtiler Bulgar.”29 Traditionally, at weddings, this melody would be played for dancers, repeated with variations and embellishments to maintain interest (both for musicians and dancers).30

For xylophonists there is undoubtedly a connection to Eastern European music by way of cimbalom (hammered dulcimer) playing.31 The Continental four-row xylophone and cimbalom share physical attributes of trapezoidal design, common technical concerns for playing, and a common repertoire from the turn of the twentieth century. Teddy Brown (born Abraham Himmelbrand), a xylophonist and multi-instrumentalist renowned for his career in England, was a highly successful entertainer who initially studied xylophone with a cimbalom player. A native New Yorker, Brown first established himself as a soloist with society orchestras, as well as a member of symphonic orchestras around New York. He subsequently studied with Philip Rosenweig, an immigrant who had taught cimbalom in Warsaw and Paris before coming to America, where he dedicated

31 For discussion of early European xylophone design, see: Chapter 2, “Origins, Design, and Sound of the Xylophone.”
his life to the xylophone. Brown’s unique xylophone technique (see Figure 1.1), with an extended index finger and palm facing downward, bears an uncanny resemblance to cimbalom technique. Brown also chose hard mallets and played with minimal effort beyond the wrists, with almost no arm movement, as is typical of cimbalom playing.

Figure 1.1: Right hand of Toni Iordache, cimbalom virtuoso (left) and Teddy Brown’s technique with extended index fingers (right). (Source: Youtube.)

Rosenweig’s transition from teaching cimbalom to teaching keyboard percussion instruments in America is yet another testament to the Eastern European string traditions transferred to band instruments (wind, brass, and percussion) in the New World. Sheet music of band arrangements from the early twentieth century often included a section in the drum parts for “xylophone or cimbalom.” Carl Gardner, in his Jacobs’ Orchestra Monthly column “The Drummer,” addresses a reader’s inquiry about substituting the marimba for the xylophone in certain repertoire. Gardner writes that “the xylophone is frequently substituted for the cymbalum [sic] by players and condoned for expediency’s

sake by directions in some publications,” further demonstrating the interchangeable status of the cimbalom and xylophone.

These connections between European traditions and early-twentieth-century American performance practices highlight the porous boundaries of popular styles. In our modern understanding of a particular musician’s influences, issues of style, performance setting, and historical background are often over-simplified. These crossovers among practices were not fully documented for various reasons. For example, many immigrants changed their names to sound more American, including musicians who took on stage names that sounded less foreign, and therefore programs, recordings, and other documentation were easily lost. In order to avoid discrimination, the Jewish drummer and xylophonist Milton Schlesinger performed under the pseudonym Don Williams. Abraham Himmelbrand became known as Teddy Brown, and there were numerous other examples. In such cases, the musicians’ legacies are difficult to trace, and frequently are absent from discographies and public records. Other names of individuals and groups were changed to avoid conflicting record contracts, where an artist would not otherwise be allowed to record for a competing company. In other cases pseudonyms were used simply to lend variety to the names in catalogs.35

Immigrants could easily be ostracized, and so adjusting to the melting pot of cultures in America involved publically shedding parts of one’s identity. For immigrant musicians, particularly of European origins, there was another side to this adjustment, as the record industry simultaneously constrained their involvement on one hand, and

---

35 Allan Sutton, Recording the ‘Twenties (Denver: Mainspring Press, 2008), 11.
opened doors for them on the other. The American record industry executives had the choice between importing “foreign” records or creating their own “ethnic” records. The latter approach produced “ethnic” records and involved a fascinating process of cultural reconstruction, as William Kenney says, in “tailoring non-American musical and theatrical traditions to fit both the experiences of American immigrants and their children as well as the new sound medium.”

The influence of improvisatory folk music styles did not always suit the recording field. The size of recorded discs restricted durations to three to four minutes of music per side of a disc. This meant that performers were obliged either to truncate renditions of pieces that may have been performed live in much longer versions, or to arrange the pieces to include their essential parts, but in miniature form. Seth Rogovoy describes this scenario in regards to klezmer dance sets:

Klezmer, heretofore a folk genre passed down orally, became a style of commercially marketed popular music; this had a significant impact on the music itself. Songs that formerly were performed in continuous twenty-minute suites for dancing at weddings and celebrations were now sold to individual consumers in the form of 78 rpm platters containing three minutes of music per side that were played in private living rooms. As the music slowly left the firsthand world of live performance for the secondhand world of recordings, whatever wound up on those recordings -- stylistic variations, mistakes, and all -- became the "record" of the music, in every sense of the word.

For these and other reasons, the freedom of improvisation by American immigrant musicians, who permeated the early recording industry, must have taken place more in live performance than on record.

37 Ibid. 66.
Xylophonists Influenced by George Hamilton Green’s Variation Style

Xylophonists Harry Breuer, Sammy Herman, and Red Norvo have recalled the influence of early George Hamilton Green recordings on their respective musical development. Breuer stated, “My only contact with George Green was through listening to his recordings. I literally wore out the ones that he recorded with the Earl Fuller Orchestra. I spent hours copying his variations, rhythmic patterns, etc.”39 In another interview, Breuer recalled listening to Green with Earl Fuller’s group at Rector’s restaurant, where Green performed beginning in 1917:

I used to stand outside of the restaurant on 48th Street in New York, where Earl Fuller’s Orchestra was playing, and listen to George Green. In the summer the windows would be open and you could hear them very plainly in the street…the reason I’d go there was to listen to George. I was working at a place called “Palisades Park” in New Jersey. I’d get through at 11:00 and by midnight I’d be outside of the restaurant.40

Sammy Herman includes a heavy dose of Green’s recordings, in particular with the All Star Trio, on the tape anthologies he called “The History of the Xylophone.”41 Herman told James Strain that he purchased every recording that Green made in order to master Green’s style.42

Lastly, we are led to Red Norvo, the proclaimed pioneer of jazz mallet playing. Green’s recordings and style informed Norvo’s early development. In Norvo’s words:

I listened to records of George Hamilton Green with the All Star Trio (with Frank Banta on piano and a sax player by the name of F. Wheeler Wadsworth) and tried to hear what he was doing. I realized he was playing pretty even and he was playing syncopation so I kind of got that figured out. That was the beginning.43

---

40 Eyles, “Ragtime and Novelty Xylophone,” 41-42.
41 Sammy Herman, History of the Xylophone, cassette tapes. Kutztown University Center for Mallet Research. The collection is not catalogued.
42 James Strain, “Improvising on Xylophone in the ‘HOT’ Style (featuring the music of Sammy Herman),” presentation at the Percussive Arts Society International Convention, Atlanta, GA, November 6, 1994.
While Green was a major figure in Norvo's development, Norvo also drew from the styles of Bix Beiderbecke, Louis Armstrong, Earl Hines, and other musicians from Chicago down to New Orleans. Norvo represents a convergence of various European and African musical traditions. Beiderbecke’s influences included European classical music by Debussy and Ravel, who themselves were influenced by African-American music.

The generation of xylophonists that included Breuer, Herman, and Norvo, who were a decade younger than Green, would eventually be working side-by-side in New York City’s top performing ensembles.

Probably the best-known leader, the “king” of society dance bands, during most of the twenties was Meyer Davis, who, for large hotels or parties used about twenty-five members, with two xylophonists, in front, one on each side of the band. Sam Herman, Harry Breuer and Red Norvo were the xylophonists who most often appeared with his orchestra during this decade.

Herman also regularly performed alongside Breuer in the B.A. Rolfe’s “Lucky Strike Hour” Orchestra. Eventually George Hamilton Green replaced Breuer in the group. Initially Herman, having lost the opportunity to play with his close friend Harry Breuer, did not speak to Green. Over time Herman became friends with Green, commuting together after their Saturday night radio engagement. Despite differences and a competitive music field, it was important for the xylophonists working in New York to maintain amicable feelings towards one another. Red Norvo recalled when he

45 For extensive discussion see: chapters on Debussy and Ravel in Deborah Mawer, French Music and Jazz in Conversation (New York: Cambridge University Press, 2014).
47 Peter Dilg and Lew Green, Interview with Sammy Herman, September 1993, unpublished CD, private collection of Lew Green.
first arrived in New York from Chicago, Sammy Herman was able to refer him for work, and the two became friends.  

The new generation of Herman, Breuer, and Norvo worked in a tight-knit community. All three xylophonists worked as staff musicians for NBC during the same period. Norvo went on to establish himself as one of the top band leaders of the 1930s, while Herman and Breuer flourished in the studios, sometimes working side-by-side. It is thus clear that these xylophonists, all influenced by George Green, also influenced one another through their interactions in the diverse musical environment of New York City.

Attitudes Towards Improvisation and Spontaneity

Today it is often thought that improvisation is a defining characteristic of jazz, or even synonymous with it. To understand that xylophonists of the pre-swing era were in fact improvising, it is necessary to look at some definitions of improvisation from a genre-less point of view. The Grove Music Online dictionary defines improvisation as the following:

The creation of a musical work, or the final form of a musical work, as it is being performed. It may involve the work’s immediate composition by its performers, or the elaboration or adjustment of an existing framework, or anything in between. To some extent every performance involves elements of improvisation, although its degree varies according to period and place, and to some extent every improvisation rests on a series of conventions or implicit rules. The term ‘extemporization’ is used more or less interchangeably with ‘improvisation’. By its very nature – in that improvisation is essentially evanescent – it is one of the subjects least amenable to historical research.

A commonly used shorthand definition, “spontaneous composition,” highlights the

---

48 James Strain, 1995 Interview with Sammy Herman, Hi8 tape. Kutztown University Center for Mallet Research. The collection is not catalogued.
connection between composition and improvisation. Since the 1970s, ethnomusicologist Bruno Nettl has contributed tremendously to the scholarship on improvisation. Here, Nettl addresses the spectrum, or different “faces” of composition and improvisation:

It is now largely accepted that if there is a contrast, there is also a close relationship between improvisation and composition, that the two are different faces of the same process, that it is hard to know where one ends and the other begins. The mainstream discourse of scholarly literature about improvisation has revolved around three questions: (1) whether something is properly improvisation, and how we can find out; (2) the relationship between some point of departure learned by an improviser and product that it has created in the course of performance; and (3) the methods combining, juxtaposing, and otherwise arranging building blocks to create music.50

This study on xylophone improvisation from the interwar period will explore these three realms. Those who have examined xylophone performance from the 1910s and 1920s argue that improvisation was implemented sparingly, or not at all.

Randall Eyles suggests that the xylophonists of the era were not usually improvising, or were doing so to a limited degree:

Certainly most of what was recorded on discs and cylinders consisted of worked out variations. However, it is evident that George Hamilton Green improvised on recordings—especially when he was playing with his All Star Trio. Also, there is no doubt that Teddy Brown (British xylophonist)51 was an avid improviser. Even so, extensive improvising on ragtime and novelty xylophone solos is not authentic performance practice. Working out variations and utilizing restrained improvisation is appropriate.52

Upon closer examination, there may not be enough evidence to establish which of Green’s recordings were improvised spontaneously -- nor, for that matter, which of Teddy Brown’s recordings. However, it is known that Green and his contemporaries improvised, because they said so. Green’s method books were geared towards aspiring

---

51 Teddy Brown was an American who spent much of his performing career in the United Kingdom.
52 Eyles, “Ragtime and Novelty Xylophone,” 35.
xylophonists and all contained excerpts on improvisation. He also gave clinics and presented workshops addressing improvisation,\textsuperscript{53} which demonstrates the great desire by other xylophonists to learn Green’s improvisational techniques.

What is not evident, though, is whether improvisation as understood at the time involved real-time decision-making (as jazz musicians currently use the term) or something else. David Gornston, in his 1934 book \textit{Improvisation Simplified}, defines improvisation as “playing something that is not on the sheet.”\textsuperscript{54} This definition, along with Green’s lengthy “Final Instructions” to his \textit{Instruction Course},\textsuperscript{55} omits mention of spontaneity. Whether or not there was spontaneity involved, there is a relationship between improvisation done by these performers and those who were improvising jazz.

Parallel to development in xylophone styles through the 1920s are the solo piano styles transitioning from ragtime to stride. In a study addressing composition and improvisation in stride pianist James P. Johnson’s “Carolina Shout,” Henry Martin calls Johnson a “compositionally oriented musician who elaborated on his works at the piano in live performance.” Martin concludes his study by asserting that Johnson’s status as an improviser “in no way detracts from the importance and exceptionally fine quality of his music, but rather shows that we must not thoughtlessly attribute our latter-day understanding of improvisation to early forms of jazz.”\textsuperscript{56} Similarly, the xylophone recordings of the 1910s and 1920s that will be looked at in this study feature extensive playing of variations by soloists, in some cases departing significantly from written

\textsuperscript{55} George Hamilton Green, \textit{Instruction Course for Xylophone: A Complete Course of Fifty Lessons}. Edited by Randy Eyles and Garwood Whaley. (Fort Lauderdale, Florida: Meredith Music Publications, 1984), 160.
sources, sometimes spontaneously, and sometimes not. What was of most interest to record producers and consumers at the time was the final product, not the process.

Without having multiple recordings of the same selection, it is a difficult -- perhaps impossible -- task to decide if a player is in fact spontaneously improvising. Drawing conclusions would take more insight than solely hearing a recording. Improvised solos from performance on record may be later transcribed and recreated by the soloist in future performances. Louis Armstrong addressed this issue: “Who knows who’s improvising? All trumpet players can hear what you play and they can play the same notes … And always, once you got a certain solo that fit in the tune, and that’s it, you keep it. Only vary it two or three notes every time you play it – especially if the record was a hit. There’s always different people there every night, and they just want to be entertained.”

Here a jazz musician is corroborating the idea that spontaneity may not be as easily identifiable as contemporary listeners may assume. Also, Armstrong is not concerned with the composed nature of a solo detracting from its perceived quality; in fact, he encourages repeating the same solo in response to audience demand.

Lawrence Gushee’s article “Improvisation and Related Terms in Middle-Period Jazz” elucidates, through lexicography and musical practice, terms and attitudes taken to improvisation during 1910s-30s. The entry on improvisation in the 1927 edition of *Grove’s Dictionary of Music and Musicians* begins: “[Improvisation is] the art of thinking and performing music simultaneously. It is therefore the primitive act of music-making, existing from the moment that the untutored individual obeys the impulse to relieve his feelings by bursting into song.” Gushee points out that, in 1927, this dictionary did not make reference to “jazz,” rather emphasizing French and English

---

church organists, nevertheless the entry supports common claims of improvisation as “faking,” a less educated and therefore less refined approach to musical performance.

In an exploration of ragtime performance practice issues by Edward Berlin, evidence of contradictory advice and commentary on the subject is discussed:

Do the aesthetics of the period demand that ragtime piano always be improvised? I do not think so. Even though virtually every professional ragtime pianist improvised, and was expected to do so, there is evidence that not all composers appreciated the practice. Artie Matthews wrote “Don’t Fake” at the end of his eccentric Pastime rags, and Joplin wrote in his School of Ragtime: “We wish to say here that the ‘Joplin ragtime’ is destroyed by careless or imperfect rendering . . . [It is] harmonized with the supposition that each note will be played as it is written, as it takes this and also the proper time divisions to complete the sense intended.” I have heard the argument that Joplin’s plea was directed towards the inept rather than the proficient; that he would have been thrilled to hear such artists as Eubie Blake or Jelly Roll Morton improvise on his music … The issue of performance practice, then, should hinge not only on what was done by performers of the period, but also on what the composer wanted.

The degree of spontaneity, if any, with which Eubie Blake or Jelly Roll Morton would have improvised on Joplin’s music is still unclear. Their versions of this music could be classified as arrangements or adaptations rather than improvised embellishment.

However, in addition to similarly composed variations and arrangements for xylophone, it is extremely likely that Green also performed spontaneous variations. It may be because of the negative connotation displayed by the 1927 Groves entry, and the amateur or “untutored” musicians who reinforced it, that Green omits mention of the spontaneous nature of improvisation. Instead, he gives detailed instruction about how to elaborate on a written part, suggesting harmonizing melody notes and filling in sustained

60 Scott Joplin, School of Ragtime (New York: Scott Joplin, 1908), as cited in Berlin, Reflections and Research on Ragtime, 23.
61 Berlin, Reflections and Research, 23.
notes with ragtime rhythms. The instructions are so detailed that they even recommend specific favorite music paper and pen. Thus, given that Green tells his reader no fewer than seven times to write out variations, the modern reader is left with the lingering question: why not address the element of spontaneity head on?

The level of xylophone performance, in its infancy compared to piano performance, leaned more toward the inept side than the proficient. In a 1925 *Jacobs’ Orchestral Monthly* article describing frustration with “faking” xylophonists, Green makes a case for his variation method:

Too many xylophonists have tried to improvise and feature variations and ragtime rhythms in a melody without having a sound technique and thorough knowledge of their instrument to back them up. The result is usually discouraging, because when it comes time for the variations or the ragtime rhythms they have not the least idea as to what they are going to play. And to make matters worse, they will make a spasmodic attempt to fill in by speeding up and down their instrument and striking all notes at random, regardless of tempo, the key the orchestra is playing in, etc.

Some of them will say, “Oh, well, I’m getting away with it, even if it isn’t so good.” But how long will they be able to get away with it? And besides, it is not very pleasant to think that you must always get away with it. How much nicer it is to know that you can play whatever is put before you, and at the same time put in variations and ragtime rhythms that are right, that are original, that harmonize with the melody. Your success is assured when you can do this. You can do it. It is simply a question of following the routine which I have outlined above …

Green’s pedagogical efforts aimed to elevate the status of the instrument from its folk and novelty roots. With his teaching methods, Green resisted the acceptance of second-rate performance on what could otherwise be excused as an instrument with grave limitations. Green demonstrated to students that one must take responsibility for all aspects of performance. It would not have been in Green’s best interest to suggest pupils

---

62 Green, *Instruction Course*, 160.
spontaneously create variations: the very mention of spontaneous improvisation may encourage pupils to bypass the tedious work involved in writing out variations, and, as the 1927 *Groves* entry on improvisation suggests, haphazardly “burst out into song.” However, in the case of more proficient students, Green was not opposed to progress and development beyond his personal approach. When a young Red Norvo approached him for lessons, Green supported Norvo’s new approach to the instrument and developing style:

“He asked me to play some of my jazz things for him, so I did.” Norvo recalled. “He said ‘My goodness, I never heard anybody play like that. I’m not going to teach you – go ahead the way you are.’” Later, when Norvo had a band of his own in New York, he used to rehearse at the Conn studio and, at Green’s request, would demonstrate his technique for Green’s students.64

**Revival Era Approaches to Improvisation**

Percussionist and 1920s musical revivalist Bob Becker remarks on the option of improvisation in Green’s solo pieces in his 1986 publication of Green’s *Modern Improvising*:

It could be argued that Green’s solo pieces are beautiful compositions, just as they are, and that improvising and adding variations is simply “gilding the lily.” Personally, I feel this is not necessarily the case, and judging from George Green’s recordings and the existence of a book like *Modern Improvising*, neither did he. However, there are always questions of taste and style, which ultimately depend on the performer’s musical judgment. It seems to me that arrangements of these pieces that flaunt taxi horns, slide whistles and pop-guns do a disservice to the music which, when played well, can stand proudly on its own.65

To contextualize this commentary from the 1980s, the various incarnations of this music should be understood. There are three broad periods of solo xylophone playing involving improvisation throughout the twentieth century: the acoustic recording era when the

---

64 DeMichael, *Giants of Jazz*, 17.
pieces were first composed and recorded; the “corny” period of the 1940s-60s referenced by Becker with mention of taxi horns; and the 1970s revival led by Becker, William Cahn and the Nexus percussion ensemble.

From the end of the acoustic recording era around 1925, to the mid-1930s, there was a transition in popular styles and instrumentation. Some players, like Red Norvo, moved on with the times, even going so far as to switch from playing xylophone to vibraphone. William Cahn recalls learning about the sudden transition in an interview he conducted with Norvo in the 1980s: “One day in the mid-1930s, Norvo came into the NBC radio studio for a broadcast and, at the decision of the NBC upper-brass, vibraphones had replaced all the xylophones.”  

Although Norvo continued to play the xylophone as his principal instrument into the 1940s, the xylophone had long fallen out of favor as a mainstream commercial instrument.

The vaudeville circuit that supported many xylophonists had died out by the 1930s, when the swing era took center stage. Some musicians continued to play music from earlier styles, but with different goals in mind. One of the most famous of these musicians was percussionist and bandleader Spike Jones.

During the late 1930s and early 40s, while playing with radio bands, [Spike Jones] began burlesquing songs by adding unusual percussion sounds such as tuned cowbells, washboards, tuned doorbells, automobile horns, pistols and anvils; there was soon a demand for his special sound effects in radio studios. In 1942 he formed his own band, Spike Jones and his City Slickers, and achieved prominence with a recording for Walt Disney’s satirical cartoon *Der Fuehrer’s Face* … His greatest success came in a period when naiveté was cultivated in popular music and when extravagant elements, a legacy of vaudeville, still provided much material for the entertainment media.  

---

Spike Jones recorded with xylophonist Lou Singer in 1950 for his recreations of nostalgic 1920s hits on the album *Spike Jones Plays the Charleston*. Performer Jimmy Vey (born Vecchio) made several appearances on *The Spike Jones Show* (1954-1961) as a tap dancing xylophonist. The approach taken by these xylophonists and the members of Spike Jones’ ensemble was one of lighthearted irony, poking fun at the music itself. The twist of virtuosic performers, capable of playing serious music, brought a new vitality to the old music, capitalizing on the campy side of show business. Distracted by the smile on his face (often not looking at his hands), only a discerning viewer would be able to tell that Vey was not simply striking the instrument at random, as fast as possible, taking every opportunity to play glissandi up and down the instrument. Vey’s was a carefully crafted act.

In an interview with Randall Eyles, Harry Breuer recalled his own music being “corny,” even as early as the 1920s. Breuer discussed his non-improvising approach to his original solo compositions:

Breuer: Well, there was a whole series published by…let me see…my memory isn’t as good as it used to be. One of the first ones was “Bit O Rhythm,” and that was published in 1928, and then in 1932…
Eyles: I’ve got some of those solos right here…
Breuer: Well, it was the same firm that published a series of them, I think ten or twelve titles in 1932. They were all exactly as written. There was no improvisation on them. We’d just play them as they are.
Eyles: Okay, that’s good.
Breuer: We were very corny in those days.
Eyles: Oh, it was corny even then?
Breuer: Yes! In the 40’s I stopped using them as solos on the radio, because the producers used to kid me about doing those corny pieces. So then I would take pop tunes of the day and improvise on them. But none of those were ever published.68

In the late 1950s and 1960s Harry Breuer and Sammy Herman released a number of recordings featuring stereo sound. The high fidelity capabilities of recording captured

---

68 Eyles, “Ragtime and Novelty Xylophone,” 40.
high and low frequencies, allowing explorations in various types of recording that often put more emphasis on the sound than on the music. Harry Breuer’s *Mallet Magic – A Study in High Fidelity Sound* (1958), *Percussive Vaudeville: The Big Theatrical Sound Doctored for Super-Stereo* (1960), and numerous other recordings brought back a repertoire dating from the vaudeville era. These recordings featured popular repertoire from the 1910s-1930s but used a full array of keyboard percussion instruments and sound effects. The pieces were sometimes arranged using trendy musical styles of the 1950s such as “Samba Macabre” (originally “Danse macabre”), or “Maple Leaf Jump.” By that time, the demands on a studio xylophonist had diversified to include many more instruments and foley sounds for television. When Nexus recorded their “Ragtime Concert” in 1976, the sound effects stayed.

Bob Becker recalls the early concerts and development of George Green’s music in Nexus’ repertoire:

> One night I played one of those pieces [a Green xylophone solo] on our marimba during an improvised concert. What the guys had available to improvise on to accompany me were things that were in tuning systems that had nothing to do with the chromatic scale on my marimba, and furthermore, made sounds that were from every place on earth except the United States in the 1920's. It was wacky, and really fun, and the audience got off on it. That sort of thing started to creep into our concert performances.

> Eventually I had the idea to arrange some of the piano accompaniments that exist for the old xylophone solos. I arranged the piano part for “four guys on two marimbas.” It gave each person a part to play. We gave that a shot, and the audiences flipped over that music – even young people who had never heard the style before. Some older people remembered it from when they were kids. It was something that spoke to all of them, and it still does.

> So that became something that we began to include in our concerts regularly – ragtime music with a xylophone playing solo and four guys on two
marimbas accompanying. Mike Craden played percussion. Our arrangements eventually became standard material for college xylophone training.69

The period Becker is discussing in the aforementioned interview is from the early 1970s, when Nexus transitioned from completely improvised concerts to performances including fixed repertoire. The group’s extensive touring in the early 1970s brought the xylophone styles of the 1910s and 20s to the attention of the general public and academic percussion pedagogues. The addition of these pieces to standard college percussion training, as arranged by Becker and Cahn, allowed for keyboard percussion training to include solo xylophone playing, and provided percussion ensemble repertoire. Between Green’s performance and the revival period, the treatment of the music had changed as it absorbed successive influences from musical developments throughout the twentieth century.

Influenced by Becker’s performance with Nexus, generations to follow would continue to perform, research, and expand upon the history of this 1920s repertoire. However, the days of xylophonists hopping from studio to studio and playing several dances across New York City in an evening are long over. The revival, though brought on by Becker’s outstanding performance, has been academic, catering to the preparation of percussion students in college programs.

Classical and Jazz Pedagogy

The grey area between improvised and non-improvised music makes this xylophone music attractive to classical performers who aim to recreate and interpret notes on a score. Percussionists receiving classical training are expected to have some proficiency on the drum set, the most common configuration of percussion instruments. Drumming being rooted in improvisation, the appeal of improvised or improvisation-oriented music to classical percussionist is not a mystery. The improvisation-oriented role of percussion instruments has also presented challenges for percussion to be accepted among the classical elite, where musical literacy is valued and associated with long traditions of through composed music.

No jazz musicians currently maintain repertoires of the music played by the xylophonists preceding Red Norvo and Lionel Hampton. This is for two reasons: (1) Melodic improvisation is typically omitted from classical percussion studies, and the 1910s-20s xylophone repertoire is mostly preserved in percussion curricula aimed at classical percussion training and, (2) since Red Norvo, few improvising musicians have maintained the xylophone as his or her primary instrument. Though drummers in early jazz ensembles also improvised on the xylophone, today the instrument is almost entirely missing from the field of improvised jazz and narrowly represented in other genres of improvised music.

The musicians who have taken up the performance of this xylophone repertoire by means of transcriptions do not identify as improvisers, and are classically trained. As one’s personal ability and contributions as an improviser have long been the hallmark of
jazz, it could be said that development of jazz played on the xylophone was halted in 1943 when Red Norvo switched to the vibraphone.

Since the revived interest in the xylophone music from the 1920s, pedagogues have taken interest in Green’s teaching methods, primarily the very popular *Instruction Course*,\(^{70}\) as a means to approach xylophone performance. Green’s methods have been repurposed with modern application to orchestral and chamber music styles placing emphasis on playing technique. Although the style studies of foxtrots, blues, and ragtime are considered long passé, the lessons that Green published are still applicable today for achieving fluency on the xylophone. These style studies are also verification of improvisation being an important aspect of xylophone playing at the time; however, today this improvisation is not practiced or widely taught.

In 1984 Meredith Music reissued Green’s book, with the exact contents preserved except for the cover, where Green’s intentions in writing the book were omitted (see Figure 1.2).

---

\(^{70}\) Initially offered as fifty individual lessons, Green’s *Instruction Course* as a complete course including all fifty lessons in three editions: George Hamilton Green, *Instruction Course for Xylophone: A Complete Course of Fifty Lessons*. Edited by Randy Eyles and Garwood Whaley. (Fort Lauderdale, Florida: Meredith Music Publications, 1984); George Hamilton Green, *Instruction Course for Xylophone for the Advanced Pupil* (New York: George Hamilton Green Studio, 1924-26); George Hamilton Green, *Instruction Course for Xylophone for the Advanced Pupil* (Kenosha, Wisconsin: George Hamilton Green Studio, 1924-26).
This change reflects the repurposing of the book from its original audience to that of the classical percussion studio. An advertisement in Figure 1.3 is from a 1925 Jacobs’ *Orchestral Monthly* magazine begins with the point of improvisation.\(^{71}\)

\(^{71}\) Jacobs’ *Orchestral Monthly* 16 no. 2 (February 1925): 65.
Yet, today few students who use the book get past the primary use for technique and reading. More recent method books for jazz improvisation have been favored over Green’s course. Finally, the ultimate goal of achieving fluency in improvisation is one that is intended for the “advanced pupil,” a term and aim removed from the Meredith publication’s cover. Green’s Instruction Course is now treated without emphasis on improvisation and style, but rather with the same emphasis of his New Elementary Studies for Xylophone and Marimba: “to develop sight reading, accuracy, perfect tempo and a fundamental knowledge of the instrument.”72

With today’s renewed interest in xylophone repertoire and music from the jazz age, percussionists would benefit from a deeper knowledge of the performance practice by Green and his contemporaries. Studying this music will expand percussionists’

---

repertoire, since its performers played in so many more styles and contexts than are often remembered. Thus, revisiting the music discussed in these chapters will offer insights to the musicians who currently perform it, whether they identify as classical or jazz musicians.
Evolution: Nineteenth Century to Twentieth Century, Instruments and Repertoire

By definition, the xylophone (from Greek *xylon* and *phonē*, “wood” and “sound”) is a percussion instrument with wooden bars supported at two nodes of vibration and struck with mallets. The exact era and details of the advent of the xylophone are lost in antiquity, leaving scholars to debate its roots in Asia and Africa. The instrument dates back to at least 2000 B.C. in Asia, leading most scholars to believe that Asia is its place of origin. Later examples of xylophones were found in the West Pacific, Africa, Europe, and throughout Asia. Slaves brought the African xylophone, or at least the knowledge of it, to Central America during the Spanish colonial period. In North America around the turn of the twentieth century, elements of the Central American xylophone or marimba, such as the materials used and layout, became incorporated into the European template.

The modern xylophone has European roots dating back to the sixteenth century. It was first used as an organ stop around 1506. The organist Arnold Schlick made mention of the organ stop, called *hültze glechter* (“wooden sticks”) as early as 1511 in his *Spiegel der Orgelmacher und Organisten*. Although xylophones existed as an organ stop and a stand-alone instrument since the sixteenth century, the tradition of virtuosic solo

---

75 Arnold Schlick, *Spiegel der Orgelmacher und Organisten* (Speyer, 1511), as cited in Ibid., 409.
xylophone performance began in the nineteenth century with the *strohfiedel* or “straw-fiddle.” This instrument was a collection of wooden tone bars laid over rows of straw in a trapezoidal arrangement, played with wooden beaters.

It was very much an instrument of the itinerant musician until the nineteenth century, when it rose to prominence as a solo instrument and attracted the notice of Mendelssohn, Chopin and Liszt, all of whom spoke of the expertise of Michał Guzikow [sic], a Polish Jew. Mendelssohn said, “I must own that the skill of the man beats everything that I could have imagined, for with his wooden sticks resting on straw, his hammers also being of wood, he produces all that is possible with the most perfect instrument.” Guzikow’s instrument consisted of a series of 28 crude wooden bars arranged semitonally, the four rows resting on five straw supports.⁷⁶

Trapezoidal “row” xylophones still exist in Russia and throughout Europe, and are sometimes referred to as Continental xylophones. Around 1870 the Tryphone, named after Parisian musician Charles de Try, was introduced. It is possible that the bars of Try’s instrument were already arranged in two rows, keyboard-fashion.⁷⁷ The first known method for playing a two-row chromatic arrangement of the bars was published in France by Albert Roth in 1886.⁷⁸

During this period, some of the earliest known concert works featuring the diatonic xylophone (not the chromatic one, despite its nascent existence) were composed. Camille Saint-Saëns’ *Danse macabre* (1874), followed by his *Carnival of the Animals* (1886) have been frequently cited as the earliest concert works to include xylophone, though earlier works for chamber music and even orchestral settings exist. A number of works featuring the xylophone date from the Viennese court of the late eighteenth century.

---

Possibly the first composers to write such original compositions for the xylophone were Ignaz Schweigl and Paul Wranitzsky, whose works for the instrument date back to 1798. These pieces were dedicated to Empress Marie Therese, who had an interest in unconventional instruments.\textsuperscript{79} The instrument used was likely similar in design to a rosewood xylophone known to have been in the collection of Grand Duke Ferdinand as of 1794 (see Figure 2.1). The configuration of these xylophones consisted of sixteen vertically hanging bars, twelve to twenty-six centimeters in length,\textsuperscript{80} arranged in what was sometimes referred to as a one-row “small ladder” configuration.\textsuperscript{81}

Figure 2.1: Hanging xylophone from the collection of Grand Duke Ferdinand, housed in the Museo degli Strumenti Musicali, Florence. The image appears in John A. Rice, Empress Marie Therese and Music at the Viennese Court, 1792-1807, New York: Cambridge University Press, 2003, 144.

A work from 1845, “Champagne Galop,” by the Danish composer Hans Christian Lumbye, has also recently been uncovered. Lumbye refers to the xylophone in his music

\textsuperscript{79} John A. Rice, Empress Marie Therese and Music at the Viennese Court, 1792-1807 (New York: Cambridge University Press, 2003), 141-143.
\textsuperscript{80} Ibid., 143.
\textsuperscript{81} Cahn, “The Xylophone,” 409.
as *traespil* (‘play of wood’).\(^{82}\) The short work features a xylophone and glockenspiel duet that is in keeping with other novel uses of the instrument as a sound effect. Often performed in a celebratory context, Lumbye uses the brass and percussion in “Champagne Galop” to imitate the sound of a cork popping from a bottle of champagne.

Saint-Saëns’ *Carnival of the Animals* exploits the xylophone in the seventh movement, “Fossils,” evoking the image of skeletons dancing. This association was not a new idea by any means: a woodcut of “The Old Woman” by Hans Holbein the Younger first published in 1538, from his *Dances of Death* series, depicts a skeleton playing a portable xylophone made out of bones.\(^{83}\) This image of the xylophone-performing skeleton inspired many artists from the sixteenth to nineteenth centuries who depict similar characters.

![Image](https://ebooks.adelaide.edu.au/h/holbein/hans/dance/complete.html)


---


Holbein’s woodcut is sometimes referred to as the first known depiction of the xylophone in Europe. The narrow tone bars of the xylophone correspond to the eerie imagery of a skeleton’s ribcage, while the instrument’s hollow sound evokes the rattling of bones. A twentieth-century example of the xylophone’s association with bones is Carl Stalling’s “Skeleton Dance,” written for an early Disney cartoon in 1929 and recorded by the Green brothers, George Hamilton Green and Joe Green. The piece paid homage to Saint-Saëns’ novel use of the xylophone and was perhaps responsible for cementing the long-standing use of fast scalar xylophone passages as a leitmotif in the cartoon soundscape.

Today, the xylophone can be heard routinely in the concert hall in dozens of twentieth-century works by Kabalevsky, Stravinsky, Bartok, and Shostakovich; most often, the instrument is used for its coloristic effects. These Russian and Eastern European works derive their lineage from Gusikow and his strohfiedel, albeit using the modern two-manual xylophone. The presence of the xylophone in major works by Americans Gershwin and Copland can be attributed to the influence of the early-twentieth-century American popular music that is at the core of this study. Gershwin’s strongly accented, ragtime-influenced xylophone part in the Overture to Porgy and Bess (1935) brought the instrument into the opera house, and it can be heard in the catacomb-like practice rooms of conservatories at any given hour.

84 Carl Stalling, The Skeleton Dance, directed by Walt Disney (New York: Columbia, 1929), 16mm film. The soundtrack is available separately: Carl Stalling, The Silly Symphony Collection 1929-1939, Disneyland 002175401, 2015, LP.
By the mid-1930s, xylophonist Harry Breuer was already an established radio musician in New York City, and friendly with George and Ira Gershwin. Breuer’s performances constitute an example of a bridge between the concert hall and popular music. While the xylophone part in *Porgy and Bess* may not have not been specifically written with Breuer’s talents in mind, it is because of Breuer that it stayed. The story, as told by Robert Breuer, Harry Breuer’s middle son, is as follows:

George Gershwin was also a friend of Dad's. Dad played the very difficult xylophone part during the overture for *Porgy and Bess*. It's a classic for xylophone players. Dad played it for the first time ever, when practicing with George. When he first tried it, Dad couldn't get it quite right. Gershwin told him, “Harry, if you can't play it, forget it -- I'll rewrite it, because nobody else will ever be able to play it, either!” Well, Dad was very proud of that. But Dad said he played and played around with Gershwin's xylophone part, until he finally nailed it. He played the first premier of *Porgy and Bess*, when it played Carnegie Hall in 1935. Gershwin hand-picked him to play the xylophone part.86

**Instrument Design and Range**

With the surge of popularity of the xylophone at the turn of the twentieth century, the manufacture and design of instruments went through several changes. Modifications and improvements were executed to meet the demands of professionals seeking a better sound for the increasing number of recordings and developing recording industry. As xylophone was taken more seriously, there was a need for properly tuned instruments that recorded clearly and were capable of reflecting a performer’s expression. Earlier diatonic instruments of the late nineteenth century were left behind for chromatic models. The rounded bars of instruments designed for glissandi, such as those played on recordings

---

dating from 1896 by Charles P. Lowe (see figure 2.3), were no longer needed, since, from the later 1910s and onward, the instrument had progressed past its phase of being a novelty keyboard with effects. The addition of resonators and tiered manuals allowed for increased velocity, with less time spent reaching for the “black keys” (as on the piano).

Figure 2.3: Charles P. Lowe and his diatonic single-row xylophone, with a European configuration, rounded bars, and large mallet heads. Photo courtesy of James Strain. Used by permission.

The range of keyboard percussion instruments has increased over time and continues to increase. By the 1920s, the standard professional instrument was a three-and-a-half-octave F3-C7 range. Four-octave models were produced en masse, but perhaps because the lower range did not record well, they were not commonplace on recordings. The Deagan and Leedy companies, the two largest manufacturers of xylophones, produced four-and-a-half-octave and even five-octave models.

---

88 Perhaps for their quality, Deagan and Leedy instruments from this era continue to be the most sought-after instruments today. James Strain has documented numerous other manufacturers in “The Xylophone, ca. 1878-1930,” 17-36.
In the late 1920s and early 1930s, Red Norvo performed and recorded on a five-octave Deagan Artists’ Special xylophone, first produced in 1920. Similar to a marimba in range, yet distinct in timbre, this instrument is heard on Norvo’s 1933 recording of “In a Mist” and “The Dance of the Octopus.” Norvo first met famed bandleader Paul Whiteman at the College Inn restaurant at the Sherman Hotel in Chicago, where Norvo was playing solos during the Ben Bernie dance band’s breaks. Since the five-octave Deagan Artists’ Special did not fit on the bandstand, Norvo was pushing the xylophone from table to table like a strolling violinist. Suddenly, he chanced upon an inebriated Whiteman at one of the tables. Whiteman was caught off guard that the xylophonist was performing “In a Mist” and “In the Dark,” repertoire by Bix Beiderbecke, a cornetist with Whiteman’s ensemble since 1927. This new music would only have been known by a select few keeping tabs on new experiments in jazz. Norvo would join Whiteman’s network of performers shortly after that chance meeting at the College Inn.

Also in 1933, Harry Breuer had the J.C. Deagan Company make an even larger instrument than the five-octave Artists’ Special: a combination of a marimba, xylophone, and vibraphone specifically designed for radio and studio work. The vibraphone was to be stacked, or raised slightly in front of the marimba keyboard, like a massive percussive organ. Most vibraphone keyboards were made with flat configurations of the two manuals, but on Breuer’s custom-made instrument, the “black” bars were raised far enough above the “white” notes that they could share the dampening felt in between the two manuals (see Figure 2.4). One reason for this was to assure consistent playing.

---

between the marimba, xylophone, and vibraphone, since all three instruments in this setup had similar design. Breuer used it at NBC and for recordings that were made for Brunswick Records. Eventually, the instrument was exchanged for an individual xylophone, marimba, and vibraphone, because of the difficulty and impracticality of transporting the massive all-in-one instrument in the heavy trunks.  

Figure 2.4: Harry Breuer in NBC studios performing on the custom Deagan combination marimba, vibraphone, and xylophone. Image housed in the Center for Mallet Instrument Research, Kutztown University, PA. Used by permission.

While these rare instruments with extended range and size were being produced, there was also a need for more portable models that were ideal for travel. In addition, the space-restrictions of orchestra pits and economic restrictions meant smaller instruments and further demand for “double drumming,” by a single percussionist. A section that previously consisted of a snare drummer, a bass drummer, a cymbal player, and a xylophonist was reduced to one player. “Double drumming” spurred new developments in pedal-operated instruments as well as a xylophone that could be played by a seated

---

91 Bush, “Interview with Harry Breuer,” 53. The instrument is now in Dana Kimble’s possession, with plans to be moved to the Kutztown Center for Mallet Instrument Research.
92 Developing from 1870s until the advent of the modern drum set in the 1920s, “double drumming” was the practice of a single drummer or percussionist playing the snare drum and bass drum parts by himself. Later this practice included cymbals, auxiliary percussion instruments, and the xylophone, bells, or vibraphone.
drummer.\textsuperscript{93} The Deagan model no. 844 “Drummer’s Special” was marketed with “resonators for each bar,” and boasted a “one-minute set-up time,” a 38-inch length, a three-octave chromatic range, and “Nagaed” bars. The Nagaed branding -- Deagan spelled backwards -- indicated the premium rosewood that Deagan offered.\textsuperscript{94} The “Drummer’s Special” was ideal for the drummer who could quickly shift his or her body and play a strain or chorus on the xylophone. The instrument was sold with leg extensions, giving the player the option to perform in a standing or seated position.

Deagan offered other portable models, some with less adequate tone than others, due to the narrowness of the bars. Instruments were produced to be affordable, and were offered with payment plans. The Deagan Company's biggest competitor, the Leedy Drum Company, offered instruments with similar specifications, along with folding rails and easily transported resonators that fit entirely in a pair of trunks. Deagan referred to its folding instrument models as “radio models.” The term both capitalized on the celebrity of radio artists, thought to be the top tier of performers, and the necessity of getting one’s instrument from studio to studio. Although the largest radio studios and staff artists had their own instruments that would not often need to be transported, the term “radio models” lent cachet to the folding instruments.

The three-octave range (C4-C7) of the most portable models was not standardized, but was common enough so that the opening excerpt of \textit{Porgy and Bess} ends at the low C4. In the opening of the overture, the xylophone part, otherwise in unison with the violins, stops at the point where the violins continue down to a low G3; thus, it may be inferred that this G, and the other notes below C4 were not on the

\begin{footnotes}
\end{footnotes}
xylophone Gershwin had written for. Xylophonist Ian Finkel, playing a three-and-a-half octave xylophone that extends to low F3, alters the xylophone part from the opening of *Porgy and Bess* to include the lower notes for four additional measures. According to Finkel, “Anyone can notice that it ends four bars early, the violins keep on going. So whenever I had to play the thing, I added the four more bars which go down to the violin's G, and it is great fun to see the various conductors smile.”

Today the standard range is still three-and-a-half octaves (see Figure 2.5), though four-octave xylophones are also commonplace in universities and orchestras.

![Figure 2.5: Standard xylophone, 3.5 octave Deagan 870 (photo by author).](image)

Some orchestral repertoire has included the low notes of the four-octave range, and classical recitalists such as Yoichi Hiroaka, whose repertoire selection will be discussed later in this chapter, performed on a four-and-a-half octave instrument. Starting in 1938, Hiroaka played a four-and-a-half octave Deagan Artists’ Special xylophone, and later in his career commissioned numerous solo works exploiting the entire range.

It was on the five-octave Artists’ Special xylophone that Red Norvo first explored contrapuntal writing. His four-mallet 1933 composition “Dance of the Octopus” exploits

---

95 Ian Finkel, E-mail Message, October 25, 2016.
a bass accompaniment of the left hand on the xylophone supporting an independent melodic right hand. According to Gunther Schuller, the recording session of the adaptation of Beiderbecke’s “In a Mist” and Norvo’s “Dance of the Octopus” had to be done surreptitiously as Brunswick records executive Jack Kapp “would have never approved the waxing of such elitist, esoteric ‘stuff.’”96 Following a late-night session on November 21, 1933, recording such adventurous works as “Dance of the Octopus” and Norvo’s arrangement of Bix Beiderbecke’s “In a Mist,” a displeased Jack Kapp indeed ripped up Norvo’s contract right in front of him.97 Distraught that the pieces did not gain Kapp’s approval, Norvo destroyed his remaining four-mallet solo compositions, throwing them in his fireplace.98 Thus, “Dance of the Octopus” is the only piece that survived from a repertoire that Norvo composed in a four-mallet contrapuntal style.

Kapp’s success in the record industry, first as an executive with Brunswick and then as the founder of Decca Records, was based on selecting artists to make commercially viable popular music. Norvo’s departure from popular norms was a far stretch from his first Brunswick record date, just seven months earlier on April 8, 1933. That first date included “Knockin’ on Wood” and “Hole in the Wall,” upbeat two-mallet compositions by Norvo. These pieces were in the popular style of the time, with flashy syncopated xylophone playing throughout, accompanied by four sidemen from the Dorsey Brothers Orchestra. The contrast between the music on Norvo’s first and second recording sessions could not be starker.

---

98 Ibid.
The atonal setting of the introduction to “Dance of the Octopus” is one of the piece’s most striking features. Gunther Schuller has praised “Dance of the Octopus,” calling it “the most advanced composition of the early thirties, falling almost outside the realm of jazz, and being in no sense a dance or ‘entertainment music’ music.” For xylophone performance, Norvo’s contrapuntal writing and four-mallet independence, aided by his five-octave extended range xylophone, was decades ahead of its time. This style of playing would go on to be developed in the 1960s on the vibraphone by Gary Burton. However, from the time of Norvo’s experimental pieces in the 1930s onward, the xylophone would remain dominated by two-mallet performance.

**Bar Materials**

The dense and dry old-growth Honduran rosewood used by the best companies of the 1920s-1930s has long been depleted. The qualities that made that rosewood so valuable were density, dryness, and resistance to splintering or denting. In comparison, modern instruments made with less dense, younger Honduran rosewood, played with hard mallets by orchestral players, splinter and dent easily. Modern marimba and xylophone makers claim they hear no difference between the rosewood used in the highest quality instruments from the 1920s and the wood used today, and that, for them, the determining factor is sound, not the grain or how long wood has been dried. Yet, it

---

101 Omar Carmeantes, "Honduras Rosewood: Its Endangerment and Subsequent Impact on the Percussion Industry" (D.M.A. Treatise, Florida State University, 2010), 57-60.
has been commonly stated by performers that the best instruments were produced in the 1920s and even declined in quality as soon as the 1930s.\textsuperscript{102}

As an alternative to rosewood, synthetic-bar fiberglass instruments, developed for their durability and outdoor use, were developed in the 1970s.\textsuperscript{103} In order to lower costs and provide an alternative to an endangered rosewood supply, less expensive rosewood substitutes, such as padauk, have been produced in recent years. In his 2010 doctoral treatise, Omar Carmenates conducted extensive research on alternatives to rosewood.\textsuperscript{104} Carmenates’ conclusion is that, as of yet, there is no substitute for rosewood. Padauk is approximately half the weight of rosewood and dents easily, making it appropriate only for entry-level instruments. Additionally, fiberglass bars have brighter and louder tone compared to rosewood, and may be classified as belonging to completely different instruments, as the xylophone, by definition, is a wooden instrument.

Mallets

Mallet selection plays a vital role in producing xylophone tone. One’s mallet choice will have the most immediate impact on their sound, no matter what the materials of his or her instrument, or even playing technique. For this reason, percussionists carry mallet bags filled with sticks and mallets of different lengths, weights, core materials, shaft materials, and wraps. The common materials for vibraphone and marimba mallets are cord or yarn wound rubber or plastic cores. Due to the demand of today’s orchestral and marching band xylophonists for a loud and cutting sound, today’s xylophone mallets


\textsuperscript{104} Carmenates, “Honduras Rosewood,” 60-62.
use unwound rubber balls, and sometimes wood or plastic (phelonic) for use on synthetic bar instruments. Mallet manufacturers market very few wound mallets as xylophone mallets. Ian Finkel is one of the only xylophonists today regularly using wrapped mallets on xylophone. The lack of wrapped mallets in the commercial xylophone mallet market may contribute to a bias against the xylophone’s sound, thought to be “percussive” and piercing as played with unwrapped mallets. Although a closer look at the mallets and preferences of players from the 1920s and 1930s reveals that unwrapped mallets for xylophone were not always the standard.

George Green’s mallet bag is known to have contained many yarn-wrapped mallets, while Sammy Herman stated that his mallet preference was always for cord-wound rubber mallets. While playing accompaniment figures, Herman regularly played with dead-strokes, a technique where the mallet head is pressed into the bar to “deaden” the ringing of the bar. A wrapped rubber mallet aids in cushioning the attack of a dead-stroke, resulting in the tone heard on Herman’s recordings. A hard rubber mallet would bounce and buzz on the bar, not immediately halting the bar’s vibration. William Dorn, himself a xylophonist, wrapped mallets for Herman and other top musicians, eventually developing a business for his hand-made products.

In a 1982 interview Red Norvo claimed to have only used rubber mallets on xylophone:

On xylophones and marimbas, I always played with a rubber mallet, because I think that’s the only way you get the true sound of the wood. Of course, a lot of

---

105 David Harvey, E-mail message to the author, November 18, 2016.
106 Bob Becker and William Cahn, 1995 Interview with Sammy Herman, Hi8 tape. Kutztown University Center for Mallet Research. The collection is not catalogued.
guys now are playing marimbas with vibraphone hammers, which I think have a tendency to take away from the wood sound.\textsuperscript{107}

Contrary to Norvo’s words, publicity photographs from the 1930s show Norvo at the xylophone holding wrapped mallets, and mallets of non-rubber materials. Also, it was common practice for players to use wrapped mallets when playing with four mallets, often rolling and reducing the contact sound for a chorale texture. “Slap” mallets designed by Norvo, although a novelty, were among the few “signature” mallet lines associated with star soloists. “Slap” mallets give exaggerated attack, with a leather pouch placed over the rubber ball to increase contact friction, minimizing the wood sound of the instrument.

Norvo’s wrist stroke, like Green’s, was minimal in height. In order to achieve a lyrical tone in their respective performance practices, Green and Norvo favored shorter mallets. The heads of their mallets were balanced on a shaft that went entirely through the mallet head, rather than halfway through as most modern mallets do. Additionally, Green’s mallets were made of a very high-density rubber. Modern mallets are generally constructed of a less dense rubber than those made before World War II, requiring the exertion of more stroke energy for the same degree of impact. Mallet density and weight is one possible explanation of how Norvo was able to achieve a substantial enough tone to be heard, yet still appear to have a light and effortless technique, as it was often described.

Shafts

Aside from the size and material of the mallet head, the length and material of the shaft or handle is a matter for consideration. Green’s “Rules for Practice” in the introduction to the *Instruction Course* include mallet advice:

I advise the length of the hammers be thirteen inches, with a one-inch ball. The handle of the hammer should be fairly stiff, in order to give more accuracy. The one-inch ball on the end should not be too hard. Avoid wooden or extremely hard rubber balls, as they not only ruin the instrument by pounding it full of dents, but the tone they produce is harsh and displeasing to the ear. I advise a three-quarter hard ball of rubber for all public renditions, and a half-hard ball or softer for practice. Select hammers that have good balance. They should not be too heavy or clumsy.\(^{108}\)

While most of the xylophone mallets from the 1920s were made with rattan shafts, it is known that Green did play with stiff tapered oak and hickory shafts. Hickory shaft mallets were even produced by Leedy, but sold only for a short period, as they broke easily and were twice as costly as rattan. Most players favored a firm rattan.\(^{109}\) In 1936, Billy Gladstone patented a mallet with a more durable and flexible hollow celluloid shaft. Gladstone’s mallets were produced by the Gretsch Company and endorsed by Gladstone himself, Sammy Herman, Red Norvo, Yoichi Hiroaka, and a list that read like a “Who’s Who” of percussionists in New York.\(^{110}\) Gladstone’s mallets remained in vogue through the 1950s, but, in more recent years, synthetic shafts for mallets have fallen out of favor with professional players. Today’s mallets are often sixteen or seventeen inches in length, made on either rattan or birch shafts, designed for playing instruments with wider bars and for individual mallet independence in four-mallet playing. However, recent attention has been given to the vintage mallet design of the

---

\(^{108}\) Green, *Instruction Course*, 3.
1920s and 30s, and companies are now offering shorter rattan mallets, around thirteen inches, for two-mallet xylophone playing.

**The Challenge of Playing Legato**

Xylophonists have always lamented the difficulty of playing legato, from the musicians discussed above to more recent players and teachers such as leading revivalist Bob Becker. Becker describes his early struggles dealing with issue:

> For a long time it didn’t go very well. I couldn’t find mallets that felt or sounded good and everything I played seemed out of control – I mean playing legato on any percussion instrument is a challenge, but the xylophone is just ridiculous.\(^\text{111}\)

Legato is achieved by matching the attack of the second note to the ring of the first note; that said, the xylophone’s bars do not ring very long.\(^\text{112}\) The xylophone’s dense, high-pitched tone bars are placed over a resonator that amplifies some of the bar’s harmonics. Ironically, resonators reduce the ring-time of the bars as they take energy from them.\(^\text{113}\) Use of a hard rubber or plastic mallet increases higher harmonics, because there is less elasticity in the head and less contact time with the bar. The higher frequencies decay quickly, thus impeding legato. Conversely, if a softer mallet head is in contact with the bar for a longer time, the higher partials are dampened. A softer mallet gives a darker, or rounder result, and more possibilities for legato playing.

The contemporary use of the xylophone in the orchestra is relegated to high register passages to complement high strings or winds with a punchy, percussive

---


accentuation requiring hard mallets and almost always staccato. However, a number of soloists from the period of this study performed transcriptions of classical works demanding a wide range of articulation. One way of working with the limited sustaining ability of the instrument, suggested by xylophone recitalist Yoichi Hiroaka, was choosing appropriate repertoire, thus avoiding the issue of getting the wood to “sing.”

Hiroaka, the first Japanese artist to broadcast on WJZ (NBC), was a xylophonist who was active in New York City from 1930-1942.\footnote{Goto, “Yoichi Hiroaka,” 14.} For more than ten years Hiroaka performed on a fifteen-minute program every morning, Monday through Saturday, at 7:30 A.M., amassing a repertoire of over 1,000 works.\footnote{Ibid., 16.} In a 1934 article in *Etude* Magazine, Hiroaka described his process of choosing repertoire to suit adaptation for the xylophone. Pieces such as Baroque works written for harpsichord or clavier were favorable because “the less sustained quality of the xylophone’s tone gives back the real feeling of earlier instruments of the clavier-type a great deal more faithfully than does the piano.” He also found faster pieces suited the xylophone “because there is less need for sustained tone in them.”\footnote{Yoichi Hiraoka, “The Modern Marimba and Its Relation to the Xylophone,” *Etude Music Magazine* 56, no. 9 (September 1938): 570.} Hiroaka’s fifteen-minute program allowed for an emphasis on showpieces, without the need for a more balanced program involving slower-paced works.

Despite the instrument having a quicker decay than that of others, it is the xylophonist’s challenge to get the widest possible range of expression on the instrument no matter the repertoire. That task is undertaken by three variables: playing technique, illusions of sustaining the bars’ ringing, and mallet choice (as discussed above).
**Technique**

Technique can be broken down into the way the mallet is held (grip), which, if it is to be regarded as an extension of the body, thereby influences the way the mallet comes into contact with the bar. There is, however, a paradox in this regard, because of the small size and high vibrating frequency of the xylophone’s bars. A singing, connected tone is not necessarily the result of a relaxed and loose grip or stroke. Historically, the combination of a tight finger grip and short quick stroke has been used to get the most desirable xylophone tone on early recordings; this topic will explored further below. Beginning in the 1930s, with microphones and expanded instrumentation, the limitations of the instrument’s volume were dealt with by using harder mallets, losing the strong presence of a fundamental pitch.

**Grip**

In a supplemental pamphlet included with his *Instruction Course* entitled “How to Grip the Hammers,” Green goes into detail on his playing technique or “finger grip” (see Figure 2.6).^117^  

---

^117^ George Hamilton Green, *How to Grip the Hammers* (Kenosha, WI: George Hamilton Green, 1926).
This technique requires the mallets to be gripped with a fulcrum between the first joint of the index finger and thumb. David Harvey cites this grip as the key to Green’s sound. According to Harvey, “This was the first time the instrument had been utilized so lyrically – not percussive or staccato at all. That was possible because of the Finger-Grip method.”

Execution of Stroke

Aside from efficiency of movement and energy, a lower wrist-stroke keeps the player in as close proximity to the instrument as possible, aided by shorter mallet lengths. This improves accuracy as a mallet within inches of its target is much more likely to meet the target note than a mallet coming from a greater distance. To dissuade showy antics and unnecessary movement, Green insists in his Instruction Course that his pupils keep mallets close to the instrument. In Lesson 13 of the course, Green asks, “Are you keeping your hammers low?”

Harry Breuer also asked students to keep their hands so

---

119 Green, Instruction Course, 43.
low they may be frequently touching the keyboard with their knuckles while playing.\textsuperscript{120}

Accuracy was extremely important to Green, Breuer, and other contracted recording artists. Edison, for example, had a “three strikes you are out” policy, where a staff musician would be permitted three takes with mistakes before having their contract terminated.\textsuperscript{121}

In addition to accuracy due to the proximity of the keyboard, a short, quick stroke results in a far more desirable tone. The combination of Green’s grip, the weight of the mallet head attached to a shaft of a suitable material and length, and a narrow bar with less material to vibrate, is necessary for maximum sustain. As David Harvey says, this tone set Green apart from the status quo:

> When these three elements are combined – a secure fulcrum, a heavy but balanced mallet, and a bar that is not excessively wide – a maximum amount of punch can be delivered with a minimal, almost fleeting motion … What this meant to his music was a legato manner that included very relaxed, sustained notes. It is this lyrical, almost singing, quality which immediately distinguished this style from all others.\textsuperscript{122}

In a 2009 interview, Bob Becker also addressed his own hand position and stroke, modeled on Green’s published instructions. Becker points out the difficulty of the stroke due to the strength required by the forearms, the muscle group controlling the short, quick, and strong wrist motion of the stroke.

> When playing the xylophone, my hand position is generally palms down, with the hands no more than an inch above the keyboard, and the stroke is made almost entirely with the wrist. The stroke height is also kept to only two or three inches, no matter what the dynamic. It’s described in detail in all of George Green’s lesson books. This technique can still produce a good and a big sound, but it requires a lot of forearm strength and endurance, and is not easily mastered. Even so, it is very useful on all of the percussion instruments. Furthermore, as I always point out to students, this is a great way to play the xylophone, but it is not

\textsuperscript{120} James Saporito, E-mail message to the author, December 12, 2016.
\textsuperscript{121} Lewis, “Much More Than Ragtime,” 60.
\textsuperscript{122} Harvey, “A George Green Centennial Tribute,” 40.
the only way. I believe any serious performer should be in command of many grips, stroke types and wrist motions, and be able to use them freely for creative expression.\textsuperscript{123}

All of the xylophonists in this study underwent training during the acoustic recording era. Their technique, then, would be shaped by the need to project in ways that began to wane after the microphone came along. George Green was primarily a studio musician, playing directly into the recording horn literally two feet away from him. Hence, Green used Leedy's 3/4 hard rubber balls, which were not very hard, for all his work. Conversely, Lou Chiha Friscoe, though he made recordings for Edison, was primarily a vaudeville theater performer. He used hard phenolic mallet balls, also sold by Leedy, for the purpose of projecting volume into a large hall.\textsuperscript{124}

In order to play the fast popular styles of the 1910s and 1920s, and hear the fundamental tone of the bar with dampened partials, great wrist strength is needed. The balance of a strong wrist stroke with a pinching fulcrum between the thumb and index finger, yet an otherwise relaxed wrist and hand, is one that few players achieve.

This type of technique can be seen in thirty-plus years of film footage of Red Norvo playing the vibraphone, dating from 1951\textsuperscript{125} to 1982.\textsuperscript{126} Norvo’s vibraphone and xylophone technique were similar. His constant swinging feel and lightness of touch, coupled with a consistent tone throughout the xylophone and vibraphone’s range, are evidence that he treated both instruments similarly as far as grip is concerned. Norvo


\textsuperscript{124} David Harvey, E-mail Message to the author, March 26, 2017.

\textsuperscript{125} Clarke E. Reynolds, Disc Jockey, 35mm film, directed by Will Jason (Los Angeles: Allied Artist Pictures, 1951), film.

\textsuperscript{126} Jazz at the Smithsonian: Red Norvo, VHS, directed by Clark Santee and Delia Gravel Santee (1981, Forked River, New Jersey: Kultur Video, 1992), VHS.
presumably studied this technique with Green. In an interview, Harry Breuer recalled hearing these two great xylophonists, citing their technique and tone.

George Green was (in my opinion) the greatest xylophonist of our time, a superb musician, performer and composer. His technique was flawless, and the sound he produced was the cleanest, most musical of all the xylophonists. In later years, Red Norvo (who was way ahead of his time as a jazz player) had the same light touch and produced the same lovely sound.

**Volume**

Red Norvo was one of the only xylophonists who recognized the xylophone to be a quiet instrument with limited projection. He did not use hard mallets, instead favoring a warmer tone and orchestration that supported his sound. By the time Norvo was recording, electric microphones had made it possible to manipulate dynamics in the recording studio. The xylophone no longer needed to be the loud, clear cutting instrument necessary for vaudeville stages, large movie houses and the acoustic recording environment. Richard Sudhalter described the dynamic range Norvo’s bands utilized in the 1930s:

What strikes the ear – he’s looking for a way to form an ensemble that has a dynamic range large enough to allow the xylophone to function organically without having to be boosted artificially or electronically ... You can’t get much volume out of a xylophone.

Eddie Sauter, trumpet player and arranger, is hailed as an important contributor to the band’s sound, as his arrangements did not overpower the xylophone or other soloists in the ensemble. Sauter addressed the idea of having a band that played soft dynamics in an era when the excitement of boisterous horns was gaining public favor:

---

129 “Red Norvo: Mr. Swing,” *Jazz Profiles*.  

---

57
So the emphasis was on playing softly. [They] really did play soft. So whether you did it on a clarinet or a saxophone didn’t make very much difference. That was any specialty of Red, that’s what it was. We used to call it the “subtle swing.” That was his subtitle. I’ve always been attracted to that – the most exciting parts of it were very very soft – like a whisper sometimes.\textsuperscript{130}

That “whisper,” as George Simon, editor of \textit{Metronome} magazine put it, “was like holding hands with a girl, and going no further.”\textsuperscript{131} Norvo’s tone was the xylophonist’s equivalent to crooning, drawing his audience close with a clear tone, using softer mallets than his contemporaries, and favoring quiet dynamics.

\textbf{Illusions of Sustaining Tone: Rolls, Tremolo, and Trills}

Gunther Schuller writes about Red Norvo in \textit{The Swing Era} citing the issues of sustain and describing some solutions:

To create the \textit{illusion} of a longer note, the xylophonist has to use a tremolo, a rapid alternation of two notes or the same pitch, “rolled” with two mallets. But if you tremolo all the time, it can get awfully boring, for it is an effect that wears out its welcome rather quickly. The xylophonist then has to resort to other devices, one of which is the arpeggio, outlining chords and harmonies in rapid mallet alternations. But constant arpeggio playing can also get very tedious. And so the xylophonist has to be a remarkable inventor of melodies, of motives, of themes which do \textit{not} require an excessive amount of filling out with tremolos or arpeggios. The xylophonist can play double-stops (or octaves), of course, with two mallets simultaneously, or with four mallets, producing full harmonies. Such harmonic effects work beautifully in moderate or slow tempos but are quite limited, purely technical, in fast tempos. Norvo, by the early thirties, had developed a virtually infallible sense of balance among these various devices, steering a narrow course between the instrument’s various limitations and his impeccable musical taste, almost never allowing himself to be entrapped in clichés.\textsuperscript{132}

By definition, vibrating sound created on percussion instruments decays after the initial activation of sound. Therefore the percussionist must find other ways to maintain

\textsuperscript{130} Ibid.
\textsuperscript{131} Ibid.
\textsuperscript{132} Schuller, \textit{The Swing Era}, 517-518.
the initial vibration, or substitute something that will come close, creating the illusion of sustain. The range of techniques that improvisers employed on the xylophone will be discussed at length in Chapter 4 of this study. One of the most common was fast arpeggiation using chord tones to harmonize the melody. Constant playing of arpeggios, when executed smoothly, effectively filled the space between two main melody notes. An example of this technique is seen in Figure 2.7, the original vocal melody and Harry Breuer’s sheet music of Nacio Herb Brown’s “The Doll Dance” (both from 1927), where the third and fourth measures are filled with sixteenth notes that serve to extend the G in the vocal melody. While this type of gap-filling could conceivably be improvised, in this case Breuer wrote out his variations entirely.

Figure 2.7: Nacio Herb Brown, “The Doll Dance,” mm. 1-4 of the C strain, original vocal sheet music (above) and variations written out by Harry Breuer (below).

The most common way to sustain a single tone is by rolling: rapidly striking the bars so that the decay of each bar is met with another attack, giving the illusion of a continuous tone. In many cases, rolls are played at exaggerated speeds, overplaying the bar, thereby stopping the vibration instead of reactivating it.

Randall Eyles addresses the speed with which the players rolled on recordings before there was an established recording standard of 78 rotations per minute:

There is widespread belief that xylophonists rolled faster during the golden age of the xylophone than xylophonists roll today. My research has indicated that this is not a true generalization. If the Victrola or Edison machines are properly oiled

\[ ^{133} \text{Breuer’s manuscript is housed in the Kutztown Center or Mallet Instrument Research.} \]
and calibrated, acoustic discs can be played at the proper speeds: either 70 rpm, 78 rpm, or 80 rpm—depending upon the recording. If a machine is not properly oiled it is difficult to play a disc at the proper speed, because the machine will stop. Consequently, acoustic discs are often played too fast which of course makes the rolls sound very fast. In nearly all recordings that were listened to in the context of this report, the rolls were executed at a reasonable speed. The very fast roll was not particularly characteristic of the period.¹³⁴

George Hamilton Green’s roll speed, in particular, was slower than most. The short and separated rolls utilized by Green are a challenge in transcribing passages of Green’s performance. What sounds like a sustained quarter note at a moderate tempo may in fact be an eighth-note triplet, rather than the typical roll notation suggesting eight thirty-second notes. Teddy Brown, on the other hand, used very hard mallets, and can be heard playing as many as six or seven strokes per beat -- approximately twice as fast as Green’s roll speed.¹³⁵

Because of the clarity of the xylophone’s attack, it is possible to ascertain the amount of strokes in a roll by slowing down a recording. What also becomes evident is that roll techniques vary from artist to artist and depending on the situation, namely the tempo and duration of the note to be rolled. A closer look at Green’s rolls in measures 111-113 of “Castle Valse Classique” (Emerson 3290-1) shows how he gives a legato illusion by anticipating the beat and beginning with the lower voice in an uneven rhythm. The listener hears something approximate to sustained rolls between the right and left hands on the beat as written in Figure 2.8.

¹³⁵Although Teddy Brown played xylophones with resonators, Charles P. Lowe, and other xylophonists of the pre-resonator period played particularly fast rolls in comparison with Green’s roll speed.
However, when slowed down, a consistently uneven rhythm is exposed, despite the roll notation that suggests a steady rhythm. Figure 2.9 shows the actual treatment that Green uses in this case.

Green favored leading rolls with the lower voice, typically played by the left hand. The higher, faster-moving frequency of the main melody note is thus delayed, giving the lower harmonizing note a brief moment to catch up before the high note decays. Aside from being left handed himself, Green most likely suggested this method of rolling for both right hand or left hand-dominant players as a means to even out the voices. A right hand-dominant player leading with their right hand will inevitably put emphasis on the melody note played by their dominant hand, losing the desired blend of both notes articulating simultaneously. The smoothness of Green’s rolls is one of the most striking and unique traits in his playing, as other top players of the 1920s did not apply the same principles.

Figure 2.10 is an excerpt of a transcription of Teddy Brown’s recording of “The Doll Dance.” Instead of playing a variation with chromatic passing notes and arpeggios,
as indicated in Harry Breuer’s sheet music (seen previously in Figure 2.5), Brown rolls through the third and fourth measures. The transcription below is an approximation of this roll.

![Xylophone Sheet Music](image)

Figure 2.10: Nacio Herb Brown, “The Doll Dance,” mm. 1-4 of the C strain as recorded by Teddy Brown (Edison Bell Electron-0187).

Brown’s roll speed sounds as though it is played as fast as possible, rather than in a succinct consistent rhythm as Green does. The beats are not clearly marked, and at a slowed-down speed, the roll has a stammering effect, trying to fit as many strokes in as possible. Given that this is a faster excerpt than “Castle Valse Classique,” Brown is fitting between five and six strokes in the span of a quarter note, demonstrating the faster roll speed to which Eyles alludes. Brown generally rolled as fast as possible, despite the tempo of the music.

Red Norvo was another trailblazer in legato xylophone playing. His fluid rhythmic vocabulary (to be discussed in Chapter 4) and the balance in his playing between motivic lines, rolls and trills, and rests, demonstrate an evolution of style. Norvo varied the speed and attack of his trills and tremolos, often utilizing Green’s technique of leading rolls with the left hand, when playing with four mallets. For articulate shorter rolls with two mallets, Norvo struck both voices together, and followed with a trill (the second stroke being the upper, right hand, voice). This approach results in a clean

---

136 Schuller, The Swing Era, 517.
execution of the sounding interval, where the trill supports the natural decay of the double stop. Typical of the popular style of xylophone playing that Norvo’s early compositions emulated, an example of the double-stop roll attack can be heard in the opening of the 1933 composition “Hole in the Wall” (see Figure 2.11).

![Figure 2.11: Red Norvo, “Hole in the Wall,” mm. 10-12, notated rolls performed with double stops struck together followed by rolls beginning with the upper voice.](image)

In situations where double stops are not struck together, it is difficult to discern between what is rolled and what is heard as part of a fast line. Such examples have resulted in discrepancy between the published notation and the recorded versions of embellishments. The discrepancies regarding interpretation and improvisation will be further explored in Chapter 4, but here it should suffice to say they come in three forms.

1. There are notated rolls that are not performed as rolls, as in the fourth beat of the first measure of Figure 2.12.

![Figure 2.12: Red Norvo, “Knockin’ on Wood,” published sheet music and transcription of recorded performance of mm. 44-48.](image)
Alternatively the rolls are performed in a completely different manner than notated, such as the first beat of the first measure of Figure 2.12, where a minor third oscillates in a tremolo. (2) Some trills are not performed as continuous rolls, as notated, but instead as an abbreviated version. Here, as in the second and third measures of Figure 2.12, the third beats are ornaments creating the effect of sustain. Norvo underplays the oscillating interval of a fourth, drawing attention to the harmony rather than rhythm. A similar example is seen in the fifth and sixth measures of Figure 2.12, where the performed rhythm can be interpreted as varied roll speed (fast sixteenths to slower eighth-note triplets). Because the tempo of “Knockin’ on Wood” is in brisk cut-time, these trills and tremolos can be heard either as rolls or fast articulate rhythms. (3) Norvo commonly exploits trills, or rolling between adjacent notes at a step or half step interval, as an integral part of his style. Figure 2.13 depicts an example of a trill on the second and third beats executed with space between the main note and the trill. By letting the bar ring, Norvo utilizes the natural decay of the instrument which transforms the percussive nature to one that is capable of sustaining, brief as it may be.

Figure 2.13: Red Norvo, “Knockin’ on Wood,” measure 41, published sheet music and transcription of recorded performance.

As demonstrated above, performers dealt with achieving legato and sustain in their own unique way. Free of the restrictions of specific notation, the improvising xylophonist found way to best exploit the instrument in differing musical contexts. By
way of technical choices, materials, and musical devices, the musicians discussed were able to develop the technique of legato playing.
CHAPTER 3
MUSIC INDUSTRY AND XYLOPHONISTS OF NEW YORK CITY 1916-1942

New York City

By the 1920s New York City had become the epicenter of recording, sheet music publishing, theater, and radio. Around 1920, a large number of musicians migrated from the Midwest to New York, a city offering opportunities for the country’s top musicians. The Midtown theater district was home to Broadway, high-society restaurants with resident musical groups, and movie houses. Tin Pan Alley was the focus of popular song writing. The destination of many jazz musicians was Harlem, home of stride piano, followed by the soloist-based arranging styles that were foundational to swing. Since the late nineteenth century, music could be heard in ever neighborhood throughout the city, from around Union Square to the red-light district of Times Square, down to the Bowery and along Third Avenue below Fourteenth Street. During the summer months, Coney Island and Manhattan Beach were home to the brass bands and orchestras that were among the city’s biggest musical attractions.137

From 1920 to 1932, Prohibition created circumstances resulting in plentiful work for jazz musicians. Improvisers who could create infinite variations on blues and popular songs were in great demand. These musicians developed jazz through the 1920s playing long hours through the night in speakeasies around the city. In 1933, with the repeal of Prohibition, and subsequent cabaret licensing, jazz moved midtown to a stretch of 52nd Street. Music was recorded in studios and broadcasted on radio stations all over the city,

---

although the largest networks were centralized to midtown by 1930. Later, when television emerged, New York maintained a central role in the new technology. It was at the 1939 World’s Fair in New York that the first television sets were demonstrated and sold to the public; New York City had the first and only broadcast station at the time. Following World War II, in the 1940s, TV studios superseded radio on the forefront of broadcasting and entertainment. By the 1950s, the golden age of radio broadcasting had ended. Thus, New York City has always played a vital role in the recording and broadcasting industries, as well as in the development of styles that were nationally disseminated by these media. As the aforementioned technologies and styles changed, the instrumentation and settings used evolved. Xylophone was primarily used in commercial music, theater music, and classical music, not the music that would later be recognized as early jazz.

In Chicago and New York, the xylophone was a rarity in the black neighborhoods where jazz was developing, although some blues recordings did feature the instrument. Jimmy Bertrand, Jasper Taylor, and Mort Perry were drummers who doubled on xylophone and can be heard playing xylophone on early blues recordings by Blind Blake, W.C. Handy, and Mamie Smith, respectively. The existence of these recordings raises the possibility that the xylophone could have been more prominent in jazz, had instruments simply been available. Cornetist Rex Stewart wrote of efforts by Harlem musicians to hear Red Norvo elsewhere, because there was no instrument for him to play in Harlem:

I was glad to meet him [Norvo] when Adrian Rollini (the world’s greatest bass saxophonist) took Red up to Harlem.\textsuperscript{138} In those days, Harlem was the section

\textsuperscript{138} Norvo and others also remember Adrian Rollini (1903-1956) as one of the great xylophonists of the 1920s. Rollini is omitted from this study as there are very few examples of his xylophone playing circulation, all meager offerings on early California Ramblers recordings.
where the musical action was, the eastern counterpart of Chicago’s south side … The Dorseys, Bix, Eddie Lang, Miff Mole, trombonist George Troupe, Bunny Berigan, Bud Freeman, Rollini, and Red made the rounds of Harlem at least once a week. But we never had a chance to hear Red play, because there were no xylophones in Harlem.\(^{139}\)

Norvo and his wife Mildred Bailey would host dinners at their home in Forest Hills, Queens, and then go out to hear music. A typical evening may have included travel from Queens to hear Chick Webb’s band at the Savoy in Harlem, then visiting different clubs afterward.\(^{140}\) The close proximity of New York’s neighborhoods meant there were few boundaries for those in the musical community.

**Entertainment: Vaudeville and Cabaret**

The transition from vaudeville circuits to New York City’s recording and radio studios was an important step for many performers.\(^{141}\) Vaudeville variety shows were not only home to many novelty acts featuring the xylophone, but also training grounds for the entertainer-performers who would go on to other stages. By the time George Green had arrived in New York City, he had gained a decade of experience in vaudeville, traveling throughout the Midwest with a variety of acts ranging from musical to comedy, to acrobatic, to every other combination deemed possible for the sake of entertainment. Green travelled to New York City in 1916 to make test recordings for Edison, and signed a contract by the fall of that same year. His first six recordings for Edison were arrangements of classical works that had been in his repertoire for at least two years.

---

\(^{139}\) Rex Stewart, *Jazz Masters of the 30s* (Cambridge: Da Capo Press, 1982), 74.


\(^{141}\) For further discussion of vaudeville xylophone acts see: James Strain, “The Xylophone, ca. 1878-1930: Its Published Literature, Development as a Concert Instrument and Use in Musical Organizations” (D.M.A. diss., University of Rochester, 1995), 45-53.
prior: Kreisler's *Caprice Viennois*, *Schon Rosmarin*, and *Liebesfreud*; Drdla's *Souvenir*; Wagner's, “March” and “Chorus” from *Tannhäuser*, and Suppé's *Light Cavalry Overture*. These recordings of classical works lacked the type of improvisation that would be heard with dance bands and the All Star Trio just two years later.

By the late 1910s, recording “jazz” groups were performing at high-society restaurant venues for Manhattan’s after-theater elite. Their musical styles were most likely developed off record for several years. Earl Fuller’s groups, for example, had been performing at Rector’s Restaurant since 1914, but did not record until 1917. Each group was associated with a particular New York society venue, like the Original Dixieland Jass Band (ODJB) that first played in New York at the Paradise Room of Reisenweber’s restaurant. In many cases, as in that of Fuller’s Rector Novelty Orchestra, the venue was so important to a group’s success that it would become a part of the group’s name.

Drummer and bandleader Earl Fuller had heard George Green in Omaha and, around 1916, invited him to perform with his group in New York. The most successful competitor and imitator of the ODJB, Fuller had the imagination to incorporate the xylophone in his groups. In the December 1917 issue of *Variety*, an advertisement for Fuller’s groups notes both George Green as a member of Earl Fuller’s Novelty Orchestra and Joe Green as a member of Earl Fuller’s Combination Seven. The advertisement includes the slogan “My organizations are originations,” suggesting a competition between the ODJB, James Reese Europe, and Ford T. Dabney’s groups. All of these groups were performing in similar venues and claiming to be originators of the

---

144 Advertisement for Earl Fuller’s groups, *Variety*, December 1917, 156.
developing musical styles in New York. Green’s early success in New York can be attributed to his association with Fuller’s group, and his recordings with the group. George and his brother Joe were soon recording studio favorites, also performing in New York City’s largest movie houses opening for moving pictures.\footnote{Edison’s Attic, “Playlist for Thomas Edison’s Attic.” August 24, 2004, WFMU Radio, accessed February 20, 2016, http://www.wfmu.org/playlists/shows/12312.} With his arrival in New York City, Green was on his way to transcending vaudeville variety show performances involving stage antics such as performing blindfolded, or with a sheet covering the xylophone.\footnote{Ibid.}

Teddy Brown is often cited as a performer with Fuller’s groups in New York around the same time. Whether he did so before Green’s arrival or afterwards is unclear, and many recordings of Fuller’s group have been attributed to Brown erroneously.\footnote{George Hamilton Green is the xylophonist on the Columbia recordings that Brown is credited for with Earl Fuller’s Rector Novelty Orchestra in Brian Rust, The American Dance Band Discography 1917-1942, Volume 1 (New York: Arlington House, 1975), 553-554.} In a 1920 article in The Musical Messenger, writer Edward Porter states, “It is to Earl Fuller the Producer that George Green, the xylophone player, and Ted Lewis, the jazz comedian, now so popular on the stage, owe their New York opportunities.”\footnote{Edward D. Porter, “Earl Fuller, Musician and Executive,” The Musical Messenger 16, no. 1 (January, 1920): 22.} There is no mention of Brown in this article, or other articles and listings of his personnel from the time. However, it is likely that Brown, who is described as “pianist at Thomas Healy’s restaurant” on his World War I draft card, performed as a multi-instrumentalist in many lavish Midtown Manhattan society restaurants at the same time as Green. Thomas Healy’s restaurant featured an indoor skating-rink, as well as an enormous ballroom, and
drew theater and burlesque patrons well into the late hours. Brown’s persona as a bandleader, as seen in later films made after 1930, was rooted in vaudeville showmanship. His signature move, playing continuous scales on the xylophone while spinning around, is a highlight of his Pathé films. Such acrobatic tricks, performed by a nearly 400 pound xylophonist, must have delighted audiences of the 1920s and 1930s. Brown was also billed as a saxophonist, and displayed virtuosic skills as a multi-instrumentalist. With technical abilities on the xylophone that were in many ways unparalleled, Brown’s penchant for entertaining kept him in the vaudeville listings even into the late 1920s. He was frequently listed among variety and vaudeville acts, even while establishing himself overseas, leading a band at London’s Club de Paris in 1927-28. Brown’s skills as an entertainer eventually led to a career in film. By the 1930s he took acting roles, working with the Crazy Gang, a group of British entertainers, appearing in *The Indiscretions of Eve* (1932), *On the Air* (1934), and *Convict 99* (1938). Brown is most remembered for his appearance as a xylophonist in *Elstree Calling* (1930), a “Cine-Radio Revue” -- a series of comedy and musical vignettes -- directed by André Charlot, Jack Hulbert, Paul Murray, and Alfred Hitchcock. Only one xylophonist, Red Norvo, balanced the skills he learned as an entertainer from vaudeville with musical and artistic development following current styles throughout his career.

Red Norvo began his professional career in 1925 with the Collegians, a five-member marimba and xylophone ensemble, touring the vaudeville circuit in cities as far west as Portland and Seattle. Their show included an impersonator, a song-and-dance act and a soft-shoe team; Norvo was their star soloist, and he also danced. At age 19 he was balanced the skills he learned as an entertainer from vaudeville with musical and artistic development following current styles throughout his career.

---


150 Josh Duffee, Phone conversation, February 9, 2017.
billed as “Red Norvo – The Man with $100,000 Hands”: presumably, for publicity purposes, Norvo’s agent had had his hands insured with Lloyds of London.\(^{151}\) It was at that time, while playing vaudeville houses, that Norvo followed his agent’s advice and learned to play without looking down at his hands. For the sake of entertainment, it was important to make eye contact with the audience.

Norvo made a distinction between his unseen work in studios, and his theater performances with their visual elements that he had learned as a vaudeville entertainer. One act involved “slap” mallets that he used in theater shows with Paul Whiteman, and when he played “intermission xylophone” during Victor Young band’s breaks. The mallets, first made by Norvo’s father, made a slapping sound that became part of an act where Norvo struggled to get sound out of the instrument. While performing with Benny Goodman, Norvo’s act involved ripping bars off of the instrument to roaring applause. Norvo would then leave the stage with the bars and reappear with another set of bars that he would throw onto the ground in frustration. One incarnation of the act even had Goodman handing Norvo a broomstick-sized mallet with a boxing glove as a head, so he could wreak havoc on his instrument.\(^{152}\)

While starting out and playing vaudeville houses around the country, Norvo had his sights set on more creative endeavors, practicing and listening to the newest jazz music backstage.\(^{153}\) Norvo recalls getting to know how to manage his time between performing during the shows:

The first day in the theater, if I watched the picture that was going to be played

\(^{151}\) Lylkoft, “An Interview with Red Norvo,” 45.
when the vaudeville wasn’t on – I could tell when I’d have to stop and I’d say “well I can play about twenty minutes now,” and I’d have a stop watch and practice scales … and if I got too loud the projection engineer would run back and stage and “tell that Red kid to shut up.”

The practicing paid off, as did listening to jazz recordings by Norvo’s role models, whom he would soon be joining on bandstands in New York.

For Sammy Herman and Harry Breuer, New York was both their birthplace and ultimate destination after touring with dance bands and variety acts associated with vaudeville. Herman’s most active touring years began with the Eight Popular Victor Artists, playing programs that were “composed of semi-classical, popular, and humorous selections, both vocal and instrumental in solo and concerted form, with a dash of American jazz added for spice, and delivered with a superb artistry and balance.” The Victor Eight put on a show that fit the bill for vaudeville’s largest venues, featuring the top names of the recording industry.

Harry Breuer began his career performing with variety acts as well. At age sixteen, Breuer played timpani in the Brooklyn Academy of Music orchestra, across the street from the Mark Strand Theater, where, starting in 1924, he was credited as a xylophone soloist, arranger, and bandleader. During the early 1920s Breuer toured vaudeville’s Keith Circuit as a “xylophone soloist and versatile specialist.” He was often billed, like Teddy Brown, with mention of his abilities as a saxophonist in addition to xylophone playing. During this period, Breuer made appearances as xylophone soloist

---

157 Ibid.
with orchestras at the major movie houses in large Midwestern and eastern cities, establishing himself on the national stage. In 1926, Breuer married Marion Cowson, a dancer at the Mark Strand Theater in Brooklyn. They moved together to 262 Carlton Avenue, just a few blocks from the Strand. Shortly after, when Breuer was on the road in late 1927, an offer was extended to join Roxy’s Gang, an important break bringing him to Manhattan. Breuer was an early radio star, and fans from the Strand celebrated Breuer’s feature numbers with letters and wished him luck with Roxy’s Gang, assuring him they would listen in on the airwaves.

The Whiteman Connection

By the 1930s, Paul Whiteman’s influence on jazz and music across the United States was profound, and posterity has inextricably linked his style to the xylophone’s development in jazz. Leader of the symphonic jazz movement that dominated commercial markets with the sound of large ensemble arrangements, Paul Whiteman moved to New York in 1920. By the fall of 1921 Whiteman’s group was the top dance orchestra in New York City. Following this success was the establishment of Paul Whiteman, Inc., a company overseeing nearly twenty orchestras performing in New York clubs, hotels, restaurants, and ocean liners. One such group was the All Star Trio, comprised of George Hamilton Green, xylophone; Victor Arden, piano; and F. Wheeler Wadsworth, alto saxophone. While Whiteman’s own groups have been criticized for

---

159 Harry Breuer Scrapbook.
160 Ibid.
their lack of improvisation,\textsuperscript{162} for the generation of xylophonists following George Hamilton Green, the recordings of the All Star Trio were the precedent for improvisation. Many of the group’s influential recordings were of up-tempo instrumental versions of popular songs with improvisations. The All Star Trio had six top-20 hits between 1919-1921, all for the Victor Company.\textsuperscript{163}

Nearly a decade later, Red Norvo, one of those influenced by Green, would also join Whiteman’s network of musicians. Whiteman first hired Red Norvo for an NBC staff position in Chicago, where Norvo played in a group led by tenor saxophonist Jules Herbuveaux. Norvo’s daily routine began with a morning show from 7:00 to 8:00 a.m. Additionally, three afternoons a week, he would play for fifteen-minute shows, accompanying one of Whiteman’s singers, Mildred Bailey, noted by Norvo for her unique clarity.\textsuperscript{164} Their early interactions in Chicago at NBC would soon blossom into a marriage in 1933. Depending on the time of day they broadcasted, the group led by Herbuveaux was called either the Tea Timers or Rascals, and also played for the King’s Jesters and Jack Fulton, among others.\textsuperscript{165} In the evenings, Norvo would rehearse with

\textsuperscript{162}See: Scott Yanow, \textit{Swing} (San Francisco: Miller Freeman Books, 2000), xi: “A much more significant band was led by Paul Whiteman, whose great popularity (starting in the 1920) was partly due to his willingness to use arrangements that had the feel of jazz without the chance-taking, a safer version of the music played by blacks in smaller combos.” See also: Joel Dinerstein, \textit{Swinging the Machine: Modernity, Technology, and African American Culture Between the World Wars} (Amherst, Massachusetts: University of Massachusetts Press, 2003), 51: “Whiteman created a hybrid genre called “symphonic jazz,” a large unit, heavily arranged style that left little room for improvisation. Whiteman thought about music through the written score, not through hearing musical ideas expressed by individuals. As Gunther Schuller points out, it was thus not “a jazz concept”: it’s not jazz if the musician do not improvise, do not create a spontaneous musical conversation, and do not aim to create a distinctive signature sound on their instruments.”


Paul Whiteman and Ferde Grofé’s groups.\textsuperscript{166} Norvo eventually quit his NBC job and became a full-fledged member of Whiteman’s band in 1932, which brought him on a tour to New York, where he would stay.

In June 1932, shortly after joining Whiteman’s touring group, Norvo applied for union affiliation in New York. While establishing residence in New York, Norvo was then unable to continue to play for Whiteman’s other touring engagements, due to union regulations.\textsuperscript{167} He spent a year waiting for his Local 802 affiliation in New York, during which he played with various society bands and took referrals for whatever work he could get from Sammy Herman.\textsuperscript{168} Norvo recalled his first year in New York in a 1993 interview with percussionist Bent Lyllof:

I remember it took me a long time to get my union card in New York. In those days it took a year to get a card and I had to scuffle. I worked with all the “sissy” bands – you know the Lanin Brothers and Meyer Davis for society parties and they would have an accordion player. In those days accordion and xylophone were a very popular combination for society bands. So I practiced my scales real fast; like the old Lucky Strike Dance Orchestra used to play then.\textsuperscript{169}

Norvo credits his association with Whiteman for bringing him status in Chicago, and subsequently launching his own career as a bandleader in New York.\textsuperscript{170} After his time working under Whiteman, Norvo led bands along with his wife and former Whiteman vocalist Mildred Bailey. The two became known as “Mr. and Mrs. Swing,” performing and recording together throughout the 1930s, with Norvo leading from behind the xylophone. By 1943, Norvo had discontinued leading his various groups and joined

\textsuperscript{166} Ibid.
\textsuperscript{167} Ibid., 72.
\textsuperscript{168} Ibid., 485.
\textsuperscript{169} Lylloff, “An Interview with Red Norvo,” 47.
\textsuperscript{170} DeMichael, Giants of Jazz: Red Norvo, 13.
Benny Goodman as a sideman, at which point he switched to the vibraphone, a sound that “married the clarinet and piano,”\(^ {171}\) in Goodman’s quintet.

As Whiteman was a consultant for NBC, he influenced many musical spheres. By way of Paul Whiteman’s own radio appearances, his hosting shows featuring all-star lineups, or leading ensembles performing his newly developing symphonic jazz, the Whiteman brand elevated the status of the xylophone. It is likely that without Paul Whiteman and his influence on other composers and bandleaders, the xylophone would be much more scarce in the music of the 1920s.

**Publishers and Sheet Music**

Since the 1890s, sheet music publishers, piano rolls, and then sound recordings had tremendous growth as commercial products.

Music publishers’ offices were housed in old brownstones on a stretch of 28th Street in New York City where, in a labyrinth of little rooms, tunesmiths and song pluggers banged away on cheap upright pianos. The noise was described by newspaper columnist Monroe Rosenfeld as the **banging of tin pans, and he dubbed the location “Tin Pan Alley.”**\(^ {172}\)

Of all the xylophonists in this study, George Green and Joe Green benefited most directly from the sheet music boom. They not only published method books, but also created a new repertoire through their many arrangements of popular songs and their

\(^ {171}\) According to Norvo, at early rehearsals for Goodman’s quintet, the xylophone would only blend with the high end of the piano. As there was a vibraphone in the rehearsal studio, pianist Teddy Wilson suggested he try it, and the results were favorable, prompting Norvo to switch to the vibraphone from then onwards. For more on the circumstances of Norvo changing his principal instrument from xylophone to vibraphone, see: DeMichael, *Giants of Jazz: Red Norvo* 24-25.

original compositions.\textsuperscript{173} However, despite their recent relocation to New York, their music was published by Midwestern publishers such as Sam Fox of Cleveland, Ohio, and the Leedy Manufacturing Co. of Indianapolis, Indiana. In 1919 Sam Fox capitalized on New York City’s positive reception of the Green Brothers. An advertisement for George Green’s “Fluffy Ruffles” in \textit{The Metronome} celebrated the newest trending music, mentioning all its available forms as piano music, piano roll, and phonograph record:

… In New York City and the East dance lovers are raving as they dance to its fascinating strains. Its popularity is fast spreading eastward and the best orchestras in the best places are playing “Fluffy Ruffles.” Ask for it tonight. Hear it, buy it, take it home. Get it for your piano, your player piano and your talking machine.\textsuperscript{174}

In 1920 Sam Fox had a hit with George Hamilton Green’s “Alabama Moon.” The promotion and success of Green’s music was notably attached to his popular songs, rather than his xylophone solos, although Green did record instrumental versions of his songs with the All Star Trio. The national spotlight was on New York City and Sam Fox’s ads drew attention to Green’s recent success in New York. Again, an ad in \textit{The Metronome} connects the Southern-themed song to Broadway:

In New York along Broadway, “Alabama Moon” is heard in every place that has an orchestra. The remarkable success of “Alabama Moon” has caused its being recorded on all phonograph records and player piano rolls. Mr. Green is one of the best-known orchestra musicians in New York and his xylophone records are heard wherever there are phonographs. “Alabama Moon” bids fair to rank Mr. Green among the leading composers of the day.\textsuperscript{175}

No other known xylophonists expanded their catalog of compositions to include popular songs, instead favoring the arrangement of existing popular songs as instrumental xylophone features. Even more successful were the arrangements of popular novelty

\textsuperscript{174} Advertisement, \textit{The Metronome}, 35 no. 4 (April, 1919), as cited in Lewis, “Much More than Ragtime,” 86.
piano tunes such as Felix Arndt’s “Nola,” Jesse Greer’s “Flapperrette,” and Zez Confrey’s “Dizzy Fingers” and “Kitten on the Keys.” These tunes were arranged for various ensembles and commonly used on radio programs and in auditions when xylophonists aimed to impress program directors.176

With the commercial “jazz” fad of the 1920s, sheet music sales supported the general public’s desire to play the fashionable hits. One of the most essential aspects of jazz as presented by groups like the ODJB was the “break,” a short flourish at the end of a musical phrase. One’s ability to play breaks with variety and interest became one of the hallmarks of the best jazz playing,177 as well as a step towards improvising full choruses. Famous artists published books of breaks for band instruments, and even entire choruses as transcribed by staff arrangers. Some of the books of breaks and endings available for xylophonists include Dave Grupp’s 100 Jazz Breaks for the Xylophone published by Alfred (1926), and Harry Breuer’s Modern Hot Rhythmic Flash Breaks, published by Tin Pan Alley composer Al Piantadosi’s publishing company (1929).

Entire choruses of popular songs were also written out and attributed to popular artists. According to an advertisement on the back cover of Sammy Herman’s Modern Hot Xylophone Solos, these hot solos are “torridly treated tunes for the instrumentalist of today – scored by master arrangers!”178 In 1938, two volumes of Sammy Herman’s choruses on popular songs were offered by Mills Music Publishers, “transcribed from the original dance orchestration.”179 Instrumentalists could perform the choruses along with

179 Ibid.
stock arrangements on the bandstand or for home practice or enjoyment. The complete choruses often included additional optional breaks as well. Red Norvo also had a similar two volume series of *All-American Modern Rhythm Choruses Improvised by Red Norvo for Xylophone*, published by Robbins (1934). However, while Herman’s choruses suit the style on his recordings, the Norvo publications do not relate to transcriptions of Norvo’s work by the authors of this or other studies.

New York City’s top publishers took an interest in promoting and publishing the music by all the most popular recording and radio figures. Sheet music sales boosted record sales and vice versa; as seen by the previously mentioned advertisement for George Green’s “Fluffy Ruffles,” the industry saw no limits in commercial sales of music. In the late 1920s through the 1930s Jack Robbins realized the commercial possibilities of more experimental jazz before it was in vogue. Robbins published Red Norvo’s work beginning in 1928 with his arrangement of Bix Beiderbecke’s “In A Mist,” followed by Norvo’s own “Breakfast Breakdown,” “Hole in the Wall,” “Knockin’ on Wood,” and “Dance of the Octopus,” published by between 1932 and 1935. During the same period, Mills Music published Sammy Herman’s arrangements of popular hits such as “Stardust,” “Sophisticated Lady,” “Kitten on the Keys,” “Dizzy Fingers,” “Flapperette,” and “Valse Mirage.” The Alfred Company first published Harry Breuer’s original solo xylophone compositions in 1932, “Blue Tid Bit,” “Chokin’ the Bell,” “Four Stick Joe,” “Happy Hammers,” “Minor Moment,” “On the Woodpile,” and “Powder Puff,” though several were written in years prior. It can be surmised that the solos and arrangements by these radio xylophonists were popular, even during the Great

---

180 Harry Breuer Interview, cassette tape, Kutztown University Center for Mallet Instrument Research, not catalogued.
Depression, by the sheer number offered by New York City’s top publishers.

**Xylophone in Acoustic Recording**

During the acoustic recording era (1877-1925), the xylophone emerged as a dominant instrument on rosters of recording instrumentalists; its presence is evident in recordings produced by the largest companies, Edison, Columbia, and Victor, which had studios in New York, Philadelphia, and around New Jersey. While listeners today take for granted the ability to listen to music in digital formats, it is difficult to imagine the early days of recorded sound. William Cahn’s book *The Xylophone in Acoustic Recordings (1877-1929)* gives a detailed account of the development of recording, companies, and xylophonists from that period. Here it will suffice to give a brief description of the rise of the xylophone as a recorded instrument that reached its most popular stage during this era. Although the acoustic era began in 1877 with Thomas Edison’s invention of the first sound recording device, musical recordings did not begin to flourish until the 1890s. Beginning in 1889, coin-slot machines were used to play music at exhibits, taverns, penny-arcades, and phonograph parlors.\(^{181}\) For the first time the public was able to hear music replicated without live musicians. In the 1890s catalogs offered recordings of piano duets, whistling solos, and various instrumental solos with piano accompaniment, including the xylophone.\(^{182}\) As the acoustical recording process captured limited audio frequencies, approximately 100-2500 Hz, certain instruments were favored for their reproduction clarity. Xylophone, banjo, trumpet, trombone, and tenor and baritone voices were among the instruments whose

\(^{181}\) Cahn, *The Xylophone*, 2.

\(^{182}\) Ibid.
sonic qualities made them favorites in early recording.\textsuperscript{183} There was significant overlap between what recorded well and what was offered in the variety shows. Such shows demanded projection in large theaters or outdoor venues, where minstrels, burlesque, and opera would share the same playbill.\textsuperscript{184} Clarity and volume were optimal characteristics for musicians in both the acoustic recording studio and large performance spaces.

Listening to an acoustic recording will give the modern listener an understanding of just how suitable the xylophone’s tone was. The clarity of the xylophone is heard above most any other instrument or ensemble. Due to the technique of acoustic recording, there is no mixing or adjusting of volume levels between instruments, and so the listener experiences a “live” sound of the recording environment. Instruments were placed further or closer to the recording horn to prevent distortion,\textsuperscript{185} a concern for the cutting sounds of instrumental and vocal music. Since there was no volume control on early phonographs, recordings were made to be loud and clear as possible. In order to turn down the volume coming out of the horn, phonograph listeners were told to “put a sock in it.”\textsuperscript{186}

Xylophonists would play polkas, waltzes, ragtime, light-classical selections, and popular music of the time – anything that could fit on cylinder or disc and sell. The magic of recorded sound continued to fascinate the public during the acoustic period, and the record companies capitalized on not just the musical performance, but also the novelty of recording itself, a new instrument of sorts. Even as late as 1920 an ad boasted

\textsuperscript{185} “About the National Jukebox”
\textsuperscript{186} Andre Millard, \textit{America on Record: A History of Recorded Sound} (New York: Cambridge University Press, 1995), 145.
about the talents and excitement of Vaudevillian xylophonist Lou “Friscoe’”s act. In Edison tone-tests, Friscoe’s live performance was compared to recordings in the presence of an audience:

Vaudeville’s Strangest Thrill – Meet Signor Friscoe, xylophone artist extraordinary – and vaudeville’s newest purveyor of magic. Meet the New Edison – his chief “magic.” Signor Friscoe comes on to the stage and plays. His agile hammers ripple merrily over the xylophone keys. Suddenly Signor Friscoe holds his hammers poised in mid-air. But his xylophone performance continues – as if some magic influence were at work upon the keys. Then the curtains part. The audience gasps. The New Edison stands revealed. It has been matching Signor Friscoe’s performance so perfectly that its Re-Creation could not be distinguished from his original performance.187

Though still a novelty that was at home in vaudeville, pairing the xylophone with any type of ensemble was not unusual. The J.C. Deagan Company made attempts to market their xylophones in advertisements from 1917-1921 in The Metronome, suggesting drummers could expand their setup and employment opportunities. With the boom of social dancing in the 1910s, dance band drummers frequently doubled on bells or xylophone, eventually giving the xylophone an independent role. Dance bands were not just playing for live settings but also recording discs appropriately marketed “for social dancing.” Now the novelty of music in the home could be combined with music’s oldest counterpart: dance. According to historical writer Mark Whalan, “Dances [of the 1910s] and the music that accompanied them were often adapted from African American forms in terms of a mixture of racial fascination, perturbation, and denial which had much to do with changing attitudes to the public performance of sexuality.”188

Recordings made it possible to play the new music in the home, or for social events where live music was otherwise unavailable or a financial burden.

---

188 Mark Whalan, American Culture in the 1910s (Edinburgh: Edinburgh University Press, 2010), 121.
Though essential to the sound and energy of live performance, the dance band drummer is often missing from early acoustic recordings. As drums recorded poorly, there were alternative opportunities for drummers to thrive in the recording studio performing the xylophone. Chicago-based drummer Jimmy Bertrand has been cited as the first jazz xylophonist,\textsuperscript{189} and can be heard moving from the drums to the xylophone with E.C. Cobb and His Corn Eaters.\textsuperscript{190} Bertrand became better known as a washboard player, another instrument that recorded with more clarity than drums.

Eventually, recording technology would progress and benefit from the ability to accurately record drums, cymbals, and a much wider range of frequencies from all instruments. In the early 1920s radio posed challenges to the recording industry because of radio’s wider frequency range and greater volume than what phonographs provided.\textsuperscript{191} Experiments and development of an electric recording process would be mainstreamed by 1925. By 1925 the acoustic period had virtually ended; the electric microphone brought on new capabilities for recording along with a preference for the newly audible bass register, general sonic clarity, and new sounds.

\section*{Radio}

The record industry suffered following the onset of the Great Depression in 1929. Edison, the label that once sparked the development of xylophone performance, closed its doors in 1929, putting an end to the production of cylinder phonograph records at that time. The changes within the American economy gave rise to radio broadcasting, as airtime was paid for by corporate sponsorship that provided the audiences with free

\textsuperscript{189} Scott Yanow, \textit{Classic Jazz} (San Francisco: Backbeat Books, 2001), 32.
\textsuperscript{190} E.C. Cobb and His Corn Eaters, “Transatlantic Stomp,” Victor 38023, 1928. 78 rpm disc.
\textsuperscript{191} Allan Sutton, \textit{Recording the 'Twenties} (Denver: Mainspring Press, 2008), 147.
listening entertainment. James Strain describes the large networks broadcasting from New York:

Generally speaking, there were two major networks broadcasting out of New York, and to the entire United States via the “chain hook-up.” These networks were known as the “Red” and “Blue” networks, or the National Broadcasting Company (NBC) and the Columbia Broadcasting System (CBS). Major stations, like WEAF in New York, would “link up” to broadcast major commercial shows from the station of origin. By 1925, numerous stations were established, and large cities and several programs to choose from. The commercial show was an entire show sponsored by one company, such as a food, drink, clothing, or automobile manufacturer, usually lasting from fifteen minutes to one hour in length.\(^{192}\)

The competition of the recording industry transferred to radio, and only the best musicians would rise to the top and flourish in the radio industry. Sammy Herman, Harry Breuer, Red Norvo, and Yoichi Hiroaka would regularly broadcast from New York City throughout the 1930s. The most recorded xylophonists of the 1920s, George and Joe Green, also maintained careers in radio, although with developing musical styles, the Green Brothers’ celebrated popularity of the 1920s began to wane throughout the 1930s.

The commercial sponsorship of mainstream radio meant catering to the general public and programmers. Yoichi Hiroaka was able to successfully pitch himself to NBC as a classical soloist rather than a novelty act. Hiroaka suggested that because he would be the first Japanese musician to be broadcast on NBC, the Japanese listeners in New York would embrace him with pride. Thus, NBC would benefit by expanding their listenership to a wider audience, including Japanese listeners.\(^{193}\) For those working regularly as soloists on the radio it was necessary to maintain a vast and varied repertoire with little time for rehearsal. Hiroaka rehearsed with his accompanist each morning from 6:30-7:30 a.m. Two NBC accompanists in particular, Leo Russotto and Vladimir

\(^{192}\) Strain, “The Xylophone,” 92.
Brenner, had coached Hiroaka on interpretation and the challenges of phrasing on the xylophone.\textsuperscript{194} Sammy Herman, perhaps known best as an improviser, would keep rehearsal to a minimum, preferring to spend roughly fifteen minutes deciding on the selections and forms he would play with pianist Frank Banta.\textsuperscript{195} Using sheet music provided by NBC librarians, Herman would spontaneously arrange piano parts for the xylophone.\textsuperscript{196}

Another type of radio performance was a shorter feature number in a variety show. Often hosted by a comedian or celebrity, these types of radio shows were a natural progression from vaudeville variety shows. Sammy Herman performed medleys on the \textit{Shell Chateau Hour} (1937), hosted by legendary comic Joe Cook (with whom Herman had worked in \textit{Earl Carroll’s Vanities}, a Broadway revue), and the \textit{Kraft Music Hall} (1935), hosted by Paul Whiteman. These performances on programs with all-star lineups were most likely of worked out arrangements with minimal improvising in the moment, due to their large orchestrations. These must have been unique performance highlights for Herman, who not only shared the stage with the top celebrities of the 1930s, but also took enough pride in his own performance to request transcription discs of the broadcasts “taken off the air.”\textsuperscript{197}

Harry Breuer was involved in the earliest days of radio, broadcasting as early as 1920 or 1921. He first played on the air when WHN was established in the Ridgewood section of Brooklyn, a few blocks from his father’s drugstore. In his own words:

\begin{footnotes}
\item[194] Ibid., 14-15.
\item[195] Peter Dilg and Lew Green, Jr. Interview with Sam Herman.
\item[196] Becker and Cahn, Sammy Herman Interview.
\item[197] Sammy Herman “For Vi,” cassette tape, in Kutztown University Center for Mallet Instrument Research, not catalogued.
\end{footnotes}
I was asked to play on that … of course it was all gratis, there were no commercials or anything of that sort in those days, and there was a piano player who rehearsed with me, and when we went on the air it turned out that he was also the announcer. So we played a couple numbers and he announced that I was going to play unaccompanied four-mallet solo … I think it was “Roses of Picardy,” and he left me. He walked out of the studio while I was playing. So I finished, and not having another unaccompanied solo prepared, I stood there with egg on my face and wondered what would happen next. Instinctively I walked over to the mic and announced we were going off the air temporarily … That was my first experience with actual broadcasting in radio.  

It was Breuer’s good fortune that the WHN studio, that would go on to operate as the longest continuously licensed station in the boroughs of New York, happened to be in his neighborhood. WHN’s independent status meant that the programming could be more adventurous than that of networks directed by commercial sponsors. The network would go on to operate as the longest continuously licensed station in the boroughs of New York. In the early 1920s, however, there was no way anyone could imagine the developments of radio in years to come. The experience that Breuer had was most likely paired with excitement for getting to broadcast across airwaves and make use of the new technology. Nevertheless, even from the time of his first broadcast on WHN, when he was still a teenager, Breuer preferred a refined and prepared performance rather than improvising in the moment.

Breuer, Herman, and Green’s scrapbooks contain just a smattering of newspaper listings for their hundreds, if not thousands of radio appearances listed in newspapers. During the early days of radio and even throughout the golden age of broadcasting, most programs were not recorded or archived for future listening. Yet, due to the interest of fans, collectors, and historians, rare recordings have surfaced, giving recorded evidence

198 Harry Breuer Interview, cassette tape.
of music and programs played over the airwaves. Lawrence Gushee asks: “Would we be interested in jazz without the recordings that so vividly preserve the expressivity and spontaneity of the hundreds (thousands?) of bands and soloists from the 1920s and 1930s?”200 It is not by coincidence that this study, involving the xylophone as an improviser’s tool, surveys a period when recording and radio broadcasted sounds unintended for repeat listening. Fortunately, transcription discs made for syndicate programming and those requested by performers to preserve their own broadcasts give a snapshot of the thousands of programs aired during radio’s “golden age.”

Transcription and Depression Era Records

Even though much of the appeal of radio was the live programming, there were reasons to record for and from radio. Sixteen-inch transcription records were made for distribution to syndicated radio stations that had no other methods of getting network programming. In this regard, radio contributed greatly to the record industry’s survival during the early Depression years, because of the demand for recorded programming.201 New York City, once again, thus became the city that dictated musical trends throughout the country.

As the aluminum transcription discs were not intended for mass consumption, they had a limited dynamic range and inferior sound quality, and were subject to deterioration.202 Aside from being used for syndicated programming, aluminum

201 Allan Sutton, Recording the Thirties (Denver: Mainspring Press, 2008), 35.
transcription discs were also a means to capture home and radio broadcasting. For this reason we still have rare recordings of broadcasts from artists who requested to have a recording made from the radio, and fans who captured programs on home recording devices. In his retirement, Sammy Herman enjoyed making compilation tapes for friends and family, including numerous dubs of transcription discs he had made of broadcasts he deemed important, most dating back to the 1930s.

During the rise of radio, in 1930-32, the Durium Product Corporation offered “Hit of the Week” records. These were records released on a weekly basis, available on newsstands for just fifteen cents a record. The top names in popular music, including Vincent Lopez, Phil Spitalny, Duke Ellington, Rudy Vallee, and Eddie Cantor, were offered on Hit of the Week releases. Sammy Herman’s hot xylophone improvisation was featured on Phil Spitalny’s recording of “Now’s the Time to Fall in Love,” released on January 14, 1932. The Depression-era tune, popularized by Eddie Cantor on his weekly radio show, featured lyrics that made light of the economic situation. Just six months after Herman’s hot chorus hit the newsstands, the price of the records rose to twenty cents, and sales plummeted, ending the “Hit of the Week” in the United States.

With record releases on a weekly basis, and daily radio programs, the rate of musical turnover and development increased through the 1930s. New York’s top musicians hardly felt the effects of the depression, having more opportunities to perform and record, maintaining lucrative contracts with radio sponsors. Radio broadcasting did away with the limitations of 78 discs, thereby allowing for longer and more plentiful content.

---

203 Ibid.
204 Sutton, Recording the ’Thirties, 10.
In the 1930s, jazz emerged into the mainstream, crossing over with commercial markets, and giving opportunity for soloists of the swing era. Red Norvo and the improvising innovators of jazz came to the forefront of America’s musical interest. By the 1940s, the xylophonists preceding the swing era had either retired or diversified by playing the entire family of keyboard percussion instruments – vibraphone, marimba, and other sounds that would supersede the xylophone.
CHAPTER 4

STYLISTIC DEVELOPMENT OF IMPROVISATION

Development of Style

In order to look at the chronological development of xylophonists’ improvisational styles, it is necessary to separate the styles according to their salient features. In doing so, we must recognize that there are significant shared traits among styles, and only slight differences. The period between 1916 to the 1930s saw rapid change in style by some players, while others maintained their steadfast methods, eventually being left behind.

Ragtime Misnomer

Popular xylophone music from the late 1910s-1920s is often incorrectly, regardless of genre, referred to by percussionists as ragtime. Green’s music, and that of his successors, fits into a middle ground between ragtime and jazz that is not easily classified under a single umbrella term. Although connections to ragtime are evident in this music’s early development, the many departures from ragtime mark a change from the ragtime era that ended in the 1910s. In his assessment of James Europe’s 1914 recording of “Castle Walk,” Samuel Charters writes of these developments in ensemble performance:

Ragtime was a piano idiom, and wide melodic leaps and sudden syncopations, easy for pianists, were very difficult on other instruments. In better theaters the orchestra would occasionally painfully read through an orchestral arrangement of one of the classic rags, but usually they were content to play a noisy approximation of the difficult scores. Jim Europe’s music was developed from instrumental ragtime, but it had a looser melodic line and a greater rhythmic excitement.\(^\text{205}\)

George and Joe Green’s music is certainly linked to ragtime because of its frequent use of march-like bass, “trick rhythms,”206 shared chord progressions, and ragtime forms in terms of length and number of strains and their repeats. Bob Becker, 1920s musical revivalist, and author of the forward to the re-issue of George Hamilton Green’s Modern Improvising addresses the issue:

Although it is appropriate to speak of many of George Hamilton Green’s compositions as being in a ragtime style, it is somewhat of a misnomer to call them “rags,” a term that properly refers to an earlier form of piano composition. George Green himself never used the word rag in relation to his own compositions.207

Most scholars agree that ragtime music developed in the 1890s and peaked in popularity in the late 1910s. Therefore, the popular and commercial music of the 1920s and 1930s are genres from a post-ragtime era. Thus, this style study of different performers will reveal the diverse treatment of Tin Pan Alley-era repertoire performed on xylophone. Such an examination will reveal both signature traits of particular performers as well as stylistic trends common to several performers.

George and Joe Green Xylophone Improvisation Methods

Beginning in 1916, both George Green and Joe Green relocated from the Midwest to New York City. Although Joe joined John Philip Sousa’s touring band in 1917, he spent time off in New York City. George wrote three methods between 1922 and 1937 with significant details on improvisation. The first method was written with his brother Joe, and published privately as the Green Brothers Advanced Instructor. The book is a

206 In many of Green’s publications he refers to four-against-three cross rhythms, common in ragtime music, as “trick rhythms.”

207 George Hamilton Green, Modern Improvising and Application of Ideas to Melody for Advanced Player Only (Ft. Lauderdale, FL: Meredith Music Publications, 1986), 5.
collection of exercises that George and Joe Green wrote for themselves to practice. The
Green Brothers published the exercises in response to a demand from fans around the
country.\textsuperscript{208} George Green, alone, wrote the following two methods discussed here.
Henceforth, Green refers to George Green, unless otherwise noted.

Green’s next published method of improvisation was his \textit{Instruction Course},
originally offered as a series of 50 mail-order lessons, beginning in 1924. Each lesson
was available for the cost of $1, attracting an international enrollment of over 1500
students.\textsuperscript{209} All 50 Lessons were available in a complete package by 1926. While many
of the lessons are perfectly suited for the reading xylophonist, dealing with issues such as
scales, double stops, and musical style, the lessons are more structured towards becoming
an improviser. “Variation,” “trick-rhythms,” “breaks,” “doubling back,” “hot” playing,
“blues,” triplets, and dotted eighths are some of the terms covered, all leading to Lesson
50, which explicitly addresses improvisation.

In 1936-37, Green offered \textit{Modern Improvising and Application of Ideas to
Melody for Advanced Player Only} as a mail-order course. By the time of publication, the
examples in these lessons were already stylistically dated. \textit{Modern Improvising} includes
more conceptual approaches to melodic construction and variation than Green’s previous
publications. Material from all three publications, \textit{Green Brothers Advanced Instructor,
Instruction Course}, and \textit{Modern Improvising and Application of Ideas to Melody} are
discussed in this chapter. Examination of terminology used in George and Joe Green’s
methods will reveal details about their approaches to improvisation.

\textsuperscript{208} George Green and Joseph Green, \textit{Green Brothers Advanced Instructor} (New York: Green Brothers,
4.1. Variation Style

One of the earliest forms of improvisation-oriented variation over a verse or chorus of a piece is aptly called the “variation” form or style. In Chapter 12 of *Advanced Instructor*, three styles are suggested, the first of which being the variation. The sample variations given here incorporate a combination of lower neighbor tones, ornaments, and arpeggios of the following types of chords:

- major and minor triads
- major sixth chords
- diminished seventh chords
- dominant seventh chords
- augmented triads

Using Stephen Foster’s “Swanee River” as the basis of his variations, Green writes the melody, harmonized with a second voice, on the top staff. On the bottom staff he writes a variation using arpeggios connected by brief scalar passages approaching or leaving a melody note.

![Figure 4.1: George Hamilton Green and Joe Green, “Variation on Stephen Foster's 'Swanee River,'” excerpted from “Hints for Improvising,” in the Green Brothers’ *Advanced Instructor*, p. 91. Melody notes circled by author.](image)

Green’s *Instruction Course* also details variation form in several of the lessons. In Lesson 22, the form is introduced as sixteenth-note arpeggiation, both ascending and

---

210 George Green and Joe Green, *Advanced Instructor*, 90-91.
descending. In Lesson 25, the variations are adapted to melodies and chords and featured in a complete one-step solo for dance. Lesson 38 deals with playing the variation form in all keys. Lesson 40 expands the variation idea by interspersing it with chromatic scales and then showing it in triplets connected to ragtime rhythms. Once fully developed as an improvisational device that can stand alone, or be used with other approaches, the variation form is applied to three example choruses as found in examples 6, 7, and 8 of Lesson 50. Lesson 50 is the first lesson to introduce a melody as the subject of a variation. In lessons prior to Lesson 50, Green discusses the variation form but without citing an original melody, or what was being varied. Therefore variation form, at least in the Instruction Course, means arpeggiation of harmony, with the melody notes as targets when applicable.

“Doubling back” is a particular kind of variation form featured in Lesson 14 of Green's Modern Improvising and Application of Ideas to Melody. Described as one of the most popular devices used in variations, doubling back is a technique that repeats the second to last note (“back”) of an arpeggio, thus displacing the following iteration (“doubling”) of the arpeggio. Figure 4.2 shows doubling back on a C6 chord from Lesson 14, which Green adapted to 3/4 time for the opening measures of his variations on “Castle Valse Classique,” to be discussed later.

Figure 4.2: Lesson 14 from George Hamilton Green, Modern Improvising and Application of Ideas to Melody. Copyright Meredith Music. Used by permission.

\[^{211}\] Green, Modern Improvising. 45-47.
Doubling back variations are most commonly played over four-note chords: major sixth, dominant seventh, and fully diminished seventh. Aside from being richer than triads, four-note chords lend themselves to this type of arpeggiation more easily than do triads, in which the interval of a fourth is a more difficult jump than those in four-note chords. Fluidity and speed are important aspects of doubling back, as it is a technique most often used in double or quadruple time in relation to the melody. Doubling-back variations were performed both as worked-out variations and as spontaneous inventions, depending on the performer, as will be discussed.

Sammy Herman, known as a xylophonist with remarkable skill for improvisation, has made a distinction between variations and “noodling” or instantaneous improvisation. According to Herman, worked-out solos based on the melody and chords are variations. Herman refers to instantaneous improvisation performed spur of the moment as noodling, a practice attributed to a later style.\(^{212}\) Herman was guided by his ear and instinct, rather than harmonic or melodic analysis.\(^ {213}\)

### 4.1.1 Castle Valse Classique (Recorded by George Hamilton Green, 1917-1918)

“Castle Valse Classique” is an adaptation by Ford T. Dabney of Antonin Dvořák’s *Humoresque*, Op. 101, no. 7, first published in 1914. Dabney wrote many pieces in 1914 for the famed dancers Irene and Vernon Castle, headliners with James Reese Europe’s band in New York City. Like many of Dabney and Europe’s pieces, “Castle Valse Classique,” was named for the Castles. Green’s adaptation of the work

\(^{212}\) James Strain, “The Xylophone, ca. 1878-1930: Its Published Literature, Development as a Concert Instrument and Use in Musical Organizations” (D.M.A. diss., University of Rochester, 1995), 188.

\(^{213}\) Bob Becker and William Cahn, 1995 Interview with Sammy Herman, Hi8 tape. Kutztown University Center for Mallet Research. The collection is not catalogued.
became one of his popular xylophone solos during his tenure with drummer Earl Fuller’s orchestra.  

“Castle Valse Classique” was so popular that its various recordings sold over one million records combined, and Green’s were among the top selling. Advertisements for Green’s Emerson recordings showed that the Emerson Company was particularly proud of his performance on this record:

The musical world has never before been stirred by so masterful a rendition of an old favorite as this recording by George Hamilton Green. The waltz that was introduced by our beloved and honored Castles, the air of the Humoresque softly carried by the orchestra with variations by the greatest artist on the Xylophone ever heard.

In this selection the theme of Dvořák’s “Humoresque” is splendidly carried by the orchestra in the bewitching Waltz time, with a marvelous obbligato by the Xylophone. Making the record doubly fascinating is the extraordinary technique of the soloist, interlacing the melody with harmonious trills and runs.

The word “obbligato,” a commonly used synonym for the variation style and particularly Green’s approach, had appeared throughout several eras of music history to connote improvisation. In the eighteenth century, the “obbligato” refers to the obligatory accompaniment part, ranking just below the melody (as opposed to doubled parts, which could be omitted). “Ad libitum” was the opposite of “obbligato” in the eighteenth century when mentioned in part of a title, referring to the optional parts. In David Gornston’s 1936 article in The Metronome, Gornston states that obbligato hot playing “occurs when the improvisation is built on the harmony to the melody instead of the

---

214 The group played at Rector’s Restaurant in New York City’s theater district. Green made several recordings of “Castle Valse Classique” during the period of 1917-1920.
217 Ibid.
melody itself.” Gornston’s definition thus evokes the obbligato line as a countermelody that embellishes a main melody.

Regarding the variation style as applied to xylophone playing, the following traits show the variation style’s obbligato nature, gleaned from the historical use of the term:

- Constant, unbroken, lines of sixteenth notes, making heavy use of arpeggios
- Reference to a melody, either as a variation of the melody or as accompaniment to a concurrent melody
- Countermelody that does not actually reference the melody itself, leading to a more free improvisation that creates new melodies led by chord tones, rather than select melody notes

With the knowledge of Green’s own instructions on how to improvise, we can surmise that Green performed variations that he wrote out, practiced, and memorized. For example, Green gave his student Milton Schlesinger a written-out version of variations on “Castle Valse Classique.”

James Strain notes that variations beginning around 1920 were presented as both worked-out material and as spontaneous improvisations:

Most of the later “variations” which were used for jazz or dance bands appear to most any listener as spontaneous. Only upon examination of several different recordings of the same piece does the fact that the variations are worked-out ahead of time become evident. What also becomes evident upon repeated hearings of recordings was that many artists did actually improvise a strain or chorus of a tune.

Spontaneous or not, there is evidence that the different versions show development in Green’s playing, and that he did not continue to perform the same variations throughout his career.

A comparison of two recordings of “Castle Valse Classique” shows development in Green’s variations from 1917 (Columbia A5989, #49236) to 1918 (Emerson 991,

---

220 David Harvey, E-mail Message, September 4, 2016.
One hypothesis as to why Green made these changes is the need to provide different recording companies with varied products. In the 1910s, Emerson made three record sizes: 7" diameter, 9" diameter, and 10" diameter. Different record diameters produce different duration recordings, so Green’s recordings for Emerson discs of different sizes would need to be different arrangements of the same selection.

There are several significant differences between the recordings from 1917 on Columbia and 1918 on Emerson. The 1917 recording has a four-measure introduction and immediately begins with the obbligato xylophone variations. On the 1918 recording, Green plays the melody (harmonized with his left hand) for an entire form (AB), before the obbligato line begins. Typically, introductions would be added to fill a larger disc, but in this case the 1917 Columbia recording is four minutes long while the 1918 Emerson, more varied in its arrangement and including an introduction, is just three minutes.

The first five measures of both versions (see Appendix B-1) are identical, demonstrating some degree of composition, or worked-out variation ideas. The first departure in this 1918 version occurs in measures 6-7, where the variation’s melodic contour rises to D6, when in the 1917 version it continues with doubling back in the middle register. This ascent leads into the 1918 version’s lower neighbor figure of measure 8.

---

223 Harvey, E-mail Message, September 4, 2016.
224 Many lower notes are indiscernible on the 1917 recording, but as the audible notes all line up perfectly, the lower notes are most likely also part of identical worked-out variations.
The dissonant lower neighbor on each beat alternates with its resolving chord tone on the off-beats, giving the impression of further syncopation. This type of figuration is common throughout the version from 1918. As more ornate lines are developed, long chromatic scale runs such as in measures 13-16 of the 1917 version are omitted. The lower neighbor tone figures are a harbinger to later soloist-based improvisational styles in chorus form.\textsuperscript{225} Chromaticism was mostly limited to scales connecting two points, but in these passages, chromatic embellishments of a melody are employed in more subtle ways. Instead of using long chromatic scale passages that are applicable to any melody or harmony, Green harmonizes with the melody,\textsuperscript{226} and uses short chromatic ornaments. Green does continue to use a signature descending chromatic scale in thirds throughout his career, but always in moderation.

Melodic linearity is also developed between these two recordings, aided by the use of lower neighbor tones. Segmented diatonic scale sequences in the 1917 version shifted to sequences connected with chromatic alterations, or chromatic neighbor tones, as shown in Figure 4.4. In such instances, the main melody notes are often placed on strong beats, followed by short sequences of scales or arpeggios.

\footnote{225}{See Swing section of this chapter.}
\footnote{226}{Stone, “The Drummer,” 50.}
4.1.2 Watermelon Whispers (Recorded by George Hamilton Green and Joe Green, 1918)

On the other side of two Emerson discs containing “Castle Valse Classique” was one of George Hamilton Green’s own compositions, a “captivatingly lively Fox Trot” entitled “Watermelon Whispers.” Green first published “Watermelon Whispers” for piano in 1918, with the Ted Brown Music Company in Chicago. In the same year, both George Green and his brother, Joe Green, recorded “Watermelon Whisper” on the xylophone with band accompaniment.

George Green's Edison recording of “Watermelon Whispers” is similar to the sheet music, without many embellishments, whereas his Emerson 991 performance is full of variation. Similar to George Green’s Emerson recording, Joe Green’s performance on Gennett 8539 features variation throughout, and two strains of doubling back and “trick-rhythms.” These happen in the C strain of the composition. The first C strain is shown with two of George Green’s recordings and the published sheet music in Appendix B-2.

George Green performs “Watermelon Whispers” (Emerson 991, B side) as an embellished melody with several other types of linear and rhythmic figurations. The form, with variations from the published sheet music throughout, is Introduction/A/A/B/B/C/C/A. No two strains repeat without variation, and they are

---

227 Lewis, “Much More than Ragtime,” 75.
228 The known recording label numbers from George Green are Emerson 991, Emerson 7425, Edison BA3482, Edison DD50488, Medallion 826. Joe Green’s recording is Gennett 8539.
closely related to the right hand of the piano part. Like many of Green’s compositions, the solo line in the xylophone part is an embellished figure, rather than a simple melody.

![Figure 4.5: George Hamilton Green, “Watermelon Whispers,” mm. 1-5 of the A strain, top line staff, piano sheet music; bottom line, Emerson 991 transcription.](image)

The line in the third and fourth measures of Figure 4.5 ascends and descends on an embellished C7 chord. The ascending line of the third measure is comprised of lower neighbor tones while the descending line in the fourth measure, in triplets, has more diatonic movement. Both lines outline the harmony of a dominant seventh chord that is preparing to resolve to the IV chord. The B-flat on the fourth beat of the fourth measure was possibly intended to be a C, which would maintain the contour of the line. A common practice is to move chromatically from the tonic, to major seventh, then flat seventh. This discrepancy, and the fact that this triplet figure only occurs on the C7 once during the performance, suggests some element of spontaneity.

One particular approach to variations that Green uses is to repeat a short line as a refrain every time he arrives at a certain place in the form. Figure 4.6 shows an example of this technique from “Watermelon Whispers,” using a triplet figure that is heard verbatim on all three A strains:

![Figure 4.6: George Hamilton Green, “Watermelon Whispers,” mm. 14-15, Emerson 991.](image)
The material preceding this repeated refrain is varied in each A strain. Placing the refrains throughout the performance is an intermediate step between entirely worked-out material and freely improvised strains. The variations on the Emerson 991 recording of “Watermelon Whispers” are made before the fixed ending phrases. This placement is different from the usual position of improvised breaks, at the end of a strain.

4.1.3 Ida! Sweet as Apple Cider (Recorded by George Hamilton Green, 1917)

The excerpt in Figure 4.7 is of two takes of the beginning of Green’s doubling back variations on Eddie Munson and Eddie Leonard’s “Ida! Sweet as Apple Cider,” recorded on September 5, 1917 by Earl Fuller’s Rector Novelty Orchestra. The different xylophone solos in Green’s two takes of this recording (matrix numbers 77308-1 and 77308-2) are testimony to his agile spontaneous improvisation abilities.

Figure 4.7: Eddie Munson/Eddie Leonard, “Ida! Sweet as Apple Cider,” two takes from September 5, 1917, 77308-1 (upper line), and 77308-2 (lower line).
The doubling-back variations are identical in the first four-and-a-half measures in both takes. From the middle of the fourth measure, both takes vary completely until the break in mm. 15-16. The doubling back pattern is broken on the fourth beat of measure 14 in the first take, in order to prepare for the break, which is worked-out to begin on a high F6. Improvisation relies on spontaneous decisions that demand time, and the rapid tempo taken does not allow for much thought. It is likely that by repetition, as emphasized in his teaching, Green had become so familiar with the inversions and variations on doubling back lines that he could spontaneously vary popular songs like “Ida,” while maintaining certain set markings in the form (in this case, the break) necessary for the arrangement. The fast tempo makes the local note-selection less important than the flow and the outlining of chords, a demand for which doubling back variations are suited.

By the conclusion of the 1910s, variation methods had changed to favor improvisations using a wider range of devices. Another development in the hot music of the 1920s included greater degree of spontaneity. For some xylophonists, “improvisations” were frequently worked-out, as shown by the advice of George Green to his pupils in his Instruction Course. The exact point where a performer departed from written scores to spontaneously create variations, then referred to as noodling, is unclear. However, it is evident that spontaneity by xylophone performers in the 1920s had increased. As will be discussed below, the degree of spontaneity was a matter of experience, performance setting, training, and ultimately personal preference.
4.4 Hot Style

In 1917, the earliest recordings of the jazz style, and subsequent global dissemination of the music, had a dramatic effect on commercial music. Formative components of jazz included the blues, ragtime, Tin Pan Alley, late nineteenth-century European concert and dance music, grand opera, vaudeville and the minstrel traditions, the white folk music of Appalachia, and village concert bands.\(^{229}\) Just as Bruno Nettl suggests that improvisation existed on a spectrum, jazz would also lie on a spectrum along with its influences. One of the distinct results of the combination of these elements is the hot style, often associated with jazz, popular through the 1920s and 1930s. As Richard Sudhalter says about the classification of hot and jazz genres, “In the 1920s, if there were any distinction at all between ‘hot’ and ‘jazz’ music, it would be a casual distinction and usually racially based.\(^{230}\)

The history of hot music is long and complex, and it is difficult to assess what was exactly meant by the term in different times and in different genres. Erick Thacker’s article on “Hot” in the *New Grove Dictionary of Jazz* mentions early usage of the term in varied types of pieces:

> Tune titles making use of the adjective first occurred in the ragtime era, well-known examples being Theodore Metz’s *A Hot Time in the Old Town Tonight* (1896) and Paul Pratt’s *Hot House Rag* (1914); several in the early jazz period included the word, notably *Hot and Anxious*, *Hotter than that*, and *Hot Lips*.\(^{231}\)

---


The aforementioned composer Theodore Metz was the leader of a minstrel troupe and composed “A Hot Time in the Old Town Tonight” as a march with lyrics by Joe Hayden. Both in dialect and narrative, the lyrics imply an African-American revival meeting. It has been suggested that Metz, who is credited for the composition, had heard the music elsewhere:

Professional entertainers and songwriters had heard it [“coon song”] in sporting houses and drinking establishments. Theodore Metz, a bandmaster for a white minstrel company, first heard his “A Hot Time in the Old Town” in an all-colored whorehouse.

Inclusion of the word “hot” does not necessarily make the work itself “hot,” but draws a connection to its African-American roots associated with the term. Regarding the term “hot,” Thacker continues:

The term was used relatively vaguely to describe all types of band – from dixieland sextets to large dance orchestras whose repertoires occasionally included jazz-oriented pieces or solos. Notable groups that referred to themselves as “hot” were Louis Armstrong’s Hot Five and Hot Seven, Jelly Roll Morton’s Red Hot Peppers, and the Quintette du Hot club de France, an ensemble that was supported by the growing movement in France of clubs of enthusiasts devoted to “hot jazz.” … Hot solos were generally performed at considerable speed and were characterized by a frenetic quality, an urgent sense of rhythm, agitated syncopation, eager anticipations of the beat, and an earthy or “dirty” tone. Such solos were played in some instances over whole or successive choruses, but orchestrated jazz frequently gained impetus from hot breaks or licks of as little as one or two bars.

Musical styles changed throughout the 1920s, pushing boundaries of tempo, rhythm, and intensity. The “frenetic” energy moved the music towards a more unhinged improvisation, giving both performing musicians and their audiences a sense of uncertainty and vitality.

---

234 Thacker, “Hot, (i).”
The developments in speed and rhythm were well suited for the xylophone. Green touches on “so called ‘hot’ playing” in Lesson 44 of his *Instruction Course*. Green’s approach is to use the stronger right hand to accent what he calls an “after-beat effect,” putting emphasis on the second and fourth beat. An increased sense of syncopation, explicitly putting emphasis on weak beats, is typical of the hot style. The other definitive aspect of hot playing that Green mentions is the freedom to feature a triplet “anywhere in the measure.” Green’s own composition title “Triplets,” an exploitation of the triplet rhythm, demonstrates that this emphasis on the triplet was new; it was not in regular use in fox-trot music.

George Green’s playing in the 1910s was progressive for the time. However, newer types of syncopation, rhythm, and melodic embellishment were in vogue by the close of the 1920s. Green’s variation style was at the peak of its popularity by the early 1920s. While he continued to record, perform, compose, and teach throughout the 1920s and 1930s, Green’s work that was most influential to other xylophonists was done in the late 1910s. With more developments and changing trends throughout the 1930s, the musical styles with which Green was associated had become a caricature of a bygone era. Sammy Herman, Harry Breuer, and Red Norvo came to represent the next generation of recording and radio artists with evolving styles.

### 4.2.1. Chromatic Fox Trot (Recorded by George Hamilton Green, 1925)

Regarding jazz at the onset of the Jazz Age (1918-1929), Richard Sudhalter writes:

---


“In the semantics of the time, ‘jazz’ quickly became synonymous in the American vocabulary with forced gaiety, abandon – and any music lively or loud enough to promote it.”

When George Hamilton Green self-published his *Jazz Classics* series of xylophone solos in 1924, exploitation of the term “jazz” was in vogue. The pieces in Green’s *Jazz Classics* series were no more related to jazz than his previous syncopated works.

The refrain of the A strain of both “Chromatic Fox Trot” and “Log Cabin Blues” (to be discussed later in this chapter) are almost entirely varied from Green’s sheet music. The decision to improvise extensively on a single chorus of variation is a new development in Green’s solo performances. It may also be noted that on all his takes of “Log Cabin Blues” with piano accompaniment, Green plays marimba rather than xylophone.

The melody in much of Green’s solo work is actually played by accompanying instruments. Bob Becker addresses Green’s complex xylophone writing in his introduction to *Modern Improvising*:

… However, since they are already composed in an elaborate and rather complex style often without a simple melodic line, the approach to improvisation in these particular pieces often has to be somewhat different from the melody/improvised chorus method outlined previously. The A strain, which in these tunes is repeated at least four times, is usually the best place to add improvised choruses. In addition, breaks and stop-time choruses are always appropriate places for improvisation, even though composed phrases may be provided in the solo.

The improvisations played in the hot style are often figurations of material that has already been varied once. The source melody is given either in the vocal line of the sheet

---

238 George Hamilton Green, *George Hamilton Green’s Jazz Classics for the Xylophone* (New York: George Hamilton Green, 1924).
music, or, in the case of “Chromatic Fox Trot,” in the right hand of the piano. There are significant differences between the approach needed to vary a song, and that needed to vary virtuosic instrumental works. Green’s solo compositions already used a percussive solo texture tailored for the xylophone. Given that the “Chromatic Fox Trot” is an exploration of the chromatic scale, Green improvises on the harmonic structure, often placing emphasis on neighbor tones or non-chord tones, and using a trick rhythm variant in triplets.

A development from Green’s early lower neighbor tone usage, such as that previously discussed and shown in Figure 4.3, is passages including shorter double neighbor tones. Green uses double neighbors throughout his improvisation in “Chromatic Fox Trot” to embellish chord tones, interspersed with arpeggios and lines. The neighboring tones used span a major, minor, and augmented second from the main notes. In Lesson 7 of his Modern Improvising, Green describes this device, when beginning and ending with the chord note, as “a sort of ‘turn.’” It starts on a given note of the chord, goes above and then below the chord note, and then comes back to the chord note.”

Figure 4.8: George Hamilton Green, “Chromatic Fox Trot,” Improvisation on refrain of A strain with double neighbor tones circled (Edison 51527-L).

---

240 Ibid., 24.
4.2.2 Trick Rhythm in Triplets

Green’s triplet variation in “Chromatic Fox Trot” creates metric tension by superimposing four-note groupings against the subdivisions of three within each pulse. An elision on the downbeat of the third measure of this passage resets the groupings. This phrase, as shown in Figure 4.9, then continues for four measures, unaltered.

![Figure 4.9: George Hamilton Green, “Chromatic Fox-Trot,” improvisation recorded with Frank Banta (Edison 51527-L), four-note groupings in triplets.](image)

Instead of chromatic scales, Billy Gladstone uses pentatonic material in his performance of “Ida! Sweet as Apple Cider.” In Figure 4.11, Gladstone uses a triplet division with groupings of four descending notes within the phrase.

![Figure 4.11: Eddie Munson/Eddie Leonard, “Ida! Sweet as Apple Cider,” m.6.](image)

Lastly, George Green’s tag ending on his composition “Triplets,” also makes use of pentatonic material (see Figure 4.12). This break adds yet another degree of displacement to the variation, by beginning the four-note groupings on the second, weak beat of the phrase.

---

241 Green, *George Hamilton Green’s Jazz Classics for the Xylophone* (New York: George Hamilton Green Studio, 1924). An earlier 1920 recording with band did not have this tag ending see: George H. Green, “Triplets,” Emerson 10169, 1920. 78rpm disc.
4.2.3 On the Woodpile (Recorded by Harry Breuer, 1929)

Harry Breuer claims he did not improvise on his solos in the 1930s and 1940s, and that everything was written out with the exception of some “noodling up and down, you know, a lot of chromatics.” Ever the perfectionist, Breuer usually wrote out choruses for recording. Despite playing with Paul Whiteman, Benny Goodman and Duke Ellington’s ensembles, Breuer’s career following vaudeville was mostly outside the realm of jazz and improvisation. Breuer established himself as a commercial studio musician.

Randall Eyles interviewed Breuer about his xylophone solos and arrangements, and the degree to which he spontaneously improvised on them. Regarding a series of Breuer’s solo arrangements from the 1940s, Breuer responded, “they were performed as written, too. I think there were a few variations written into it, but, it’s not improvisation.” One of Breuer’s earliest solos, “On the Woodpile,” is part of Breuer’s catalog of non-improvised work. Yet, on a Brunswick Brevities radio program in late 1929, Breuer’s performance of “On the Woodpile” features a variation strain that sounds improvised.

4.2.4 Rhythmic Development

Breuer writes: “‘On the Woodpile’ is intentionally less flashy, not overloaded with

---

242 Eyles, “Ragtime and Novelty Xylophone,” 43.
notes, putting emphasis on rhythmic patterns rather than runs and embellishments."\textsuperscript{243}

This was in response to some earlier criticism of Breuer’s showpieces. One reviewer wrote: “It seem as if the soloist, in some selections, was trying to cram as many notes as possible into each bar.”\textsuperscript{244} This criticism could be applied to many of the hot xylophone solos of the 1920s, as speed and virtuosity are essential to the style.

Breuer’s broadcasted performance of “On the Woodpile” follows the published sheet music, with the exception of some breaks and a variation of the first half of the repeat of the Trio. In this variation, Breuer develops syncopation. The original figure makes use of a 2+3+3+3+3+2 subdivision, as seen in Figures 4.13a and 4.13b.

Figure 4.13a: Harry Breuer, “On the Woodpile,” mm. 57-58.

Figure 4.13b: Rhythmic grouping, “On the Woodpile,” mm. 57-58.

On the repeat of the A section Breuer improvises a whole-tone break using the same syncopated rhythmic grouping (figure 4.13c).

Figure 4.13c: Harry Breuer, “On the Woodpile,” whole-tone break at the conclusion of the second A section.

For the variation on the Trio section, the syncopated phrasing is varied in a slower division of quarter notes, rather than eighth notes. The phrase in the first two measures is


\textsuperscript{244} Ibid.
adorned by triplet turns (see Figure 4.14a and 4.14d), an ornament common to jazz vocabulary. For example, the iconic jazz pianist Fats Waller uses a similar device in his piano solo “Handful of Keys” (see Figure 4.14b). Measures 5-6 of Breuer’s “On the Woodpile” variation, shown in Figure 4.14c, share rhythmic grouping and contour to measures 1-2.

Figure 4.14a: Harry Breuer, “On the Woodpile” variation, mm. 1-2.

Figure 4.14b: Thomas “Fats” Waller, “Handful of Keys,” mm. 47-48.

Figure 4.14c: Harry Breuer, “On the Woodpile” variation, mm. 5-6.

Figure 4.14d: Rhythmic grouping of “On the Woodpile” variation, mm. 1-2 and mm. 5-6.

Both syncopated figures from Breuer’s variation above use an idiomatic device consisting of a repeated cell, with moving notes above a stationary figure. Breuer and Sammy Herman both utilized this technique with regularity. In his 1931 chorus of a
Depression-era tune, “Now’s the Time to Fall in Love,” Herman uses the technique to allude to the melody in the upper voice (see Figure 4.15).

Figure 4.15: Al Sherman/Al Lewis, ”Now’s the Time to Fall in Love,” excerpt of Sammy Herman’s chorus from Phil Spitalny’s Hit of the Week 1188 A-2-3.

In the midst of a chorus made up of sextuplet scales and arpeggios with neighboring tones, Herman keeps the sextuplet motor rhythm constant during the device. Here, the repeated B-flats allow for the isolation of slower-paced melody notes, over the sextuplet ostinato.

4.2.5 Outlining Chords with Chromatic Passing Tones

Another feature of Breuer’s “On the Woodpile,” and one that is unique to Breuer’s approach, is the use of triplet figures to outline chords, connected by chromatic passing tones. In Figure 4.16, Breuer outlines an augmented Ab triad on the strong beats.

Figure 4.16: Harry Breuer, “On the Woodpile” variation, mm. 21-22, outlining an A-flat augmented triad, circled.

A signature line from Breuer, he wrote a similar variation into the concluding phrase of his “Joplin on Wood,” a staple of his repertoire (see Figure 4.17). This line is also used as an introduction on a recording of the same composition, which was released in 1958 as “Maple Leaf Jump.”
4.2.6 Ida/Some of These Days Medley (Recorded by Billy Gladstone, ca. 1927-1931)

William “Billy” Gladstone is remembered today for his inventions, snare drums, successful students (among them Joe Morello, Shelly Manne, and Morris Lang), and contributions as a staff percussionist from the opening of Roxy’s Radio City Music Hall. What he is not remembered for, however, is his ability as a xylophonist.

When asked in an interview by Bent Lylloff about xylophonists of his day, Red Norvo included Gladstone:

Harry Breuer, Billy Dorn and Sam Herman were dear friends and of course Adrian Rollini who also played bass sax. I met George Hamilton Green when I first went with Whiteman to New York. Billy Gladstone was quite a terrific xylophone player in those days too, you know.245

Gladstone was an active and renowned percussionist during his tenure in New York City’s theater district. He performed as a regular orchestra member in the world’s largest theaters: The Roxy, Capitol Theater, and eventually Radio City Music Hall, where he would remain until his retirement. Harry Breuer mentioned an incident in which Gladstone was by his side at The Roxy when one of Breuer’s feature performances went awry:

The first solo I had to play was the “13th Rhapsody” [by Liszt, arranged] by Erno Rapee … In one section the orchestra was completely on the after-beat, the “oompahs.” It’s very easy for something to go wrong with something like that. … One day, who walked out [to conduct] but Roxy himself … He’d gotten off the

tempo and – there were four percussionists behind me – one was Billy Gladstone, who was quite famous himself as a percussionist, he said “keep going, keep going, we’ll catch up.”

One of three existing known recordings of Billy Gladstone is a performance of a medley, Eddie Munson and Eddie Leonard’s “Ida! Sweet as Apple Cider” and Shelton Brooks’ “Some of These Days,” with the Capitol Theatre Orchestra. While there is no exact date on this Major Bowes radio broadcast, it most likely falls between 1927 and 1931, the years Gladstone and Major Bowes, the famed Capitol theater manager, were working at the Capitol Theater and broadcasting on the WEAF network in New York City.

4.2.7 Form

This transcription of “Ida/Some of These Days” places the first tune in tonic E-flat and the second tune in the subdominant, A-flat. The practice of progressing from the tonic to the subdominant is standard in popular piano ragtime pieces by Scott Joplin and Joseph Lamb, among others. This progression, dating back to the 1890s, remained common practice through the early 1920s. The medley is a showpiece for the xylophone in every way.

The ensemble, embellished only by figuration on the xylophone, states the melody of “Ida” in the first chorus. On the second chorus the arrangement goes between single and double time, giving Gladstone a chance to play some fast figures in double time, which continue even when the ensemble returns to single time accompaniment.

246 Harry Breuer Interview, cassette tape.
Table 4.1 shows the form of this arrangement with the breaks that transition between the two pieces played at different tempi.

<table>
<thead>
<tr>
<th>Introduction</th>
<th>A</th>
<th>A2</th>
<th>B</th>
<th>B2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tempo: Quarter = 264</td>
<td>16 measures “Ida”</td>
<td>Slower tempo A</td>
<td>32 measures of “Some of These Days”</td>
<td>32 measures of stop time</td>
</tr>
<tr>
<td>Tempo: quarter = 168</td>
<td>4 measure break from the downbeat of 15th measure of A. Unprepared slower tempo mid-break sets up second A.</td>
<td>Tempo: quarter = 264</td>
<td>Tempo: quarter = 192</td>
<td></td>
</tr>
<tr>
<td>6 measures followed by implied double time (2 measures) returning to A tempo for 8 measures. Then a faster break leads to the pick-up of “Some of These...”</td>
<td>32 measure for (break 15-16 and break 31-32, slower break)</td>
<td>2 measure tag ending featuring Gladstone’s unique ascending grace notes.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.1: Form of “Ida/Some of These Days” medley.

Gladstone’s virtuosic performance, including lengthy uninterrupted sixteenth-note runs in the B2 section, brings up questions about the original speed of the recording. There are several points for consideration in deciding if the recording is sped up or if Gladstone’s actual performance was actually even faster, and the recording has been slowed down.248

### 4.2.8 Concluding Lower Neighbor Passage

At the conclusion of the performance, Gladstone plays an arpeggio with grace notes, a unique effect that is neither clean double stops nor straight eighth notes. The continuous string of grace notes is clearly intentional, resulting in an ascending arpeggio with a lower neighbor arpeggio. The technique is effective as a final stamp following Gladstone’s chorus of non-stop arpeggios with stop time accompaniment. Figure 4.18a illustrates the final arpeggio in A-flat. Its twists and turns make Gladstone’s rendering an

---

248 The pitch discrepancy could be due to the original recording process, a transcription record of a radio broadcast, the speed of the record altered when recorded to tape, or the tape transfer to the digital format which had been transcribed.
exceptional display of virtuosic technique. This figure is juxtaposed with a more
common and natural version on a G triad with F-sharp as the lower neighbor triad (black-
to-white notes, like on the piano). With the lower neighbors directly in front of the target
notes, it would be relatively easy to drop the mallets from above, falling to the main notes
on the lower manual, shown in Figures 4.18b.

![Figure 4.18a: Shelton Brooks, “Some of These Days,” mm. 117-118 in the key of A-flat. The lower notes are played as grace notes, an effect unique to Gladstone’s playing.](image1)

![Figure 4.18b: Shelton Brooks, “Some of These Days,” mm. 117-118 in the key G, a key in which this run can be played with a regular pattern between the upper and lower manuals.](image2)

### 4.2.9 “Hot Licks” over Common Chords

The following figures illustrate other passages that draw attention. Measure 24
contains a double-stop arpeggio in Bb7 (presuming the original is in Eb). This arpeggio
realization typifies “hot licks” over common dominant chords such as C7, F7, and Bb7,
reinforcing Eb as the probable key.

![Figure 4.19: Eddie Munson/Eddie Leonard, “Ida! Sweet as Apple Cider,” mm. 23-24.](image3)
The sextuplet F7 arpeggios in Figures 4.20 and 4.21, also conventional, reinforce the argument for Eb being the original key. E7 is a more rare chord for this style and period.

Figure 4.20: Eddie Munson/Eddie Leonard, “Ida! Sweet as Apple Cider” m. 33.

Figure 4.21: Eddie Munson/Eddie Leonard, “Ida! Sweet as Apple Cider” mm. 47-48, high-speed F7 arpeggiation.

The extended sixteenth note runs in the final chorus of “Some of These Days” lay comfortably on the instrument in Ab, while if in G they would require awkward navigating. However, given Gladstone’s apparent virtuosity, either key is possible. With no further recordings or evidence of Gladstone’s xylophone playing there is no support for his favoring certain keys over others. In addition, lessons on xylophone playing, especially for popular medleys such as this, repeatedly stressed playing in all keys, a necessary skill for working musicians of the time. However, one final case for Eb and Ab rather than D and G is a broadcast from the same period of Sammy Herman playing a similar medley with the Paul Whiteman Band. The concluding tune is “Some of These Days,” which is played in Ab. It is likely that Herman and Gladstone even played together at the Capitol Theater, although in all of Herman’s discussion of xylophonists from his early career, he never mentioned Gladstone.249

4.2.10 More “Hot Licks”

In this improvisation Gladstone capitalizes on some common devices of 1920s xylophone performance, combining multiple approaches with virtuosity and variety. He makes use of typical ragtime figuration played at a much faster tempo than most of his contemporaries. Gladstone’s rhythmic approach exploits triplet subdivisions at the quarter, eighth, and sixteenth note level. He also used hemiolas, or trick rhythms in various groupings, including those previously discussed with other examples in triplets.

Figure 4.22 is a quintessential figure of xylophone ragtime. The sticking and in the right-hand, with a harmonizing left hand, give a unique result when played on the xylophone. This is a drumming figure assigned to two voices. The resulting balance of percussion and melody is most likely what George Hamilton Green is referring to when he proffers “more real ragtime can be played on the xylophone than any other instrument.” This kind of figure can be found in nearly every phrase of the music, as it is one of the defining characteristics of the ragtime style of xylophone playing.

Figure 4.22: Eddie Munson/Eddie Leonard, “Ida! Sweet as Apple Cider,” mm. 7-8.

Figure 4.23 is evidence of Gladstone’s ability and experience as a drummer. Here, his left hand maintains the kind of patterns a snare drummer might play (later to be replaced by a ride cymbal). Gladstone incorporates melodic material, not simply relying on purely percussive “stick tricks” found in other xylophonist’s variations.

250 Stone, “George Hamilton Green,” 84.
Figure 4.23: Eddie Munson/Eddie Leonard, “Ida! Sweet as Apple Cider,” mm. 21-22.

Figure 4.24 is a lick over C7 that demonstrates Gladstone’s creativity. While leaps of thirds or even fourths are common in xylophone playing, disjunct movement in fifths, sixths, and octaves is unique to this example by Gladstone.

Figure 4.24: Eddie Munson/Eddie Leonard, “Ida! Sweet as Apple Cider,” mm. 29-30.

Figure 4.25 parallels Figure 4.16, again using triplet double-stops over a B-flat 7, covering the range of the instrument. And lastly, the third and fourth measures (mm. 74-75) in Figure 4.25 contains an example of the signature ragtime-sticking pattern over an E-flat 7, with a chromatic descent. This is a left-hand-led permutation of the 3:2 hemiola.

Figure 4.25: Eddie Munson/Eddie Leonard, “Ida! Sweet as Apple Cider,” mm. 67-70, B-flat 7 triplets, and descending chromatic E-flat 7 hemiola figuration.

4.2.11 Hole in the Wall (Recorded by Red Norvo, 1933)

Red Norvo’s first recording session as a leader was of his own compositions “Knockin’ on Wood” and “Hole in the Wall.” These recordings marked the beginning of Norvo’s association with Brunswick records. The session, on April 8, 1933, was with
sidemen from the Dorsey Brothers Orchestra, including Jimmy Dorsey on clarinet. The selections on this recording are typical of early Norvo, in transition between hot and virtuosic showpieces such as Gladstone’s medley, and a developing swing style, influenced by many jazz musicians and hot styles outside the xylophone idiom.

Idiomatically, “Knockin’ on Wood” and “Hole in the Wall” emerged out of the vaudeville and theater style in which Norvo was immersed during his teenage years. The form of “Hole in the Wall” is Introduction/A/A/B/A/C/A, with the addition of a flat to the key signature during the Trio at C, typical of ragtime form. The fast-paced double stops and syncopated lines over a stationary bass accompaniment are also typical of the novelty ragtime style. Here, after a call-and-response introduction between the xylophone and band, the piano sets up a boogie-woogie vamp. There are subtle differences between the sheet music and Norvo’s xylophone performance. During the introductory vamp, pianist Fulton McGrath plays something entirely different than the published sheet music (see Figures 4.26a and 4.26b).

![Figure 4.26a: Red Norvo, “Hole in the Wall” sheet music, mm. 9-10.](image)

![Figure 4.26b: Red Norvo, “Hole in the Wall,” transcription of Frank McGrath’s performance of mm. 9-10.](image)
McGrath’s piano part, and Norvo’s composition, with its flowing xylophone melody, build upon preexisting forms, evolving from ragtime syncopation built on a steady march accompaniment.

From the first beat, Norvo uses octaves on the xylophone to get a richer texture than a single line. The call-and-response of the introduction is also essential to Norvo’s style, which involved the common jazz practice of listening and interacting with other members of his ensembles. Even in the through-composed examples of “Hole in the Wall” and “Knockin’ on Wood,” the genesis of his interactive approach to improvisation can be recognized. Unlike previous examples of xylophone solos, Norvo features other instrumentalists with solos throughout his compositions. “Knockin’ on Wood” includes an interlude with improvised solos by Jimmy Dorsey on clarinet and Fulton McGrath on piano. The interactive aspect of performance is further highlighted throughout Norvo’s career. By spontaneously developing motives used by other soloists in their improvisations, and vice versa, Norvo’s approach to improvisation relies on spontaneity and a shared musical vocabulary among instrumentalists.

4.2.11 “Xylophonia” Figuration

The A section of “Hole in the Wall” uses a common idiomatic approach to arpeggiating chords on xylophone. Joe Green has exploited this figuration throughout his composition “Xylophonia,” first published in 1925. The thematic material of “Xylophonia” makes repeat usage of drumming figure seen in Figure 4.27.

![Figure 4.27: Joe Green, “Xylophonia” rhythm, m. 9.](image)
As David Gornston states in his 1934 book on hot improvisation, and is still common practice among teachers of improvisation, the first steps in improvising are to alter phrasing, and then rhythm. Gornston’s instructions for improvising in the hot style are to “change the note values without changing the original melody tones. This exercise lays the foundation for future ‘hot’ playing because to the varied rhythm, other notes will be added later.”

Tailored for the xylophone, this “Xylophonia” figuration is a rhythmic alteration of doubling back in sixteenth notes, varied with a triplet (see Figures 4.28a and 4.28b).

![Figure 4.28a: “Xylophonia” figuration as sixteenth-note doubling back, mm. 9-12.](image)

![Figure 4.28b: Joe Green, “Xylophonia,” mm. 9-12.](image)

Sammy Herman’s written out chorus on “Dinah” uses this rhythm exclusively, outlining the chromatic decent of the harmony (see Figure 28.c).

![Figure 4.28c: Harry Akst et al. “Dinah,” mm. 17-19, from Sammy Herman, Modern Hot Xylophone Solos.](image)

This figuration is a common device used by most xylophonists. Advantageous for both outlining harmony in a melodic fashion, and providing a strong rhythmic foundation by repetition, this “Xylophonia” figure takes on a new dimension in Norvo’s “Hole in the

---

Wall” (see Figure 28.d). By omitting two of the sixteenth notes, Norvo uses the space the space to lean closer to the triplet than dotted rhythms, giving a swinging lilt, rather than Green’s ragtime phrasing and articulation.

![Figure 4.28d: Red Norvo, “Hole in the Wall,” m. 13.](image)

4.2.12 Al Fresco (Recorded by Sammy Herman, 1927)

Sammy Herman and his duo partner, pianist Frank Banta’s arrangement of Victor Herbert’s 1904 composition “Al Fresco” features eight measures of improvised noodling. Originally written for piano solo, “Al Fresco” is an example of a light-classical intermezzo, or short piece that has a similar form to turn-of-the-century ragtime pieces.

This duo arrangement involved a typical Herman device of harmonizing the melody of the A strain, first with the melody played in the right hand and harmonized with the left; then, Herman places the melody in the left hand and harmonizes with the right. As natural a decision as it may seem, to balance right and left hand, this was not common for xylophonists of the time and was a result of Herman’s strong left hand. Herman recalls:

> As a lefty, I was able to play the melody in the left hand and the harmony notes in the right hand. I didn’t approach the instrument from a technical aspect; I just played the best music I could, noodling wherever I thought it was appropriate, letting my ear guide me.252

Herman and Banta’s arrangement gradually gets more complex, leading to the improvised Trio strain, and then returns as before, with a single-line melody.

---

Table 4.2: Form of Frank Banta and Sammy Herman’s arrangement of Victor Herbert, “Al Fresco” (Columbia 20558).

The improvisation in “Al Fresco” is restrained to eight measures of the second trio strain, while the other embellishments heard throughout the piece are predetermined. The variation in measure 31, seen in Figure 4.29, fills the piano’s sustained notes to make up for the xylophone’s lack of sustaining sound (and give energy to an otherwise subdued original, from two decades earlier). Another sextuplet variation is heard in Herman’s xylophone variation on a C7 harmony in measures 64-65, shown in Figure 4.30.

Figure 4.29: Victor Herbert, “Al Fresco,” piano solo (top staff), m. 31. Sammy Herman and Frank Banta arrangement, xylophone variation (lower staff), m. 31.
The improvisation on the trio, shown in Figure 4.31, is representative of Herman’s hot style: increased tempi, fluid runs, and a departure from the angular trick-rhythms and double-stops that were essential to Green’s earlier style.

4.2.13 Ya Vas Da-Ra-Ga-Ya Loo-Bloo (Recorded by Sammy Herman, 1941)

Some of the main aspects of Herman’s style are fast and fluid sextuplet phrases, an exaggerated sense of swing, playing in octaves, and dead-stroke accompaniment, all exemplified in his rendition of Sano Marco and Jack Erickson’s “Ya Vas Da-Ra-Ga-Ya Loo-Bloo.” This notated transcription comes from an electrical transcription recording of the Sammy Herman Trio, with accordionist Charles Magnante and bassist Sam Shoobie.
The small ensemble allows for freedom to suddenly change tempi, adding to the drama of this example of an Eastern European folk tune rendered in the hot style, with all Herman’s signature moves and rhythmic vitality. Herman’s scalar improvisation style is suited for modal music or popular tunes with fewer harmonic changes. “Ya Vas Da-Ra-Ga-Ya Loo-Bloo,” makes use of a Dorian scale, altered with a sharp fourth scale degree. Referred to as either a “Ukrainian Dorian scale,” or the Misheberak scale, common in Jewish and Romanian music, the scale is shown in figure 4.32.

Figure 4.32: Ukrainian Dorian scale.

Several xylophonists continued the tradition of Eastern European folk music that dates back to early xylophonist Michal Gusikow, in the nineteenth century. The Gusikow lineage extended into the twentieth century, with four members of the Gusikow family performing with the Philadelphia Orchestra around the 1920s. Jacob Hoffman was another Philadelphia Orchestra member at that time, a xylophonist and percussionist who learned klezmer repertoire from his father. In 1923 Hoffman recorded a virtuosic solo xylophone piece with the accompaniment of Harry Kandel’s Orchestra in Camden, NJ. This was the first known recording of klezmer xylophone, marketed as a “Hebrew Dance.” Fitting the “foreign” classification for marketing purposes, recordings such as this one would eventually infiltrate popular music and swing styles in the 1930s and 1940s (previously discussed in Chapter 1).

---

253 Netsky, “Klezmer: Music and Community,” 75-76.
254 Ibid., 75.
Sammy Herman and Lou Singer also recorded xylophone-based examples influenced by Eastern European and *klezmer* repertoire. Singer and Nat Farber’s composition “Bar Mitzvah Special” was recorded in 1956 with a band led by Mickey Katz, made up of musicians who at one point worked for Spike Jones. The style is a throwback to the once-popular *klezmer* xylophone performances that are mostly lost. Sammy Herman’s hot adaptation of Sano Marco and Jack Erickson’s “Ya Vas Da-Ra-Ga-Ya Loo-Bloo (I Love You)” from 1941, like Singer’s performance, is up-tempo with an emphasis on hot rhythm. All three of these examples feature the same scale, of which ethnomusicologist Mark Slobin says:

> There is no convenient name for this scale, which is predominant in the klezmer bulgarish and doina (doyne). Throughout his 1929 book, *Jewish Music in Its Historical Development*, Idelsohn had called it the “Ukrainian Dorian Scale,” while in all of his Russian and Yiddish language articles Moshe Beregovski had called it the “Altered Dorian Scale.”

The scale is a Dorian scale with a sharp fourth. It is heard in the opening xylophone figures of all three of these examples, seen in Figures 4.33a, 4.33b, and 4.33c.

---

**Figure 4.33a:** Sano Marco/Jack Erickson, “Ya Vas Da-Ra-Ga-Ya Loo-Bloo,” m.2.

**Figure 4.33b:** Lou Singer/Nat Farber, “Bar Mitzvah Special,” m. 5.

---

Herman’s exaggerated swing, almost double-dotted in execution, is also found in dances of Eastern European and Russian origins. For Herman though, his rhythmic approach is an exaggerated form of George Green’s, what Ryan Lewis calls “a slight lilt—a slightly relaxed, ‘lazy,’ half-swing rhythm.”

A comparison between the sextuplet improvisation on “Al Fresco” in 1927 (see Figure 4.34), a hot chorus on “Now’s the Time to Fall in Love” in 1932 (see Figure 4.34), and “Ya Vas Da-Ra-Ga-Ya Loo-Bloo” in 1941 (see Figure 4.35), further demonstrates that Herman maintained his style throughout his performing career, with little changes to his improvisational approach.

---

**Figure 4.33c:** Traditional *Klezmer*: opening phrase from Harry Kandel’s Orchestra, “Doina and Hora,” Jacob Hoffman, xylophone.

**Figure 4.34:** Sano Marco/Jack Erickson, “Ya Vas Da-Ra-Ga-Ya Loo-Bloo,” sextuplet xylophone improvisation, mm. 45-53.

---

In both of the aforementioned examples, Herman creates lines with smooth contours comprised of sextuplets. Making regular use of high-speed diatonic scales intertwined with chromatic scales, the results produce highly interesting phrasing. Aside from these scalar combinations, the rhythmic groupings Herman uses smoothly transition between groups of two, three, and four notes within the sextuplets.

4.2.14 Bye Bye Blues (Recorded by Sammy Herman, 1959)

Herman’s 1959 improvisation on “Bye Bye Blues” follows the example of his style displayed on his earliest recordings from 1923, and the written out Hot Choruses volumes published in 1938. There are no recognizable influences in Herman’s xylophone playing from developments in jazz styles since the 1920s. Although recorded well after the period of this study, according to Herman, his recording of “Bye Bye Blues” received more attention from xylophonists than any of his other work, on recording or radio.
Herman received countless letters from fans asking if he could send them a transcription of his chorus on “Bye Bye Blues.” In Herman’s words:

I just couldn’t write it out. It was done on the spur of the moment. It was just an improvisation on the melody of the chorus of Bye Bye Blues. Of all the difficult things that I did play in my lifetime, that was the most popular one, as far as the public was concerned. Some people did try to imitate it, but I never heard it.\footnote{Becker and Cahn, Interview with Sammy Herman.}

In his chorus of “Bye Bye Blues,” Herman places an emphasis on arpeggiation. Lower neighbor arpeggios, doubling back arpeggios, and repeated descending arpeggios make up the majority of both Herman’s variation on the tune (see Figure 4.36b). Arpeggiation devices such as these aptly fit the original melody, consisting of mostly chord tones on the beat in long durations (see Figure 4.36a).

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure436a.png}
\caption{Dave Bennett et al. “Bye Bye Blues,” original melody of the chorus, mm. 1-8.}
\end{figure}
The repeated descending arpeggios and chromatic passages shown in Figures 4.36b and 4.36c come from Herman’s 1938 hot choruses in *Modern Hot Xylophone Solos*. These types of figuration can be directly linked to the 1959 chorus of “Bye Bye Blues,” demonstrating Herman’s consistent use of such devices throughout his career.
Figure 4.36d: Andy Razaf/Thomas “Fats” Waller/Harry Brooks, “Ain’t Misbehavin’,” mm. 17-20, from Sammy Herman, *Modern Hot Xylophone Solos*.

Herman’s chorus on “Bye Bye Blues” is unquestionably hot in its tempo, spontaneity, and inclusion of different types of rhythmic devices. Yet, most of the improvisation puts emphasis on strong beats, and the only explicit trick rhythms employed are in the last six measures. In notation, most of the chorus looks no different than Green’s earlier improvisations in “Castle Valse Classique,” obbligato lines over a melody composed of half note and quarter note values. However, Green’s improvisation is much less aggressive in comparison, serving as an embellishment of a melody performed simultaneously by the ensemble. Herman’s chorus is accompanied by a stop-time chorus playing the melody of “Bye Bye Blues” without syncopation, but with rigorous and articulate melody placed on strong beats. Thus, surveying these examples, we can surmise that each xylophonist has a different approach to the “hot” style, dependent on the ensemble context of their solo as well.

### 4.3 Blues

The blues, ragtime, and European classical music are often said to be the ingredients of jazz. The improvisational style associated with the blues, along with alterations to pentatonic and diatonic scales, was influential on Tin Pan Alley and commercial musicians, albeit with differing results. Historian Kathy Ogren notes some of the limitations of notation stating “when blues were written down, their West African pentatonic-based tones were adapted to the European diatonic-based system of pitch and notation. ‘Blues notes’ were represented by flatted thirds, sevenths, and later fifths on the
Musicologist Peter van der Merwe writes about the essential elements of the blues style, addressing rhythm and modality:

All blues tunes have two things in common: one is syncopation, and the other is a mode, which is not merely a mode, but a particular kind of modality, dominating and controlling the whole style in much the same way a particular kind of tonality dominates the Classical style.

Although improvisation is not essential to blues melodies, it is common enough to be addressed in this study of improvisation. The xylophonist’s challenge was to imitate vocal inflection that is associated with the proto-blues style of the nineteenth century American South. The moans, hollers, and vocal effects of the blues are most fit for instruments that do not have fixed pitches. For this reason, stringed or wind instruments were the choice instruments of accompanists to vocalists who first recorded what would become known as the “classic” blues. In performance of the blues and blues-style pieces, radically different results were yielded by drummer-xylophonists Jasper Taylor and Mort Perry, and radio and recording xylophonists George Hamilton Green, and Red Norvo.

Jasper Taylor (1894-1964) is remembered as a drummer and washboard player, thought to be the first to make the household appliance into a musical instrument. From the mid-1910s, Taylor was active in Memphis with W.C. Handy and Jelly Roll Morton, among others. Taylor moved to New York City in 1917 and recorded as a xylophonist

---

and drummer with W.C. Handy’s band.²⁶¹ Though primarily a drummer, Jasper Taylor recorded as a xylophonist with W.C. Handy. Taylor is the xylophonist on the 1917 W.C. Handy recordings of “Fuzzy Wuzzy Rag” and “That ‘Jazz’ Dance.” These are examples of the through-composed ragtime blues that feature the xylophone throughout. The non-improvised nature of the music is confirmed by the unisons of the xylophone and violins.

Mort Perry is confirmed as the xylophonist on Mamie Smith’s early Okeh recordings in Perry Bradford’s autobiography, Born With the Blues.²⁶² Bradford, the songwriter responsible for organizing the recording sessions featuring Perry’s xylophone, describes his arranging process for “Crazy Blues:”

> When my jazz band played for Mamie Smith to record the “Crazy Blues,” we had no arrangements. They were what I called “hum and head arrangements.” I mean we would listen to the melody and harmony of the piano and each man picked out his harmony notes.²⁶³

While these words refer to Mamie Smith’s first recording, and most notably the first “race record” of a blues sung by a black artist, this is most likely the process used for most of the blues recordings during this period.²⁶⁴

White recording artists in the 1920s also recorded a large body of blues repertoire, and xylophonists were no exception. George Green’s blues performance is refined, possibly to a fault. Green plays with a jagged angular rhythmic flow, absent in Southern

---

²⁶¹ Taylor is not credited in the Columbia files or on the disc labels; his presence is confirmed in W.C. Handy’s memoirs.
²⁶³ Ibid., 14.
²⁶⁴ Titles and label numbers, all on the Okeh label, include “Royal Garden Blues,” 4254; “Shim-Me-King’s Blues,” 4254-A; “That Old Thing Called Love,” 4296-B; “Old Time Blues,” 4296-A; “Baby, You Made Me Fall for You,” 4305A; and “You Can’t Keep a Good Man Down,” 4305B.
blues. His approach to the blues involves specific neighboring tones and passing tones, and is otherwise similar to hot playing.\(^\text{265}\)

**4.3.1 Log Cabin Blues (Recorded by George Hamilton Green, 1925)**

George Green addresses blues playing in Lesson 45 of his *Instruction Course*,^266^ “Blues in Ragtime.” According to this lesson, the method of playing blues on xylophone is to harmonize with double stops below the melody line, and drop the harmony note a half step below, then resolve to the original harmony note. Green’s description given in Lesson 34 of his *Modern Improvising* expand the note selection to include tensions of a whole step as well:

… These extra “blue” notes are in reality passing notes, however they may be used in sustained form, if desired. Also, they are usually played in connection, and together, with the fundamental harmony, or notes of the chord. A “blue” note is usually a half tone, or whole tone, under a given chord note … However a blue note may be applied to any note in the chord and played either a half tone, or a whole tone under the note of the keys.\(^\text{267}\)

Green’s composition “Log Cabin Blues” adheres to a typical march form, Intro/AA/BB/A/CC/DD, much like many of his pieces from the 1910s influenced by ragtime form, syncopation, and style. The recordings of “Log Cabin Blues” discussed here follow the same form, extended from the sheet music to A/A/B/A/C/C/D/D/A/B/B/A/C/D/coda. Although the A and B strains are 16-measures in length, the Trio section of “Log Cabin Blues” truncates to a 12-bar form.

Green’s Edison recordings of “Log Cabin Blues” from 1925 are varied throughout with ornamentation, different endings, and an extensive improvisation on the second A strain. Along with “Chromatic Fox Trot,” previously discussed, these recordings were


\(^{266}\) Green, *Instruction Course*, 138-140.

\(^{267}\) Green, *Modern Improvising*, 106.
performed on marimba. The timbre of lower range register of the marimba often clashes with middle register of the piano on the Edison recordings. An overlap in the marimba and piano’s range creates more dense blues tensions than other recordings, where the xylophone is clearly separated from the accompaniment, with clarity in a higher register.

An ornament that typifies Green’s blues treatment is the descending grace note heard in the second measure of a 1925 Edison recording. The same ornament, unique to Green’s performance, is used on a break of “Fascinating Rhythm” recorded by the Green Brothers’ Novelty Band in the same year (see Figure 4.37b).

Figure 4.37a: George Hamilton Green, “Log Cabin Blues,” 1925, m. 2, second A strain (Edison 51527).

Figure 4.37b: George Gershwin/Ira Gershwin, “Fascinating Rhythm,” 1925, Green Brothers’ Novelty Band, break at 1:38 (Edison 51497).

As previously mentioned, lower-neighbor tones used as passing tones in linear passages, rather than ornamenting repeated notes, are common in all of Green’s improvisations, but in particular in blues-related material. The A strain of “Log Cabin” begins with parallel thirds, common to blues and ragtime repertoire. The passing lower neighbors, first leading to the third and fifth scale degrees in measure 1-4, and then the flat-seventh of the dominant chord of measures 5-6, are harmonic embellishments, rather than melodic (see Figure 4.38).
Green’s variations in all three takes of “Log Cabin Blues” include lower-neighbor embellishments, as in the original printed xylophone solo. An examination of the different takes, shown in Figure 4.39, reveals slight variation between takes, but with similar movement based on the harmonic structure of the strain.

4.3.2 Yodel Contour

Another common device used in 1920s hot and popular music is the mimicking of yodeling. By alternating between low and high voices, with the lower voice connecting to the next iteration, the result is a contour that outlines harmonic motion. A particularly
useful device for horns and other monophonic instruments, the motion became cliché in many 1920s styles, commonly found in the blues and blues-oriented music. John Avery Noble and Sunny Cunha’s “The Hula Blues” has a yodel motive in the chorus. The original 1920 sheet music includes a note in the sheet music about the relationship of yodeling to the lyrics: “‘Hoae-ae’ (Pronounced ‘Ho-i-i’) translated means Hawaiian ‘Yodel.’” Just one example of countless uses of this contour, the vocal line seen in Figure 4.40 has been adapted to all instruments, including the xylophone.

Figure 4.40: John Avery Noble/Sunny Cunha, “The Hula Blues,” vocal melody, mm. 1-3 of the chorus.

George Green’s blues improvisations often use the “yodel” motive, most often as a cadential figure. While outlining chords in a linear fashion like doubling-back, the “yodel” motive lends linearity, favoring a single moving line over fast arpeggiation. Two takes from Green’s 1925 “Log Cabin Blues” recordings use the device in both a brief diatonic passage (see Figure 4.41a), and a longer passage adorned with chromatic passing tones (see Figure 4.41b).

Figure 4.41a: George Hamilton Green, “Log Cabin Blues,” Edison 51527, second A strain, m. 8.

269 George and Joe Green recorded “The Hula Blues” with the Green Brothers Novelty Band, Okeh Marimba Band, and the All Star Trio Orchestra, several times between 1920-21. Known recordings include Brunswick 2065 by the Green Brothers Novelty Band, Path 22486 by the Okeh Marimba Band, and Victor 35707 by the All Star Trio Orchestra.
As tempos increased through the 1920s, the “yodel” contour at the interval of a sixth is inverted to a third and developed rhythmically, in triplets, as used by Harry Breuer in his break of “On the Woodpile” (see Figure 4.42).

Red Norvo incorporated the motive in his swing style performance, in examples such as a chorus from a 1936 recording of “I Got Rhythm,” (see Figure 4.43a) and in his lyrical and rhythmically fluid lines in “Remember,” recorded in 1937 (see Figure 4.43b).
4.3.3 Blues in E-Flat (Recorded by Red Norvo, 1935)

For all the conjecture regarding the spontaneous nature of improvisatory performance, Norvo’s “Blues in E-Flat” is a definitive study in spontaneity. At the recording session, only the sequence of solos was agreed upon in advance. A common performance practice for blues compositions is to state a melody for a chorus, and then embellish the melody on the following choruses. Embellishments and improvisations are either through melodic embellishment, or lyrical development. In “Blues in E-Flat,” the arrangement opens with a chorus before the melody is stated, similar to Louis Armstrong’s iconic “West End Blues,” where Armstrong plays an introduction to be followed by a melody and chorus-long solos, also in the key of E-flat.

Norvo’s chorus begins with a four-note decent, one of the only explicitly chromatic passages in the chorus. Norvo avoids chromatic scales that were previously commonplace for xylophonists connecting two points, favoring melodic motives or harmonically enriching note selection. The chromatic opening leads to an E-major seven harmony, typical of the era, but atypical of what modern audiences come to expect from a blues sound, with the flatted seventh as a default. Trills and tremolos mark the ends of fluid lines that give the impression of accelerating and slowing tempi by alternating between smaller and larger note values. In the fourth measure, Norvo plays an F major triad over an E-flat dominant chord. The triad is composed of the ninth, sharp eleventh, and thirteenth from the E-flat root, tensions which are previously unheard of as melodic material in the styles discussed here. This development of harmonic extensions or

---

270 DeMichael, Giants of Jazz: Red Norvo, 36.
alterations is in direct correlation with rhythmic development. An example of this is Norvo’s exploitation of rhythmic displacement in the subsequent phrase.

4.3.4 Rhythmic Displacement

Rhythm songs, such as George and Ira Gershwin’s 1924 composition “Fascinating Rhythm,” became popular in mid-1920s and were of varied complexity. Such songs could consist of simple repeated syncopated patterns, or more complex manipulation of a series of notes. An essential feature of rhythmic songs is rhythmic displacement, the repetitive use of material with different placements within a beat or measure. As the basis for the melody of “Fascinating Rhythm” (see Figure 4.44), Gershwin begins the melody with a metric imposition of 7/8 meter over 4/4.

Figure 4.44: George Gershwin/Ira Gershwin, “Fascinating Rhythm,” 7/8 grouping over 4/4 in the melody.

Norvo’s development of rhythmic displacement is found in “Blues in E-Flat.” Up until the harmonic change to A-flat in the fifth measure, Norvo’s lines are floating in odd groupings. The rubato xylophone lines are supported by steady quarter notes in the accompanying bowed bass, piano, and drums, played with brushes. The fifth measure brings stability with evenly placed sixteenth notes outlining the A-flat dominant harmony, immediately followed by rhythmic displacement. The phrase is repeated

---

verbatim with the same cell of pitches, but rhythmically varied and displaced by a sixteenth note (see Figure 4.45).

Figure 4.45: Red Norvo, “Blues in E-Flat,” mm. 5-6.

George Green’s approach to rhythmic displacement on a blues, as recorded nearly a decade earlier, lacks the subtlety and fluidity of Norvo’s lines. In a 1926 recording of “St. Louis Blues,” Green displaces a four-note cell. He does so by altering the rhythm by an eighth note, adding a single note for two reiterations, and truncating the last (see Figure 4.46).

Figure 4.46: W.C. Handy, “St. Louis Blues,” George Hamilton Green and Frank Banta, Vocalion 15307, rhythmically displaced phrase, mm. 81-83.

4.3.5 Motivic Development

Prior to the 1930s, xylophone variations generally followed guidelines discussed by George Green. Melodic variation was closely related to embellishing a fixed melody or creating variations on chord tones, often by way of arpeggiation and filling space when the instrument does not otherwise continue to sound. By the 1930s though, Norvo uses the xylophone to do what other innovative soloists of the swing era were doing, creating new melodies and developing them through choruses. Aside from the rhythmic development previously discussed, another means was melodic motivic development. In
“Blues in E-Flat” Norvo plays a descending whole tone passage over E-flat on the fourth beat of the third measure (see Figure 4.47a).

Figure 4.47a: Red Norvo, “Blues in E-Flat,” m. 3.

The motive appears again in the first beat of the ninth measure (see Figure 4.47b). The setting over B-flat is particularly colorful as it makes use of the augmented fifth scale degree on the dominant.

Figure 4.47b: Red Norvo, “Blues in E-Flat,” m. 9.

To conclude the chorus and set up the main melody, in measures 9-12, a climax in octaves is reached. The first octave played is a colorful flat sixth, an extension of blues tensions previously taken by altering the third or seventh, as shown in Figure 4.48.

Figure 4.48: Red Norvo, “Blues in E-flat,” mm. 9-10, octave climax.

Norvo’s use of octaves is ubiquitous, not limited to the appearance in blues examples. The use of octaves and motivic development, as displayed in his chorus in “Blues in E-Flat” are common to Norvo’s performance in all genres, particularly during the Swing era.
4.3.6 Blues in E-Flat (same session; Teddy Wilson, piano)

Teddy Wilson and Red Norvo’s musical kinship has received attention by scholars Richard Sudhalter and Gunther Schuller. Sudhaleur has suggested that Norvo and Teddy Wilson’s solos on “Blues in E-Flat” were so closely related that one could not tell them apart. One of the most important harmonic developments of the time that influenced both Wilson and Norvo was the tritone substitution.

Figure 4.49: Red Norvo, “Blues in E-Flat,” Teddy Wilson’s piano chorus, arrows to tritone substitutions.

The tritone substitution technique, employed on “Blues in E-flat,” is to retain the tritone present in dominant chords (between the third and seventh), and move the root a tritone away (see Figure 4.49). Where A-flat to D-flat is a common dominant resolution, the substitution of D for A-flat shares C and G-flat (F-sharp) as the third and seventh scale degrees, and results in a bass resolution by half step, from D to D-flat. These half-step bass relationships are found in the tritone substitutions in Wilson’s chorus on “Blues in E-Flat” leading into measures 5, 7, 8, and into the third beat of measure 12. In this

---

272 “Red Norvo: Mr. Swing,” Jazz Profiles.
example, Wilson works melodically within the main key, not in the tritone substitution. However, other examples, such as Norvo’s chorus on “St. Louis Blues,” demonstrate how tritone substitution, or implied b2 chords serve as a harbinger to bebop styles.

4.3.7 St. Louis Blues (Recorded by Red Norvo, 1938)

By 1938, Red Norvo had been performing with vocalist Mildred Bailey for nearly eight years and married to her for five. For a recording session on September 29, 1938, Bailey had the idea of combining personnel from Bailey and Norvo’s band with that of bassist John Kirby’s band. At the time, Bailey and Kirby alternated for a few weeks at the Famous Door on New York City’s 52nd Street. In keeping with standard practice for vocal arrangements, instrumental solos were kept brief, as to feature Bailey’s voice. Following Bailey’s first vocal on “St. Louis Blues,” Norvo takes a twelve-bar solo, a well-balanced miniature demonstrating many of his stylistic traits for the period: lines with flatted second, fifth, and sixth scale degrees, ending phrases with parallel thirds, and the use of octaves. By 1938, Norvo’s use of flat second, fifth and sixth scale degrees were not just integral to his improvisation, but the sound of his entire ensemble. In his study of big band jazz arranging, John Wriggle notes the connection between chromaticism and Chappie Willet’s 1938 arrangements for Norvo’s band:

Modulations and interludes were not the only passages available for the application of chromatic effects, nor was the whole-tone scale the only tool available. Willet sometimes employed ascending or descending chromatic half-step motion to create harmonic substitutions for a song’s original chord progression. In particular, brief passages of chromatic harmony substitution are found in arrangements written for Red Norvo during 1938, including “Jump Jump’s Here,” and as heard in radio transcription recordings of “A-Tisket-A-Tasket,” “Blue Skies”, and “I’d Climb the Highest Mountain.”

273 DeMichael, Giants of Jazz, 43.
“St. Louis Blues” includes not only the previously mentioned blues effect, mimicking a vocal cry or bend with grace notes, but also regular placement of chromatically altered tensions on the downbeat. Only the second measure of the entire chorus, shown in Figure 4.50a, begins with a chord tone. Instead, Norvo plays with tensions on downbeats and places their resolving chord tones on weak beats, contributing to the swing of his lines.


A passage in measures 9-10 of the chorus makes use of the flat-sixth and flat-second scale degrees (see Figure 4.50b), fully exploited in Norvo’s worked-out bridge of “I Got Rhythm” (see Figure 4.50c).

4.50b: W.C. Handy, “St. Louis Blues,” Red Norvo with Mildred Bailey and Her Orchestra (Vocalion 4801), xylophone chorus, mm. 9-10.
4.50c: George Gershwin/Ira Gershwin, “I Got Rhythm,” bridge on Decca 779 (upper line) and First Esquire All-American Jazz Concert (lower line).

Such tensions are a significant melodic development from hot style of the 1920s to swing of the 1930s. Contrary to the notion that tritone substitutions started in bebop, Norvo and others in the swing era made use of tritone substitutions by way of implying chromatically neighboring chords in lines, sounding as chromatic upper neighbor tones. Norvo’s line in the bridge of “I Got Rhythm” is a worked-out passage that he utilized within improvisations on the form. Two versions of the passage shown in Figure 4.50c, from a 1938 recording, and 1944 live performance, are identical, with altered improvised endings. The C-flat, or flat-fifth of F7, is on the final dominant of a series of secondary dominants, emphasized by the repetition of straight quarter notes, resolves as a chromatic neighbor tone above tonic B-flat.

4.4 Swing

Red Norvo was the most celebrated, if not sole xylophonist performing in the swing style of the 1930s on xylophone in New York. Norvo’s style evolved from the 1920s with smooth moving melodic lines that contrasted angular ragtime syncopations and edgy hot energy. Norvo’s penchant for new vocabulary expanded to upper
extensions of triadic harmony and followed the conventions of other soloists of the time, finding new ways to interpret Tin Pan Alley standards.

4.4.1 I Got Rhythm (Recorded by Red Norvo, 1936)

Red Norvo’s performance of George and Ira Gershwin’s “I Got Rhythm” is an example of his lyrical approach to fast-paced chord changes. One of the most daunting developments of the music examined in this study is the increased rate of chord changes. George Green’s variations in the 1910s would span four measures in a moderate tempo. By 1930, George Gershwin’s music involved harmonic changes on each beat. Norvo’s light touch and swinging lines were not bogged down by the concern for quick-changing harmony. In a 1982 interview with Crescendo magazine Norvo states “if the lines are strong, you don’t need chords all the time.” Norvo is referring to playing chords with four mallets, versus two-mallet playing, but the sentiment can be applied to understand an overall hierarchy of melody and harmony, where the melody is paramount.

If a player thinks of each chord as a variety of options, constructing a sensible phrase from those options, in time, is an extremely challenging task. Instead, Norvo uses melodic motifs from scales, adjusting to necessary harmonic changes. His melodic vocabulary stresses upper extensions of the chords that were previously avoided. The ninth and alterations above (flat-fifth or sharp-eleventh, flat-thirteenth, etc.) are Norvo’s rule rather than exception.

During the 1920s, Norvo was listening to soloist-oriented jazz styles of Louis Armstrong, Bix Beiderbecke, Frankie Trumbauer, Red Nichols and his Five Pennies, and

---

275 Les Tomkins, Red Norvo: Interview 3.
Earl Hines among others.\textsuperscript{276} As a result of these influences, Norvo departed from the popular idiom of xylophone performance before him. Instead, with the influence of horn-driven melodic lines, Norvo uses motives composed of melodic fragments. One example of such motivic development in Norvo’s lyrical style is his first chorus of “I Got Rhythm” from 1936.

The pitch material, shown in Figure 4.51 can be condensed to a pentatonic scale with a passing sharp second scale degree.

![Figure 4.51: “Swing” scale in B-flat.](image)

The C-sharp is used to decorate the major third, as a lower neighbor that generally resolves upwards to D. This is a melodic ornament, as opposed to a sharp-ninth in a chord.

4.4.1 Motivic Development

Playing horn-like lines, Norvo’s variations are closely linked to vocal melodies of jazz repertoire. Norvo either plays with the original melody of a song, or a motive of his own invention. The first chorus in “I Got Rhythm” is built around the following four-note motive (see Figure 4.52),

![Figure 4.52: George Gershwin/Ira Gershwin, “I Got Rhythm,” Red Norvo’s opening melodic motive (Brunswick 02255-A).](image)

\textsuperscript{276} Schuller, \textit{The Swing Era}, 515.
This motive appears six times throughout the chorus, all in different rhythmic positions within the measure (see Figure 4.53).

Figure 4.53: George Gershwin/Ira Gershwin, “I Got Rhythm,” Red Norvo’s first xylophone chorus, opening motive circled.

Norvo opens the chorus with the motive as a pickup. The second appearance of the motive, in mm. 4-5 of the chorus, delays the resolution to B-flat by three beats. Another alteration of the motive occurs in its third appearance, adorned by an ornamental triplet in m. 13 of the chorus.

4.4.2 Phrase Structure

Striking aspects of Norvo’s playing are his lyrical approach and balanced phrasing. The result is a conversational quality of antecedent and consequent phrases. An example of
Norvo’s melodic and rhythmic structures can be found in the bridge of his first chorus in “I Got Rhythm” (see Figure 4.54).

![Figure 4.54: George Gershwin/Ira Gershwin, “I Got Rhythm,” bridge of Red Norvo’s first xylophone chorus.](image)

The bridge is in three parts, organized by contour and rhythm. The first four measures of the bridge are continuous, followed by two two-measure sub-phrases in the second half of the bridge. By ending the first two phrases on the fifth scale degrees of the chord, Norvo sets up the concluding phrase to end on the root, F. Additionally, the first half of the bridge descends and then ascends in contour. The second half of the bridge is comprised of two descending sub-phrases.

Throughout the chorus, Norvo begins phrases with quarter notes to begin phases. This approach is common in stop time accompaniment, however, here the accompaniment continues. All three sub-phrases of the bridge are marked by quarter notes on the downbeat. Then, following the bridge, Norvo plays with expectation and delays the quarter note to the third beat.

### 4.4.2 “Trumpet Style” Octaves

Norvo’s adaptation of the “trumpet style” octaves, as developed by pianist Earl Hines, is a quintessential aspect of his xylophone style. Hines sought a way to give more strength to lines on the piano, and project with a trumpet-like power and volume. One of Hines’
solutions was doubling lines or chords at the octave, naturally adapted to two-mallet xylophone playing. Norvo uses repeated octaves at the climax of his chorus in “I Got Rhythm,” concluding with a tremolo (see Figure 4.55a).

![Figure 4.55a: George Gershwin/Ira Gershwin, “I Got Rhythm,” octave climax.](image)

Although this example is entirely comprised of octaves, Norvo typically interjects repeated octaves played by both hands with single notes played by the right hand.

In his solo in “Honeysuckle Rose,” Norvo opens his solo, similarly using the third below the upper voice in the measure 2-3 of Figure 4.55b.

![Figure 4.55b: Thomas “Fats” Waller/Andy Razaf, “Honeysuckle Rose,” Red Norvo xylophone solo, mm. 1-5.](image)

Another use for octaves is to accent individual notes. In “Ain’t Mishavin’,” Norvo does so by doubling an octave higher than the melodic line (see Figure 4.55c).

![Figure 4.55c: Thomas “Fats” Waller/Harry Brooks/Andy Razaf: “Ain’t Misbehavin,” Red Norvo’s solo in the first four measures of bridge.](image)

Although just a snapshot of Norvo’s swing style, the chorus on “I Got Rhythm” demonstrates many aspects of Norvo’s improvisational vocabulary: motivic development, conversational phrasing, clear formal structure, and use of octaves to reach musical
climaxes. Norvo’s improvisations developed and changed according to stylistic trends and needs of different ensembles, and then seamlessly transitioned to the bebop style. Switching to the vibraphone in the 1940s, the following chapters in Norvo’s career mark him as one of the most stylistically diverse musicians to specialize in keyboard percussion instruments.
Conclusion

The history of the xylophone’s improvisatory practice between 1916 and 1942 is one of great scope. This study examines the music made by key figures of xylophone playing in New York during this period. Beginning with George Green’s move to New York City in 1916, we see a progression of stylistic development proceeding with the Green Brothers’ successors Sammy Herman, Harry Breuer, Billy Gladstone, and others. Finally, Red Norvo emerges historically as the premier xylophonist in history in terms of sophistication and harmonic expansion.

After Norvo’s change from xylophone to vibraphone as his principal instrument in 1943, further developments of xylophone improvisation in popular music had waned until the 1970s. Since 1971 there has been a resurgence of interest by percussionists in the xylophone music of the 1920s. This revival was sparked by performances of period repertoire by the Nexus percussion ensemble with soloist Bob Becker. Becker, along with another founding member of Nexus, William Cahn, brought attention to the great xylophonists of the “golden age” of the instrument through their critical research, transcribed arrangements, and performance. The revival period of the 1970s brought changes in performance practice, including the types of ensembles, performance settings, and approaches to improvisation. As discussed in the first chapter, these changes have affected our modern day understanding of the music of the 1920s and 1930s.

Clearly, a study of the xylophone tradition does not point the way for contemporary players towards a single approach to the instrument. The styles practiced were much more varied than common perception is to believe. Even in novelty bands, often considered to be lacking in complexity, more variations and improvisations were
implemented than often acknowledged. While Red Norvo is frequently cited as the originator of jazz xylophone playing and improvisation, this study has also examined improvised styles preceding Norvo. From George and Joe Green’s earliest recordings we have evidence of their florid style, rich with improvised arpeggios and scales. Rising tempi of the 1920s, and developments in melodic and rhythmic material are found in performances by consummate improver Sammy Herman.

This study focuses on the musical history in New York, examining the music of the city’s publishing, recording, and broadcasting industries, along with New York-based performers. Regionally, outside of New York, there is a rich history of improvised xylophone playing in Chicago and Great Britain worthy of their own study. However, as Norvo is one of the only xylophonists in New York who played in the swing style, an additional study would be necessary to contextualize Orvo’s style within those of other instrumentalists. Additionally, there is yet to be a study connecting xylophone performance to the pioneers of jazz vibraphone performance of the 1940s and 1950s. Such a study could further bridge a gap between the two instruments and their histories, extending this dissertation.

As George Green, Joe Green, and Harry Breuer’s compositions have become ubiquitous in college recitals, this document serves to contribute to the performance practice of their repertoire. Many of the works discussed in these chapters are taught in percussion programs, yet improvisation is seldom incorporated. Thus, we continue to honor the legacy of George Green, Joe Green, Sammy Herman, Harry Breuer, Billy Gladstone and Red Norvo, the significant improvising xylophonists in New York during the 1920s and 1930s.
# APPENDIX A: DISCOGRAPHY OF TRANSCRIBED EXAMPLES (by title)

<table>
<thead>
<tr>
<th>Title</th>
<th>Artist</th>
<th>Date</th>
<th>Label/Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ain’t Misbehavin’</td>
<td>Red Norvo with Teddy Wilson Quartet</td>
<td>1/5/1937</td>
<td>Brunswick 7964/LA-1408-C (third take, first two takes were on vibraphone)</td>
</tr>
<tr>
<td>Al Fresco</td>
<td>Sam Herman with Frank Banta</td>
<td>3/4/1927</td>
<td>Columbia 20558/BVE-35793 (Take 8)</td>
</tr>
<tr>
<td>Bar Mitzvah Special</td>
<td>Lou Singer, with Mickey Katz and His Orchestra</td>
<td>11/28/1956</td>
<td>Captiol T1021</td>
</tr>
<tr>
<td>Castle Valse Classique</td>
<td>George Hamilton Green, Jr. with Earl Fuller’s Rector Novelty Orchestra</td>
<td>6/9/1917</td>
<td>Columbia A-5989/49236 (take 3)</td>
</tr>
<tr>
<td>Castle Valse Classique</td>
<td>George Hamilton Green, Jr. with Earl Fuller’s Rector Novelty Orchestra</td>
<td>11/15/1918</td>
<td>Emerson 991/3290-1</td>
</tr>
<tr>
<td>Chromatic Fox Trot</td>
<td>George Hamilton Green, Jr. with Frank Banta</td>
<td>1925</td>
<td>Edison DD51527-L</td>
</tr>
<tr>
<td>Doina and Hora</td>
<td>Jacob Hoffman with Harry Kandel’s Orchestra</td>
<td>1/25/1923</td>
<td>Victor 77163/B-28671</td>
</tr>
<tr>
<td>Fascinating Rhythm</td>
<td>Green Brothers’ Novelty Band</td>
<td>1/28/1925</td>
<td>Edison 51497</td>
</tr>
<tr>
<td>Hole in the Wall</td>
<td>Red Norvo</td>
<td>4/8/1933</td>
<td>Brunswick 6562/B13205A</td>
</tr>
<tr>
<td>Honeysuckle Rose</td>
<td>Red Norvo and His Swing Octet</td>
<td>1/25/1935</td>
<td>Columbia 3059-D/CO-16703-2</td>
</tr>
<tr>
<td>I Got Rhythm</td>
<td>Red Norvo and His Swing Sextette</td>
<td>3/16/1936</td>
<td>Decca 779/60898-A</td>
</tr>
<tr>
<td>I Got Rhythm</td>
<td>Esquire All-American Jazz Concert</td>
<td>1/18/1944</td>
<td>Radiola 2MR-5051</td>
</tr>
<tr>
<td>Ida! Sweet as Apple Cider</td>
<td>George Hamilton Green, Jr. with Earl Fuller’s Novelty Orchestra</td>
<td>9/5/1917</td>
<td>77308-1</td>
</tr>
<tr>
<td>Ida! Sweet as Apple Cider</td>
<td>George Hamilton Green, Jr. with Earl Fuller’s Novelty Orchestra</td>
<td>9/5/1917</td>
<td>77308-2</td>
</tr>
<tr>
<td>Ida! Sweet as Apple Cider/Some of These Days Medley</td>
<td>Billy Gladstone with the Capitol Theater Orchestra</td>
<td>ca. 1928-1930</td>
<td>N/A</td>
</tr>
<tr>
<td>Log Cabin Blues</td>
<td>George Hamilton Green, Jr. with Frank Banta</td>
<td>1925</td>
<td>Edison 51527-R</td>
</tr>
<tr>
<td>Now’s the Time to Fall in Love</td>
<td>Sam Herman with Phil Spitalny’s Orchestra</td>
<td>1931</td>
<td>Hit of the Week 1188 A-2-3</td>
</tr>
<tr>
<td>Song</td>
<td>Performer Details</td>
<td>Date</td>
<td>Label and Record Details</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------------------------------------</td>
<td>------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Remember</td>
<td>Red Norvo and His Orchestra</td>
<td>3/22/1937</td>
<td>Brunswick 7896/C-1853-1</td>
</tr>
<tr>
<td>St. Louis Blues</td>
<td>George Hamilton Green, Jr. with Frank Banta</td>
<td>3/10/1926</td>
<td>Vocalion 15307</td>
</tr>
<tr>
<td>St. Louis Blues</td>
<td>Red Norvo with Mildred Bailey and Her Orchestra</td>
<td>9/29/1938</td>
<td>Vocalion 4801/23516-3</td>
</tr>
<tr>
<td>The Doll Dance</td>
<td>Teddy Brown with His Band</td>
<td>10/28/1927</td>
<td>Edison Bell Electron 0187/11260</td>
</tr>
<tr>
<td>Watermelon Whispers</td>
<td>George Hamilton Green, Jr. with Earl Fuller’s Rector Novelty Orchestra</td>
<td>11/15/1918</td>
<td>Emerson 991/3289-1</td>
</tr>
<tr>
<td>Watermelon Whispers</td>
<td>George Hamilton Green, Jr. with Orchestra</td>
<td>1918</td>
<td>Edison DD50488/6019</td>
</tr>
<tr>
<td>Watermelon Whispers</td>
<td>Joseph Green with Conklin’s Novelty Orchestra</td>
<td>1919</td>
<td>Gennett 8539</td>
</tr>
<tr>
<td>Ya Vas Da-Ra-Ga-Za Loo-Bloo</td>
<td>Sam Herman Trio with Charlie Magnante, accordion; Sam Shoobie, bass</td>
<td>ca. 1941</td>
<td>N/A</td>
</tr>
<tr>
<td>Date</td>
<td>Title</td>
<td>Artist</td>
<td>Label/Matrix</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------</td>
<td>--------------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>6/9/1917</td>
<td>Castle Valse Classique</td>
<td>George Hamilton Green, Jr. with Earl Fuller’s Rector Novelty Orchestra</td>
<td>Columbia A-5989/49236 (take 3)</td>
</tr>
<tr>
<td>9/5/1917</td>
<td>Ida! Sweet as Apple Cider</td>
<td>George Hamilton Green, Jr. with Earl Fuller’s Novelty Orchestra</td>
<td>77308-1</td>
</tr>
<tr>
<td>9/5/1917</td>
<td>Ida! Sweet as Apple Cider</td>
<td>George Hamilton Green, Jr. with Earl Fuller’s Novelty Orchestra</td>
<td>77308-2</td>
</tr>
<tr>
<td>1918</td>
<td>Watermelon Whispers</td>
<td>George Hamilton Green, Jr. with Orchestra</td>
<td>Edison DD50488/6019</td>
</tr>
<tr>
<td>11/15/1918</td>
<td>Castle Valse Classique</td>
<td>George Hamilton Green, Jr. with Earl Fuller’s Rector Novelty Orchestra</td>
<td>Emerson 991/3290-1</td>
</tr>
<tr>
<td>11/15/1918</td>
<td>Watermelon Whispers</td>
<td>George Hamilton Green, Jr. with Earl Fuller’s Rector Novelty Orchestra</td>
<td>Emerson 991/3289-1</td>
</tr>
<tr>
<td>1919</td>
<td>Watermelon Whispers</td>
<td>Joseph Green with Conklin’s Novelty Orchestra</td>
<td>Gennett 8539</td>
</tr>
<tr>
<td>1/25/1923</td>
<td>Doina and Hora</td>
<td>Jacob Hoffman with Harry Kandel’s Orchestra</td>
<td>Victor 77163/B-2867</td>
</tr>
<tr>
<td>1925</td>
<td>Chromatic Fox Trot</td>
<td>George Hamilton Green, Jr. with Frank Banta</td>
<td>Edison DD51527-L</td>
</tr>
<tr>
<td>1925</td>
<td>Log Cabin Blues</td>
<td>George Hamilton Green, Jr. with Frank Banta</td>
<td>Edison 51527-R</td>
</tr>
<tr>
<td>1/28/1925</td>
<td>Fascinating Rhythm</td>
<td>Green Brothers’ Novelty Band</td>
<td>Edison 51497</td>
</tr>
<tr>
<td>3/10/1926</td>
<td>St. Louis Blues</td>
<td>George Hamilton Green, Jr. with Frank Banta</td>
<td>Vocalion 15307</td>
</tr>
<tr>
<td>3/4/1927</td>
<td>Al Fresco</td>
<td>Sam Herman with Frank Banta</td>
<td>Columbia 20558/BVE-35793 (Take 8)</td>
</tr>
<tr>
<td>10/28/1927</td>
<td>The Doll Dance</td>
<td>Teddy Brown with His Band</td>
<td>Edison Bell Electron 0187/11260</td>
</tr>
<tr>
<td>1931</td>
<td>Now’s the Time to Fall in</td>
<td>Sam Herman with Phil Spitalny’s Orchestra</td>
<td>Hit of the Week 1188 A-2-3</td>
</tr>
<tr>
<td>ca. 1928-1930</td>
<td>Ida! Sweet as Apple Cider</td>
<td>Billy Gladstone with the Capitol Theater Orchestra</td>
<td>N/A</td>
</tr>
<tr>
<td>4/8/1933</td>
<td>Hole in the Wall</td>
<td>Red Norvo</td>
<td>Brunswick 6562/B13205A</td>
</tr>
<tr>
<td>1/25/1935</td>
<td>Honeysuckle Rose</td>
<td>Red Norvo and His Swing Octet</td>
<td>Columbia 3059-D/CO-16703-2</td>
</tr>
<tr>
<td>3/16/1936</td>
<td>I Got Rhythm</td>
<td>Red Norvo and His Swing Sextette</td>
<td>Decca 779/60898-A</td>
</tr>
<tr>
<td>1/5/1937</td>
<td>Ain’t Misbehavin’</td>
<td>Red Norvo with Teddy Wilson Quartet</td>
<td>Brunswick 7964/LA-1408-C (third take, first two takes were on vibraphone)</td>
</tr>
<tr>
<td>Date</td>
<td>Title</td>
<td>Artist/Performers</td>
<td>Label/Record Number</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------</td>
<td>-------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>3/22/1937</td>
<td>Remember</td>
<td>Red Norvo and His Orchestra</td>
<td>Brunswick 7896/C-1853-1</td>
</tr>
<tr>
<td>9/29/1938</td>
<td>St. Louis Blues</td>
<td>Red Norvo with Mildred Bailey and Her Orchestra</td>
<td>Vocalion 4801/23516-3</td>
</tr>
<tr>
<td>Ca. 1941</td>
<td>Ya Vas Da-Ra-Ga-Ya Loo-Bloo</td>
<td>Sam Herman Trio with Charlie Magnante, accordion; Sam Shoobie, bass</td>
<td>N/A</td>
</tr>
<tr>
<td>1/18/1944</td>
<td>I Got Rhythm</td>
<td>Esquire All-American Jazz Concert</td>
<td>Radiola 2MR-5051</td>
</tr>
<tr>
<td>11/28/1956</td>
<td>Bar Mitzvah Special</td>
<td>Lou Singer, with Mickey Katz and His Orchestra</td>
<td>Capitol T1021</td>
</tr>
</tbody>
</table>
APPENDIX B: ADDITIONAL TRANSCRIPTIONS

The transcriptions in Appendix B are more complete transcriptions of excerpted material in this study. For details of recording dates, companies, and label numbers, see Appendix A.
Appendix B-1: Antonin Dvořák/Ford T. Dabney, “Castle Valse Classique,” two recordings by George Hamilton Green. Both performances feature doubling back throughout. The Emerson recording has longer scales and lower-neighbor passages, a development from the earlier Columbia recording. See: pgs. 96-101.

Castle Valse Classique

Antonin Dvořák / Ford T. Dabney
as recorded by George Hamilton Green
with Earl Fuller’s Novelty Orchestra
Transcription by J. Singer
Appendix B-2: George Hamilton Green, Trio section of “Watermelon Whispers,” piano sheet music, and three recorded performance by George Hamilton Green and Joe Green. The three xylophone versions are juxtaposed against the original piano sheet music to show different approaches to variation. George Green’s Edison version is close to the piano music, while the Emerson version is significantly more varied. Joe Green uses doubling back throughout. See: pages 101-103.
Appendix B-2 (continued): George Hamilton Green, Trio section of “Watermelon Whispers,” Piano sheet music, and three recorded performance by George Hamilton Green and Joe Green.
Appendix B-3: Eddie Munson/Shelton Brooks, “Ida/Some of These Days Medley,” as recorded by Billy Gladstone. Gladstone’s virtuosic performance demonstrates a variety of approaches to the hot style, executed at different tempi throughout the arrangement. See: pages 115-121.

Ida/Some of These Days Medley

Eddie Munson/Eddie Leonard
as recorded by Billy Gladstone
Transcription by J. Singer

\( \text{\( \frac{d}{=\text{ca. 132}} \)} \)

\( A \)

\( \text{\( \frac{d}{=\text{ca. 84}} \)} \) slower (quasi-half time)

\( B \)

V.S.
Appendix B-3 (continued): Eddie Munson/Shelton Brooks, “Ida/Some of These Days Medley,” as recorded by Billy Gladstone.

Xylophone

Faster (a tempo \( \approx \)ca. 132)

C

Appendix B-3 (continued): Eddie Munson/Shelton Brooks, “Ida/Some of These Days Medley,” as recorded by Billy Gladstone.
Appendix B-3 (continued): Eddie Munson/Shelton Brooks, “Ida/Some of These Days Medley,” as recorded by Billy Gladstone.
Appendix B-4: Harry Breuer, “On the Woodpile,” Variation of Trio strain, recorded by Harry Breuer. An example of what was most likely a composed variation with an emphasis on syncopation. See: pages 111-115.

On the Woodpile

Harry Breuer
as performed by Harry Breuer
Transcription by J. Singer

Ya Vas Da-Ra-Ga-Ya Loo-Bloo
(I LOVE YOU)

Sano Marco and Jack Erickson
as recorded by Sammy Herman
Transcription by J. Singer

V.S.

Xylophone

25

27

(rit.)

29

(deadstrokes)

33

(b)

37

39

42

45

47

49

Xylophone

\[ \text{Musical notation images} \]
Appendix B-6: Victor Herbert, “Al Fresco,” recorded by Sammy Herman. Herman’s first solo recording, “Al Fresco” exploits variations harmonized by both the right and left hand, as well as a hot improvised strain before the reprise of the A section. See: pages 125-127.

Al Fresco

[Sheet music image]
Appendix B-6 (continued): Victor Herbert, “Al Fresco,” recorded by Sammy Herman.
Appendix B-7: Red Norvo, “Blues in E-Flat,” opening chorus, recorded by Red Norvo. Typical of Norvo’s playing from the mid-1930s, this chorus is harmonically adventurous, exploiting trills, octaves, and motivic development in free rhythm. See: pages 142-145.
Appendix B-8: Thomas “Fats” Waller/Andy Razaf, first two choruses, recorded by Red Norvo. An example of Norvo’s motivic development and use of octaves in a standard composition. See: page 154.

Honeysuckle Rose

Thomas “Fats” Waller/Andy Razaf
as recorded by Red Norvo
Transcription by J. Singer

Remember

Irving Berlin
as recorded by Red Norvo
Transcription by J. Singer

179
Bibliography

Books


________. *How to Grip the Hammers*. Kenosha, Wisconsin: George Hamilton Green, 1926.


**Chapters in Books**


Journal Articles


Eyler, David P. “Early Development of the Xylophone in Western Music.” Percussive Notes 41, no. 6 (2003): 42-44.


Dissertations and Other Unpublished Materials


**Liner Notes**


**Radio Broadcasts**


**Interviews and Correspondence**

Becker, Bob, and William Cahn. 1995 Interview with Sammy Herman, Hi8 tape. Kutztown University Center for Mallet Research.

Duffee, Josh. Phone conversation with the author. February 9, 2017.

Finkel, Ian. E-mail message to the author. October 25, 2016.

Harvey, David. E-mail message to the author. September 4, 2016.

__________. E-mail message to the author. November 18, 2016.

__________. E-mail message to the author. March 26, 2016.


Saporito, James. E-mail message to the author, December 12, 2016.

**Internet Resources**


http://www.loc.gov/jukebox/about/acoustical-recording.


Uncataloged Resources

Harry Breuer Interview, cassette tape. Kutztown University Center for Mallet Instrument Research, not catalogued.

Harry Breuer Scrapbook, courtesy of Anthony Breuer.

Herman, Sammy. History of the Xylophone, cassette tapes. Kutztown University Center for Mallet Research. The collection is not catalogued.

_________. Tape for Vi, cassette tape. Kutztown University Center for Mallet Research. The collection is not catalogued.

Strain, James. 1995 Interview with Sammy Herman, Hi8 tape. Kutztown University Center for Mallet Research. The collection is not catalogued.


Lecture Notes


Recordings and Films


Jazz at the Smithsonian: Red Norvo, VHS, directed by Clark Santee and Delia Gravel Santee. 1981, Forked River, New Jersey: Kultur Video, 1992, VHS.

Reynolds, Clarke E. Disc Jockey, 35mm film, directed by Will Jason (Los Angeles: Allied Artist Pictures, 1951), film.


**Music Scores**


Green, George Hamilton. *George Hamilton Green’s Jazz Classics for the Xylophone*. New York: George Hamilton Green, 1924.


_______. *Triplets*. New York: George Hamilton Green, 1924.


