

Hammond Technique and Methods: Music Written for the Hammond Organ

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Abstract

The following thesis is made up of four original compositions written between February and September of 2012, with emphasis on the Hammond Organ in the context of jazz and rhythm and blues ensembles. The pieces of music were designed to feature the organ as the lead instrument in order to highlight various playing techniques that are specific to the Hammond Organ within these genres. In addition to my own music and an explanation and analysis of my work, the writing will provide a historical overview of organists I have chosen to highlight as influences to provide a framework for each piece of music. In order to aid this discussion of what has been an under-theorized instrument and performance tradition, I have sought out active contemporary organists to discuss their creative practices on the Hammond, as well as their insight into the notable organists of the past. Finally, of particular interest to me in this thesis is the emphasis on the Hammond Organ as an electric instrument, and the unique musical textures that are possible through the exploitation of the multiple controls that are integral to the instrument's construction. An audio recording of each piece accompanies the scores that are included.

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Introduction

The music I have written for this thesis focuses on the Hammond Organ, my longtime passion. In composing instrumental music for the organ, I wanted to not only give myself an opportunity to further study this instrument, both as a player and a composer, but to help further the discussion of this under-theorized instrument in academic literature.

I have chosen to work within different models of performance practices that are unique to the Hammond Organ as an electric instrument. In order to put my own compositions in context, Part I of this thesis gives a historical overview of selected organists that have influenced my approach to the four compositions featured in this thesis, and the techniques and sounds that are specific to them. Part II features an analysis of my own music, and how I chose to use techniques for the organ as compositional ideas and possibilities.

I have composed four pieces for the organ in the following genres: two in different jazz traditions; and two examples of rhythm and blues and soul organ playing, with one of these demonstrating the link between gospel and soul music.

It was my aim to tie in each of the pieces to a sound specific to particular players of the instrument. The selection of these genres and players was based on my explicit interest in these players, and to varying degrees, their influence on my own playing and writing. Consequently, the writing of this paper is not meant to be comprehensive, or to provide a thorough history of the Hammond Organ.

This project could have taken on a much broader scope, due to the Hammond Organ being such a diverse instrument that crosses over multiple genres of contemporary music. Often used as a jazz instrument, the Hammond has also contributed to the development of blues,

gospel, soul, funk, rock and roll, and reggae. I have focused on the role of the Hammond in jazz, blues, gospel, and soul music. It is through these genres that I have chosen to develop my own playing as well as compositional skills for the Hammond Organ.

Methodology

Part of the challenge in this project was to search the quantity and quality of existing literature on the Hammond Organ, academic writing or otherwise, in order to facilitate the historical research. Part of this thesis will explore my findings from various sources, as well as first hand research I conducted following the writing of my music, by speaking with active contemporary organists and asking them not only about their performance practices, but also for their insight into the organists I have highlighted. Because many of the legendary practitioners of the Hammond are deceased, speaking to current players was essential to document varying individual techniques, musical preferences and experiences, in what has been a largely oral music tradition. The process of speaking to organists first hand was also an opportunity to better understand an instrument I hope to continue playing and writing for, and therefore became a practical resource in improving my own playing.

Of the existing literature, the one source that proved to be the closest to an encyclopedic work on the Hammond Organ is *Beauty in the B*, by Mark Vail, published by *Keyboard Magazine*, which was originally released in 1997, and subsequently re-issued with further information in 2002. It outlines the history of how the Hammond developed as an electric organ, and the many notable players who contributed to its popularity. There is also an overview of the inventor, Laurens Hammond, as well as Don Leslie, the man behind the Leslie Speaker. The

book explains the technology of the Hammond Organ and the Leslie Speaker. It also offers advice for buying and maintaining organs, as well as playing tips showing drawbar configurations and “Licks You Must Know”¹

I approached the writing of the music from two angles. The first was the sound or tonal qualities that are unique to individual players and genres, achieved via the manipulation of the various controls from the instrument, and how different players used these controls on the organ to orchestrate different timbres. The second was a musical analysis of examples that I selected in relation to each model of playing that I chose to compose in. In nearly all of the genres, this involved analyzing and comparing multiple examples of songs in terms of bar lengths, form, chordal and harmonic structure, melodic and/or rhythmic development. In this way, my own compositions could be seen as musical analogues, in which I wanted to borrow musical elements from various organ players as well as composers. As the analysis of my own work will show, each of my original examples use these devices to varying degrees. I will explain why I chose to use or chose not to use the various devices.

I must point out the specific technology used in creating my musical work as it relates to my experience on the organ. In addition to mastering the physical techniques and limitations of an instrument, which a musician or composer must learn when playing or writing for that instrument, in the case of the Hammond Organ one must manipulate a variety of controls in order to expand the range of possible sounds.

When compared to the acoustic piano, which requires a specific touch and attack on a single 88-key keyboard and the control of no more than three foot pedals, the Hammond

¹ Mark Vail, *Keyboard presents The Hammond Organ: Beauty In The B* (San Francisco: Miller Freeman, 1997), 173.

demands the use of two manuals², a set of 25 bass pedals, and the control of expression and dynamics with a foot pedal. Along with these demands are multiple sets of drawbars to control overtones, preset keys, specifications of the attack/decay rate, the use of chorus and vibrato controls, and perhaps most important of all, the use of the rotating Leslie speaker, controlling tremolo at varying speeds.

I have had many occasions both in live performance and in recorded work, where I have been fortunate enough to play the real thing — that is, a true tonewheel Hammond Organ with a real Leslie speaker attached, either a Hammond B-3, or similar models such as the A-100, C-3, or M-3 as examples. I became familiar with playing the Hammond eight years before the writing of this paper. However, I have not owned an organ for any extended period of time, other than a brief year or two when my family was given a spinet style Hammond L-100. The majority of my learning curve as a player has come by discovering and playing the more recent portable imitation organs, often known in keyboard circles as “Clonewheel” organ products.³ The one I have played most often, and still own to this day is the Korg CX-3, a single manual keyboard that offers “about as many controls as possible just as those controls are arranged on a Hammond organ.”⁴ In my composition process, parts of each of the tunes were created at the Korg, though I was also able to visit a rehearsal space with a real B-3 and Leslie to continue writing and to refine the work.⁵

² The manuals will refer to the upper and lower keyboards on the organ that each consist of 61 keys.

³ Stephen Fortner, “Clonewheel Heaven,” *Keyboard*; 30. 11 (November 2004): 30, accessed November 16, 2012, <http://search.proquest.com.ezproxy.library.yorku.ca/docview/229464439?accountid=15182>.

⁴ Mark Vail, *The Hammond Organ: Beauty in the B (Second Edition)*. (San Francisco: Backbeat Books, 2002), 228.

⁵ The rehearsal space referred to is owned by Jordan Glick, mentioned in the acknowledgements of this paper.

Genres and frameworks

The first portion of this thesis will provide a historical context for the genres that I have chosen as frameworks for my own music. This discussion of the Hammond will begin by tracing the development of the organ as a jazz instrument, including the work of players such as Fats Waller, Wild Bill Davis, Count Basie, and Milt Buckner. These organists are often pointed to as the earliest practitioners of the organ in jazz, and are notable for playing in the full organ style, making use of a number of different registrations, and with full block chords, in which the organ could fill the role of a horn section in a big band.

When writing my own music in this tradition, I chose to work within the song forms that would have been used during the time of these organists focusing on the 32-bar (AABA) form as a starting point, thinking of songs that Fats Waller would have written, while still including some of my own arrangement ideas. My composition, “Rain In July,” was composed with a big band arrangement reminiscent of the classic swing bands of the 30s and 40s. The ideas and devices used to arrange and expand this piece will be discussed in its analysis.

For the second composition, my original idea was to focus on the work of Jimmy Smith, who revolutionized the use of the organ as a jazz instrument in a trio format where the organ, among other functions, replaced the upright bass. As I brought myself to write the piece of music, I realized that my own interest in this sound was broader, and could not simply be narrowed down to Jimmy Smith. Working from my own tastes and experience of discovering the Hammond Organ, I can point to others in this vein as influences — Jack McDuff and Jimmy McGriff, for both their sound and repertoire. One of the earliest records that drew my attention to the sound of the organ was the album *Down Home Blues* (1997) released as a collaboration

between pianist Gene Harris and Jack McDuff. Keeping this in mind, the discussion of the organ from this breakout point in the 1950s will highlight Jimmy Smith—and why so many organists today still point to him as the most revolutionary player on his instrument—but will also provide a brief comparison with the work of Jack McDuff and Jimmy McGriff.

One immediate comparison point is the ability, and varying degrees to which all of the above-mentioned organists can cross over between blues and jazz. My compositional ideas relied heavily on blues structures, both in form and melodic content, in order to demonstrate the link between blues and jazz in this model of organ playing. Since the first initial of my own name, ‘J’, keeps coming up among organ players, this piece has been entitled “Another Blue J”. While I aimed to follow this model of orchestration with a trio made up of organ, guitar, and drums, the bass function is limited by my experience on the Hammond up to this point, which so far has not included playing with the foot pedals, but only with the left hand on the organ manuals.

For my other two compositions, I have worked in the vein of rhythm and blues and soul music, demonstrating the techniques and timbres deployed by organists Booker T. Jones and Billy Preston.

In imitation of Booker T. Jones, I wrote an instrumental employing the template of a Memphis rhythm section (Hammond Organ, electric bass, electric guitar, and drums.) This four-piece lineup is the same as that of Booker T. & The MGs, who not only recorded under their own name, but were also the session band behind legendary Stax vocalists including Sam & Dave, and Otis Redding. The process of composing this example was very much based on improvising, thinking along the same lines as how the MG’s hits like “Green Onions” would have been

written. When analyzing my own work, “Smokey’s Hop”, I will explain how much improvising was included in the construction of this piece.

Writing in the style of Billy Preston, I chose to highlight the importance of gospel and its link to soul music, particularly in terms of orchestration. This example was written to feature the Hammond with the acoustic piano. I consider this to be a key feature of much of Preston’s music, and it was my aim to show how these two keyboard instruments compliment each other in this context. Of particular interest to me in the composition “Rise To One” are the chords associated with Preston. By analyzing the progressions and cadences and deconstructing them, I attempted to not just mimic these often used gospel harmonies, but also to create some new variations on typical gospel progressions.

To B3 or not to B3?

I will refer to the instrument chosen for this paper as the Hammond Organ, rather than single out arguably the definitive model produced by the company, the Hammond B-3 Organ. Due to the historical points, it is worthwhile to mention the various models of Hammonds specific to each of the players that have served as models for my own playing and compositions. I will still point out that the set up of the Hammond B-3 can serve as a template for my own music, and any of the controls referred to in the analysis of my own pieces are those as would be laid out on a B-3. However, I did not want to limit the larger discussion to talking exclusively about the B-3 for a couple of reasons.

The first reason is for historical context. The original organ invented by Laurens Hammond appeared as early as 1935, and was debuted as the Model A, while the model B-3 was

not introduced until twenty years later in the mid 1950s. The B-3 was the organ that was revolutionized by Jimmy Smith. Booker T. Jones' work at Stax included many examples on the B-3, though on the instrumental classic "Green Onions" the organ used was the M-3, without the revolving Leslie speaker. As the findings here will show, some examples by the organists referred to may not have been performed on Hammond organs at all.

Secondly, many of the specific devices used are interchangeable among different models of Hammonds. Controls such as drawbars, chorus and vibrato can be found on other organs mentioned at the top of this introduction. The A-100 and C-3 are both organs that are internally and electrically similar, though are both unique in cabinet size and design, and the case of the A-100, "was self-contained, meaning that the speakers were internal and no external tone cabinet was required, although one could be added."⁶

Even in the process of creating these original works, the recording session for the completed versions took place on a Hammond C-3 Organ, which still allowed for the same controls and devices I would have had available on a B-3. The decision to record using a C-3 was based on the recommendation by Denis Keldie that this particular organ is one of the finest available in Toronto.

Electric vs Electronic

One issue I discovered when researching the Hammond Organ, was how to best define the instrument's unique technology and sound production. I knew early on that it was important to discuss the technology of the instrument—its controls and devices that are available to an

⁶ Vail, *Beauty in the B (first edition)*, 76.

organist—though without much consideration, I began to refer to the instrument as electronic. It wasn't until I began my first-hand discussions with the organists I was interviewing, that I realized there is a distinction to be made between electric and electronic, with the majority of organists agreeing that the Hammond Organ is an electric instrument.

The Hammond Organ is one of many instruments that relies on the manipulation of technology to shape the sound, though it is unique due to the specific technology used to create its waveforms. The sound of the Hammond depends on rotating mechanical tonewheels, and the use of additive synthesis, making the instrument an electromechanical organ. The earliest example of this technology was used in The Telharmonium, created by Thaddeus Cahill in 1897.⁷ The Telharmonium did not last beyond the early Twentieth Century and was not produced after 1936, though the impact of the Hammond has allowed its technology to remain in use up to the present. When referring to the tonewheel organ, the consensus was that it is an electric instrument, tending to refer to later synthesizers and purely digital keyboards as electronic. It was Paul Shaffer who first drew this to my attention.

To me electronic means transistors—well, even that's a pretty dated concept but—I think when they first came in, you know transistorized things, things more like synthesizers... but the Hammond is a relic of the days before electronica, it's mechanical.⁸

Speaking with Lance Anderson, he even went so far as to use the term “electroacoustical”, due to the mechanical motion of both the tonewheel organ and the Leslie speaker.⁹

Interestingly, many other organs produced during this same era—from the 1930s until the mid 1970s—can be defined as electronic. A couple of resources both written by the same author,

⁷ Vail, *Beauty in the B (first edition)*, 36.

⁸ Paul Shaffer, interview by author. 5 October, 2012.

⁹ Lance Anderson, interview by author. 24 October, 2012.

Stevens Irwin, illustrate this distinction. Irwin wrote *Dictionary of Electronic Organ Stops: A guide to the understanding of the stops on all electronic organs*, which was published in 1968. This book looks at organs that would be used in churches and theaters, and is aimed at players wanting to learn the organ in a way that imitates the sounds created by a traditional pipe organ. Irwin makes the point that the ability to control the stops and pipes of an organ is equivalent to conducting an orchestra.¹⁰

In images in specific pages, it references the design features of organs such as custom built church organs (26), The Lowrey Berkshire Deluxe Stop-Controls (58), and The Wurlitzer Pipe Organ that would have been used in Radio City Music Hall, New York (186). These organs can be defined as electronic since they are specified as imitating the natural wind sound from pipes. Irwin explains the technology in great detail over three pages. In simplest terms he makes several references to electronic circuitry, and offers the following explanation as an example of electronic tone generation: “The original sound *signal* is sometimes amplified as much as thirty million times, and passes through a great maze of wiring and transistors before it reaches the ear of the listener.”¹¹ This technology is similar to the description of modern synthesizers and keyboards.

While the above resource does not mention the Hammond, Irwin’s book *Dictionary of Hammond Organ Stops* is focused exclusively on the Hammond, and was issued multiple times, first as early as 1939, then subsequently in 1952, 1961, and again in 1970.¹² Though it focuses on the Hammond, it is clearly aimed at the same market, with the subtitle: *A Translation of Pipe-*

¹⁰ Stevens Irwin, *Dictionary of Electronic Organ Stops* (New York: G. Schirmer, 1968), vi.

¹¹ Irwin, *Dictionary of Electronic Organ Stops*, 41-42.

¹² The book referenced here will refer to the revised fourth edition from 1970.

Organ Stops into Hammond Organ Number-Arrangements. The common thread between these two books is the focus on stops, and in the case of the Hammond, how the drawbars can be used to create a wide range of combinations as a tool to orchestrate different timbres. Like the literature on the electronic organs, the book of Hammond Organ stops is not only focused on the organ as an accompanying instrument, but on how the drawbars can be arranged to imitate the sounds and timbres of orchestral instruments. This shows in how the contents and chapters of the book are laid out according to the following groupings

The Dictionary

1. The Foundation Stops (including Diapasons)	58
2. The Flute Stops	83
3. The String Stops	102
4. The Reed Stops	118
5. The Percussion Stops	138
6. The Full Organs	140

(*Dictionary Of Hammond Organ Stops*, Irwin, Contents)

Since Irwin's writing is clearly aimed at the more classically trained organist, he makes no mention of the role of the organ in contemporary settings such as jazz or rhythm and blues bands, and as a result makes no mention of many of the devices I consider to be crucial to contemporary organ playing. However, this does demonstrate the target market for the Hammond Organ in its earliest form — as a replacement for the pipe organ. The book does make the case for how dominant an instrument the Hammond was becoming, as the first page includes an introduction by the Hammond Instrument Company in Chicago:

The need of a 'Dictionary' for the Hammond Organ tone qualities has become increasingly apparent as the use of the instrument has spread into homes, churches, schools, theaters, and public auditoriums.

The Hammond Company saw its product early on as a replacement for the pipe organ in the home, church, or theater. The instrument was designed to approximate other timbres, rather than reaching its full potential of sounding like an organ unto itself. I spoke with Toronto organist Lance Anderson, who is still very active on the R&B scene, and one of Toronto's foremost practitioners of bass pedals in his organ and drum duo Anderson/Sloski (with drummer Michael Sloski). He attests to original Hammonds coming with manuals demonstrating stops similar to those found in Irwin's book.

The organs used to come with a booklet with stops, and how to get a clarinet sound, and how to get a flute sound. Sometimes I've come across organs—maybe the A-100 I think... I don't know where it would be now—but it had the original manual, and it had all that stuff. I remember trying to get the clarinet sound [using the approximate stops 880080880], you're doing the odd harmonics from the harmonic series, so all the reed instruments are the odd harmonics. They went through all that on those things. I never paid much attention to them, because I wasn't trying to make the instrument sound like a clarinet, and when I started playing in the mid '60s, that was an old way of thinking. Nobody I knew would try to make the instrument sound like anything but an organ.¹³

Commentary such as this illustrates how different the Hammond Company's initial vision may have been from how it came to be used in later years, to the point of there being a rulebook on playing the organ. However there is one additional point from Irwin's writing on the Hammond that may provide some crossover between the old and new ways of playing. Even if not acknowledging other worlds explicitly, it does explain the range of potential that the instrument is capable of, and shows that Irwin was aware of the potential of the Hammond to be a diverse instrument.

It is probable that if every possible variety of every basic tonal pattern in this Dictionary were worked out to the fullest extent on the drawbars, at least 80,000,000 different timbres of *traditional* stop-tones could be heard. This number is not too large, but conservative for the mathematical possibilities of just *one group of drawbars*. There are

¹³ Lance Anderson, interview by author, 24 October, 2012.

only a few thousand stops listed in this book, but the total number available is almost endless, and should satisfy every type of tonal requirement. Styles of playing, the Percussion Control, the Vibrato Chorus, the Reverberation Control, acoustical effects of walls, the swell pedal, and other devices can all put the drawbars' tones into a limitless variety of tonal dimensions.¹⁴

Irwin hints at considerations for the organ that came up in my discussions with contemporary players, and many of these will be applicable to examples of my own music. The style of playing is one factor, and another is the acoustical context. The acoustical element reinforces that someone playing the organ has to be prepared to react to the properties of an acoustic space or a musical setting, and be able to vary the above devices to use them effectively.

The potential to vary organ timbres played a large part in the broad appeal of the organ. With the cost being much less than a pipe organ, combined with its portability and ability to create such a wide range of sounds, the Hammond began to appeal to African-American churches in the south. That is what led to the organ playing such a large part in gospel music. A number of sources say that the church factor allowed the Hammond to find its way into jazz, blues, and R&B, given that a number of church players would have gone on to play in these other settings. They recognized the potential for such a diverse range of timbres from one instrument.¹⁵

¹⁴ Stevens Irwin, *Dictionary of Hammond Organ Stops* (New York: G. Schirmer, 1970), 9.

¹⁵ Vail, *Beauty in the B (first edition)*, 15.

Payzant on Performance And The Existence Of Art

There was one unexpected source that came about from my initial discussion of electric vs electronic, but it is something that speaks very closely to my process of composition in this case. When Paul Shaffer first brought up the comparison of electric and electronic instruments, as a source he had mentioned the name Geoffrey Payzant.

I was an undergraduate at U of T, taking philosophy and psychology and such, and in one class called aesthetics there was a professor named Geoffrey Payzant. And he gave a lecture on the Hammond Organ, he was a sort of a Hammond guy himself. He told us about the drawbars...¹⁶

Shortly after this discussion, I searched Payzant's name to see if he had written any articles on the organ, but there were none immediately accessible. I did find an article by Payzant entitled *Performance And The Existence Of Art*, from an issue of *The Dalhousie Review*.

In the article he presents three different theories concerning the existence of music: the Matrix Theory, the Recipe Theory, and the Collaboration Theory. The Matrix Theory is based on a work existing alone as the creation of the composer; the Recipe Theory is dependent on the performer for a piece to exist, and that something does not exist without it being performed.

While Payzant presents these first two theories, he emphasizes the Collaboration Theory.

Payzant cites this example:

[Where] a composer presents his own work ... I am speaking of the more ordinary sense where a composer mounts the first presentation in public of a new work. He alone will be responsible for the preparation of the work, its rehearsal as well as its design ... As composer he will set down the work in notation, having in mind his own technical limitations as a performer, and the limitations of all the resources he expects to have at his disposal for the performing of the work ... And when he comes to practice or rehearse

¹⁶ Paul Shaffer, interview by author. 5 October, 2012.

the work, he will continue to modify and refine it as changes are indicated under rehearsal conditions.¹⁷

I wasn't aware of this concept prior to the writing of my own works, but upon reading it, I discovered that it was very applicable to the method I undertook for my own pieces in the process of writing and refining them. I have always thought of myself as a player first, rather than as a composer. Therefore, my original works are not pieces that I see as merely existing independent of rehearsal and performance. I had the sonic qualities and limitations of the Hammond Organ in mind, my own limitations as a player, and the type of ensemble I wanted to write for, in order to enhance the work. Each of the works were created via a number of different devices that will be discussed as each piece is analyzed in detail, including but not limited to discussions about improvisation, notation, refining the notation, and further refinement of the pieces after rehearsing them with live musicians.

¹⁷ Geoffrey Payzant, "Performance And The Existence Of Art," *The Dalhousie Review* 44 (1964): 91.

Part 1: Historical Overview of selected organists, their music and techniques

Chapter 1. The Early Jazz Tradition: Waller, Basie, Davis, and Buckner

The first group of organists—Fats Waller (1904 - 1943), Count Basie (1904 - 1984), Wild Bill Davis (1918 - 1995), and Milt Buckner (1915 - 1977)—have been selected due to their influence on my own composing. My own work in this vein borrows from each of them for different devices, something that will also prove to be true for the other organists cited with regard to each of my compositions. One reason I sought out these points of interest was that I wanted an opportunity to more closely examine the contributions each of these four players made on the organ, and how they approached playing the organ. The majority of histories or summaries written on the Hammond Organ usually point to these names as the earliest notable performers on the Hammond, and among the first to treat the organ as a jazz instrument but little is said beyond that introductory point. It was only in seeking out their recorded work, and through my discussions with living organists that I was able to get a better sense of the devices they used on the organ.

Fats Waller is one of the first names mentioned (though it is important to note that most of his work on the organ that has been documented was not done on the Hammond, but rather on large pipe organs, theatre organs and other electric organs). There is evidence to support that Waller was very fond of the organ and often cited it as his “first love”. He learned to play the organ in church and started by accompanying his father, a preacher, by playing the harmonium.¹⁸ Some examples of his live performances on the organ included weekly Saturday radio broadcasts

¹⁸ Nat Hentoff, “A Jazz Master Remembers,” *Wall Street Journal*, December 30, 2003, accessed November 10, 2012, <http://search.proquest.com.ezproxy.library.yorku.ca/docview/398955675?accountid=15182>.

from New York's Paramount Theatre¹⁹, playing for silent films at the Lincoln Theater in New York²⁰, and performing between films in a noted Philadelphia movie house, The Royal “[advertised] as ‘America’s Finest Colored Photoplay House.’”²¹

Arguably the most notable record credited to Waller on the Hammond is “The Jitterbug Waltz” from 1942, since it is one of the earliest examples of the Hammond Organ on record, performed by Waller, his Rhythm and his Orchestra. For my purposes, what provided greater insight into Waller’s organ work was examining his solo organ works dating as early as 1926 through 1929. In addition to listening to the recordings, I found transcriptions of a few examples of these records in *Thomas Wright “Fats” Waller: Performances In Transcription, 1927-1943*, edited by Paul S. Machlin. These records were made on an Estey Opus 2370 pipe organ, made by the Victor Company, and the examples documented here include Waller’s own “Rusty Pail Blues”, as well as his versions of “Waiting at the End of the Road” (Irving Berlin), and “I Ain’t Got Nobody” (Spencer Williams/Roger Graham). This organ is described as

[An] orchestral organ heavily influenced by theater instrument design. The Opus 2370 was then likely one of the most advanced instruments of its type available at the time. The instrument had three manuals (keyboards) and a pedal board coupled to a range of thirty-three ranks of pipes or “stops”, each with a characteristic tone color or timbre.²²

¹⁹ “Fats Waller Plays Organ on Saturdays,” *Atlanta Daily World*. May 6, 1934, accessed October 12, 2012, <http://search.proquest.com.ezproxy.library.yorku.ca/docview/490435133?accountid=15182>.

²⁰ Geoff X Alexander and Robert L. (Bob) Doerschuk, “Historic Masters of Jazz Organ: burnin on the big bad B-3,” *Keyboard* 15 (May 1989): 44.

²¹ Kimberly C. Roberts, “The Royal Treatment: Restored theater will revitalize South Street,” *Philadelphia Tribune*, February 11, 2003, accessed February 2, 2013, <http://search.proquest.com.ezproxy.library.yorku.ca/docview/337741502?accountid=15182>.

²² Thomas Wright “Fats” Waller, *Thomas Wright “Fats” Waller: Performances In Transcription, 1927-1943*, ed. Paul S. Machlin (Madison: A-R Editions, 2001), 203.

What proved to be most interesting upon looking closely at these transcriptions was the way Waller balanced his accompaniment parts, both in his left hand comping and his bass parts, with the foot pedals. The examples notated are all detailed to the point of showing three staves, including the bass parts that would have come from the pedals. What stands out is the role of Waller's left hand, which for a good percentage of the time remains active by playing chords in quarter notes four to the bar, most often in three or four note block voicings, and with a short attack and release. This allows Waller to maintain a "4" feel, even if the bass pedals are accenting only beats one and three, accompanying either with quarter notes or half notes. While the left hand is able to remain rhythmically active, it is also clear that Waller is able to use the sustain of the organ in his lead lines, maintaining independent control between all three parts — lead, comping, and bass pedals.

The left hand comping on every beat stands out because it is a device that has been very important in my overall development, and it is a technique I have associated with guitar and piano rather than the organ, a technique that will be discussed in detail in relation to my own work in this style. What is amazing upon hearing Fats Waller play in this style is his ability to emphasize the rhythm and articulation of his accompaniment parts, even from a large pipe organ such as this, which often sounds like a wind instrument. A review of these works by Stephen Budiansky comments on these challenges:

If nothing else, Waller's organ performances are technical tours de force that reveal an almost wizardly mastery of what is surely the most ungainly instrument ever pressed into the service of jazz... The instrument's sound-generating mechanism has two modes, on or off, wind flowing through the pipe or wind stopped, and there simply is no way to swing a beat by making one note of a measure louder than any other. Adding to this difficulty is the fact that even with modern organs, the player experiences a tiny delay between the depression of a key and the emergence of a sound. Any hall big enough to hold a pipe

organ has a natural reverberation of as much as several seconds, which adds to this disorienting sensation. Somehow Waller did make the pipe organ swing.²³

What proves true for Waller as well as many of the other organists referenced in each of the coming chapters, is that they were keyboardists who started on piano and later came to the organ. What I explored in my own work was the contradictory elements of playing piano and organ, and how this era allowed those elements to crossover. Lance Anderson explained to me the fundamental difference for players who come to the organ from the piano. The first thing is not having to use as much weight on the organ.

[We] can't stop ourselves from the louder it gets, the more we'll hit it. It's psychology reversed. Cause the piano, of course, the louder you do get, the more you'll have to strike it. With the organ it doesn't matter in the least. The real organists...even if they're playing a real rhythm [demonstrating a syncopated and busy rhythm], it's all right there, the attack is light. I have to try to remind myself.

Surprisingly, when I worked with Oscar Peterson, he used to talk about that, even with piano players. He called them 'flying fingers'. People wasted energy doing a lot of this kind of stuff [lifting the fingers too high]. You don't need flying fingers, that's what his Hungarian Classical teacher told him. That if you wanted to get speed, you had to keep the fingers under control, don't let them fly around, cause you're just going further.²⁴

Anderson also thought that for someone like Waller, the crossover from stride piano to organ technique would have to have been a major shift.

Fats Waller, it's a funny style, cause he's playing theatre organ, basically. And he's playing some jazz songs, standard songs or showtunes on the organ, and he does a lot of locked hand type of stuff. I've never seen a film of him actually playing the organ...but, it's kinda funny because of course, the whole stride technique doesn't work on organ. So, it would be so against his technique. I don't know what his hands would have looked like as he played, but it sure sounds like he's playing organ. Bill [Count] Basie, the same thing. He sort of played the piano very close to the board too.²⁵

²³ Stephen Budiansky, "Melodic Invention," *Humanities* 21. 4 (July/August 2000): 22, accessed October 12, 2012, <http://search.proquest.com.ezproxy.library.yorku.ca/docview/236370060?accountid=15182>.

²⁴ Lance Anderson, interview by author. 24 October, 2012.

²⁵ ibid.

A discussion of Count Basie's work on the organ follows logically from that of Fats Waller, since it has been documented that Basie was a student of Waller's, which is how he came to playing the organ. One of Count Basie's first records on the organ that is commonly brought up is his version of "Live and Love Tonight" from 1939. What separates Basie from Waller is something that can also be applied to his piano playing, and that is economy. Count Basie is not viewed as a solo organist in the way Fats Waller is, which has to do largely with Basie's economical playing, his use of space, and the use of his band, either in a full big band setting, as The Count Basie Orchestra, or in a smaller group with The Kansas City Seven. The ensemble setting is a key factor due to the role of the bass. Whether or not Basie learned the bass pedals when studying with Waller, his records stand as an exception to the common ensemble of an organ trio or quartet. His recordings often featured a full horn section as well as a full rhythm section with upright bass.

Though Basie is another convert from piano to organ, in his playing it is clear how he used many of the common essential devices of an organist: taking advantage of the sustain of the organ, using dynamics, expression and swells, using it as a backing instrument, and creating brassy horn figures. On upbeat numbers such as "Count's Organ Blues", Basie is audibly punctuating very short, sparse shots in the background when accompanying, and adding sparse fills in response to horn leads that are not unlike the sense of space in his piano playing. The sustain and swells particularly come across on slow tempos such as on "I Want A Little Girl" from his album *Count Basie And The Kansas City Seven* (1962).

There are a number of records that feature Basie and his band, with the Count on organ. One album from 1958 entitled *Memories Ad-Lib* features vocalist Joe Williams. A number of

instrumental recordings from the 50s and 60s include Basie on organ joined by saxophonist Illinois Jacquet, while some examples feature two keyboards, with Hank Jones or Oscar Peterson playing the piano.

Sonically, it is clear how Basie followed the influence of Fats Waller on the organ. Basie's tone on the Hammond is similar to Waller's in that he was approximating the sound of a theater organ. The challenge in examining Basie's work is that his performances on organ are hard to find as far as film footage, there is not exact documentation of models of organs he used, and his drawbar settings or presets for the Hammond have not been that thoroughly documented. By listening to a number of his different recordings, Basie appears to have a number of particular sounds he often incorporates. I was not able to figure out conclusively a group of stops that Basie relies on. However, for lower dynamics on background parts, it is evident that less harmonics are active from minimal combinations of one or two drawbars, and the swell/expression pedal is pulled back. Basie tends to activate larger combinations of fundamental and odd harmonics to bring out the mid to upper register, with potential variations on all of the drawbars pulled out to lesser degrees to create a fuller, brassy sound.

"I Want A Little Girl" is a good example of how Basie appears to have at least four different groups of stops set up, which makes perfect sense on a Hammond, considering that he could alternate between two different groups of drawbars on two different manuals, by using the Bb and B presets on each. There is also the possibility that some of his sounds could have been from the factory presets on a Hammond (any of the 9 reverse keys from A down to C#), though when testing them and playing along, it does not sound exactly like Basie's sound. One tone that is fairly distinguishable from this recording is his use of nothing more than the 1' drawbar to play

background fills. This registration manages to work in accompaniment, since the uppermost harmonic doesn't provide much volume on its own.

What is evident on Basie's organ recordings is his use of chorus, vibrato, and the Leslie speaker. The majority of the time the Leslie remains on fast while the chorus and vibrato dial is set to the highest possible rate, either at C3 for chorus or V3 for vibrato.²⁶

In following the line of playing that would have come from theatre organs, the use of the vibrato, chorus, and the Leslie is interesting. It has been well established that Laurens Hammond was opposed to any rival company interfering with the sound of his instrument. This is why Don Leslie's offer to add an external rotary speaker was declined by the Hammond company. Despite Hammond's attempts to dismiss the Leslie speaker, the overwhelming preference of this sound by organ players led to the pairing of the Hammond and Leslie that still holds to this day.²⁷

For Basie as well as all the players cited here, it is common to use a fair amount of vibrato or chorus on the earliest Hammonds by themselves. When the Leslie speaker was used by these players, its speed setting would remain on fast. Tony Monaco explained to me the difference between chorus and vibrato, as well as why the early Leslies would only operate on one speed.

The difference between chorus and vibrato is chorus is sort of like an exciting sound, where vibrato is more like a Leslie sound. So, the vibrato sound was Laurens Hammond's idea of what the Leslie should sound like, where chorus was just basically like an additional excitement sound... chorus is just a lot less percentage of vibrato... so you're getting more of the pure organ sound, and much less of the other.

[The] original 21Hs only had fast and off because it didn't even have a two-speed motor. The newer 122s ended up having fast and slow. To get off, you have to actually turn the

²⁶ On the vibrato and chorus knob the rates alternate between V and C and are arranged in a clockwise sequence. Starting from the top at the center they are as follows: V3, C3, V1, C1, V2, C2.

²⁷ Vail, *Beauty in the B (first edition)*, 12, 134.

power off. So, then later on they made relay switches and stuff, and then they came out with the 760 Leslie that you could actually control fast and slow, and off.²⁸

That is a good indication of why the earliest Hammond recordings from this era sounded the way they did: the heavy chorus or vibrato coming from a Hammond tone cabinet without a Leslie, and the fact that the earliest Leslies only had the capability of one speed. It is a sound that can come across as dated since these sounds are so different from the sound that has become associated most with jazz organ via Jimmy Smith. Denis Keldie offered this theory on how the Hammond in these early years could have been seen and used as a way to catch on to new trends.

I guess it was regarded kind of as a novelty instrument, much like Moog synthesizers were in the 1970s. There was all these guys like Dick Hyman that were coming out with Moog records, usually doing pop tunes, and organ was kind of the same idea in the 1940s. It was such a new sound, that it didn't really sound like the type of organs that people would have heard prior to that, like theatre organs. Especially when they were using Leslies with them.²⁹

Something to keep in mind in examining these selected players is that with the exception of Fats Waller who did not live beyond the 1940s, people like Count Basie, Wild Bill Davis and Milt Buckner were all active, and still playing the organ in the years after the scene had shifted and the organ had become a more common jazz instrument in the 1950s and 1960s. So even though these players and this tradition has often been seen as a precursor era to the organ trio style of the 1950s, the different scenes and groups of players co-existed in the 1950s and 1960s. The output of these earlier players was not exclusive to a short time, both in performance and on record.

²⁸ Tony Monaco, interview by author. 19 November, 2012.

²⁹ Denis Keldie, interview by author. 2 November, 2012.

As a source of inspiration for my own work, I did not rely so much on Count Basie's playing, but more on the other parts around him and the larger sense of his sound. The fact that his band consisted of a rhythm section with a string bass was something I kept in mind in relation to my own work. I also was influenced by their overall relaxed swing feel, tempo, and their arrangements. One of the first examples I thought of when composing in this vein was the classic Basie chart of "April In Paris", and the connection made sense, since that chart had been arranged by Wild Bill Davis.

Wild Bill Davis is most often credited as the one who started the trend of the organ replacing a big band and working in a trio setting. He became known for his reputation and experience as an arranger, which is the biggest factor as far as his influence on my work. In addition, most of the histories and summaries of Davis point to him as someone in the rhythm and blues scene as much as the jazz scene.

This crossover factor seems to have a lot to do with the time Davis was active as a pianist and arranger, before he became known for his organ playing. Some of his best-known work in this regard was as the pianist and arranger for Louis Jordan's Timpany Five, whom he joined in 1945. In an interesting twist, when Davis eventually broke out on his own playing the organ and left Jordan's band, he was replaced by Bill Doggett, who became known in his own right as an organist in a similar vein as a contemporary of Davis'. The two managed to remain on good terms contrary to reports of them battling at one time for who was "the best Hammond Organ artist".³⁰

³⁰ "Doggett And 'Wild' Bill Davis Are Good Friends," *Atlanta Daily World*. May 27, 1955, 7, accessed February 5, 2013, <http://search.proquest.com.ezproxy.library.yorku.ca/docview/491057573?accountid=15182>.

With the swing and rhythm and blues influence and his sense of arranging, Davis' sound is known for often featuring full organ, using all the drawbars, with the use of full block chords to act as a horn section. That is a key device that I was thinking of when writing for this style of organ playing.

I was interested in his Basie connection and his 1955 arrangement of "April In Paris". The recording has become legendary for being the best-selling instrumental record by the Basie band. Davis' arrangement is highlighted by the repeated "One more time" and "One more once" ending, something that came about on the bandstand when Basie's orchestra and Davis' trio shared the bill at Birdland. It has been reported that Davis was the first to shout "One more time" at the end of the chart. Also worth noting is that due to Davis' lack of availability, the record was performed solely by Basie and his big band, even though the original idea was to reprise what happened on stage by having Davis' trio join that recording.³¹

The last organist to cite in this line of playing is Milt Buckner. As was the case with each of the previous names, Buckner started on piano, and much like Wild Bill Davis, he worked in an established band as both a pianist and arranger. In Buckner's case he was working for Lionel Hampton's band for eleven years between 1941 and 1952, and was credited with arranging Hampton's "Flying Home", claiming in later years that he may have written as many as 15 arrangements of that song.³²

³¹ Chris Albertson. Liner notes, *The Complete Clef/Verve Count Basie Fifties Studio Recordings*, Count Basie and His Orchestra, Mosaic MD8-229, 2005, compact disc.

³² "Buckner, Ex-Hampton Pianist Hit Jackpot In Switch To The Organ," *The Chicago Defender (National edition)* (1921-1967), Jun 25, 1955, 18, accessed November 9, 2012, <http://search.proquest.com.ezproxy.library.yorku.ca/docview/492969113?accountid=15182>.

As a player, both on piano and later on organ, Milt Buckner's signature became his use of block chords, and he is often credited as one of the first keyboardists to have developed this method. His individual contribution stands out since his playing is known as a “locked hands” style, where both hands are moving parallel when filling out a harmonized part. Lance Anderson told me of the high regard that Buckner was held in by Oscar Peterson, and how he essentially started this movement.

Well, Milt Buckner invented it. You know, everybody gives it to George Shearing, George Shearing just happened to have a hit with it. But Milt Buckner definitely was doing it a long time before, on both piano and organ, and Oscar Peterson used to talk about Milt Buckner, that that's where he first heard that type of playing.³³

Denis Keldie further confirmed this by relaying how Lance had learned via his personal experience with Oscar that “Milt Buckner was in fact Oscar Peterson’s favourite jazz organist.”³⁴

A physical factor that has been made note of is Buckner’s short stature, peaking at no more than 5’ 2”. Some commentators suggest that he was too short to play the foot pedals, which could be why his organ recordings included a string bass player. The lineup from his first records starting in the mid 1950s, with *Rockin’ With Milt* (1955) as an example, into his ‘60s records are for the majority credited with a bass player. Yet Buckner would have learned to play pedals early in his career, despite not using them on many of his recordings. Press from 1955 indicates that Buckner was touring at this time in a lineup with saxophone and drums, in addition to the organ.³⁵ Buckner continued to play the bass pedals, and worked in a self-contained organ trio, as is evident in performance footage from his later years, in the 1970s.

³³ Lance Anderson, interview by author. 24 October, 2012.

³⁴ Denis Keldie, interview by author. 2 November, 2012.

³⁵ “Buckner, Ex-Hampton Pianist Hit Jackpot In Switch To The Organ,” 18.

Watching footage of Milt Buckner from this era gives good insight into his playing, particularly in a series of clips from 1975 which feature Buckner playing in a trio formation in France with Illinois Jacquet and Jo Jones. Some examples of tunes from this performance include “On The Sunny Side Of The Street” or Count Basie’s “One O’Clock Jump”.³⁶ What is interesting to make note of is Buckner’s organ bass playing, since he does not appear to always use the combination of the left hand on the lower manual with the bass pedals, but more often drives the bass exclusively from the pedals when the right hand is playing the lead. He often makes a visual gag out of this by raising the left hand visibly above the keyboard, as if to intentionally indicate that the feet are doing the work. It is particularly noteworthy that Buckner continued to play bass parts with the technique specific to his era, exclusively using his feet throughout the twenty plus years he played the organ. This is what would have allowed Buckner to play in the locked-hand style he became famous for, since the left hand would be a key part of it, where the sound depends on “both hands moving together over the keyboard to accommodate the melody note (the top voice of his right hand).”³⁷ The locked-hand style worked so efficiently to re-create the saxophone section of a big band, as this movement was based around the style of big band arranging from the swing era that featured block chords. A four-part block voicing could easily be expanded to accommodate five saxophones (two altos, two tenors, and one baritone) by having the baritone saxophone double the melody one octave lower.³⁸

³⁶ “Milt Buckner, Illinois Jacquet, Jo Jones, part 1,” [1975], video clip, accessed February 19, 2013, YouTube, <http://www.youtube.com/watch?v=kcxMqP-xZDo>.

³⁷ Champian Fulton, “The Transcendent Aesthetics Of The Block Chord Language,” *Downbeat* 78. 9 (September 2011): 60.

³⁸ John MacLeod, *Arranging 5 & 6: A Course in Arranging and Orchestration For Big Band*, 8.

Buckner's tone is definitely something that stands out, and although it is vaguely similar to some of those old fashioned Basie stops with the fast Leslie and full chorus, it comes across as his own sound when played with his chordal technique. It was largely Buckner's tone that served as a template for how I set up the organ in my own work. Still with all these different factors of influence coming from different players, there is one other name that bears mentioning.

Erroll Garner deserves honorable mention because he is often credited as a significant figure in the style of block chord piano playing, commonly with the right hand melody in octaves with additional notes filled in between. When I first heard the Erroll Garner record *Concert By The Sea*, I discovered how Garner was able to virtually re-create the sound of the entire Basie band, from not only his full block chords, but right down to the left hand four downbeat attack style, getting the same effect as Freddie Green would on guitar with Basie. The independence of both hands that Garner was known for is what made him stand out from the other keyboard players known for block chords, including Milt Buckner with his locked hands.

Erroll Garner's name in relation to the organ I find has a strange history. In some discussions of jazz organ, there is a reference to an Erroll Garner style, both in terms of specific technique and drawbar registrations. What is odd is that there is very little written or recorded history of Garner playing the organ that is immediately accessible. A complete discography of Garner's recorded music lists only one session from August 7, 1969, with two unissued recordings described as "the first known to feature Garner on organ", both listed as "Untitled Original".³⁹ Even stranger is that an easier source to find this style of organ playing on record is

³⁹ James M. Doran, *Erroll Garner: The Most Happy Piano* (Metuchen: Scarecrow Press), 278.

from Jimmy Smith⁴⁰, which suggests that Erroll Garner's piano technique could have been transferred to the organ by Jimmy Smith. A webpage known as *Hammond Wiki* references the Erroll Garner style and provides a link to the term "Squabbling", which reads as: "'Squabbling' is the term used by Joey DeFrancesco to describe what Jimmy Smith calls Erroll Garner Style."⁴¹

The organists in this first tradition followed a similar line, yet each with their own different take on it and with different things that stood out. They all proved that the organ could swing and could function as a jazz instrument serving the very practical function that a small group with an organ could replace a large jazz ensemble. The 'jackpot' article on Milt Buckner reiterates this fact that a pianist switching to the organ proved to be a good business decision that could keep a successful organ trio employed as often as possible, stating at the time that Buckner's band "[hasn't] had trouble getting a booking since he first went out with a trio", and that the entertainment and danceability factor of this style allowed the group to remain booked in diverse venues, whether for listening or for dancing.⁴²

⁴⁰ On Jimmy Smith's 1960 album *Crazy Baby*, he performs versions of "Makin' Whoopee" and "Mack The Knife" in a squabbling style similar to Garner's piano playing. This involves a block chord combination in the right hand using a slur up to an octave with a fourth or fifth added in between.

⁴¹ "HammondWiki — Squabbling," accessed December 11, 2012, <http://www.dairiki.org/HammondWiki/Squabbling>.

⁴² "Buckner, Ex-Hampton Pianist Hit Jackpot In Switch To The Organ," 18.

Chapter 2. The Organ Trio: Jimmy Smith's influence

While the Hammond Organ was becoming a more practical instrument by the 1950s, its role in jazz could still be seen as a novelty instrument. The previous organists discussed were performing music that was closer to swing or rhythm and blues, and the organ's potential as a linear instrument in bebop had not been explored yet. It is safe to say that the emergence of Jimmy Smith (1925 - 2005)⁴³ did more for the popularity of the Hammond Organ than anyone before. Smith single-handedly defined a specific sound and way of playing that influences players to this day. He had as great an impact for organ as Louis Armstrong did for trumpet⁴⁴ or Charlie Christian for guitar.⁴⁵

Smith popularized a number of techniques: how bass parts were created from the organ; the use of a percussive tone and combination of drawbars that has influenced countless organists; and a linear vocabulary and level of improvising that managed to highlight the sophistication and speed of bebop, while still being deeply rooted in the blues. This placed him in the tradition that came to be known as Hard Bop. All of the organists I spoke to mentioned Jimmy Smith as a significant influence.

As a point of context for my own composing and playing, Jimmy Smith was an obvious starting point. I also wanted to explore the work of his contemporaries who have had a significant influence on my work: Jack McDuff and Jimmy McGriff. I discuss Jimmy Smith's work in greater detail, and that of McDuff and McGriff more generally, but all with an eye to examining and understanding these influences within my own approaches.

⁴³ Jimmy Smith's year of birth has been cited by some sources as 1925, and by others as 1928.

⁴⁴ Pete Fallico, "Jimmy Smith: NEA Jazz Master," All About Jazz, last modified February 10, 2005, <http://www.allaboutjazz.com/php/article.php?id=16506#.UU85DqXWqsg>.

⁴⁵ Alexander, and Doerschuk, "Historic Masters of Jazz Organ," 46.

Smith's approach to the bass is the first key point. Jimmy Smith began to learn the bass pedals after his discussions with Wild Bill Davis. Whether or not Davis was a direct teacher of Smith on the pedals, what has been cited from Jimmy Smith himself in a number of sources is that Davis motivated him to learn the pedals as fast as he possibly could, ironically by telling him the opposite. A number of interviews cite different dates and timelines, but the basic story is that Smith asked Davis the amount of time he could expect to put in on the pedals, and the responses ranged from fifteen years (cited in one interview from the mid 1980s, with Brian Case)⁴⁶ down to four years, as reported by Carl Woideck in 1995, in his liner notes for *Walk On The Wild Side*.⁴⁷ Regardless of which timeline is accurate, Smith clearly felt the urge to prove himself. It has been stated that he responded by learning the bass pedals, eventually playing in front of Davis, in four to six months.

A couple of noteworthy factors about Smith may have contributed to his accelerated path of mastering the pedals. He told *Downbeat* how he had studied string bass before even coming to the organ⁴⁸. He also explained to *Hammond Times* for a 1964 article that he had developed the flexibility of using both the heel and the toe relatively easily, since he had previously been a tap dancer. In addition, he goes onto explain, in his own words, that "When it came to the foot pedals, I made a chart of them and put it on the wall in front of me so that I wouldn't have to look down."⁴⁹ This method of reading from a wall suggests reaching a certain comfort level with

⁴⁶ Tim Dean-Lewis, "Treading The Board: A Pedal Play—The Artistry Of Jimmy Smith in Performance," *Annual Review of Jazz Studies* 10 (1999): 209.

⁴⁷ Dean-Lewis, "Treading The Board," 209.

⁴⁸ Larry Birnbaum, "Jimmy Smith: Sermonizing in the '70s (interview)," *Downbeat* 44 (December 15, 1977): 23.

⁴⁹ Dean-Lewis, "Treading The Board," 208.

the physical technique of playing an instrument. A player does not need to always look closely at his or her instrument in order to produce selected notes.

A number of the above comments from Jimmy Smith were compiled and cited in Tim Dean-Lewis' article "Treading The Board: A Pedal Play", which proved to be a very informative investigation of Smith's organ work, with an emphasis on his bass technique. This is a piece that I would recommend a full reading of outside of this study.

Despite the clear control of the bass pedals that he developed on the organ, it is not merely Jimmy Smith's foot control that separated his style from those who preceded him. Why Jimmy Smith is credited with taking organ bass in a different direction has as much to do with his left hand, the bass lines created from the lower manual of the organ, the interaction between the left hand and the feet, and the sonic effect it created. This is the aspect that many current organists still point to as a significant shift in jazz organ. Lance Anderson cited this as a factor that encouraged him to learn the pedals.

Jazz organ by itself didn't swing, I feel, until Jimmy Smith. Yes, it did work when the organist was playing with a big band, but the jazz trio thing... This is what kept me away from pedals for instance. Cause I always just heard this sort of thing [single-note lines, with repetitive I-V motion] Anybody who played organ, especially all the club organists when I was growing up, that's all they did, and I wasn't interested in the I-V... that kind of motion. It wasn't until I heard Jimmy Smith, and it was a revelation—nobody had heard the organ swing like this, and what Jimmy Smith did, in my mind, his real revelation is that he doubled the left hand. It's not that he even doubled it. Cause, if you're playing "The Cat" [demonstrates "The Cat" bass line], your foot's only going to do that [a simpler rhythm].⁵⁰

As shown in the figure below, Anderson goes on to demonstrate how the pedals and left hand enhance each other, while playing over a tune such as Jimmy Smith's "The Cat".

⁵⁰ Lance Anderson, interview by author. 24 October, 2012.

Fig. 2.1: Demo by Lance Anderson of the bass interaction, “The Cat”.

The musical score consists of four staves of music, each with a tempo of $\text{♩} = 190$. The first staff shows the organ and pedals playing eighth-note patterns. The second staff shows the organ and pedals playing sixteenth-note patterns. The third staff shows the organ and pedals playing eighth-note patterns. The fourth staff shows the organ and pedals playing eighth-note patterns. The score includes lyrics and quotes from Lance Anderson:

- "The Cat" (in a box)
- "Your foot's only going to do that"
- "The left hand does all the pickups"
- "it actually swings better because it is an octave down"
- "it makes it sound like you're doing stuff like..."

The last two-bar figure is meant to demonstrate more of an implied rhythm than an exact duplication of the end result between the left hand and the pedals. The point that Anderson emphasizes is that the rhythm feels better and the sound of the pedals interacting with the left

hand is its own sound. It would not sound the same with only the left hand, or only on the pedals where “you *think* you’re getting that sound”.⁵¹

Not every organist who followed this line of playing will maintain the exact same technique. Jimmy Smith’s bass work has been known to vary depending on the key and tempo. The consistent factor that always comes up when referring to this interaction between the pedals and the lower manual is the pop or the tap of the pedals. The concept of tapping the foot pedals is that of touching the pedals with a light attack and a short release, so that the pitches selected do not stand out, but are heard as a subtle sonic effect. When the left hand is leading and playing more discernible legato lines to outline the changes, the rhythmic overlap occurs and creates the effect similar to the slap of a string bass.

Tony Monaco gave a very thorough explanation of the concept of tapping the pedals in combination with the left hand, and the advantage that an organist would have in contrast to a string bass, which is the capability to vary the timing of the tap, which can then vary the overall effect of the bass.

Now what’s cool about it is you can tap in front, or you can tap behind, which a bass player can only tap in front. He plucks the string and then it sounds. Where we can tap right on, we can tap a little bit before, or we can tap a little bit after. And when we tap it before, it gives you a lifting feel, kinda makes you wanna jump out of your seat. When you tap it behind, without even changing the tempo, it just gives you that greasy feel. As opposed to [example of tapping in front]. When I tap behind, it makes you kinda wanna lay back and eat some fried chicken.⁵²

The results of tapping in front of the beat or behind the beat raises the issue of perception. The question is whether the effect of tapping is experienced by both the performer and the audience or whether the organist is the only one to feel these shifts. Dean-Lewis references

⁵¹ Lance Anderson, interview by author. 24 October, 2012.

⁵² Tony Monaco, interview by author. 19 November, 2012.

moments of Jimmy Smith in performance where it looks as though he is moving his foot “around the pedalboard...miming the bass line with his left foot.”⁵³ The author argues that this creates the appearance of a walking bass line from the foot and augments the visual experience for the audience, but for Smith the linear quality of the bass pattern is coming more from the left hand while the foot “is simply adding ‘punch’ to the bass sound.”⁵⁴

The issue of note selection from the pedals becomes interesting. In order to create that pop, the short duration of the notes makes them act as ghost notes. Dean-Lewis’ investigation points out that the pitch B near the center of the pedalboard appears to be a frequent target pitch to create these ghost notes, and in an example such as Smith’s blues piece “The Sermon”, in the key of F, he focuses on a “limited set of four pedals” ranging from Bb, B, C, to Db.⁵⁵ B, out of all of these, is the pitch that occurs most frequently in the space of a single chorus. Tony Monaco further explained this by saying that he (in his own playing) will often keep the same note going when tapping on the pedals, adding “The pitch is totally irrelevant, and if you pull the drawbars of the bass pedals down at 7, you wanna keep the bass line underneath⁵⁶. So the tap is very staccatissimo, you’re just basically trying to get a little bit of that spit.”⁵⁷

The aforementioned techniques are not meant to be taken consistently as rules for how an organist would play on every tune. Jimmy Smith would be more likely to play notes that would sustain from the pedals during a ballad. This frees the left hand to comp with chords. When

⁵³ Dean-Lewis, “Treading The Board,” 198.

⁵⁴ ibid.

⁵⁵ Dean-Lewis, “Treading The Board,” 199.

⁵⁶ Monaco indicates his preference for the two drawbars that operate the harmonics of the footpedals. He prefers to set the lower 16’ harmonic to the 7th degree and not use the 8’ harmonic.

⁵⁷ Tony Monaco, interview by author. 3 December, 2012.

playing conventionally moderate or up-tempo numbers (which would call for a walking bass line), a player can use the device of tapping the pedals to create extra syncopation and the slap effect.

Lance Anderson mentioned how the interaction factor isn't all just tapping the pedals, while the left hand drives the bass, referring to Jimmy Smith's big innovation.

Some people said 'well he never plays the pedals, he always just pounds', but he didn't, he would save the actual pedal playing for a moment in the tune...he could go through the whole thing, then when he got to [a turnaround]...and just stick on the five. So he'd save it, and Doug Riley would do that, he'd suddenly have...if he was gonna do a shout chorus, he'd go down and hit a really big five, with his foot down now, so it freed the left hand up to go to here, pull out these drawbars [full stops, and set up a big turnaround].⁵⁸

Lance Anderson's personal technique proved to be a masterclass in bass pedals. His technique represents a way of playing that is closer to my areas of interest. The major difference in Lance's playing is a greater use of the pedals. He sometimes plays with both feet and allows the pedals to lead the hand rather than the other way around. The one device that struck me in particular was how the response of the wood from the pedals can create the beat, an example he demonstrated over a straight time R&B groove. The bass figure indicated is from the intro to an original piece, "Where There Is Love", that appears on his organ and drum duo recording with Michael Sloski, *Footwork* (2003).

⁵⁸ Lance Anderson, interview by author, 24 October, 2012.

Fig. 2.2: Demo of the single-note heel-toe technique.

J = 88 "Where There Is Love", intro

Org.

Ped.

heel toe heel toe heel toe heel toe

For repeated notes, you can do nice repeated notes [giving the beats a kick with the heel, as an accent], and what's great about it, you get this feeling that 'there's the beat!' The first time I heard that kind of thing was from two guys, one guy was a pop organist, and he played stuff like this, he gave the beats a kick with his heel [over a slow 2-beat feel]. He played with his toe [creating a string bass feel, with the slap], he'd just do that on the organ, it's not louder, but actually you do hear a bit of the wood, the audience would hear some of the wood sound. That sort of thing really makes it feel solid. Sometimes it's hardly even sounding, when I'm doing that repeated thing, it's long and short, it just works out between your toe. It's a nice way of getting a long and short groove happening. That kick really made a difference, when I felt that kick. I heard it in gospel players too... and it's something that you can't pick up when somebody's playing, unless you're really close, if you're out in the audience... That's why I really took to the organ, because it became a full-body sort of thing, instead of more just the hands.⁵⁹

The comment about the 'full-body' response shows how every part between the hands and feet is necessary, and it demonstrates the limitations that can occur. Taking the earlier demonstration of "The Cat" as an example, Lance Anderson's main point was that the groove feels better, due to a fuller sound and the syncopation that occurs when pedals are added to the left hand. He also pointed out that if he were to attempt the same syncopation only with pedals, it would take extra practice to fill in the pickups, and it only becomes easier with two feet on the

⁵⁹ ibid.

pedals⁶⁰. Joey DeFrancesco mentions that organists should be able to walk a bass line exclusively from the pedals, “but it wouldn’t have that smooth sound—the meat of the bass comes from the left hand.”⁶¹ This hints at a certain limitation: when only one foot is active, all jazz organists may not be able to cover the complete range of a 25-note pedalboard and easily achieve effects on the bass such as pickups, skip beats, or the impression of a string bass.

The final point about pedals is how much that skill set still affects the aesthetic of being a true organist, something that was commented on by a number of the players I spoke to. Lance Anderson emphasized this point about the organ...

[To] me it’s all pedals. I know amongst organists, if you don’t play pedals you’re not an organist, you’re a pianist playing a keyboard. So it’s all pedals, it’s the interaction between the pedals and what you’re doing.⁶²

This has significance for my own study of the instrument because I have not put in an extended amount of practice on foot pedals which had ramifications for how my own compositions came to be performed, arranged, and recorded. It could place my work more in the larger context of being a keyboardist, since like many of the players, it was an instrument that I learned after studying the piano. I found it to be common among a number of the players that the use of the pedals was not necessary because their bands always had (and in some cases still have) bass players. Paul Shaffer described it to me as being “half an organist.”⁶³ If keyboard duties constitute half the work of an organist, this leads to the next key point when discussing Jimmy Smith beyond his work with the pedals.

⁶⁰ Lance Anderson also points out that in his own work in an organ and drum duo he is required to play pedals with both feet in situations where the left hand has to play changes.

⁶¹ Vail, *Beauty in the B (second edition)*, 187.

⁶² Lance Anderson, interview by author. 24 October, 2012.

⁶³ Paul Shaffer, interview by author. 5 October, 2012.

Jimmy Smith's tone, his setup of the drawbars, and his use of the percussion are a major part of his larger influence. This is possibly the element of his playing that has had more crossover impact than any other, due to the sheer number of players that have followed and imitated it, regardless of whether they would kick bass pedals or not.

The Jimmy Smith sound is a set up that relies on a simple group of drawbars to create this tone in combination with the percussion. It involves using only the first three drawbars on the upper manual, (888000000) with percussion on the 3rd harmonic, and very often with the chorus left on at the C3 chorus setting. While this is the basic template, I found that among current organists, there can still be variations and different preferences depending on the drawbars, the chorus, or the amount of percussion. Joey DeFrancesco, who cites himself as “an aficionado of Jimmy Smith”, will pull the 5½’ drawbar out only as far as 4.5.⁶⁴ Michael Fonfara mentioned a couple of different variations, one of which can highlight the percussion more, another that emphasizes the middle odd harmonic.

[If] you push these in one notch from 8 to 7, that’s the real sound. Just to match the percussion properly to it. Then, sometimes...what I prefer is not so much of this lower one, but just push that in [the 16’], the bass one, out of the way a little bit, which gives this one here, which is a 5½’, a little more of a weight. The middle one, I kinda like the way it leads the pack instead of this 16’ pipe here, which I don’t mind at all, but I like that middle.⁶⁵

The percussion section of the organ is the control that enables an organist to modify the attack, volume, decay rate, and harmonic of the first key to be depressed. Four different tabs, with two variations for each are laid out accordingly: On or off, soft or normal volume, fast or slow decay, and 3rd or 2nd harmonic. The 3rd harmonic is the sound that became a signature with Jimmy

⁶⁴ Vail, *Beauty In The B (second edition)*, 186.

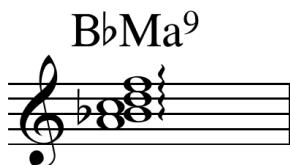
⁶⁵ Michael Fonfara, interview by author. December 14, 2012.

Smith. The 3rd harmonic percussion trigger brings out the pitch an octave and a fifth above the active key⁶⁶, which also happens to be the pitch activated by the 2½' drawbar. The remaining settings of percussion, volume and decay, can vary depending on individual tastes, but a good base template is with soft volume and a fast decay. Tony Monaco compared his own practice to Jimmy Smith, while giving an audible demonstration of how the percussion operates, first by discussing the volume.

Soft, I like it soft because I don't want the percussion to overpower the sound of the organ. So if you want a really percussive sound, you'll notice when you put it in the normal position, basically what it does instead of turning up the percussion, it just drops the organ volume down. So I like it on soft because the blend, the mix of percussion vs the real organ sound is perfect for me. Now, fast [decay] he [Jimmy Smith] liked it fast. That's the decay, the amount of time from when you push the percussion, that it decays. So if you were to push in the first three drawbars, and notice on fast, when you play the percussion it decays really fast. Now put it on slow [has a slow decay]. Now while you're holding that note, hold one percussion note, now play other notes and you'll notice they won't play. So the way percussion works is it triggers itself, and then once it reaches its decay, unless you release, it won't re-trigger.⁶⁷

In the example below, Monaco shows how a broken chord can bring out the sound of the decay, and how the click of all of the notes can still be audible when on slow decay, as long as the fingers reach all the notes fast enough.

Fig. 2.3: Five-note broken chord, descending, with slow decay and no drawbars active.



⁶⁶ Vail, *Beauty In The B* (second edition), 45.

⁶⁷ Tony Monaco, interview by author. 19 November, 2012.

The slightest changes of the controls as shown above, and how organists can use these tools to create their own mix and balance according to taste or different situations, is something that comes up again and again in discussions of creating organ textures, regardless of idiom.

When setting up the organ for left hand bass in the model following Jimmy Smith, the settings on the lower manual are in fact very similar to the upper, by utilizing at least the bass (16') and the fundamental (8') drawbar pulled out. How the middle (5½') drawbar is used can vary, depending on the sense of balance in the same way as with the upper manual. A common version of this is to set the lower to 848000000, with the middle drawbar halfway. Tony Monaco explained how he prefers this set up compared to 808, which he described as being “just a little thinner in the comp. When you pull the 5½' out to 4, you’ll notice it’s got a bit more depth. It’s minute, but I like the 848 sound.”⁶⁸ The footage of Jimmy Smith from *Treading The Board* by Dean-Lewis, from the BBC2 series *Jazz 625* in 1965, reveals a setting of 828000000 on his lower manual for the bass, combined with the two pedal drawbars set at 82.⁶⁹ None of these combinations are meant to be taken as definitive groups of stops that define the “true” Jimmy Smith sound for bass, but they emphasize the point of being reactive as an organ player. This also applies to the upper drawbars being used as a starting template that can be modified according to different acoustic environments. On an electric instrument, such as this, the slightest adjustment in registrations that may seem minute can make a substantial impact as each playing context changes.

Lastly, there is Smith’s vocabulary and his level of technique in his improvising. One factor that can point to the level of linear playing he achieved is Smith’s preference for studying

⁶⁸ Tony Monaco, interview by author. 19 November, 2012.

⁶⁹ Dean-Lewis, “Treading The Board,” 205.

horn players over fellow keyboard players. In a 1977 interview from *Downbeat* he highlights a number of horn players as influences, starting with Charlie Parker.

Bird, man, that's the only one I used to listen to. Yeah, the father of 'em all. And before Bird I was listening to people like my man from Houston, Arnett Cobb. I was listening to Cobb before I was listening to Lockjaw. Then after I listened to Lockjaw I found out about the Beast, Illinois Jacquet. I listened to all horn players, I never listened to no keyboard players. Once I started playin' organ, I wanted to listen to horn players because the horn players would give me the passages that I needed, see, and I'd take 'em and put 'em my way.⁷⁰

This accounts for one side of his playing, the speed, but it would be remiss to merely place Jimmy Smith as a purely harmonic or theoretical bebop player. In both his repertoire as well as his soloing, the key feature of his vocabulary is his soulfulness and ability to be a blues player. When I examine the right hand parts in lead lines or in soloing, I notice Smith's ability to gain maximum effect out of the blues scale in its most unaltered form (the way beginning students are taught the blues scale). The main difference is that Smith's sense of rhythm and his technical capabilities take his playing beyond that of a beginning student. Many of my favourite examples of his soloing incorporate this factor including "Back At The Chicken Shack" (1960) or "Organ Grinder's Swing" (1965) in a basic 12-bar blues format (as shown on the following page). His takes on repertoire such as "I Got A Woman" (1959) or "The Preacher" (1963) feature similar vocabulary over songs with a rhythm and blues structure.

⁷⁰ Birnbaum, "Jimmy Smith: Sermonizing in the '70s," 23.

Fig. 2.4: “Organ Grinder’s Swing” solo, first chorus.

MEDIUM UP SWING $\text{♩} = 160$

STARTING AT 1:13

ORGAN

The musical score consists of five staves of organ music. Staff 1 (top) shows a treble clef, 4/4 time, and a key signature of one sharp. It features a series of eighth-note chords and some sixteenth-note patterns. Staff 2 (second from top) shows a bass clef, 4/4 time, and a key signature of one sharp. It contains mostly quarter notes and some eighth-note patterns. Staff 3 (third from top) shows a treble clef, 4/4 time, and a key signature of one sharp. It features a continuous pattern of eighth-note chords. Staff 4 (fourth from top) shows a bass clef, 4/4 time, and a key signature of one sharp. It contains mostly quarter notes and some eighth-note patterns. Staff 5 (bottom) shows a bass clef, 4/4 time, and a key signature of one sharp. It contains mostly quarter notes and some eighth-note patterns. A box labeled "STARTING AT 1:13" is located at the top left of the first staff. The tempo is indicated as "MEDIUM UP SWING" with a note value of "♩ = 160". The instrument is identified as "ORGAN".

The first chorus of “Organ Grinder’s Swing” shows how Smith is able to rhythmically develop simple combinations of notes within a group of bars. The end of the second bar in the second system introduces the two-note repetition from C to Bb that continues for two bars. The bar after that Smith begins the grouping of triplets centered around C, Eb, and F, lasting for three and a half bars in which he places the rhythmic emphasis on every second note.

The ability to use those essential notes of the blues scale is something that can prove effective when playing in a minor key. This was a consideration when composing my own work in this model.

Another interesting factor of this combination of blues and jazz in the hard bop aesthetic is how it can allow an organist to either accompany or lead with relatively minimal material. I don’t mean to discount the chordal or harmonic sensibility of someone like Jimmy Smith. My aim is to point out that the physical devices of comping, playing the melody, and soloing on the organ can often be effective with simple two-note or three-note groupings. This is a different path from the preceding block chord or locked hands style of Buckner and Davis. Michael Fonfara mentioned how this aspect was one thing that encouraged him to learn the organ, and was something he responded to more about the organ than the piano.

If you played a 4-5 note chord on the organ, just the way you would on the piano, it sounds a little too thick. You know [demonstrating an F9 chord from the root up - F, A, C, Eb, G]. Then I found out that I’d use the 3rd, the 9th and the 7 on that chord, and then somebody who’s playin’ the root down there, all of a sudden I’ve got two fingers that aren’t playin’ that chord but I found that the chords sound better and cut through the band nicer, and I’m listening to the way Booker T, Jimmy Smith, and Ray Charles are playing these things...they’re not playing thick chords on the organ. They’re doing all that on the piano, and one of these days, God willing, I’ll be able to play some piano like that, but in the meantime I thought that perhaps I had to be able to get the organ because I was starting from scratch, and I was able to. I was sort of able to crawl right in there and just hear really simply, like, play something like ‘Chicken Shack’. You’re doing little 3rds and 5ths, do that on piano, and it’s not quite the same, unless you’re...some of those kind of

jazzy bluesy piano players, like who did ‘In Crowd’. [Ramsey Lewis] You play this on piano ['Chicken Shack'] it doesn't sound the same. I had to learn this. So by learning from scratch, I had to ignore all the piano stuff, cause every time I'd think piano I'd get frustrated...⁷¹

For all of Smith's abilities and immediate sonic gestures that are so identifiable on record, his versatility becomes apparent when examining his larger body of work. He recorded an album in tribute to Fats Waller, *Jimmy Smith Plays Fats Waller* (1962), and on this record he utilizes the earlier example of the “Erroll Garner” style on a good number of the tracks, which is quite a contrast from his standard percussive stops.⁷² Smith is also able to have those moments of full organ that Wild Bill Davis might have done, turning on the fast Leslie and all the stops during the peak of an arrangement or solo. His version of “Since I Fell For You” (1958) as an alternate take, released on the CD issue of the album *Home Cookin'*, brings out this side of his playing in a self-contained shout chorus, with a truly stunning display of perfectly-timed tremolo, that upon listening, gives the impression that it cannot merely be from the operation of the Leslie on its own. Finally, there is his ability to play with a big band behind him with arrangements that still leave room for his organ chops and sense of swing. A full album of arrangements from *Peter And The Wolf* highlights this, as do a number of other recordings. One personal favourite that I have studied closely is his take on “God Rest Ye Merry Gentlemen”, originally from a Christmas record entitled *Christmas '64*. The arrangement begins with timpani, leads up to a brassy big band arrangement of the melody, and then takes off from there with Smith's soloing.

⁷¹ Michael Fonfara, interview by author. 14 December, 2012.

⁷² The approximate “Errol Garner” stops remove the element of percussion, with a fast Leslie speed, and much more emphasis on the upper harmonics, with a grouping of either the last three or last four drawbars as 800000888 or 800008888.

The thing to take away from all of this is Jimmy Smith's diversity and his ability to acknowledge a wide range of idioms and traditions. With his command of the instrument, he proved to be able to take these influences, and create a very distinctive way of playing the organ. With his range in playing bass parts, acting as a rhythm player and as a linear soloist, he managed to condense the essential parts of a jazz quartet into a trio that could function independent of a horn and bass player. This is no small contribution by Jimmy Smith in leading the way for the organ trio tradition.

The challenge in looking at the work of those who followed this tradition is that it requires a much closer look at what separates other players. The reality for many organists was existing in the shadow of Smith's influence (something that proved to be a contentious issue for some but not others).

Jack McDuff (1926 - 2001) has acknowledged and given full credit to Jimmy Smith for being first; pointing out that, "I never tried to copy him". He gives emphasis to the aspect of his own playing that involves using the ear, indicating that it does not drive him to copy a style or a song "note for note".⁷³ In this same interview, many of the personal techniques McDuff talks about appear to line up very closely with the Jimmy Smith method (specifically in relation to bass pedals). McDuff claims to use the same combination of tapping foot pedals to create the thump with a left hand bass line, as well as the practice of leading with pedals during a ballad. Both organists have previously played string bass. McDuff acknowledges Smith again by striving to reach that same sound of "a good round bass".⁷⁴ To separate his work from Jimmy

⁷³ Gary N. Bourland, "Jack McDuff: Blues~Roots Jazz Organ," *Contemporary Keyboard* (September/October 1976): 8.

⁷⁴ Bourland, "Jack McDuff," 28, 30.

Smith, McDuff points out that he tends to focus more on his bass lines to create the swing feel (admitting to not emphasizing scales or technique for the right hand). In a joint interview for *Downbeat* between McDuff and Joey DeFrancesco, the latter acknowledges McDuff's bass parts as being his favourite. "When you play the organ, your bass line's more staccato—*poom, poom, poom, poom.*"⁷⁵

Orchestration in Jack McDuff's band is an important element in his recordings from the 1960s. The band consisted of an organ quartet (including the addition of saxophone as well as guitar). Smith did utilize horns and play as a quartet, but with McDuff's records from the '60s, it seems to be a more common and more integral part of the orchestration. The use of the sax and the arrangements, as well as his grooves and sensibility, that includes a healthy amount of blues and gospel influence, places Jack McDuff's work in a rhythm and blues and funk context. This sub-genre is known as soul-jazz.

There is the side of his playing that involved more unique stops and tonal qualities. Jack McDuff's live record, *Live! At The Front Room* (1965) showcases his range of creative tones and stops. His natural percussive organ comes across as more overdriven on "Rock Candy"; there is the use of what McDuff calls the "piano" stops⁷⁶ (essentially percussion with all the drawbars pushed in) on a number of tracks. By playing along, I deduced that this seems most consistent with the chime of the 3rd harmonic on a fast decay. It is not certain, but it seems logical that it could be set to the normal volume rather than soft, in order to allow the sound of only the percussion to cut through. Playing with only the 3rd harmonic and no active drawbars provides an interesting aspect, since it means the organist has to transpose on the keyboard down a fifth. This

⁷⁵ Tom Surowicz, "Organ Groovin' With Joey D & Brother Jack," *Downbeat* 61.7 (June 1991): 22.

⁷⁶ Bourland, "Jack McDuff," 28.

is audible on his version of “It Ain’t Necessarily So”, where he is playing on the keyboard position of F minor when the song is in C minor.

On the live performance of this tune, he uses the groupings of white drawbars, the 8’, 4’, 2’ and 1’ to mix the fundamental with the octaves above it. This creates a more sustaining high register whistle tone. This sound could be compared in a similar vein with Groove Holmes (an organist who has often been pointed to for using a unique tone and high register group of stops that separated him from Jimmy Smith and the majority of hard bop players at the time).⁷⁷ On a live version of “Whistle While You Work”, McDuff accentuates the high register with a combination of the 16’ and 1’ providing the highest and lowest frequencies, while mixing in what appears to be a touch of the fundamental from the 8’, potentially out in the 4 to 6 digit range.

The last key point that stands out in Jack McDuff’s work has to do with his emphasis on composing as much as playing. McDuff has stated that he thinks compositionally when orchestrating on the organ. In an interview with *Keyboard*, he admits to devoting more time to writing than practicing. When asked if he changes stops mid-tune, he answers, “Yes. It depends on where the tune is going. Now that I’ve gotten more into writing, it’s kind of pre-planned.”⁷⁸ This last statement resonates with my own process in writing these original works. A major part of my process involved planning ahead and setting up the organ to pre-plan for stop changes in order to facilitate the shape of the compositions.

That McDuff focuses more on composing and on his bass parts reveals something else that makes the separation clearer between him and Smith. In his interview with *Keyboard* he

⁷⁷ Groove Holmes stops have been documented as adding the uppermost harmonic to the basic Jimmy Smith combination: 888000008. Tony Monaco demonstrated how the switch from one to the other is easy, by either triggering the percussion on or off. Groove Holmes, for the record, is one organist who was less than thrilled to be compared to Jimmy Smith.

⁷⁸ Bourland, “Jack McDuff,” 28.

claims that “I haven’t practiced in twenty years. Ordinarily, every chance I have to practice, I’ll compose instead.”⁷⁹ Choosing writing over practicing would have to create some degree of limitation in McDuff’s dexterity. When speaking with Joey DeFrancesco, McDuff humbly comments that DeFrancesco’s level of speed and technique (inspired by Smith) is something he could not see himself reaching.⁸⁰

As much as the bass interaction has been discussed, at a certain point the demands of playing organ bass must override the level of soloing. Tony Monaco commented that the reverse could have been true of Smith. “Even though Jimmy Smith played kinda really cool bass lines sometimes, you could tell that he was predominantly thinking about what he was gonna blow with his right hand.”⁸¹ Jack McDuff would not have been operating on the same theoretical or technical level as Jimmy Smith in his right hand, but he was able to think as a strong bass player and as a composer and arranger to create danceable, driving rhythms.

Jimmy McGriff (1936 - 2008) at first glance follows a similar path to that of Smith and McDuff. Like the others, he started by playing string bass, and what was unique about McGriff’s path to the organ was his upbringing in Philadelphia, which has been well-established as a location for jazz. McGriff further confirmed this by listing the names of organists that were either located there, or came through, including Jimmy Smith, Groove Holmes, Charles Earland, Milt Buckner, Shirley Scott, and Larry Young. Of these players, McGriff is reported to have studied at least to some degree in “private sessions” with Smith, Buckner, and Holmes.⁸²

⁷⁹ Bourland, “Jack McDuff,” 8.

⁸⁰ Surowicz, “Organ Groovin’ With Joey D & Brother Jack,” 22-23.

⁸¹ Tony Monaco, interview by author. 3 December, 2012.

⁸² Bob Doerschuk, “Jimmy McGriff: ‘jazz organ is alive and growing’,” *Keyboard* (January 1984): 30.

The fact that he was a bass player first enabled him to incorporate the “string bass” pedal technique similar to Smith and McDuff. McGriff also mentions the variances of either tapping the pedals before or after the left hand, as was discussed in the demo by Tony Monaco. He also goes on to mention the option to have tremolo on the pedals⁸³ (which is a good introduction to looking at the key points that differentiate McGriff’s style from Smith and McDuff).

Though he remained a peer and a friend of Jimmy Smith’s, Jimmy McGriff made a conscious effort to make not only his playing different from Smith’s, but to physically modify the organ in a number of ways, so that internally it would react and sound different to begin with. In 1984 *Keyboard* reported on a few of these specifics, or at least as many as McGriff was willing to share:

He is reluctant to go into detail about his “secrets,” other than to divulge that he had split both manuals to allow for separate upper and lower keyboard registrations on both, rewired the presets, made the key action adjustable through a 20-minute operation he declines to explain, eliminated the click sound that can usually be heard on release of the key on a stock B-3, separated the pedals from the rest of the instrument’s output, and altered the bass sound on the lower manual to make it easier to approximate a string bass or bass guitar effect. “The engineers from Hammond wanted to buy my organ to figure out how I did all these changes,” he grins, “but I wouldn’t sell it to them.”⁸⁴

With the specified or un-specified tricks and modifications, McGriff was able to create a sound that current organists are still fond of, for the extra amount of grit and drive that comes across on early hits of his including “I Got A Woman”⁸⁵ and “All About My Girl”, both from 1962. Denis Keldie re-iterates:

I’ve probably seen McGriff more than any other organist, and I was always impressed by just the range of different tones and techniques that he used. He used the reverb a lot

⁸³ Doerschuk, “jazz organ is alive,” 32.

⁸⁴ ibid.

⁸⁵ Interestingly enough, Smith, McDuff, and McGriff have each recorded their own versions of “I Got A Woman”.

more as part of the sound, he'd use the percussive thing as well...that [overdrive] sounded pretty hot when he recorded that ["All About My Girl"], and I think he had the percussion cranked up too. That was kind of the Jimmy Smith sound kicked up a bit. He had some really great voicings, and just a real great assortment of sounds and techniques. The *Live At The Apollo* album he did, that's the one that I recommend to a lot of people to listen to, cause he pretty much covers the whole range of jazz organ on that record, it was a double album, so there's quite a bit of stuff on there.⁸⁶

Similarly, Michael Fonfara singled out McGriff, "because there was something really raw about his stuff...and he made it squawk more, he made it howl more...it was overdriven, it was more grumpy sounding, something about Jimmy McGriff."⁸⁷

Minus the overdrive, McGriff's basic lead sound appears to be relatively standard with the rest, using the grouping of the first three drawbars, and potentially adding a touch of the fourth for extra colour. There are also moments on recordings by McGriff where he uses the full organ sound as well as the Erroll Garner style. On "MG Blues" he uses the Garner registration and pulls out the full stops at different points in the same tune.

One more facet of his work as an overall keyboardist was his willingness to experiment and play other keyboards as part of his larger set up, including the Fender Rhodes and Minimoog, which he told *Keyboard* were used "as an update to today's sound"⁸⁸. The comment fits with the context of 1984, when vintage instruments such as Hammonds were on the decline. Though Denis Keldie recalled seeing him during this phase at a venue in New York, and recalled how the audience, even at that time, would have preferred his organ work.

[It] was 1982, back when jazz organ was sort of bottoming out, and he had...I guess he was trying to remain relevant. He had a B-3, it was a great sounding B-3, piano, and on top of the organ he had, it was an ARP Quadra, an analog synth. It was the real kind of

⁸⁶ Denis Keldie, interview by author. 2 November, 2012.

⁸⁷ Michael Fonfara, interview by author. 14 December, 2012.

⁸⁸ Doerschuk, "jazz organ is alive," 32.

Billy Preston synth, sort of “dwee, dwee-dwee-dwee dwee”. You could just see everybody cringe when he started playing it, and it was kind of like “uh! Stick to the organ, that’s what we came to hear!”

Even with his tweaking of organs and willingness to experiment with other keyboards, the common aesthetic that Jimmy McGriff is associated with is that of the blues. Even with all of the similarities between the three players (one is a decent amount of blues influence for each of them), McGriff is the one who explicitly wanted to position himself as a blues player (which is what he believed would separate him from being another Jimmy Smith follower). One uncredited radio interview quoted McGriff as saying “Jimmy Smith is king of the jazz, but when it comes into the blues thing, we got a different outlook on things.”⁸⁹ In the earlier *Keyboard* interview, McGriff stated how he wanted to make this clear separation evident from his first album by focusing on his blues and gospel influence. “My first album wasn’t a jazz album. It had jazz tunes on it, but I was more into the church-type thing. If you put on two albums, one by Jimmy Smith and one by me, you would hear more of a jazz thing from Jimmy Smith and more of a church-type organ coming out of me.”⁹⁰ McGriff does not state explicitly that he could not reach the same level of technique as Smith, but mentions that the comparison didn’t bother him since “Jimmy Smith was so far out in front”.⁹¹ The issue of constantly being compared to Smith provides a built-in restriction. For McGriff or anyone else who followed the combination of playing left hand bass with foot pedals while soloing with the 3rd harmonic percussion over those template settings, they would have had to find other ways to separate themselves. Otherwise, they would not have been remembered beyond sounding exactly like Jimmy Smith. By

⁸⁹ Matt Rogers, “Jimmy McGriff (1936–2008): Beautiful Blues,” *Wax Poetics* 30 (2008): 24.

⁹⁰ Doerschuk, “jazz organ is alive,” 30, 32.

⁹¹ Doerschuk, “jazz organ is alive,” 30.

prioritizing his blues and gospel feeling over the level of jazz vocabulary, and by modifying the technology of the organ, Jimmy McGriff was able to successfully distinguish himself.

With Smith leading the way, McDuff and McGriff are all great cases of jazz and blues co-existing, and the Hammond Organ itself is no small part of that. I would argue that this particular organ sound, with these artists playing it, makes it hard or near impossible for the music not to come across as bluesy or soulful.

This relationship between blues and jazz brings to light the possibility that the above three players, as well as earlier players like Basie, Davis, and Buckner would not have made any distinction between the two styles as far as a common language. My findings and divisions of the terms blues and jazz have as much to do with marketing and music filing, where it is more likely that Smith, McDuff, and McGriff's recordings will be filed as jazz records, even with blues repertoire and with their soulful vocabulary. This opens the possibility for a much broader discussion of genre divisions and definitions that goes beyond my purposes in this writing.

Ultimately, the above three organists share a large number of similarities, and all of them had the ability to cross over to the different but related sounds of jazz, blues, and rhythm and blues organ. Jimmy Smith certainly had the ability to be funky, Jack McDuff could cover the uptempo, linear, swinging blues when called upon, and Jimmy McGriff could play jazz repertoire and work with a big band.

Chapter 3. The Memphis Stax Sound: Booker T. & The MGs

One of my first influences was the work of Booker T. Jones (1944), and his role in the session band at Stax records that came to be known as Booker T. & The MGs. The world of rhythm and blues and soul music are the areas of music that caught my ear and drove my passion for the Hammond Organ.

Booker T. & The MGs' recordings and their instrumental repertoire was some of the first I attempted on organ. The larger catalogue of Stax records with them as the backing band shaped my sense of rhythm and blues keyboard playing from hours of playing along with those recordings. I can still listen to tracks by Otis Redding, Sam & Dave, or the MGs themselves, and hear their influence.

Booker T. Jones started at Stax as a young and trained player with abilities as a multi-instrumentalist. He furthered his studies in music at Indiana University during the time Booker T. & The MGs remained active.⁹² The training proved to be an asset for how later tracks by the group were composed. Jones played on the studio session that produced the first hit for Stax Records, not quite at age sixteen, playing baritone sax behind Rufus and Carla Thomas on “Cause I Love You” (1960).⁹³ Less than two years later, the ensemble that became Booker T. & The MGs began to take shape.

Jones' path as a keyboardist did not involve the organ as a first instrument. He recalls discovering the Hammond Organ at age nine at his piano teacher's home.⁹⁴ He later indicated that he would be able to study from this same teacher on piano *and* organ.

⁹² Rob Bowman, *Soulsville, U.S.A.: The Story of Stax Records* (New York: Schirmer Books, 1997), 74.

⁹³ Bowman, *Soulsville, U.S.A.*, 9.

⁹⁴ Richard Williams, “The Hammond Was Mysterious, an Enigma,” *Guardian*, April 10, 2009: 5-5, accessed October 16, 2012, <http://search.proquest.com.ezproxy.library.yorku.ca/docview/1035944457?accountid=15182>.

Booker T's role with the organ in the space of the larger Stax sound is something that developed by chance, since he was more likely to accompany on piano in a session behind a vocalist.⁹⁵ For sessions that combined both keyboards behind vocals, Isaac Hayes would have been on organ. The riff that came to define "Green Onions" started with him experimenting with that riff on piano at home,⁹⁶ before the piece evolved in the studio where he played the Hammond M-3 spinet organ. Starting with that track, the Hammond became the keyboard of choice on the majority of MGs' instrumentals out of what Jones has described as "a fun diversion."⁹⁷

Booker T. Jones' stops have become a signature sound that has been well-documented, using only the first four drawbars (888800000). He offers a clear explanation of this as well as other variances in Bowman's *The Stax Sound: A Musicological Analysis*.

'[The first and third] don't have any dissonance,' mused Jones, 'so that's where the second and the fourth come in. They add those notes that aren't really in the note that make it sound kind of full and fat and give it the edge...I liked the idea of a simple sound made out of just a few harmonics. So usually I ended up using no more than four drawbars. 'Sometimes I'd pull out the first one, the third and the fourth and then the last one, which gave me a little bit of a bright sound but also darkened it up a little bit at the same time on the low end by taking that first fifth out.' For background sounds Jones sometimes used the fourth drawbar alone.⁹⁸

The 'bright sound' Jones mentioned (808800008) is an alternate setting that can be heard on tracks including "Soul Dressing" (1964), and "Booker-Loo" (1966). It serves as a good starting template when playing "Hip Hug-Her" (1967), though in my attempts to approximate that with

⁹⁵ Rob Bowman, "The Stax Sound: A Musicological Analysis," *Popular Music* 14.3 (1995): 315, accessed December 23, 2009, <http://www.jstor.org/stable/853127>.

⁹⁶ Adrian Chamberlain, "Booker T. Never Tires of Green Onions," *Times - Colonist*, Jun 13, 2009, accessed October 16, 2012, <http://search.proquest.com.ezproxy.library.yorku.ca/docview/348355662?accountid=15182>.

⁹⁷ Bowman, "The Stax Sound," 315.

⁹⁸ Bowman, "The Stax Sound," 315-316.

the original recording, it does not match up exactly, leading me to believe that there could have been some other harmonics active or certain harmonics active to lesser degrees.

Booker T's influences reveal some interesting sources, in how he came to the "Green Onions" tone. He revealed to *Keyboard* magazine in 1980 that of the earlier organ players, he was most interested in Jack McDuff, and recalled sitting beneath the organ to see how McDuff worked the pedals.⁹⁹ Jones has pointed out that the "reedy" quality of the sound employed by Ray Charles on "One Mint Julep" (1960), on the album *Genius+Soul=Jazz*, was a tone he was modeling his own sound after.¹⁰⁰

Ray Charles' organ sound was brought to my attention by Denis Keldie, showing me that the Ab reverse preset key on the upper manual was the sound utilized by Charles.¹⁰¹ This proves true when testing this preset on various Hammonds, and can be reached by using the approximate drawbar combination: 006876400, or by adding the second to last drawbar halfway, depending on the amount of high register desired. Comparing these sounds reveals that Booker T's basic sound did come incredibly close to that of Charles on "One Mint Julep", since that preset is virtually the same group of stops if they were raised an octave, minus some of the odd harmonics. For comparison, I set the following two groups of drawbars on the upper and lower manuals: 008888000 for the brighter tone, and 88880000 for the warmer tone. The timbre and range is identical, with the lower group of harmonics being played an octave above the higher

⁹⁹ Bob Doerschuk, "Booker T.: Beyond 'Green Onions': A Neo-Soul Recipe For The 1980s," *Contemporary Keyboard*, (January 1980): 32.

¹⁰⁰ Jeff Touzeau, "From Green Onions To Holey Potatoes," *Pro Sound News, International* 31.3 (March 2009): 58, accessed October 16, 2012, <http://search.proquest.com.ezproxy.library.yorku.ca/docview/200240221?accountid=15182>.

¹⁰¹ Denis Keldie, interview by author. 2 November, 2012.

group.¹⁰² The sounds also come across as very similar since “One Mint Julep” and “Green Onions” were both recorded with a flat sound, and no addition of a Leslie or chorus/vibrato.

The aim of studying these past examples of organ work has largely been that of attempting to uncover unanswered questions about the organ and the players cited, making it the musical equivalent of a forensic investigation, or studying magicians to answer “how did they do that?”

Fortunately in the case of Booker T. Jones, and his work with the MGs, plenty of information has already been well-documented, with Jones himself often explaining his techniques, both in his practices on the organ and how the band’s songs came to be composed. The goal in this chapter is to better understand the musical theory and structure behind those instrumental MGs hits. With “Green Onions” being the first hit for Booker T. & The MGs in 1962, reaching number 1 on the R&B charts, the song lives on today as a prime example of an instrumental hit record, a staple of blues repertoire along the same lines as “Back At The Chicken Shack”, and according to all accounts, one that Jones does not tire of playing to this day. The mystery behind it involves its tonality, and how the combination of blues vocabulary with a danceable beat and an ascending series of chord changes places it in this overlap between major and minor.

There are auditory and tonal cues that could lead a listener or a player to hearing “Green Onions” in either a major or minor tonality. The tendency to hear the piece as a minor blues is due to the immediate leap of a minor third in the first bar. Upon further review, most of the organists surveyed agreed that it is in a major key.

¹⁰² The trick described here can be applied to different groups of registrations, taking into account that different drawbars are within an octave range of one another in the harmonic series.

Denis Keldie remembers playing it with The Lincolns when it was suggested in a minor key, and felt that “it always sounded wrong to me”, implying that they would play the very first chord before the leap as a minor triad. He attests to hearing the major third on the downbeat of the I, IV, and V chords.¹⁰³

Lance Anderson, who hired Booker T. Jones at his own festival in Orillia, Ontario in the summer of 2012, said that while watching him play, Jones “puts that [major third] in...” though very subtly, almost as a skip or a blue note leading from Ab to A. He adds that “if you talk to a guitarist, they all call it a minor blues.” To Anderson, the fascinating element of the piece is not just the tonality, but its sense of swing, which he describes as “a very odd phrasing, very old school phrasing. Actually goes back to Wild Bill Davis and those guys, sounds more like it’s from that era...it’s not like Jimmy Smith, it’s not like anybody else...”¹⁰⁴ There is a recording Milt Buckner made of the song, and the way he plays it, to my ears the major third is audible right off the top.¹⁰⁵

Here is my own theory on why it is easy to hear it as minor. The entire structure of the organ part is built on the sequence of harmonic and bass movement that moves up by a minor third, beginning on F, moving to Ab, followed by Bb (I - bIII - IV). The Ab chord, however, is moving in unison with the bass, and therefore is not acting as an Fmi7 chord. Booker T. Jones has commented on how all three of the melodic and chordal players in the MGs would play parts in unison, including his own left hand work in relation to the bass.

¹⁰³ Denis Keldie, interview by author. 2 November, 2012. On a sidenote, Keldie recalls learning Booker T instrumentals “Green Onions” and “Hip Hug-Her” in alternate keys, up or down a semitone depending on who played them, suggesting that there may have been vari-speed on the vinyl releases.

¹⁰⁴ Lance Anderson, interview by author. 24 October, 2012.

¹⁰⁵ “Milt Buckner - Green Onions,” [n.d.], video clip, accessed February 19, 2013, YouTube, <http://www.youtube.com/watch?v=f3RvcFNBxZ8>.

Yeah, I play left-hand bass on so many of the songs. The bass on ‘Green Onions’ is the left-finger bass playing the same thing as [the bass guitar]. ‘Time Is Tight’, ‘Hip Hug-Her’ —the bass and left finger play the same thing. It’s doubled, sometimes tripled, ‘cause Steve would play it; all three of us would play the same figure as my left hand. It simplified it and made it sound like a groove. It has to do with musical voicing and choices. I play pretty sparsely. I don’t usually play more than four or five notes at a time, and that leaves room for other people to play around what I play musically.”¹⁰⁶

To show how music can be heard and interpreted differently, I admit to not hearing that major third on the first beat. When the motif repeats during the first eight bars, including the intro, I hear Booker T omitting the third of both the F and the Ab chord. A full transcription of the opening theme, as well as the organ solo is shown on the chart on the following two pages. The different progressions that follow (when the blues progression moves to the IV) all appear to be built on a sequence of major triads, even though they are still ascending by a minor third. The major triads can account for the commentary of organists hearing and feeling the tune as major. When all the notes are taken into account from each chordal progression, it is difficult to base the tune on any particular minor scale, since there are exceptions to all of them that appear — natural minor, harmonic or melodic minor. There is also the argument, in contrast to my own, that the opening material places “Green Onions” in the mode of F dorian with a key signature of three flats. Jones’ solos rely predominantly on the F blues scale and make little to no use of the D natural (from F dorian) as a point of improvising. Jones has pointed out that the song was recorded before he completed his music degree. He has compared it to his voicings used on “Hip Hug-Her”, saying that his later knowledge of exact notes and chords “gave me confidence I didn’t have when I recorded ‘Green Onions.’”¹⁰⁷

¹⁰⁶ Matt Rogers, “Soul Current: Organist and Memphis native Booker T. Jones was the life force of the Stax sound,” *Wax Poetics* 35 (2009): 49.

¹⁰⁷ Bowman, *Soulsville, U.S.A.*, 115.

Fig. 3.1: “Green Onions” transcription of melody and organ solo.

ORGAN

GREEN ONIONS

EASY SWING $\text{♩} = 140$

JONES/CROPPER/STEINBERG/JACKSON

NO LESLIE
888800000

2 (5) F^5 $A\flat^5 B\flat$

6 F^5 $A\flat^5 B\flat$ 2 $B\flat$ $D\flat E\flat$ $B\flat$ $D\flat E\flat$

11 F^5 $A\flat B\flat$ F^5 $A\flat B\flat$ C $E\flat F$ $B\flat$ $D\flat E\flat$

15 F^5 $A\flat B\flat$ F^5 $A\flat B\flat$ ORGAN SOLO

20

25 (29)

2

30

35

38

41 (41) ORGAN SOLO, 2ND PASS, 1:52

45

49

53 (53)

57

61

Jones' comment suggests that the notes used in "Green Onions" were not coming from a theoretical or modal perspective. During the recording session he likely would have focused more on the sound of the initial riff.

Other commentary from Booker T. Jones on the subject partially lines up with my auditory impressions of the piece. He tells Bowman about his preference for sparse voicings on the keyboard,

...making as much sound as you could with few notes. My game plan was to get largeness out of sparseness. For instance, two notes can sound really large if they're the right ones. If you want a simple sound, you just work with fifths... You don't need the other notes, because they're implied in the melody. If you want to thicken it up some, that's where the thirds and sevenths come in.' Jones pointed out the MGs 1962 hit 'Green Onions' as an example where he played open fifths for the whole song.¹⁰⁸

Jones does not explicitly indicate a preference or an emphasis of major or minor, but his comment does lead us to a closer look at what could really be happening between the chords and the notes used in the melody.

I examined the recording closely to hear if there was an audible example of a raised 9 chord. It is a voicing that enables a soloist to not restrict themselves to either the major third or minor third exclusively. Dr. John has talked about the key factor of the raised 9 (#9) chord.

When you hear the raised 9 chord, it's neither major nor minor. It has the elements of a major chord because it has a major third, but it also has the minor third, so you have both. And this is important when you do blues songs, because in most songs the melody is on the minor third, even though the underlying chord may be major.¹⁰⁹

The above comment about the melody with the underlying chord gives this song some context since it can emphasize the point of the organ part in that the "chords" are the melody. The

¹⁰⁸ Bowman, "The Stax Sound," 302.

¹⁰⁹ Mac Rebennack, "Raised 9ths," in *Dr. John Teaches New Orleans Piano Vol. 3: Sanctifying the Blues*, (Woodstock: Homespun Tapes, 1997), 16-17.

struggle with using the #9 chord is that there is no point on the recording where the combination of a natural and flattened third are heard simultaneously. This applies to the organ part and guitar part on their own, and as the two parts relate to each other. Steve Cropper's guitar part features his stabs of sparse voicings that enter on the last offbeat of every bar. Each of these voicings anticipates the root of the progression at the time and adds a major sixth above it, before bending to the flat seven on the downbeat. During the organ solo, the guitar is not providing a chordal accompaniment at all since it is ascending in unison with the bass, playing single notes over the pattern discussed earlier.

Fig. 3.2: “Green Onions” organ intro and melody with guitar.

The musical score consists of four staves of music, divided into four sections by measure numbers 1, 5, 9, and 13. The instruments are GUITAR (top staff) and ORGAN (bottom staff).

Section 1 (Measures 1-4):

- GUITAR:** Rests throughout the section.
- ORGAN:** Playing eighth-note chords. Measure 1: F5, Ab5/Bb. Measure 2: F5, Ab5/Bb. Measure 3: F5, Ab5/Bb. Measure 4: F5, Ab5/Bb.

Section 2 (Measures 5-8):

- GTR.** Playing eighth-note chords. Measure 5: F5, Ab5/Bb. Measure 6: F5, Ab5/Bb. Measure 7: F5, Ab5/Bb. Measure 8: F5, Ab5/Bb.
- ORG.** Playing eighth-note chords. Measure 5: F5, Ab5/Bb. Measure 6: F5, Ab5/Bb. Measure 7: F5, Ab5/Bb. Measure 8: F5, Ab5/Bb.

Section 3 (Measures 9-12):

- GTR.** Playing eighth-note chords. Measure 9: Bb, D_b/E_b. Measure 10: Bb, D_b/E_b. Measure 11: F5, Ab/Bb. Measure 12: F5, Ab/Bb.
- ORG.** Playing eighth-note chords. Measure 9: Bb, D_b/E_b. Measure 10: Bb, D_b/E_b. Measure 11: F5, Ab/Bb. Measure 12: F5, Ab/Bb.

Section 4 (Measures 13-16):

- GTR.** Playing eighth-note chords. Measure 13: C, E_b/F. Measure 14: Bb, D_b/E_b. Measure 15: F5, Ab/Bb. Measure 16: F5, Ab/Bb.
- ORG.** Playing eighth-note chords. Measure 13: C, E_b/F. Measure 14: Bb, D_b/E_b. Measure 15: F5, Ab/Bb. Measure 16: F5, Ab/Bb.

Despite the best efforts I was unable to find a confirmation on the tonality from the organist who played it.

One other perspective on tonality bears mentioning and that is the paradox of examining the tonality of blues, an african american form of music and style of performance, from standard Western musical theory. Gerhard Kubik discusses this in his article *Bourdon, Blue Notes and Pentatonism in the Blues: An Africanist Perspective*. So often the amount of pitch variation in blues as an oral tradition goes against the traditions of the Western tempered system, leading to us using terms such as “blue notes”.¹¹⁰ Kubik offers a theory that does not give special emphasis to pitches such as the minor 3rd or 7th. He puts this in the context of vocals, offering the following explanation of blues melodies and patterns:

The way out of this deadlock is simply to recognize that each vocal line in a blues performance represents an integrated, patterned whole, without any particular tones having special status. Second, the patterns formed by a blues singer’s individual pitch repertoire are part of a cognitive *system* that is mostly of non-Western origins, in some individuals more, in others less.

An interval is not defined universally. What in one culture is distinguished as “major” and “minor” is certainly also *perceived* elsewhere as a difference, but not necessarily *conceptualized* as such. A distinction can be irrelevant.¹¹¹

The final comment stands out for giving much less weight to a choice of one or the other (major or minor). Booker T. & The MGs’ work with “Green Onions” provides a paradox of its own with this theory in that they are an instrumental ensemble, and that the lead instrument, the organ, is incapable of bending pitches in the same way that a human voice or a guitar is. The targeted notes would have to remain specific. Still, given Jones’ earlier commentary explaining his

¹¹⁰ Gerhard Kubik, “Bourdon, Blue Notes, and Pentatonism in the Blues: An Africanist Perspective,” in *Ramblin’ on my mind: New perspectives on the blues*, by David Evans (Urbana, IL: University of Illinois Press, 2008), 15.

¹¹¹ Kubik, “Bourdon, Blues Notes, and Pentatonism in the Blues,” 17, 19.

theoretical perspective when he wrote the song, he may not have been imagining the piece as either major or minor, but simply a blues.

With the accumulated discussions on the subject, and the examination of many facets of the piece, my finding is that the tonality is no easier to define, and ultimately less important to define. What is more important for this study is the result that different groups of musicians react to the piece differently, depending on the parts they are playing. Keyboard and organ players are more likely to relate to the tune as being major due to thinking in terms of chords, and thinking of each chord as an individual part. They hear the major voicings when the progression moves to the IV and V chords (and in some cases, the major voicing over the I chord at the beginning). The tendency of guitar players or other musicians to think of the song as being in a minor key comes from the effect of the movement that consistently ascends by a minor third. This is taking into account commentary from players who, while working in the blues idiom, are still familiar with Western harmony and theory. My conclusion upon examining these parts is that they are specific to each instrument and player, and are not uniform chord changes for the ensemble. The parts overlap in such a way that the theory behind the harmonies becomes less important than the impact of the overall sonic effect.

Other compositions and recordings by Booker T. & The MGs will come up again when my own composing is discussed in this style, but seeing how much there was to uncover from a single 12-bar instrumental proved to be truly amazing.

Chapter 4. Gospel, soul, and crossing over: Billy Preston

The last organist could be the most important one. Billy Preston (1946 - 2006) I place right at the top for making me a fan of the organ.

With plenty of church training to begin with, and a pure soulful ability to make the organ scream and growl, Preston also managed to cross over to such diverse areas of music that his resume virtually reads like a clinic in being a well-rounded employable keyboardist today. These are his career highlights: backing up Mahalia Jackson at age 10 and later accompanying Rev. James Cleveland¹¹²; childhood footage of a classic organ duet with Nat King Cole on “Blueberry Hill”¹¹³; adding soul organ behind Sam Cooke and Ray Charles; his contributions to rock and roll playing with Little Richard, The Beatles, and The Rolling Stones¹¹⁴; and for a personal favourite that shows he could play pure blues piano, his solo on “Just Right Tonight” on Aretha Franklin’s record *Hey Now Hey* (1973) is up there. All of the above does not even touch Preston’s work under his own name.

His earliest instrumental repertoire as a solo artist provided a type of inspiration for my own composing that was not only due to the musical devices or specific organ sounds generated. By having a decent size collection of releases with purely instrumental repertoire, his albums fell in line with my focus on composing for the organ instrumentally. Preston’s solo work during this time was entirely instrumental. Albums such as *16 Yr. Old Soul* (1963), *The Most Exciting Organ Ever* (1965), and *Wildest Organ In Town* (1966) all showcase his range performing instrumental

¹¹² Bob Doerschuk, “Billy Preston: From Ray Charles To The Beatles To A Solo Career,” *Contemporary Keyboard* (February 1977): 24.

¹¹³ “11-Year-Old Billy Preston & Nat ‘King’ Cole - Blueberry Hill 1957.flv,” [1957], video clip, accessed March 7, 2013, YouTube, <http://www.youtube.com/watch?v=kxSHBIXfFPE>.

¹¹⁴ Tom Brislin and Ernie Rideout, “Billy Preston: The Last Words,” *Keyboard* 32.8 (August 2006): 24-25, accessed October 6, 2012, <http://search.proquest.com.ezproxy.library.yorku.ca/docview/1027919161?accountid=15182>.

versions of what would have been the hits of the time, ranging from R&B, funk, Motown, and Beatles covers. These sessions featured original examples composed by Preston as well.

What this speaks to is Preston's ability to interpret melodies instrumentally, and the organ remaining such a huge factor in creating instrumental records that were released as popular hits during this time. Examples include Booker T. & The MGs with "Green Onions", the similar lineup at Stax of The Mar-Keys who released "Last Night", "One Mint Julep", recorded by Ray Charles, and by Xavier Cugat, Prez Prado's hit "Patricia"¹¹⁵, or even "The Happy Organ" by Dave "Baby" Cortez.

Paul Shaffer told me of an inspiration along similar lines, when he came to compose the theme song for *Late Night With David Letterman*, (which in future years was also used on *The Late Show With David Letterman*).

Going back to the early 80s... I never forgot the scene at The Zanzibar Tavern, when I was at U of T. This was one of Toronto's venerable topless go-go establishments. At the Zanzibar they had an organ sitting on the bar, and they had live music for the topless performers to dance to. Jackie Mittoo, he was a Jamaican guy, very influential in the early days of reggae. Some say he developed the reggae comping style for keyboard, but he became a Toronto resident...in the late '60s, and I saw him come by The Zanzibar—it was a Saturday afternoon—sit in on the Hammond Organ and play "Betcha by Golly Wow" by The Stylistics. Just the melody, wasn't even soloing, and just a beautiful sound... And I thought, "that's the kind of band I wanna have on *The Letterman Show*", based on the organ, playing the melody instrumentally to soulful tunes.¹¹⁶

Preston used a wide range of sounds in his instrumentals as well as accompaniment parts behind vocals. It has proven difficult to pin down one signature "Billy Preston" setting. He clearly was flexible enough and adept at the organ to keep adjusting drawbars, although he

¹¹⁵ Denis Keldie, interview by author. 2 November, 2012.

¹¹⁶ Paul Shaffer, interview by author. 5 October, 2012.

claimed to “not think about them that much”.¹¹⁷ In the discussion of my own music, I will at least point out some starting points for coming close to his sound. One feature that Preston exploited, as did Booker T, is one that is not necessarily transferrable between all organs depending on the set up, and that is the capability of a three-speed Leslie. This enabled him to go from stopped to fast or slow, something he did quite frequently on his early recordings.

As was pointed out in the introduction, Preston’s flexibility in moving between genres appeared to come quite naturally, but it is particularly interesting to read his own thoughts on the overlap between sacred and secular music as it pertained to his own career. When he was asked by *Keyboard* in 1977 if there was any change in his playing from gospel to rock, he answered “I always put a little gospel in whatever I play. I play gospel pretty much through rock; it’s very easy to do that… [The Religious background] It gives it a little joy, Gospel is not as stereotyped or as written-out as rock. There are no charts, so you play more by feeling.” Balancing the aesthetics of different worlds did not appear to be an issue for Preston, adding “it doesn’t bother me, because I find God in all music.”¹¹⁸

While Preston stands as an example of someone able to cross over from sacred to secular, I do not examine his gospel playing in this chapter. Denis Keldie made me aware how there is an entire scene of stellar organists who have never been known outside the church, since they are unlikely to perform anywhere else. He has talked about seeing an instructional tape that outlined some unorthodox techniques.

[It] really surprised me to see it because there was a lot of techniques that I didn’t have a clue about, that they use in gospel music… on the upper manual, they would have a darker kind of sound, where they would double the top note on the right hand [with

¹¹⁷ Doerschuk, “Billy Preston,” 25.

¹¹⁸ Doerschuk, “Billy Preston,” 24-25.

virtually the first five stops all the way], then have the more transparent [high register stops] on the lower manual. I had never seen anybody play like that with the right hand on the lower manual, and the left hand on the upper.¹¹⁹

A number of different dissertations exist that closely explore the musical traditions of the Baptist Church, a couple of which are focused on the organ, or keyboard instrumentation and repertoire. They are included in the end bibliography for further reading.

Billy Preston's keyboard work with The Beatles has been well acknowledged, in particular his Fender Rhodes solo on "Get Back". From those same sessions for the *Get Back* album that eventually became *Let It Be*, the song "Let It Be" features Preston accompanying The Beatles on organ. This track exemplifies why I have devoted a good portion of my life to learning the organ.

An investigation into the recording of "Let It Be" was of special interest for a number of reasons. Firstly, it was Billy Preston's solo organ breakdown from that record that I can point to as the musical moment that got me hooked on the organ at age 8, and more importantly made me aware of the organ by seeing the film footage from "Let It Be" around the time *The Beatles Anthology* was released. In the years since then, as I have devoted more and more time to exploring the specifics of electric organ, my interest in that moment has not diminished largely because of the mystery of it. The album *Let It Be* is one that remains fascinating and mysterious because of the specific circumstances under which it was recorded that separate it from any other Beatles album.

The album was tracked at Apple Studios when Billy Preston joined the sessions, after re-locating from Twickenham, making it the only Beatles album not recorded at EMI/Abbey Road.

¹¹⁹ Denis Keldie, interview by author. 2 November, 2012.

Since the sessions were less than harmonious among The Beatles, the album remained unfinished after tracking and was not released until a year later in 1970, after being cleaned up and produced for release by Phil Spector.

As this writing has been devoted to the study of the Hammond Organ, what was a major shock to learn in recent years, and something that sparked the mystery even further, was learning that the organ part from the title track may not have come from a Hammond. Denis Keldie told me that Preston's organ work on the album was on a Lowrey DSO Heritage Deluxe organ. Lowrey was the type of organ used by Garth Hudson in The Band. It had been used by The Beatles earlier on the famous intro to "Lucy In The Sky With Diamonds".¹²⁰ I was more than slightly shocked to find out that the sound that drew me to the organ in fact came from a Lowrey. However, to make sure that this was true, I searched as many sources as possible.

The song "Let It Be" has been released three times: once as a single, once on the *Let It Be* album produced by Phil Spector, and again on *Let It Be...Naked*, each of which feature different solos, different mixes, and different overall sonic qualities. The instruments documented from the time of the original sessions (January 1969) by Kevin Ryan & Brian Kehew from *Recording The Beatles* include a Hammond L-100 and Leslie 147, plus an additional 147 that George Harrison's guitar would have been fed through, and they indicate that between 1969 and 1970, both a Lowrey TLOR, and a Lowrey Heritage DSO-1 Organ were available.¹²¹ In the *Let It Be* film, early rehearsal footage does show Preston at the organ, which I believe to be the Lowrey DSO-1. This is based on the sound and tonal qualities, but also more importantly by looking at the built-in music stand attached to the top of the organ, which appears to be more consistent

¹²⁰ Andy Babiuk, *Beatles Gear* (San Francisco: Backbeat Books, 2001), 201.

¹²¹ Kevin Ryan and Brian Kehew, *Recording The Beatles* (Houston: Curvebender, 2006) 519, 529.

with the DSO-1 model than a TLOR.¹²² The film also features a full performance of the title track, which in my opinion highlights the tone of the organ and Preston's work on the organ better than any of the versions released on record.

The visual of Preston from this film is also interesting, since the film footage does not appear to perfectly match the rhythm and note selection on the audio of Preston's organ breakdown from this same clip. This shot is rather close up, almost too close to tell, yet during a performance of "The Long And Winding Road", there is a wider shot pulled back of Preston at the same organ. It is a sequence in which the audio certainly does not match the film, but it becomes more visible from this shot that Preston is indeed playing the Hammond L-100. One can tell that it is a Hammond L-100 due to the visual cues of the tabs attached to the organ above the drawbars, and that the keyboard appears to have less weight than the style of keyboard on a typical B-3 or a Lowrey, something that is unique to the L-100. Yet with the audio not matching the film, it suggests that these could have been quick edits in order to show the visual of Preston during keyboard solos, regardless of the source of the audio. What does not help to clear this up, is the session documentation of this final day of tracking and filming at Apple—January 31, 1969, the day after the rooftop performance—which multiple sources confirm was “staged specifically for the cameras.”¹²³

Another factor that adds to the mystery is that of the Leslie. If Preston was in fact on the Lowrey and not the Hammond, this increases and further obscures the potential sources that the rotary signal could have come from. Earlier documentation from The Beatles' sessions on

¹²² "The Beatles - Let It Be The Film (Full Version) with Rooftop Concert," [1969], video clip, accessed February 14, 2013, YouTube, <http://www.youtube.com/watch?v=SkOcCMdq310>.

¹²³ Steve Matteo, "We're on Our Way Home," in *Let It Be* (New York: Continuum, 2004), 88.

Revolver for “Tomorrow Never Knows” points out that the Lowrey DSO-1 had a smaller built-in rotary speaker, meaning it could stand independent of an external source. This would account for the Leslie next to the L-100 and the other Leslie used by George Harrison for his guitar. This was a sonic feature he used quite frequently on later Beatles recordings. There is also evidence that, “at some point, the Lowrey was actually modified to allow interfacing with a standalone Leslie speaker...”¹²⁴ This does leave open the possibility that the organ signal could have been sent through either a real Leslie or the internal rotary speaker. When documenting the recording process, the authors do not indicate Hammond or Lowrey specifically, merely indicating Organ on the flow chart of channels.¹²⁵

Finally, does the sound seem to be more that of a Hammond or a Lowrey? One thing that is clear is that the use of either of these organs would explain why the tone has remained difficult to duplicate from a standard B-3 and Leslie set up, since neither of these organs have the same chorus/vibrato controls, or even the same combinations of drawbars and stops available. The impressions of the verses, when Preston is accompanying with a soft tone and a slow rotor speed, are that of a wide and reasonably fast rate of vibrato, something that sounds characteristically more like a Lowrey than a Hammond.¹²⁶ The chorus usually features the organ with a somewhat fuller tone, and Preston turns the rotor to fast by the second pass of the chorus. At a fast speed, the source of the rotor becomes more difficult to distinguish, as it sounds convincingly like a real Leslie, and with my own experience, there is no basis for comparison to the built-in rotor on the Lowrey. The key moment of Billy Preston’s two-bar organ solo is, if anything, among the hardest

¹²⁴ Ryan, and Kehew, *Recording The Beatles*, 424.

¹²⁵ Ryan, and Kehew, *Recording The Beatles*, 528.

¹²⁶ For examining the sonic qualities, the musical examples cited were taken from listening to the version from *Let It Be... Naked*, which removes any of the orchestral additions, and allows the organ to be heard in the most detail.

points to tell, since by now he is making use of a bright tone emphasizing the high register, but with a slow rotor. The vibrato remains active, becoming a more telling feature with each listen. Behind the Leslie'd guitar solo, Preston is now holding pads and even further accentuating the high harmonics of the organ, with the rotor speed on fast. Beyond this, the pattern remains the same as far as slow to fast speeds, climaxing with the fuller sound and fast tremolo during the last time through the chorus, then ending with the recap of the 2-bar instrumental hook played by the whole band as the organ sustains with the vibrato on, but the Leslie on slow, as the track fades out.

Judging by the recording information and the audio footage (from as many angles as possible) I would suggest that Billy Preston's sound on "Let It Be" was coming from the Lowrey Heritage DSO-1 Organ. The qualities of the vibrato and the rotor are more suggestive of a Lowrey than a Hammond for the majority of the recording, and while brief moments appear as though they could be approximated from a Hammond, such as those during the final chorus, they are not dominant enough to discount the factors that point to the Lowrey.

What can be taken from Preston's contribution to "Let It Be" is the role of the organ as an accompaniment instrument. The uncertainty of the specific sounds or even which organ was used further accentuates the overall mystery of his singular sound (as confirmed by his own admission of not thinking of specifics). This is a larger discussion that came up again and again in speaking with organists. The performance practice that everyone emphasized was the role of balance in an ensemble. Especially when the organ is the accompaniment instrument, the organist has the task of self-mixing in order to compliment whatever is occurring sonically from the lead voice or instrument. Preston is not alone in recounting playing situations where the organists themselves

will admit to not knowing or recalling their own set up when grabbing and switching drawbars on the fly. Lance Anderson said “that’s why I gave that up” [trying to figure out exact sounds].¹²⁷ Michael Fonfara is one who is most at home playing organ in a band, stating the preference to working the drawbars in and out with one hand, and the keyboard with the other. This can create the effect of a wah-wah, but more importantly allows him to mix before finding a set sound where he says “I might lay on it for a bit.”¹²⁸ Denis Keldie mentioned working from an idea, then adapting, recounting a first-hand lesson in accompanying from Etta James.

I tend to stay out of the way of the vocal. I learned that working with a few singers, I got to work with Etta James. I played with her for a week, and by the end of the week, I had really, I really kind of got it that — oh, ok, I should definitely stay out of the way of the vocal and support it, wherever I can, but in no way interfere with it. I never got yelled at, but sometimes she’d turn around and give you a look, but I think that’s a pretty good rule of thumb...or whatever the focal point is... Comping, I guess means complimenting, rather than competing. A lot of it’s just common sense.¹²⁹

Billy Preston demonstrates the ability for the organ to accompany behind a voice, and the ability to lead and create the melodic and singular quality of the voice, which was a major consideration in composing the music based on this model.

¹²⁷ Lance Anderson, interview by author. 24 October, 2012.

¹²⁸ Michael Fonfara, interview by author. 14 December, 2012.

¹²⁹ Denis Keldie, interview by author. 2 November, 2012.

Part 2: Compositions, analysis, and context

Chapter 5. Early Jazz Composition: *Rain In July*

Introduction

“Rain In July” was written in the style of the first group of organists discussed in this paper, a la Fats Waller, Milt Buckner, Count Basie and Wild Bill Davis. In my own musical development on the organ, this group of players and this method of playing has been my most recent discovery. I began seeking out their organ work no more than two years before writing this piece.¹³⁰ This is particularly recent when compared to my exposure to the other three schools of playing selected for this thesis.

What I found interesting in composing this example was the broad scope of influences I was able to draw on which I believe is relevant to the historical context this was influenced by. As the findings from my research show, nearly every basic summary, history, or introduction to the Hammond Organ as a jazz instrument will cite Waller, Basie, Buckner, Davis, yet it is initially difficult to get past that point since these histories do not often go beyond simply mentioning these names as precursors to the sound pioneered by Jimmy Smith. This seems to translate into the notion that the organ was not relevant as a jazz instrument until Jimmy Smith. My aim is not to debate this theory. In fact, I believe there is something to be said for that argument, since Waller, Buckner, Basie, and Davis were all piano players first, who later came to the organ. Both Count Basie and Fats Waller were arguably much better known for their piano playing as two of the finest practitioners of swing and stride piano, while Milt Buckner and Wild

¹³⁰ Count Basie being the one exception, I have heard examples of his organ work over the years, though have not studied it closely before.

Bill Davis began the movement of block chord voicing, mimicking the sound of a big band horn section. In each of these cases you have musical devices that are transferrable between piano and organ, and I believe this crossover is a major element of my own work. I was able to use the characteristics of some organ timbres and the themes of big band arranging from this era as two starting points for this piece. My own limitation had to do with my lack of experience playing the organ in this style (relative to the piano). This impacted my decisions on how to orchestrate the piece when arranging it and preparing to record it, which will be discussed specifically in relation to the bass.

The above method reinforces the idea of the organ being an imitative device for orchestration which is the method of playing that Irwin focused on in his book of organ stops. As a result, the jazz Hammond sound we know today owes so much to the Jimmy Smith tone that one could make the argument that this group of precursors were not making the organ sound like an organ, as much as they were attempting to approximate the sound of a large ensemble.

The benefit of this type of playing is that the sounds created on the organ during this era were more expansive and the tonal possibilities greater than what we hear in contemporary jazz organ. The use of a wider range of timbres on the organ in that time period tapped into more of the organ's uniqueness, both through the various sounds themselves and the expanded possibilities in musical arrangement ideas that these sounds encouraged.

Analysis and structural overview

“Rain In July” is set up entirely within the space of the first bar, with the melodic theme in figure 5.1.

Fig. 5.1: “Rain In July” motif, bar 1.



The goal in using this single motif was to focus on the melody first, and to see where I could take it through different cycles and sequences. Working from a single idea as a starting point challenged me to think much more in terms of rhythm first and constructing the melody based on rhythm, then finding harmonies and changes to suit the melody. This contrasts with my natural inclination to think of chord progressions first and writing melodies around them. In the space of this single bar, I can point to the different feels I was going for, working from my influences.

As a whole piece, I was thinking in the vein of a 30s era swing tune, something that Fats Waller would have written. “Ain’t Misbehavin’” is a perfect example that introduces the theme within a single bar, and then develops it by transposing it. Looking one step further, the A and B section of the tune are both constructed on a rhythmic idea that is introduced, then developed, and can be shown here as theme A and B.

Fig. 5.2: “Ain’t Misbehavin’” Melodic themes.

Ain't Misbehavin'

Music by Thomas "Fats" Waller and Harry Brooks
Lyric: Andy Razaf

The musical score for "Ain't Misbehavin'" is presented in G major. The first section, labeled 'A', features a rhythmic pattern of eighth notes: C6, A7, Dmi7, G7. The second section, labeled 'B', features a rhythmic pattern of sixteenth notes: Ami. The music is in 4/4 time.

I took the same approach, thinking of one simple idea that could be developed based on one rhythm for the A section, then a contrasting idea to develop during the bridge by stretching the rhythm.

The opening bar of “Rain In July” introduces this first theme, which in terms of pitch material is repeated in the second bar, then slightly modified by the third and fourth bars. The intervallic relationship between the first and second notes is not a perfect transposition, though the rhythm stays the same. After these first two groups of two bars, new material is introduced, and the theme only appears with a rhythmic variation during the seventh bar, in which the introductory note is tied over from the previous bar, and the second note now lands on beat two.

I used the arrangement of “April In Paris” performed by The Count Basie Orchestra as a specific reference for arranging for a couple of reasons. First, it is an example of a melody that is heavily based on an introductory theme, as shown here:

Fig. 5.3: Saxophone Soli from “April in Paris” bar 9, concert score.

The musical score for 'April in Paris' bar 9 consists of five staves. The top staff is labeled 'ALTO 1', followed by 'ALTO 2', 'TENOR 1', 'TENOR 2', and 'BARI. SAX.' at the bottom. The score is in common time. Measure 9 begins with a dynamic 'f'. The first three staves (Alto 1, Alto 2, Tenor 1) have a rhythmic pattern of sixteenth notes on the first beat and eighth notes on the third beat. The second measure starts with a sixteenth-note pulse on beat 1 for all staves, followed by eighth notes on beat 3. The BARI. SAX. staff has a sustained note on beat 1. Measure 9 is labeled 'SOLI' above the first staff. Measure 10 begins with a sixteenth-note pulse on beat 1 for all staves, followed by eighth notes on beat 3.

“April In Paris” is well known as an arrangement for the Basie band, and the arranger of this particular chart was Wild Bill Davis. Although there is no organ on this recording, Davis’ arrangement serves as something that could easily translate from a big band to an organist, based on the block chord arrangement of the saxophone soli.

The other ways “April In Paris” influenced my own writing were in terms of the rhythmic feel and weight of the melody. The Basie arrangement has a swing feel that emphasizes the majority of the notes in this first phrase on the beat, rather than a more syncopated phrase. This way of emphasizing the beats, particularly beats one and three, is something that I was thinking about as a rhythmic device when I began to construct my own melody for “Rain In July”.

The title “Rain In July” is also a way to pay tribute to “April In Paris” by having a similar title with a month of the year. The title came about very quickly, and was inspired directly by the time I started writing the piece. On a late Sunday afternoon in July of 2012, I began to compose the tune shortly after a downpour had started. Within an hour of the rain, I had the A section complete. I thought of the title as I noticed how the summer of that year felt particularly dry with a lack of rain.

“Rain In July” also made sense as a title when taking the rhythm into account. Even though this piece is not written with lyrics, the opening bar could fit the meter and rhythm of the phrase “Rain In July” which opens up the possibility of lyrics.

Since the opening rhythmic material is very much centered around beats one and three, the bridge introduced at bar 11 uses a similar structure consisting of only three different pitches, but expands the length of the notes, where the initial note is held, and the other notes do not enter until the second note of the triplet starting on beat three. After the first four bars of the bridge, the rhythm is shifted even further back, by having the last ascending figure in both bars 15 and 16 not move until the second note within the last triplet starting on beat four.

The opening theme goes through a number of different melodic and rhythmic variations beyond the original melody. I devoted the first eight bars after the last A section of the form (bars 27-34) to exploring the melodic development. These bars not only serve the function of melodic development, they also work as an interlude from the basic form to the solo section. The variations used in these eight bars came from a template exercise I studied for big band arranging, which I then applied to the original motif used for this piece.¹³¹ I did not use all of the

¹³¹ MacLeod, *Arranging 5 & 6*, 4.

possible rhythmic and melodic variations from the template, but it was still a good exercise to take the initial theme through a number of different variations to then see which ones best fit the song. The figure below shows which ones were used in this arrangement at various times and I discovered as the arrangement went on that there were more devices used that came naturally. These examples come up later in bars 67-70 when the theme is re-introduced then shifted rhythmically, and again throughout the remaining 24 bars of the chart.

Fig. 5.4: Melodic Development.

Melodic Development

Rain In July

Jesse Whiteley

The musical score for "Rain In July" by Jesse Whiteley illustrates various melodic development techniques. The score is in G major, 4/4 time, with two staves of music. The top staff shows five bars of music with labels above them: "Original motif" (G, D⁹), "Exact Repetition" (G, D⁹), "Transposed" (Modal variation), "Modal variation" (Rhythmic variation), and "Rhythmic variation" (different notes). The bottom staff shows four bars of music with labels above them: "Rhythmic variation on modal variation" (Augmentation), "Augmentation" (Retrograde (Mirror Image)), and "Retrograde (Mirror Image)".

The order of the devices shown above almost follow the way those eight bars play out in the completed arrangement in that same sequence. The development begins with an exact repetition of the phrase from bars 27 to 28, and goes into two bars of the same rhythmic variation, but by this point, the voicings have started to change. The motif in the third bar is set over a different chord progression and the motif in the fourth bar is a rhythmic variation with different notes to allow for more chord movement. Bar 31 returns to the original rhythm and the top melodic notes from the original theme, yet it is the first bar of these eight that slows down the movement of the chords to only one per bar, a device that continues for the next two bars after it.

The last two bars include the rhythmic variation on the modal variation over the EbMa7. Bar 34 is significant as it is an expansion of the phrase, and as a result, the first bar in the chart to this point where there is space before the second beat. This sets up the last two beats, creating the effect of brassy, big band shots as a climax to these eight bars, before bringing the dynamics back down in the organ solo over the form of the tune.

Keeping with the line of thinking of a big band chart in the style of the Count Basie band, I aimed to use as many types of arrangement devices as possible that might be found in a Basie chart—a development section, a soli section and an outro over some new material that hints at, but doesn't repeat, the head introduced at the top of the arrangement.

The bars of unison playing between the organ and guitar (51-58), I would consider more as a soli section rather than a shout chorus for the reason that I purposely wrote something that would be more linear and more effective in unison between two instruments. On the organ I chose to play more of the single notes as written, rather than filling everything out in the block chord style, which could have made these eight bars a shout chorus. When recording, it did not pan out as a soli, due to the amount of rehearsal time and the density of some the phrases as it develops. What ends up happening on the recording is the guitar book-ends this section, by doubling the written line in its first two and last two bars.

The key change, which starts its transition at bar 67 is the closest I came to writing a shout chorus, since from here to the end I made a point of this being the dynamic peak of the chart, pulling out the full drawbars at 88888888. I chose not to return to the basic form of the tune, and instead wrote an expanded ending in the new key for a big finish.

This transition and modulation was built on a couple of different ideas. Firstly, I have in recent years become fond of the sound and feeling of chords that ascend by a third. What is interesting is that I have grown to appreciate how the third moves regardless of modal relation—major or minor third, or the end tonality—whether the target chord is major, minor, or dominant. This interest in all types of thirds becomes more and more evident as the chart goes on, but in particular, moving the major chord up by a minor third is a current favourite technique of mine.¹³² This is the movement I chose to begin the modulation at bar 69. Secondly, the specific types of movement were chosen by again working off the motif at the beginning of the song. These modulations allowed me to further develop the motif by transposing some of the rhythms and harmonies, but maintaining the first pitch of the song, D. This allowed me to avoid a perfect transposition of the theme, and therefore avoid an easy, predictable repetition of the original melody in a different key. As a result, the chord movement from G to Bb to D had to do with finding common chords that included that one note.

Using that common tone as a transposition device, along with the key signature of the new key, D, left open the possibility of using all of the pitches from the first theme and keeping them diatonic, yet they would have a completely different effect in relation to the new key. There are two examples where this happens. In the first bar of the new key, bar 71, the rhythm has been varied but the pitches still appear in the same sequence. Bar 83 appears as a perfect retrograde mirror image of the theme, and happens over the same root chord as the original, G, even though G is now the IV of the new key. Though the key change is officially introduced at bar 71, the new key does not mark the beginning of a new section of the arrangement. I consider these four

¹³² Surprising as it may seem, this is *not* in reference to the earlier detailed analysis of “Green Onions”, but rather a growing awareness of this sound as I have become familiar with more examples of this movement.

bars as a way to further build up to the final section as they continue the development of the previous four bars. Therefore, the full transition lasts for the eight bars from 67 to 74. The last couple of melodic developments from these eight bars include the basic rhythmic variation in the first bar; the rhythmic variation over different notes in the next bar; and the two bars from 73 to 74, acting as both a rhythmic expansion and a transposition.¹³³

The outro, starting at bar 75, was my way of writing a big, brassy big band ending, thinking along the lines of the famous repeated ending from “April In Paris”, with its “one more time” and “one more once” calls from Basie, but unlike the Count, I opted for one time only.

In the composition of this outro, as was the case with the rest of the chart, I relied on rhythmic variations of the original motif. However, I know in writing it, this was the one point in the chart where I was thinking about the harmonies and the chord progression first by coming up with a chord progression that would set up the ending. These bars from 75 to the end are an exception to the rule I had been working from, in thinking of rhythm and melody first. The emphasis on the chords begins in the first four of these bars (75-78). These bars act as a transposition and expansion of the way the chords move in the opening progression, with only one change per bar, rather than two.

Fig. 5.5: “Rain In July” chord progression, bars 75-78.

¹³³ One discrepancy from the chart to the recording was that the note at bar 73 entered earlier and was pushed over the last half beat of the previous bar.

The chords are nearly a perfect transposition, with the exception of the second bar, when the progression moves from D to C#7 with an augmented fifth, rather than moving to the dominant nine chord, which in this key would have been A9. This choice was specific, as the majority of the notated chords in this chart are, but what is interesting is that either option—the dominant chord down a semitone, or the dominant chord on the official dominant (V) of the key—is interchangeable if this tune were to be performed in a less arranged manner as either a solo performance or as a lead sheet arrangement. In analyzing this, what came to my attention was the relationship between these two options is that of a major third, returning to my fascination with thirds. Looking at the first two bars of the whole tune, I discovered that the bass movement from D9 to F is a move of a minor third. My initial line of thinking when writing that progression was not that they would be separated by thirds, but thinking of playing it solo, and how those two choices were available as substitutions. The first four bars could easily be played as a solo arrangement on piano or organ, and still work as notated, with the following voicings:

Fig. 5.6: “Rain In July” bars 1-2 with left hand comping.

Even without a bass player, and without specifying the bass movement with slash chords, it is possible that a piano or organ player could comp with the left hand voicings shown above without explicitly suggesting a given root note.

Figure 5.6 demonstrates one facet of organ playing that is reflected in the way I wrote my charts for each of the pieces composed. This is the tendency to think of chord progressions in greater detail with substitutions. It has to do with the convention of thinking of voice leading as a keyboard player, where the player will often look for the closest possible voicing. Playing the organ enhances this attention to substitutions due to the role of the bass. For this project, I gave particular emphasis to the direction of the bass parts with indications of slash chords throughout, leaving no question as to how I wanted the progressions to move. The simpler way to write the above progression could have been to indicate those chord symbols without slashes and without the voicings specified.

The ideas from the ending feature more rhythmic and melodic variations from the theme, especially bars 75 to 78, when the rhythm is pushed off the beat, entering on the and of one. This same kind of rhythm occurs at the beginning of the last eight bars of the chart, beginning at 87, except that the motif in that bar enters on the beat and begins with a perfect transposition of the theme and then begins to move off the beat. For the bass and chord movement from 87 to the end there was no initial inspiration for why the changes move the way they do other than trial and error and coming to what I thought sounded best. I began with the pedal point of D over A (the V) for the reason that it is a common device for intros and endings, and in particular when playing swing tunes it can be a big, showy device on piano or organ. Not coincidentally, the big sounds of this ending feature the movement up by the minor third once again, this time moving in unison between the slash chords. With the sudden move to BbMa7 then EbMa7, I thought the obvious and easy thing to do would be to move down by half a step to end the chart in D. However in continuing to work by trial and error, landing on the tonic chord with the tonic note

on top did not sound right to me. I knew I wanted the pause from the Caesura in the third last bar to create that kind of space similar to the pause before the last big hit each time at the ending of “April In Paris”. Descending from F to Eb, and then to D as the top note of the last chord made sense, but the sound of D major didn’t. So, the tune ends back in the home key of G which makes perfect sense for a couple of reasons.

With D as the top note of the G chord the arrangement ends with the consistent theme of the original motif starting from the fifth of the root. Also, even though the F to Eb are meant to be single notes with no bass or chord movement, had I chosen to add bass I could have easily used an ascending bass movement using Eb, F, and landing on G. With or without adding the bass, the final leap from EbMa7 to GMa13 finishes the whole arrangement with one last leap of a major third.

I found I had a very wide range of sounds and devices available to me in this particular organ style. Achieving that full theater effect I believe has a lot to do with the amount of chorus from the organ and tremolo from the Leslie. On the records from Milt Buckner and Count Basie it is common to keep the chorus on and to keep the Leslie on fast the whole time. For my own work, I kept the chorus on, on both the upper and lower manuals at C3, with the fast Leslie for nearly the entire chart.

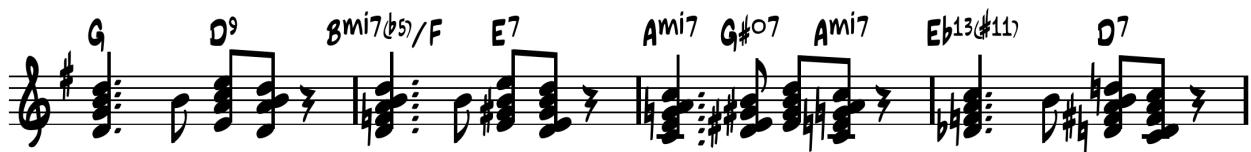
The registration I started with for the block chord melody was from what Denis Keldie suggested to me as being similar to that used by Milt Buckner, as he said a lot of it had to do with “the sound you get when you leave out the lower (16’) harmonic.”¹³⁴ Leaving out the bottom drawbar does open a lot of different possibilities. For one thing, it enhances the harmonic of the

¹³⁴ Denis Keldie, interview by author. 2 November, 2012.

drawbar right next to it, the $5\frac{1}{3}'$, which is an odd harmonic. Eliminating the $16'$ also expands the range you can use on the keyboard, especially in the low register, since the sound of the octave below the active key(s) is now gone. In other words, you can play lower without the low register sounding overly muddy. This proved to be especially useful when playing in a style that uses block chords.

When I began playing this piece, the upper registration used for the first full pass of the song—the full AABA form—was originally as follows: 088684000, though when recording the tune, I added the $16'$ drawbar just for a touch of low end in the mix in order to avoid sounding too thin. The sound used on this recording ends up being approximately 288684000. In addition to the $5\frac{1}{3}'$, the $2\frac{2}{3}'$ is out to its full value, which brings out the harmonic up an octave and a fifth from the key being pressed. The remaining active drawbars are either the fundamental, or a higher octave of that fundamental. These harmonics enabled me to start the tune by playing in the octave as it is written, beginning with the D a 9th above middle C, and to fill in the chords to harmonize the melody with the notes below that, as follows:

Fig. 5.7: “Rain In July” melody harmonized, bars 1-4.



The third bar provides the first use of a diminished passing chord on the offbeat of beat two, with the G# diminished 7 approaching below the A minor and then above it in its next inversion. It is an effective device for big band arranging in this style¹³⁵ and for playing block chords in the style of Milt Buckner.

¹³⁵ MacLeod, *Arranging 5 & 6*, 17.

In the space of the larger arrangement, starting with the lower octave is crucial, since it leaves open the possibility to save nearly two octaves on the keyboard above where this is written and not have to use the high register too early. Thinking along the lines of big band arranging, it would be the same as saving the highest possible notes for the trumpet section until later in the shout chorus or ending, when it would be more effective to reach that peak of dynamics and range.

A note on playing this example is that it could stand alone as notated and free the left hand to accompany with a walking bass line or, if this were to be played with a bass player as it was on the recording, the voicings could be expanded even further to add more of the locked hands feel of Milt Buckner with the low notes being close together. If these notes were to be expanded lower, with the left hand on the same (upper) manual, the low register would not sound too muddy, even when playing as low as the D a seventh below middle C to fill in the D7 chords that occur. Or, assuming that the lower manual is set to play bass with the registration of 848000000, if the register becomes too low a couple of options are either to move higher on the keyboard to roughly the same register as where the right hand is playing—something that is possible with two manuals—or to fill in some of the left hand chords with simple shell voicings, using no more than the root and seventh.

The end result on the recording was the decision to use a string bass. It was something I had thought about both possible options for, whether or not to add an external bass part separate from the organ, but upon recording it I was thrilled with the decision. Going into recording my own work it gave me a little extra comfort factor of not having to cover the bass parts on a tune as arranged as this, something that I am still striving to improve at. And I knew that from the

records and sources I had looked up, there were examples of both. Buckner kicked pedals on stage and on some records, and featured a bass player on other records; while the majority of Basie's organ work includes the addition of string bass. By keeping the basic instrumentation and lineup the same for this entire session—having drums, electric guitar, and acoustic and electric bass available—the combination of a full rhythm section including Hammond Organ and acoustic bass, on gut strings no less, was incredible to hear in a way I hadn't even anticipated, and proved to be my favourite track when it was completed.

The other consideration on the above setting for the upper manual was to set the percussion to soft with a fast decay and with the 3rd harmonic, but not use it until a key point in the arrangement. When recording, that consideration enabled me to use the above registration from the Bb preset, which cancels out percussion anyway, and prep the drawbars for when I would use the percussion with the B preset.

One of the devices that is possible on the organ, in playing in a block chord style is being able to reach notes that are a second apart, as in some of the dominant chords in figure 5.7 when the seventh is the bottom and top note, and being able to reach those bottom two notes with the thumb, and not having to stretch the hand too much. All of the notes will come through clearly since the dynamics are not as dependent on attack and touch sensitivity as on a weighted keyboard.

The setting and sound from the beginning of the chart remains the same until the soli at bar 51, which is the first moment that I pull out all the stops, so to speak. I pull the remaining drawbars that have not been active resulting in a full drawbar registration of 88888888. The change to the full drawbars at this point in the arrangement had partly to do with the inspiration

of hearing a record *Swing Around Rosie* (1959), by Rosemary Clooney with the Buddy Cole Trio. This record features many of these kinds of swing era arrangements from a small band with a unique instrumentation, sometimes combining the organ with piano and xylophone or vibes, often with instrumental ensemble sections with the full organ sound.¹³⁶

The full organ sound on “Rain In July” remains through the soli section. At bar 59 I left room for a guitar solo. At this point the organ could comp exclusively from the lower manual, and could have the option to slow the Leslie down, keeping in mind that the chorus is still on at C3.

The set up to the key change at bar 67 is when I would return to the full stops, with the Leslie on fast, and would keep that sound for the rest of the arrangement, with the exception of one bar which highlights a unique device of the organ. Bar 86, the last bar before the final eight bars, features a single shot, a completely exposed solo organ part coming right after a cutoff of the band. As it is notated, it has a D written in the space above the second ledger line above the treble clef. This note selection is intentional, since for this one bar I orchestrated a quick change of stops, from the full drawbars on the Bb preset, to the B preset, which should still have the percussion on the 3rd harmonic but with all the drawbars pushed in.¹³⁷ The result of this is that when the D is being pressed, the 3rd harmonic produces the sound “an octave and a fifth above the fundamental”¹³⁸, so you hear an A from the D, and with the decay on fast, you can hear that decay and still get the effect of an eighth note being cut off. This requires just as quick a move

¹³⁶ Though listed as the Buddy Cole Trio, the backing musicians are uncredited, and upon listening closely with EQ, the bass appears to be coming from a string bass player.

¹³⁷ The decision to not add percussion for the first half was what made this easier by working immediately from the Bb preset and having the B drawbars all in from the beginning with percussion on.

¹³⁸ Vail, *Beauty in the B (first edition)*, 45.

with the free hand to switch back to the Bb preset in the remaining beat, and engage the full drawbars for the big ending. Since the part is exposed and happens so quickly, the click of the preset key being switched back and forth is picked up on the recording.

All of the above are devices that are unique to the organ and the arrangement would come across differently were the song to be played on piano, yet I do not find this crossover to be that much of a stretch. I mention the piano because even though this piece of music was composed and recorded for the Hammond Organ, in the first writing session on that rainy day in July, the bulk of the melody was written at the piano.

There is one other point of influence that I find has amazing crossover potential between piano and organ which is why I feel this song could be performed just as well on solo piano, in a piano trio or organ trio. My favourite active piano player, John Sheard, is someone who has acted as a mentor to me, particularly during many key stages of my musical and career development. Early on, one of the things we focused on was keeping time in the left hand by comping with nothing but quarter notes, four to the bar, and still making it swing. It was through this that Sheard introduced me to one of his influences, the great stride pianist Dave McKenna. As a stride player, McKenna is known for a method that is slightly different from just the typical bass-chord (boom-chick) left hand pattern. Instead, McKenna would often play chunking quarter notes in the left hand, with large 10th voicings or sparse three-note voicings. It is through McKenna that I discovered Erroll Garner, since this method is a link to Garner's left hand chunking, yet McKenna still played in a stride style, and also managed to fit in walking bass patterns in the left hand as well as the bass to chord leaps.

Because of the crossover between the influence of all the different keyboardists cited—Waller, Buckner, Basie, Davis, and even McKenna and Garner—I consider this composition to have so much crossover potential from solo stride piano, to solo organ, a piano or organ trio, to a full big band.

Chapter 6. Organ Trio Composition: *Another Blue J*

Introduction

“Another Blue J” owes the most direct influence to the sound of Jimmy Smith, and most importantly the sound of the ensemble without a bass player with the bass part coming from the left hand on the organ. Per the Jimmy Smith template, this piece is set up to have the upper manual utilizing the first three drawbars all the way out (888000000), using the 3rd harmonic percussion with soft volume and fast decay; while the lower manual uses the bass drawbars (848000000). The chorus knob should be set to C3, to provide that type of chorus associated with Jimmy Smith, however for the melody at the top of this piece I chose to leave the chorus off the upper manual and on the lower manual for reasons I shall explain shortly.

In the writing process, “Another Blue J” was the last piece to be composed but was also the quickest to complete. Part of this has to do with a simple form that is used. The tune is built off an AABA form but, unlike “Rain In July”, this example relies less on arrangement and expansion of the form than on improvising and the overall blues feeling and vocabulary. Therefore, the piece can exist as a lead sheet with less bar numbers and fewer detailed arrangement sections.

One challenge I gave myself before writing this piece was to not compose a simple instrumental 12-bar blues head. In addition, I did not attempt to base my own writing off of any particular device or musical idea that I associate with either Jimmy Smith or the organists that followed him. This challenge had to do with knowing what a well-worn idiom I was working in. Due to the overwhelming influence of Jimmy Smith’s technique, tone, and vocabulary, there is already no shortage of players that have aimed to follow both his tone and, more importantly, the

format he popularized of working in a trio with the organ providing the bass. This was reinforced in seeing as how virtually everyone I spoke to during this project has cited the influence of Jimmy Smith and has likely paid tribute to him in some form or another.

In my own work, I feel the Jimmy Smith effect has much more to do with the sense of improvising and the type of vocabulary he had as a soloist and, as a result, these are things that can't be as easily composed or notated. As an example, the A section of the melody varies each time in the way that I play it. Specifically, choices such as ornamentation and other pitches I may add are things that would not remain consistent enough to warrant notating them on the lead sheet. This speaks to this jazz tradition in the sense that a tune such as this does not translate the same way on paper since I feel there is only so much of the information that can be notated.

Keeping in mind how it would be played and by the kinds of players that would be performing it, to make every detail too specific would not be practical and would not leave room for flexibility.

I could have easily taken solo ideas lifted from a Jimmy Smith example as the basis for a composition but in order to avoid creating something that could come across as merely another Jimmy Smith sound-alike, I consciously chose not to. The decision to write the tune in a minor key was influenced by the type of vocabulary I have studied closely with this style of organ playing and to this point have developed a certain comfort level with. This specifically has to do with how well the blues scale is suited to playing in a minor key.

As a result, I focused more on the larger idiom of Hard Bop that was popularized during the 1950s and tried to think along the lines of a tune such as Bobby Timmons' "Moanin'". "Moanin'", first written by Timmons for Art Blakey's Jazz Messengers and recorded on their 1958 album of the same name, has been cited for how "its call-and-response melody is regarded

as an exemplar of hard bop's 'down home' personality."¹³⁹ The tune is one I particularly gravitated to in my early jazz education for its bluesy melody, and heard it on the organ for the first time on record by Ray Charles on his 1960 album *Genius+Soul=Jazz*. I have not found a record of this by Jimmy Smith, though there is a noteworthy performance of "Moanin'" by Smith in Japan with the Blue Note Big Band that has circulated on YouTube.¹⁴⁰

Analysis and structural overview

When looking at the existing tune as a template, I noticed how it builds upon the opening phrase and develops by not simply repeating the rhythm or notes, but by increasing the density of the notes, the complexity of the phrase, and how the pitch of each phrase manages to rise higher in succession.

Fig. 6.1: “Moanin’”, A section.

MOANIN'

BOBBY TIMMONS

(Lyrics omitted)

¹³⁹ Gene Seymour, "Hard Bop," in *The Oxford Companion To Jazz*, ed. Bill Kirchner (New York: Oxford University Press, 2000), 380.

¹⁴⁰ "JIMMY SMITH MOANIN'," [n.d.], video clip, accessed December 31, 2012, YouTube, <http://www.youtube.com/watch?v=Jh4mfOYWcjY>.

In “Moanin”, the first riff starting on the F peaks as high as the Ab above it, then reaches the blue note on the Cb by the third bar, while the melody reaches its highest peak by the fourth bar with the Eb a seventh above the starting point. It is also worth pointing out that in each of these two-bar phrases the first and last note is always the same F, a fourth above middle C.

Working from that idea and the same key centre of F minor, I constructed the top of “Another Blue J” to work in two-bar sections that would progressively get more rhythmic and ascend higher with each phrase, beginning with Bb to C in the pickup bar, and eventually reaching the Bb an octave above that by bar 5. I also thought of a way to add a call and response feel, in the same way that the Bb to F cadence acts as a response to the initial melody from “Moanin”. Rather than a chordal response, I designed this response to come from the bass, leaving spaces in the upper melody, in which the bass provides short shots. This proved effective as an arrangement device for the trio I recorded it with, by allowing the drums and guitar to catch the shots indicated by the bass. One arrangement idea that came from discussing it and rehearsing it with the rhythm section was to start solo, with just shots, then to add the full rhythm section maintaining the groove by the B section, and to keep going with time and a moving bass line for the last A.

Where my melody varies and how it stands on its own, has to do with the note selection, the range of notes that are covered, and the physical challenges that come from playing such a wide range of notes that span nearly two full octaves. In the first eight bars there are plenty of notes that are only a step away but require the index finger to cross over the thumb. The first two beats in bar 2 and the pickup notes on the last eighth note before bars 3 and 5 are all examples of

this, with the Bb and C being a tone apart. The beginning of the piece starts with the pickup on the fourth finger, leaving the basic five-finger range to cover from F to C.

Looking at bars 4 and 6, within the larger two-bar sections from bars 3 to 6, the ends of those phrases have significant leaps, where the fingering on the keyboard becomes even more of a consideration. Starting on the third beat of the third bar, the notes descending from Eb to C and Ab require the player to use the index finger to cross over the thumb that would have played the C, in order to reach the Ab. That Ab, which is tied over the bar and held before the triplet phrase, requires a leap that is unique to the organ. It is not unique because that leap would be impossible on another keyboard, but the sustain allows that tied note to last for its full two beats and maintain a full dynamic, even if a finger is being switched on that key that is currently being pressed. In this specific example in bar 4, with the third finger landing on the Ab, I would need to cross to at least finger four if not finger five to reach the low Db. The choices for these bars involved similar fingering to that used for the full Ab major scale, which relies more on crossing over between fingers two, three, and four, and does not utilize the fifth finger.

The run in bar 6 features multiple leaps and points where the fingers need to cross, starting with the F to Db, crossing from the thumb to the fourth finger. The leap from the G on beat three to the Db requires crossing over from the thumb to finger two, though upon closer examination there is a repetition of a descending semitone between these two parts. This means that if the Ab to G uses fingers two to one, then the Db to C can use those same two fingers, by lifting and moving the hand. The chart below indicates the detailed fingerings chosen for the right hand in the A section.

Fig. 6.2: “Another Blue J” A section, right hand fingerings.

ANOTHER BLUE J

HEAVY SWING $\text{♩} = 116$

COMPOSED BY JESSE WHITELEY

The musical score consists of two staves of right-hand fingerings. The top staff begins with a F# major triad (F#-A#-C#) with fingering 4-5-3. This is followed by a G major 7th chord with b5 (G-B-D-G) with fingerings 4-3-2-1. Then a C7 chord (C-E-G-C) with fingerings 2-1-2-1. Finally, another F# major triad (F#-A#-C#) with fingerings 2-1-2-1. The bottom staff begins with a F# major triad (F#-A#-C#) with fingerings 1-2-3. This is followed by a G major 7th chord with b5 (G-B-D-G) with fingerings 2-1-4-2-1. Then a C7 chord (C-E-G-C) with fingerings 2-1-4. Finally, another F# major triad (F#-A#-C#) with fingerings 1-3-2-1. The score is in 4/4 time, key signature is B-flat major (two flats), and tempo is Heavy Swing with a quarter note equal to 116.

The other device that comes from this A section is something that I feel is unique to this piece which uses more frequent chord symbols than the beginning of “Moanin’’. Notating the chords allows the bass to be more active. The opening bars of “Moanin’’ are figures that lend themselves so well to a solo part, that any chords, either in accompaniment or in notation are non-essential. Therefore, until the Bb to F cadence enters, a chart could simply read N.C.

I included the chord symbols and a bass part, indicating that the bass from the left hand can remain more active during the lead lines and not wait to respond in the empty spaces, even though there is still room to do that as well. This is also not to say that “Another Blue J” could not be treated in the same way in a given performance in which the bass only responds with shots during those empty parts left by the rests.

Another way this example of my own work varies from the structure of “Moanin’’ is that the last two-bar phrase in the seventh and eighth bars is not a perfect repetition of the first two bars. If we look at “Moanin’’ as having three distinct phrases, with one of those being repeated, “Another Blue J” in fact features four different phrases. The reasoning for this is that since the

first three phrases all end on C and on a C7 chord, remaining unresolved, the last phrase requires a different ending. This also varies from “Moanin” since every one of that piece’s first three phrases end on F and are already resolved.

In terms of tonality and key centre, the melody from “Moanin” is interesting as it exclusively features the notes from the basic F blues scale. The responding cadence ends on an F major chord. In my own work I chose to base all the responding chords in a minor key, using the minor II-V progression of Gmi7(b5) to C7. The notes from the A section are all diatonic to the F minor aeolian scale (F natural minor) with the fourth bar being the one exception, featuring the chromatic approach from B natural to C. An interesting feature of playing this on the organ, one that I did not notate, is the choice of grace notes each of which are below the given note. I left them as a single diatonic note, yet when played on the organ it is possible to slide up the two chromatic notes with the same finger to get to the target note. So the Db grace note to Eb in bar 3 could also include D natural, and the target of the high Bb in bar 5 could be reached from the Ab and A natural.

The bridge of “Another Blue J” does not follow the aeolian scale, due to its emphasis on the E natural, in order to emphasize the C7(b9) chord. This could almost place the bridge in the F melodic minor scale due to the raised and flattened seventh (E natural and Eb), but bar 13 brings out the flatted 9 of F, the Gb, creating the effect of an A diminished chord or an F7(b9).

The original idea with the first chord chosen for the bridge, Ab13, was to potentially move the melody and chords up to the relative major key for a contrast. However, as I began to fill in the phrases that followed, they all seemed to suggest the minor 2-5 movement from Gmi7(b5) to C7(b9), keeping the majority of the tune in a minor key. That first Ab chord in the

bridge as a chordal and melodic idea is never repeated again. I used very little melodic development in the bridge. The only real aspect that is developed or repeated is rhythmic—the use of the three-note figures in a group of eighth notes that are usually tied over to the next beat and/or to the next bar. This occurs in every bar from bars 11 through 15 in the bridge.

In the chordal structure of the bridge, the last half is one key point in my piece where the chords and bass resemble a progression from “Moanin’”. Starting on bar 14, the chords descend from Bbm7 as the bass leads from Bb down to Ab, and to Gm7(b5) followed by C7(b9). Since it does not occur until the fifth bar of the bridge, that progression can not and does not repeat, which makes sense when considering that the melodic material is intended to be non-repetitive as well.

The Ab13 in bar 10 is a moment that only lasts for a single bar, but it is an important one. It hints at the major sound, as mentioned, but it employs the same type of voicing I would use when opening the tune up to solos over an Ab blues progression. This type of blues soloing and comping, with the 13 voicing over the root is something that speaks more to the influence of Jimmy McGriff and Jack McDuff. One tune that has become a standard among instrumental organ repertoire, is Jimmy McGriff’s “All About My Girl”. The 13 voicing is significant to this tune, since the opening hook in the key of Ab enters from the F and sets up the emphasis on the pentatonic sound which re-occurs numerous times throughout the melody and soloing in contrast to melodic and solo content that emphasizes the basic blues scale. “All About My Girl” also accentuates the pentatonic sound in its bass line beginning on the 9th bar following the first eight bars with stops.

Fig. 6.3: “All About My Girl” bass line, bars 9-20.

The musical notation shows two staves of bass clef notes. The first staff starts at bar 9 with an Ab13 chord, followed by a series of eighth-note patterns. The second staff begins at bar 15 with an Ab13 chord, followed by a blues progression: Bbm17, Eb7, Bbm17, Eb7, and Ab13. The notes are primarily eighth notes, with some sixteenth-note patterns and occasional quarter notes. The bass line consists of eighth-note patterns throughout the bars shown.

While playing over a blues progression, McGriff maintains an Ab pedal point at the beginning of each bar, that only moves when starting on the Bb to bring out the 2-5 change. Upon closer examination, it is not even a true pedal point, since on the Db7 change, the essential pitches in a Db7 are there—the 3 and 7—but they happen to start from the Ab. The one consistent note in every bar is the F, which highlights that pentatonic sound.

In my own work when I open the soloing up to a blues in the key of Ab major, I would not use a pattern as repetitive as shown above but the bass line could feature similar pentatonic movement, and my soloing does tend to cross over between the pentatonic scale and the blues scale since I often like to emphasize that 6th as a significant pitch, rather than relying exclusively on the blues scale.

Along those same lines, though in a different key, is one example of McDuff’s playing that I was hooked on early — an ad-lib solo organ intro to a slow blues known as “J & G Blues” from the album *Down Home Blues* (1997) with Gene Harris on piano. The very first moment is set up by the left hand holding sustained 13 voicings, while the right hand plays blistering blues runs.

Fig. 6.4: “J & G Blues” organ intro, first “four” bars, ad lib.

J & G BLUES (ORGAN INTRO)

SOLO ORGAN INTRO, AD LIB.

WRITTEN BY JACK McDUFF/GENE HARRIS

ORGAN

888400000
3RD HARMONIC PERCUSSION, FAST
C3 CHORUS

008000000
C3 CHORUS

G¹³ G⁷([#]5)
C⁹ Ab¹³
C⁹ G¹³

The idea to expand on the arrangement through blues improvising was something that I had planned ahead, but did not notate in detail, since I knew it would be easy enough to discuss and lead this transition right in the rehearsal and recording process. That is how it played out on the recording, by having one chorus of soloing over the full AABA form, then moving up to a major key for the remaining solos before transitioning back to minor for the last full pass through the form.

I have already mentioned that the basic organ settings work from the Jimmy Smith template. With this sound, one consideration that comes up, as we have seen (and will continue to see) in all the compositions, is that of range, specifically where the range of the melody best sits on the keyboard due to the low overtones. The way I chose to play it was up an octave from

how it was originally written, and part of that had to do with the key I was working from in relation to the melody. Knowing that I was in F minor, and had a high C as the uppermost note in the entire melody, the higher register meant that the highest note I would reach would be the uppermost note on the entire organ keyboard. Even in the context of some of the other phrases, such as those runs off of Gmi7(b5) to C7, with G as the written note, adding the C above that for effect adds some interesting colour to those runs.

However, what proves interesting after deciding on a range, is attempting to play it in the lower octave to hear how it translates. In this case, even with the Jimmy Smith setting and the 3rd harmonic percussion, the piece is playable in the lower octave surrounding middle C and, if anything, adds to the minor and moody quality of the tune. A big reason for this is the linear style of playing that relies on single notes from the right hand, which is definitely something that comes to mind when discussing Jimmy Smith (see chapter 2). With no more than two notes at most from the right hand held down at any given time, there is not much chance for any noticeable clashes in low overtones or anything that could be heard as muddy.

I mentioned the decision to set up the chorus at C3 for the lower manual playing the bass, but to have it off for the upper manual providing the melody. I planned to keep this set up the same during the full pass of AABA through the melody and put the chorus on the upper manual once the solo sections begin. Keeping in mind that I have become used to working with the type of Leslie's that can operate on slow and fast and that may not always have the third option to stop, I have grown to appreciate the sound of the natural slow tremolo without any chorus or vibrato. This is something that is so difficult to explain when translating sound into words, but in my own

mind the growl and the edge of the true organ and Leslie tone are more in evidence than when that straight sound is masked by chorus.

When I asked Tony Monaco about when he might choose to use this same combination he explained the advantages of it between the upper and the lower manual, and what kinds of tunes he would use them on.

Yeah, a lot of times like when I'm playing "Bluesette", I leave the C3 off on top and leave the C3 on on the bottom. So the C3 gives it more of a shimmering. So that dry [tone] kinda has a really cool feel to it, where the chorus is more of a shimmering. I usually like to keep the C3 on the lower manual because it makes it a little brighter, it also makes it a little louder. When you get into the C [chorus] it makes it spin a little bit more, makes that bass line a little clearer.¹⁴¹

The quality of this kind of organ playing brings another point to mind, and that is the role of the Leslie speaker. From the historical findings and commentary, it has already been pointed out that the 2-speed Leslie was a later development which enabled the slow chorale sound. As a result, many of the early Jimmy Smith records or those by similar organists from this era do not involve anything beyond a stopped or fast Leslie. Even with the potential for slow as well as fast, you will hear these types of players not touch the speed of the Leslie through an entire tune (choosing to leave it on slow). This proves to be a much different use of the Leslie with the Hammond than how rhythm and blues players such as Booker T. Jones would use it. On the recording of "Another Blue J", the only moment of fast tremolo occurs on the very last chord for effect.

I find that it proves effective for this kind of trio setting since at its best, with someone such as Jimmy Smith or Joey DeFrancesco at the organ, it is clear how much control and

¹⁴¹ Tony Monaco, interview by author. 3 December, 2012.

physical command of the instrument is required in just its essential parts—keyboard from both hands on the upper and lower manuals, and the bass pedals. There is more emphasis on the physical control and technique than on the orchestral side of exploring different timbres and colours that can come from the doppler effect from the Leslie or from the harmonics of different drawbar registrations.

Chapter 7. Memphis Stax Composition: *Smokey's Hop*

Introduction

The tune “Smokey’s Hop” was designed and composed to follow the influence of Booker T. Jones in terms of tone and drawbar registrations, using the setting arguably made most famous on the Booker T. & The MGs recording of “Green Onions”. The tone Booker T. has become known for is the use of only the first four drawbars pulled out all the way (888800000), with no chorus. I chose to follow this set up, and add the percussion on the 2nd harmonic at a soft volume in order to punctuate the rhythmic quality of the melody from the organ. Since “Green Onions” was recorded on an M-3 with no Leslie, there was no tremolo or variation in speeds at all on the original record. “Smokey’s Hop” does use the tremolo of the Leslie speaker in order to exploit the variation in Leslie speeds that Jones employs in other records such as “Hip Hug-Her” (1967) and “Time Is Tight” (1969).

I mention these two titles as examples because these were the tunes I used as models in terms of compositional structure in my own work. “Hip Hug-Her” and “Time Is Tight” both feature longer structures than a 12-bar blues in what I would like to call elongated blues forms and, in the case of “Hip Hug-Her”, use more harmonic and chordal material than the basic blues chord progression of the I, IV, and V chords. In both these examples, the rhythm section stays on the I chord for a longer stretch of time which expands the form. “Hip Hug-Her” begins with eight bars on the root before moving to the IV, while “Time Is Tight” stays on the I for the first six bars.

The larger number of bars and overall expanded structure on tunes such as these also serve as excellent models in how to use the sustain of the organ to the advantage of the music.

“Hip Hug-Her” and, to an even greater degree, “Time Is Tight” play with phrases and notes that are very connected, so much so that the tunes would have to be played differently on the piano, or any other non-sustaining keyboard. This is a device that I will discuss below with reference to my own work.

Another key feature of the cited MG’s recordings is the sparse content within the melody and rhythm parts as evidenced by the earlier analysis (see chapter 3). Booker T. Jones’ organ parts and Steve Cropper’s guitar parts are extremely sparse only filling in the essential information. “Green Onions” has already been discussed but their other pieces also stand as examples of this approach.

“Hip Hug-Her” is built on a melody from the organ along with a very definitive, driving guitar part. The opening bar of the melody, after the six bars of intro, is built on a sequence of notes that perfectly outline the Bb major triad, yet none of the notes overlap the others to fill in the full triad at once. This opening figure is transposed, and is played similarly when the band moves to the IV chord after the first eight bars of the melody. Under this is the repetitive backing parts from Donald “Duck” Dunn on bass and Steve Cropper on guitar, each of whom outlines the chord based off of unison single note lines. The lead and rhythm parts from the last four bars of the melody are sparse, yet so specific.

Fig. 7.1: “Hip Hug-Her” melody, last four bars, with rhythm section.

The musical score consists of six staves. The top two staves are for electric guitar (E. GTR.), the third is for electric bass (E. BASS), the fourth is for drums (Dr.), and the bottom two staves are for electric guitar (E. GTR.) and organ (Org.). The score is numbered 23 at the beginning of the first staff. The drums provide a rhythmic foundation with patterns for hi-hat, snare, bass, crash cymbal, and tom. The guitars and organ provide harmonic support and lead lines. The notation includes various note heads, stems, and rests, with some notes connected by beams. The organ part in the lower staves features sustained notes and chords.

I am not implying that defining chord changes would be difficult between the given parts of the bass, guitar, and organ, but relying solely on changes would not achieve the same impact. The result would be ultimately less effective if the harmony and target chords were the focal point ahead of the individual notes themselves.

“Time Is Tight” also features the organ as the lead as a good percentage of the group’s instrumentals tend to do. This lead is also based off of single notes while still using the sustain of

the organ to its full advantage. The note selection remains in single notes until the sixth bar leading to the IV chord during the first progression, a device that re-occurs each time this melody comes up. As was the case with “Hip Hug-Her”, the organ lead is supported by a very repetitive guitar and bass foundation.

Analysis and structural overview

“Smokey’s Hop” was the first tune that I completed, though the idea for the tune was the second of the four tunes to be developed. The initial motif that is introduced at bar five was based on “Green Onions” by transposing a phrase from Booker T’s organ solo from that record.

Fig 7.2 “Green Onions” organ solo 4th pass, last two bars.



It is a simple triplet phrase and in the context of the original solo, and even the larger piece, it appears much less frequently than other ideas Booker T. develops throughout. It is only used twice on the original record, both times over the harmonic root of F at the end of a larger phrase.

The main differences in how it appears in my work have to do with (1) the key, having shifted from F down a tone to Eb and (2) playing in a straight time funk groove, rather than writing something with a swing feel. As a result, the notation had to move from a triplet phrase to a group of sixteenth notes. The change of key also allowed for the use of the full range of black keys, by being able to use any of the degrees from the Eb minor pentatonic scale. This position on the keyboard also allowed for a greater physical range and enabled the right hand to stretch and reach wider gaps between notes that would not have played as easily in F. Lastly, the number

of bars in the form puts this example in closer proximity to “Time Is Tight”, since the tune remains on the I chord for six bars rather than four once the theme comes in.

Working from that idea, the bulk of the tune was constructed during a practice and improv session, in which I recorded myself improvising at the organ, then wrote the piece by transcribing and arranging my own playing after the fact. I kept two demo recordings of myself playing this piece for my own reference. The first demo recording features virtually all of the musical material that came to be included in the organ part of this chart, though it lacked any structure, and featured plenty of material that went unused. The figures that did make it into the final version also appeared in a much different sequence than they came to be arranged in as I notated them.

This process brings me to a point about attempting to compose in the style of Booker T. & The MGs. Many of their original instrumental hits at Stax Records were collaborative efforts, and have been credited as such, with writing credits on “Hip Hug-Her” as an example shared between the full lineup of Steve Cropper, Donald “Duck” Dunn, Al Jackson, and Booker T. Jones. This is due to the fact that many of their instrumentals were improvised pieces, largely created during jam sessions. For my own piece the goal was to allow room for improvisation and to create the feel of a tune that could be improvised by a rhythm section.

The title of this piece is one that was simply a reference to my cat named Smokey, and the fact that the rhythm and intervals of the lead melody suggests a leap or hop like a cat. The first bar of the melody briefly suggests this in the first interval at bar 5 and the end of bar 10 requires a hop up an octave to reach the high Eb that starts bar 11.

The chart begins with a four bar vamp over a repetitive bass figure set in unison between the electric bass and organ, while the right hand responds by entering with sustained chords on the second beat of each bar. The choice to open with a vamp was planned as was the voicing used in the first bar, written as Eb9. It was a conscious decision that did not appear in the first improv session. This device was not planned to achieve a specific analogous feel to that of to the MGs, but something that could be applied more generally to my practice as an organist in a rhythm section.

When combined with the bass, the upper three notes act as a rootless voicing for Eb9 by using all of the notes from a 1st inversion Bb minor triad. More accurately, though, the chord is difficult to define as a complete dominant 9 or 7, since it is missing the other essential guide tone, the major third. The concept of a rootless voicing is nothing new or groundbreaking as far as comping in a rhythm section on organ, piano, or guitar.

I became drawn to this particular combination of notes on the organ in particular in my experience as an accompanying player. I found the method of using less notes in comping as another dynamic option to add to either bringing back the expression pedal or pushing drawbars in to lesser values. The sparse voicings allow me to keep the expression pedal at a fuller dynamic if I would be playing left hand bass but to not have the comping become too overpowering for the soloist.

Over years of playing organ live when comping in an electric blues rhythm section, I noticed an interesting relationship between the I and IV chords, in which I could move from the I dominant 7 with a major voicing, to the IV dominant 7 chord by shifting that tonic chord to a minor triad.

The inspiration of Booker T. shows up in my own work in terms of creating sparse, specific parts. This is most evident during what I would call the two different bridges of the tune —first from bars 43 to 51, and again in bars 55-63. They were both created similarly during that first session of improvising, and both use the same device — a sustaining rhythmic pattern built around a descending bass movement. I chose to keep them both, since I discovered they were different enough and ultimately interesting enough in their own right. I chose very minimal combinations of notes from the organ that still create harmonies that could easily be defined in terms of chord symbols. The majority of these are built as slash chords or triadic inversions and still could be notated according to the chord sequence shown in this figure:

Fig. 7.3: “Smokey’s Hop” Bars 43-50.

43

E_b E_b^{m1}/B_b D_b/A_b A_b7/G_b E_b7/G

G_b F_{m17} B_b7(SUS4)

48

51

The majority of these voicings are easy to define based on the written notes with the exceptions being bars 47 and 49, in which the chord symbols given are more suggested or implied by the melody as it develops in the space of the bar rather than being immediately apparent. Those two bars help illustrate why I was not thinking of defining chord structures and triads in this improvisation but rather searching for combinations of notes and being more interested in the sound they create. This is evident in the way I have chosen to perform and notate this section of the piece because I don't feel this would translate the same way, even in my own playing, if this were to be notated as a single lead line over chord symbols.

This is where I feel the Booker T. influence rubs off. It's an interesting situation where criteria such as chord symbols are unspecific while the notes themselves remain very specific. I believe this speaks to the aural tradition Booker T. & The MGs would have been working in with their tendency for sparse voicings and it is an interesting juxtaposition of creating something spontaneous that manages to become very specific.

The opening bars of the melody showcase the sustain of the organ by using multi-layered writing with longer notes sustaining over and under more rhythmic phrases usually in response, after the first note has been introduced and sustained. This is particularly evident in bars 6-10, when the Eb is sustained while other material is introduced. This is similar to how the melody from "Time Is Tight" works off of single notes that are often sustained for multiple bars at a time, while exploiting the changes in Leslie speeds. I wanted to take this one step further by including these additional parts in response to the sustained notes.

This type of playing is unique to the organ not only due to sustain but also due to the fact that the non-weighted keys allow for more unorthodox fingerings. The two notes in bar 6 would

be started by the thumb on Eb, and the index finger (2) crossing over to the Db. With the thumb still on Eb by the end of bar 8, in order to keep that note sustaining it requires a switch from finger 1 to finger 5 to allow all the remaining fingers to reach the descending phrase that reaches the Eb an octave below the sustained Eb. The fingerings for that descending phrase aren't as important to define since I see a couple of options both of which I tried. The first beat of bar 10 features the three notes grouped as two sixteenths to an eighth, playing Gb, F, Eb. In that single run, those notes could be played with fingers 2, 1, 2, with the second finger crossing over or it is possible to slide and play all of the three notes with the thumb. For the very end of the phrase, when the notes go back up chromatically, I would tend to use no more than fingers 2 and 3. Because of very little weight and no touch sensitivity, it is possible to slide between three chromatic notes with two fingers, and frankly get away with less precise finger technique and with less effort than would be required over this phrase on a weighted keyboard.

The choice to repeat the opening section with two different endings was inspired by how "Time Is Tight" does not move past the first two chord changes in the first pass and does not introduce the new material to reach the climax of the melody until the second time. The last four bars of my own melody (bars 23-26) are another example of working with a bass and melodic movement that could be defined with chord symbols but I chose not to for the organ part and instead chose to keep the lead melody sparse by not adding dense chord voicings underneath. Particularly in bar 24, because there is so little information, I could not originally decide on how I would define the harmony for the organ between the Eb and Gb on top, with the Gb in the bass. Whether it could be an Eb minor or a Gb major 6 isn't of immediate concern.¹⁴²

¹⁴² Despite the above decisions for the organ, I kept the chart more user friendly and flexible for the guitar during the recording session by indicating chord symbols and leaving the notated parts as mere suggestions.

Working from improvised and repeated material, I managed to create some odd combinations of bar lengths, none of which stay consistent one after the other. The first time through lasts for 14 bars, though it can be organized as a 10 bar section, followed by a four bar re-statement of the intro. Within the second ending, the next pass follows most of that same material for the first 10 bars before moving to C minor for the new material, which lasts for six bars. Those six bars can be split up as two bars of C minor, before the four bar walk up. The number of bars for the second time can be broken down as follows: 10 / 2 / 4, adding up to 16 bars. Those bars are immediately followed by another repetition of the intro for the next two bars before the guitar break.

During the guitar solo, starting at bar 31, the first eight bars stay on the I chord which is similar to the first eight bars of Steve Cropper's guitar solo in "Hip Hug-Her". Following the move to Ab, the changes at the end of the solo are similar but not identical to the 2nd ending in bars 21-26. This includes the move to C minor and the ascending bass part leading to a V sus sound. They are not identical due to variation in the bass and the amount of time has been compressed, as all these ideas occur in the last four bars of the solo. The reason for moving everything twice as fast was to create a bit of an auditory illusion in which the IV chord can give the impression that the solo progression is going to be over extended blues changes or at least over the same changes as the melody. As a result, the guitar solo is the first section of the piece to last for 12 bars yet still does not feature a 12-bar blues progression.

Fig. 7.4: Left hand bass movement: Bars 43-50, and 55-62.

The bass movement for each of the eight bar sections are similar in that they feature a descending movement from the left hand while the right hand plays similar sustaining melodic and chordal figures but there are a few comparison points that stand out.

The range of both hands does not impact whether the left hand part could be played on the (same) upper manual or on the lower manual since both are possible. With the bass stops on the lower, or the first four stops on the upper, the sonic effect will not be significantly different.

The first example starting at bar 43 enters with the left hand playing the root on Eb, but rests, and does not begin descending with the long pads until the second bar. Harmonically it is moving from the root, with the right hand filling in the essential notes of Eb major followed by Eb minor. With many of the overlapping parts in both hands the left is not always moving to the root even though both hands often end up filling in all of the three notes within a given triad.

Bar 55 begins with both hands together, clearly filling in an open Ab major chord. Unlike the first progression, which relies on only five notes, this one uses as many as 11 different pitches, the first six of which are all moving chromatically. Except for the Eb to Db move at bar 59, the bass movement nearly uses an entire chromatic scale. As this was improvised, I am certain this was not a conscious decision. What I believe I was playing with was the effect of these open triadic sounds, all of which in the first four and a half bars use some shape of a drop 2 voicing with both hands moving in the same direction.

One of the most important factors of the organ that shows up in this work is how the tone and harmonics used can affect the range and the notation. By using the Booker T sound (888800000), there is a lot of low register and warmth that is brought out of the organ and the range isn't that far removed from having the bass on the lower manual (848000000). For this type of tune to properly cut the most effective range was in a higher octave. Where this is most evident is in the lowest points of the melody (bars 9-10, 25-26), where the melody would be reaching below middle C if the tune had been started an octave lower. The low register in these bars would also sound particularly muddy if there were voices and chords overlapping, as opposed to the single note lines.

I also find this to be true of the organ parts in each of the three MGs examples I have cited. The ascending chords during the head of "Green Onions" all go no lower than the F above middle C, while the majority of the phrases during the organ solo are based around the octave above that with the F in the top line of the treble clef. "Time Is Tight" uses a largely single-note melody in the key of C but reaches no lower than the E in the bottom line of the treble clef, and eventually peaks at the top G in the keyboard when the chords move to G at that point. "Hip

Hug-Her” is unique since its drawbar stops emphasize the upper harmonics more to begin with and the melody begins in the upper register of the keyboard, going no lower than the two uppermost octaves possible while in the key of Bb.

As a result, I notated the organ part as it would be played in that range of the keyboard. Being based off the higher register with the lowest four harmonics of the organ the notation tends to show a fair amount of ledger lines, while the sound manages to keep from sounding overly bright.

The use of varying Leslie speeds was a major consideration when writing this piece. The sound of Booker T. Jones stands out not just because of how he manipulates the speeds of the Leslie also because he makes little to no use of the chorus/vibrato controls. This can be most apparent when the Leslie is rotating slowly at the chorale speed or when it is stopped entirely. Jones has commented on how he prefers this sound from the Hammond and Leslie:

“...I don’t use the vibrato dial either unless I have the Leslie full throttle; then I’ll use it for a little extra effect. Ever since I began playing the organ as a boy, I’ve been mainly enticed by the straight sound. That’s the real beauty of the Hammond, and that’s still how I like to hear it today.”¹⁴³

This is the sound I chose to operate from for the majority of “Smokey’s Hop” with no chorus on the lower or upper manual. The moments when I chose to change the Leslie to a fast speed had to do with a couple of factors: (1) the sustained notes in the examples discussed earlier at the beginning of the tune; and (2) to coincide with the melodic peak of a particular section within the piece. The other big factor in my use of the Leslie depends on how active the left hand would be for the bass which depends on whether or not I would perform it with a bass player. In the

¹⁴³ Vail, *Beauty in the B* (first edition), 171.

process of composing and refining the work, I found that the tune could function in a trio setting just as well as with a four-piece.

The decision to provide bass from the left hand has ramifications for the potential use of the Leslie, since the bass player is not there to free the organist's left hand. How frequently the Leslie could be deployed also depends on what kind of set up would be used and where the control switch is positioned. When working with a real Hammond, most often the control to operate the Leslie is a switch to the lower left of the manuals at the front of the organ attached to a half moon shape. When working with the basic 2-speed, the chorale is to the left and the tremolo is to the right. When working with a clonewheel through a newer Leslie or some other simulation, I can often position the control as a foot switch to toggle slow and fast. In this case, the foot switch option would offer the flexibility to switch speeds more frequently than if operating by hand. Since the right hand in this piece is doing so much work with sustain I would have to find those key moments when I could safely release the left hand to switch the Leslie by hand.

By using a bass player for recording this example I have more flexibility and the ability to adjust speeds is not that different whether switching by foot or by hand. The key times to adjust the speeds include the sustained notes during the first section of repeated bars (5-18), any points where a significant chord change comes up (the Ab to C minor movement being a good example that occurs a couple of times) or to speed the Leslie up to reach a climax near the end of an arrangement section. The changes to a fast speed tend to be more for a brief effect and the Leslie would remain on slow for the majority of the piece.

It is worth pointing out that this is the one composition that featured a full notated score for all four parts. The emphasis in this piece as in the others was kept most specific for the organ, knowing that was the focus of this project. The parts for the other musicians here were specific to a point but were not written in stone. They were designed to offer flexibility and creativity in the ensemble and in recording it I got exactly what I was hoping for out of the rhythm section—some individual and creative moments—by using my arrangement and charts as a guide. In some cases, specific parts that were notated one way were discounted and the players improvised with something more spontaneous. The best example of this happened in recording the first middle section at bar 43 in which all three of the other players came up with inspired parts. Coming right out of the guitar solo, Mitch Lewis kept improvising and soloing, adding an interesting overlap between the guitar and organ parts; Terry Wilkins on bass followed the descending progression, but varied the rhythm to his liking, making it less dense; and Jeff Halischuk created the different drum groove that brings out the sound of the toms and creates a brand new feel at that point.

Despite my best intentions, the one element that the improvising sacrificed was the groove and the larger sound I wanted to suggest. Without indicating unison bass and guitar parts, and without telling the players to suggest a sound like the MGs, the end result comes across suggesting more of a 70s feel in the style of The Meters or the band Stuff (that included guitarist Cornell Dupree and keyboardist Richard Tee). Yet I still feel that allowing room for improvising allowed us to capture the spirit of a Memphis rhythm section like Booker T. & The MGs, working from a piece that came from improvising, yet still fits into an arranged chart.

Chapter 8. Gospel/R&B Composition: *Rise To One*

Introduction

“Rise To One” is the example designed to have a Billy Preston feel to it, and was modeled after two different examples—Preston’s own hit “That’s The Way God Planned It” and his work as a backing player on the title track from The Beatles album *Let It Be*. “Let It Be” has enormous significance for my own work as explained in the examination of that recording. The majority of the track features Billy Preston on organ in an accompaniment role, complimenting Paul McCartney’s piano and vocals. The one moment that highlights the organ lasts no more than five seconds on the record for two bars worth of music, but it is Preston’s moment to shine with this instrumental break.

Fig. 8.1: “Let It Be” organ solo (1:52).

Preston’s own tune, “That’s The Way Got Planned It” was recorded not long after *Let It Be*. It was originally released in 1971 and Preston was featured in a breakout performance of the song at George Harrison’s *Concert For Bangladesh*.

The two pieces display many similarities with regard to tempo, bass movement, progressions, and instrumental hooks. They are both based in the key of C, and both rely on a bass movement that has become so oft-used in popular music that the number of examples is

endless, and that is a descending movement based on the major scale. One other noteworthy example for the organ is Procol Harum's "A Whiter Shade Of Pale" which many say owes its melody and bass movement to Bach's "Air On A G String".¹⁴⁴ Regardless of who wrote it or played it first, it has proven to be an incredibly effective progression that has been borrowed and re-used many times over.

Analysis and structural overview

"Rise To One" was the first piece I started work on, though it took the longest to complete, spanning five months from when I began notating the piece. This example did not come together as quickly since most of the melody came from improvising and then notating. Unlike the Booker T-inspired piece, it took me much longer to settle on a melody. It is a very chord-heavy tune and more than any of the other works speaks to my natural inclinations on the keyboard to this point—thinking as a chordal player working from progressions and voicings first. Part of that has to do with the influence I knew I was working from in trying to write a tune in the style of "Let It Be" or "That's The Way God Planned It". I don't consider "Let It Be" to be a gospel song though it has plenty of gospel elements. I would define "That's The Way God Planned It" as a gospel song not only because of the harmonies and progressions, but because of Preston's lyrics and vocal performance that comes across as a full religious experience.

The original idea was to write a chord progression that was similar to that oft-used descending scale, but to try to find a different way to do it. To accomplish this I began

¹⁴⁴ Rod Liddle, "It is J.S. Bach who should claim royalties for 'A Whiter Shade Of Pale,'" *The Spectator*, Nov 18, 2006, accessed January 7, 2013, <http://search.proquest.com.ezproxy.library.yorku.ca/docview/201207765?accountid=15182>.

experimenting with adding chromatic pitches that weren't part of the natural key centre. What I came up with was the progression that starts in the fifth bar of the piece.

Fig. 8.2: “Rise To One” Chord Progression early version, bars 5-12.

The musical score consists of two staves. The top staff uses a treble clef and has a key signature of one sharp. It contains seven measures of chords: C, G/B, B_b13, A⁷, F_{mi}/A_{flat}, C, /E, F, and G. The bottom staff uses a bass clef and has a key signature of one sharp. It contains six measures of chords: C, G/B, B_b13, A⁷, A_b7, C/G, B_b, and F. The last measure of the bottom staff is in 2/4 time.

I did not write down these exact voicings and bass notes at the time since most of them are self-explanatory based on the chord symbols and not all of the indicated voicings were the exact voicings I used. However, the first two bars illustrate the sound I was going for, through their inclusion of chromatic bass notes, and the use of a common tone by staying with that G on top, which is common among all four chords in the first two bars. The specific bass notes indicated in the fourth bar were potential options I had written down for slash chord movement, such as the bass descending to D which really translates into D_{mi}7. Even when comparing this to the finished piece, the progression did not prove to be that different from what is shown here, including the last bar of 2/4, which is similar to the bars that are cut short during the verse of “That’s The Way God Planned It”.

One factor I was consciously thinking of was how the piano and organ compliment each other, which stems from the influence of “Let It Be”. Consequently, “Rise To One” is less of an organ feature than the other three pieces that comprise this thesis. It is driven as much by the

piano. The majority of the chordal writing was done at the piano while the process of the melody writing, which involved improvising and notating after the fact, was done at the organ. Due to the presence of the second keyboard, this is the one example out of my four pieces where the organ part is less critical in providing a bass role. This is in keeping with “Let It Be” and “That’s The Way God Planned It”, both of which feature a basic rhythm section of guitar, piano, electric bass, and drums.

So much of the structure and arrangement of this song was based on improvising that at times it became a jigsaw puzzle, arranging a few given minutes or seconds of material into a number of bars at any given point. Keeping each of my early drafts has proven to be helpful in recalling this since I was indicating notes at the time of which audio samples would be effective and where they were coming from. There was plenty of improvised material that went unused including alternate sections or progressions that were arranged but ultimately not included. Since the melody largely came from recording myself, the improvising session features two separate tracks that together span approximately 18 minutes of audio. These improvisations did not just feature the organ as I spent a good portion of the time improvising vocally to try and create a melody. A good example of the material that was improvised occurs in the last half of the repeated section, from bars 13 to 23, in what would be considered the pre-chorus and chorus of the arrangement.

I made the decision to think vocally for two reasons. Firstly, both “Let It Be” and “That’s The Way God Planned It” are vocal pieces with lyrics and this piece of my own is something I can hear lyrics being added to. Knowing that lyrics are not my strong point, I opted for consistency in this project by focusing on writing instrumental pieces exclusively. Secondly, I

knew thinking vocally would work for this example in particular because Billy Preston is someone I associate with creating a great vocal quality out of the organ instrumentally. This is a result of his personal tone and technique and also the repertoire he was recording in the early and mid 1960s before his work with The Beatles. (See Chapter 4.)

Due to the amount of improvised material and arranged sections in my own work, here is how the form of the larger arrangement is laid out. The four-bar intro at the beginning is a purely chordal intro from the piano. This is similar to the approach in the intros of “Let It Be” and “That’s The Way God Planned It”. Both pieces start in the key of C, as does this piece, with a chord progression that is either similar or identical to the verse with a similar bar length. The official number of bars is the same, 4, but the last bar from Preston’s intro on “That’s The Way God Planned It” is a 2/4 bar, creating the illusion of 3½ bars, a recurring rhythmic device that comes up throughout the verses to that song. This is how I set up my own intro, by using the pre-chorus progression—essentially the same chords that are used starting at bar 13. I used the rhythmic device of a shortened bar not only in my intro but also during a number of key transition points leading from the end of one section to the next.

The fifth bar is what I consider to be the start of the verse within the tune with the opening chords already discussed above. By bar 13 the arrangement takes on a different shape, since the pre-chorus and the bars that follow it are not perfectly symmetrical. The odd part is centered between the third and fourth bar when I had a decision to make regarding the meter and where the divisive double bar line would be placed. The third bar (15) by itself makes sense as a 4/4 bar, so on its own it is not that odd. However, in an early draft I had devised a way to fit eight bars from 13 to 20 with no change in the time signature. In that arrangement, what happened was

the phrase that starts the ascending movement of chords was entering on the third beat (of bar 16), and I realized that the remaining passages in 4/4 all fit in that time signature, but the overall feeling was that the entire emphasis had shifted over by two beats, that all the bars following it were overlapping a 4/4 phrase starting on beat three. For practicality in the final arrangement, the section is book-ended by bars 16 and 20 in 2/4. This leaves no question that the chorus starts in bar 17.

The chorus was a major factor that suggested the title “Rise To One”. The overall sound and mood of the piece has a bright and major tonality throughout. This is enhanced further by the influence of gospel music due to the orchestration of piano and organ and the sense of movement from the chords over the bass pattern. “Rise To One” also uses a number of plagal cadences that come up at turnarounds and the ends of certain phrases in the piece. Bars 8, 12, 16, and 25-28 all feature examples of this. The title is something that could be taken in a spiritual context and the ascending group of chords from the figure at bar 17 further suggested the idea of something rising or being uplifting. “One” is also an idea that refers to the organ in the sense that the 1' drawbar is the highest possible harmonic.

The two groups of two-bar passages, exchanged between the piano and the organ in bars 25-28, was something that was planned very early on, was notated and was not part of the improvising sessions that created other melodic material. This was my attempt to create an instrumental hook along the same lines as Preston’s example from “Let It Be”. I also examined how similar the figure is to the turnaround bar that happens at the end of every chorus in “That’s The Way God Planned It”.

Fig. 8.3: “That’s The Way God Planned It” turnaround.

Musical notation for Fig. 8.3. The top staff is in treble clef and the bottom staff is in bass clef. Both staves are in 4/4 time. The key signature is one flat. The top staff has notes Bb, F/A, C(sus4)/G, C(sus4)/F, C/E, and G(sus4)/D. The bottom staff has a corresponding melody line.

They are incredibly similar figures that both rely heavily on plagal (I - IV) cadences built over a descending bass line. They both feature the I - IV relationship between C and F with Bb moving a fourth down to F. Using that as a template, I tried to take that one step further and expand on that type of progression by starting from Bb and moving up a fourth to Eb. This is where I chose to start the instrumental break in my own tune, setting up a progression that descends with similar cadences and accelerates rhythmically. The first version I came up with was the one used as the two-bar organ solo.

Fig. 8.4: “Rise To One” Organ solo, bars 27-28.

Musical notation for Fig. 8.4. The top staff is in treble clef and the bottom staff is in bass clef. Both staves are in 2/4 time. The key signature is one flat. The top staff has notes Eb, Bb/D, C, Bb, F/A, Gmi7, C9, and F. A note '(solo organ)' is written below the treble clef staff.

I expanded on this by having the piano and rhythm section set up a variation in the two bars before it which is similar to how the “Let It Be” turnaround is played first by the rhythm section anticipating Preston’s organ figure.

This sets up the guitar solo, lasting four bars (29-32), over the same basic progression as the first ending of this chart which sets up the organ solo over the verse progression to be immediately followed by another instrumental verse.

The stop time section in the four bars following this last verse was something that had been created during the improvising session. I initially transcribed an exact duplication of the rhythms I had come up with in both the left and right hands. However, when preparing the arrangement to record, I opted to have the chart be more user friendly by indicating only the rhythms that were on the beat in quarter notes. I intentionally left room for flexibility and creativity in the rhythm section to allow any one of the players—bass, drums, guitar, or piano/organ—to improvise and fill in this short breakdown. Pragmatically, I knew that a series of quarter notes would be far easier to read than a detailed, sixteenth note-heavy bass part.

The last bit of new material is the group of ascending chords that comes in at bar 53. All three of these passages essentially follow the same sequence with the exception of where they end up on the dominant chord. Bar 53 ends on a basic G7, 54 on a C/G chord, and the third time through at bar 55 the passage lands on a G7sus4 chord. I consciously decided to include each of them so this was not something that was a result of improvising.

The piece ends with brief snippets and recapitulations of previous material from different sections, all fitting into the final 11 bars. However, I would consider the significant material to last only nine bars, in three different groups of three bars, looking at the final two bars written (65-66) as merely an extension and response to the C chord in bar 64.

More than any of the other pieces that comprise this thesis, “Rise To One” was the most flexible with regard to stops and registrations. I believe this has to do with a couple of factors,

the first being that the organ in this setting provides more of an accompaniment role than in any of my other pieces of music due to the presence of the electric bass as well as a second keyboard with the acoustic piano. The implications of this are significant since it frees up the left hand, meaning that a good chunk of the organ parts—either lead or accompaniment—could be played independently on a single manual, allowing the left hand the potential to adjust Leslie speeds and drawbar configurations on the fly.

The second factor is that with all the sources I spoke to and looked up, there was no conclusive evidence that suggests a definitive “Billy Preston” sound, which speaks to Preston’s versatility and his ability to orchestrate and constantly modify the timbres from the organ, not to mention the mystery over which organ was used on “Let It Be”. This is a good demonstration of the skill set that all organists should aspire to—the ability to keep changing sounds. As a player in a rhythm section, so much of the organist’s job is to be reactive to the rest of the ensemble and the acoustic properties of any given setting or environment either when performing live or in recording. Michael Fonfara explained to me a few sample drawbar settings, but emphasized the more important role that drawbar settings play as far as balance and how you can constantly adjust them rather than following stock settings.

I was always crazy about how these guys got their sounds, and I never cared much about getting them myself because I was too busy working with the band, and just playing the easy Jimmy Smith style sounds, and the full drawbar sounds and that, and maybe a ballad [with 808400004]..Fundamental, and then the third and fourth, and then this one up here [1’] wherever you like it in the mix. [maybe out full, maybe less] ... I’m not a solo Hammond player so much as I am, more in a band. When I hear what the band’s doing, I like to float my Hammond sound inside the band, and that’s where I use the drawbars to get a space that nobody else is occupying. I don’t wanna be in the guitar player’s way, but I wanna surround the singer with all kinds of great stuff, so that you can actually mix me way back, until I’m almost off, [but] still hear it.¹⁴⁵

¹⁴⁵ Michael Fonfara, interview by author. 14 December, 2012.

I tend to think of Billy Preston's work as well as gospel organ in general as a sound that highlights the upper harmonics with the last drawbar (1') in particular. When discussing Preston's playing with other organists, I heard many different variations as to how he got his sound and harmonics. As a listener, there are times when I can tell that he has pulled out all the stops. His solo on the live recording of "That's The Way God Planned It" is a good example of this. There are other records where the tone is still bright and full but it becomes clear that some harmonics have been pushed in.

Taking all of this in to consideration, I decided to settle on a few settings which could then be modified as the tune went on. One choice was to allow flexibility in my settings for chorus. The chorus knob was set to C3, but when I chose to leave the upper and lower chorus switches on or off was much more reactive and less consistent. This shows up on the recording, with some unrehearsed moments that surprised myself upon hearing the playback.

I set the lower manual to the bass settings (848000000) with chorus on to start when comping behind the piano. However, there could be moments when I would want to push in the two lower drawbars, to only leave the fundamental (8') active, to get that whistle tone, something that can be used as an effective solo device later on in the arrangement.

Despite the different variations on Billy Preston settings, the sound chosen for the upper manual was based on a source that provided at least one of Preston's potential groupings of drawbars. In an interview, organist Vanessa Rodrigues from Montreal points to Billy Preston's work on Aretha Franklin's *Live at Fillmore West* (1971) record, mentioning a photo showing the drawbars at 888808008.¹⁴⁶ I chose to use it as a starting point for the arrangement, which features

¹⁴⁶ Lars Mikael, "Captain-Foldback.com This Month: Vanessa Rodrigues," Captain Foldback, last modified June 2007, http://captain-foldback.com/This_month/this_month_5.htm.

a number of timbral shifts. The detailed descriptions below were analyzed upon listening to the isolated audio track of the organ take that was selected after recording, keeping in mind that the organ was an overdub after the piano with rhythm section, and none of the takes were identical as far as changes in stops or controls.

The organ first enters at bar 13, playing only on the lower manual to provide soft pads under the piano. The first switch to the upper manual happens in the pickup to bar 22 when the lead is handed off from the piano to the organ with the fuller stops where the melody now remains during the second time through the repeat at bar 5. There are quite a few shifts in Leslie speeds at this point, but even more interesting are some moments when the chorus switch is turned off mid-phrase such as at the 3rd beat of bar 7, and between bars 13-14. The solo organ figure at bar 27 comes from the upper and lower manuals with the chorus active on both with the Leslie on slow.

During the last two bars of guitar solo, while the Leslie is on fast, the remaining upper drawbars are pulled out to full to prep this sound for the organ solo. By now the C3 chorus is active on both upper and lower manuals and the solo is focused around the upper manual. The one key moment in the solo that provides another nod to Preston occurs in bar 38 where the ascending glissando from the lower manual using only the 8' with the Leslie on fast creates the organ growl for that “wow!” sound effect.

The organ lays out for two bars immediately after the solo, then when it re-enters one of those spontaneous sonic gems occurs. The Leslie is back to slow and the organ is softly doubling the melody on the lower manual with the chorus off and with just the fundamental. It is a brief

moment before I switch back to the upper manual (full stops) at bar 44 but that was one of my favourite surprises in recording this piece.

The controls and sounds are not modified again until the ending at bar 62 when the upper manual is back to the original 888808008 stops, while the lower manual is back to the bass stops with chorus on. The final moment of the song features a leap from the upper manual directly below to the lower manual. The switch happens on the fourth beat of bar 63 before the slide up to the final cadence. Unfortunately, my recollection of the session is such that I can't specify whether two different lower drawbar groups were set up between preset switches Bb and B, or whether drawbars were shifted manually from the same preset.

Of the four songs I composed for my thesis, "Rise To One" is the busiest in terms of the volume of content and the ideas that are introduced. The melody and chord changes are very active and need room to breathe. I believe the necessary balance between activity and a sense of spaciousness is achieved through the use of a slow tempo and appropriate dynamics. These dynamics have a great bearing on how the organ is used in the orchestration, both when accompanying and leading. The structure of the piece lines up with the way I would think of Billy Preston's playing, as discussed earlier in reference to his ability to use the organ vocally and to accompany a singer or a band. The element that I am most happy with in the arrangement and recording of this piece is the way in which the piano and organ take turns having moments when they are able to accompany and lead. The balance is strong enough that neither keyboard strikes me as the most dominant throughout, which is a salute to Billy Preston, who so successfully accomplished this.

Conclusion

My goal was to study a select group of players on the organ, find devices that are unique to the organ and to these players, and use those devices as tools in my own composing. I have discussed many devices: the sustain giving the organ its vocal quality and allowing for passages that would not be possible on piano; the control required between all of the organ's essential parts, which necessitates the player's command of his/her hands and feet; the organ's capability to function as a full orchestra, which brings a responsibility to the player to orchestrate and arrange as such; and the use of balance to remind an organist how the available tools can and should be used to react dynamically within an ensemble.

As stated at the beginning of this thesis, the genres discussed and the organists highlighted as part of that discussion were specific to my interest in them as frameworks for my own playing and writing. Regarding the larger discussion of Hammond playing, I have barely scratched the surface of the amount of accessible recordings and the number of organists in various eras and genres of music including the present. There is a wealth of material out there and many paths through the history of the instrument. I encourage those interested in the sound of the Hammond Organ to seek out those sounds on record and, when possible, to hear the real Hammond live in person.

The part of this process that has been most important for my own development has been closely examining what was involved, both in terms of technology and performance practice, in achieving the range of sounds the instrument is capable of. I have been reminded again why I and so many fellow keyboardists and organists became passionate about this instrument. Throughout this study, the “mystery” of the Hammond and the concept of the organist as

magician has been mentioned. Those who play the Hammond are enclosed behind a massive cabinet, allowing them to hide or show their motions as needed. The instrument allows a player to perform a number of auditory tricks. When I asked certain players about specific techniques, sometimes they gave no answer, and sometimes they were not willing to offer a clear answer. Magicians often don't reveal their tricks.

Perhaps the most encouraging result of this study was to answer the question as to whether the Hammond Organ still has relevance today. Virtually all of my findings point to yes. The sheer number of written sources and commentary as well as the discussions I engaged in that could virtually fill a book on its own is a testament to how many organists still are passionate about the instrument and are willing to pass on their knowledge of this tradition. This is something I am eternally grateful for.¹⁴⁷ In addition to this, there is no shortage of curiosity and interest in the instrument as evidenced by the amount of online forums, groups, and discussion boards asking, sharing, and debating these same topics, often in search of that Holy Grail question of "how did they get that sound?"

Part of the struggle is due to the fact that true tonewheel organs have not been produced in nearly forty years, something that was pointed out a couple of times by those I spoke to. The upkeep of vintage instruments is a topic of its own, but Lance Anderson mentioned the cautionary thought that "in fifty years, it's liable to be that we won't have a tonewheel organ anymore."¹⁴⁸ The flip side of this is encouraging in the fact that the Hammond Company has been revived by the production of newer organs as have their competitors. While not true

¹⁴⁷ While those selected for commentary here included only a handful of players, I could not devote the time to reach out to everyone I would have liked to mainly due to the need to keep the amount of content under control. In the end though, it proves to be encouraging when off the top of my head I could think of a group of active organists spanning three times the number I reached here.

¹⁴⁸ Lance Anderson, interview by author. 24 October, 2012.

tonewheel organs (something that could spark an entirely separate debate) the current line of imitators continue to be improved and upgraded, trying to come closer to re-creating the real sound of that classic Hammond and Leslie combination.

While the musical side of composing my own works for the organ was largely designed in tribute to sounds, or as analogues to certain sounds, my ultimate goal was to improve my playing and writing. Studying existing songs has enabled me to look closely at what goes into the structure of a well-written melody or arrangement in various genres. From my small collection of four composed pieces and the four eras selected, I have been able to establish and understand the connections between different players, and I have been fascinated by these findings. It has been an inspiring experience to write and play an eclectic group of songs that draws from forty plus years of history on this instrument. The Hammond Organ is an exceptional and diverse instrument, and in focusing on it with such intensity I have come to realize and appreciate the many ways it has shaped my overall tastes and growth in music.

Part 3: Scores

RAIN IN JULY

EASY, 'BIG BAND' SWING $\text{♩} = 130$

"FULL JAZZ ORGAN" STYLE, FAST LESLIE

COMPOSED BY JESSE WHITELEY

ORGAN

1. $G\ D^9\ Bmi7(b5)/F\ E7\ Ami7\ Eb13(\#11)\ D7\ G\ D7$

6. $Emi\ F\#mi7(b5)$

11. $B7\ Bb7\ A7\ D7\ F\#mi7(b5)$

10. $B7(b9)\ B7(\#9)\ Emi\ Bmi\ F\#mi7\ B7\ E$

15. $Ami7\ Bb7\ Bmi7\ C7\ Emi\ A7\ Ami\ D7$

19. $G\ D^9\ Bmi7(b5)/F\ E7\ Ami7\ Eb13(\#11)\ D7\ G\ D7$

24. $Emi\ Ami\ D7\ G$

27. $G\ D^9$

28. $G\ D^9\ G\ Emi7\ Ami11\ D7\ G$

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32 E^{mi7} EbM_A⁷ G/D D⁹

35 G⁶ D⁷ B^{mi7(b5)/F} E⁷ Ami Eb^{13(#11)} D⁷ G D⁷ E^{mi}
ORGAN SOLO

41 F#^{mi7(b5)} B⁷ B^{b7} A⁷ D⁷ G D⁷ B^{mi7(b5)/F} E⁷ Ami

46 Eb^{13(#11)} D⁷ G D⁷ E^{mi} F#^{mi7(b5)} B^{7(b9)}
SOLI W ORGAN+GUITAR

51 E^{mi} B^{mi} F#^{mi7} B⁷ E

55 Ami⁷ B^{b7} B^{mi7} C⁷ E^{mi} A¹³ Ami⁷ D⁷
GUITAR SOLO

65 Ami D⁷ G **67** G/D G

69 Bb

73 G G#07 A13 75 D C#7(45) F#mi7(b5)/C

78 87 Emi7 F07 D/F# G gmi E7

83 G G#07 D/A gmi7 Emi7 N.C.

(KEEP 3RD HARMONIC ON ALL DRAWBARS IN)

87 87 D/A F/C

FULL ORGAN

91 BbMA7 EbMA7 N.C. GM A13

ANOTHER BLUE J

HEAVY SWING $\text{J} = 116$

COMPOSED BY JESSE WHITELEY

ORGAN

A Fmi Gmi7(b5) C7 Fmi Gmi7(b5) C7

5 Fmi Gmi7(b5) C7 Fmi 1

9 2. B Ab¹³ FULL BAND IN Gmi7(b5) C7(b9) Fmi

13 F7/A Bbm17 /Ab Gmi7(b5) C7(b9) Fmi Db7

17 C7 Fmi Gmi7(b5) C7 Fmi Gmi7(b5) C7
KEEP TIME GOING DURING LAST A

22 Fmi Gmi7(b5) C7 Fmi

Solo over AABA, open solos over Ab blues, return to form for ending.

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SMOKEY'S HOP

FUNKY "BOOKER T" GROOVE

$\text{♩} = 96$

COMPOSED BY JESSE WHITELEY

GUITAR

ORGAN {

BASS

DRUMS

SOLO FILL

E_b⁹ 888800000 PERCUSSION SOFT, FAST, 2ND

OPT. DOUBLING OF BASS ON LOWER 848000000

Hi HAT

5 (5) E_b⁷ (#9 STYLE COMPING)

GTR.

ORG. {

BASS

Dr.

E_b⁷

SIM.

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8

GTR.

ORG.

BASS

Dr.

SIM. CONTINUE WITH THIS FEEL

11

GTR.

Ab7

ORG.

BASS

Ab7

(BASS)

Dr.

14

GTR.

ORG.

BASS

Dr.

E \flat ⁹

E \flat ⁹

2

(ORGAN)

2

19

GTR.

ORG.

BASS

Dr.

2.
A \flat ⁷

A \flat ⁷

C m

C m

22

GTR.

ORG.

BASS

(BASS)

Dr.

Fm9

G \flat 6

D \flat /A \flat A \flat 7

26

GTR.

ORG.

BASS

(ORGAN)

Dr.

B \flat 7(\$9)

(27)

E \flat 9

SOLO FILL

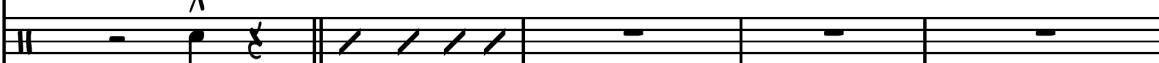
(31) GUITAR SOLO
Eb7

30

GTR. 

ORG. 

BASS 

Dr. 

Eb7

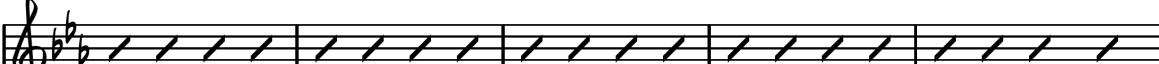
(SUGGESTED COMPING FIGURES)

PERCUSSION OFF

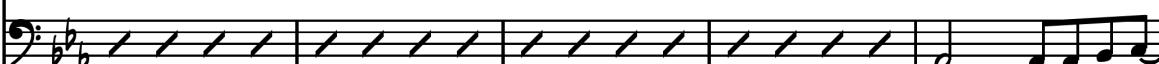
808800008

GROOVE

35 Eb7

GTR. 

ORG. 

BASS 

Dr. 

Eb7

Ab

Eb7 sim.

Ab

B:

(BASS)

(43)

C^m F^m Eb/G Ab Bb7(SUS4) Eb Ebm/Bb

GTR. ORG. BASS DR.

This musical score section starts at measure 40. It includes parts for GTR., ORG., BASS, and DR. The GTR. part has a sustained note with a fermata. The ORG. part has a sustained note with a fermata. The BASS part has a sustained note with a fermata. The DR. part has a sustained note with a fermata. Measure 41 continues with the same parts and dynamics. Measure 42 begins with a dynamic instruction: "SOFT, FAST PERCUSSION ON 2ND HARMONIC". The ORG. and BASS parts play unison rhythm. Measure 43 concludes the section.

45 D_b/Ab Ab⁷/Gb Eb⁷/G Gb

GTR. ORG. BASS DR.

This musical score section starts at measure 45. It includes parts for GTR., ORG., BASS, and DR. The GTR. part has a sustained note with a fermata. The ORG. part has a sustained note with a fermata. The BASS part has a sustained note with a fermata. The DR. part has a sustained note with a fermata. Measure 46 continues with the same parts and dynamics. Measure 47 begins with a dynamic instruction: "SOFT, FAST PERCUSSION ON 2ND HARMONIC". The ORG. and BASS parts play unison rhythm. Measure 48 concludes the section.

49 F^mi7 B_b7(SUS4) (51) DRUM SOLO

This musical score section starts at measure 49. The first two measures show the GTR. and ORG. parts. The GTR. part has a single note followed by a sixteenth-note pattern. The ORG. part consists of three staves: the top staff has a eighth-note followed by a sixteenth-note pattern; the middle staff has a eighth-note followed by a sixteenth-note pattern; the bottom staff has a eighth-note followed by a sixteenth-note pattern. The third measure shows the BASS and DR. parts. The BASS part has a eighth-note followed by a sixteenth-note pattern. The DR. part has a eighth-note followed by a sixteenth-note pattern.

(55)

53 Ab Eb/G Eb^m/Gb F^m

This musical score section starts at measure 53. The first two measures show the GTR. and ORG. parts. The GTR. part has a eighth-note followed by a sixteenth-note pattern. The ORG. part consists of three staves: the top staff has a eighth-note followed by a sixteenth-note pattern; the middle staff has a eighth-note followed by a sixteenth-note pattern; the bottom staff has a eighth-note followed by a sixteenth-note pattern. The third measure shows the BASS and DR. parts. The BASS part has a eighth-note followed by a sixteenth-note pattern. The DR. part has a eighth-note followed by a sixteenth-note pattern.

(ORGAN & BASS, UNISON)

58 E Eb Eb7/D_b Ab/C Ab^{m1}/Cb Eb/B_b

GTR. 

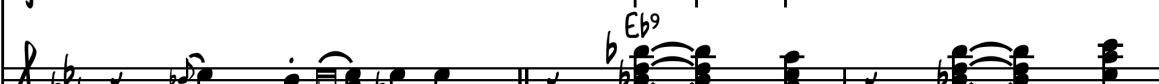
ORG. 

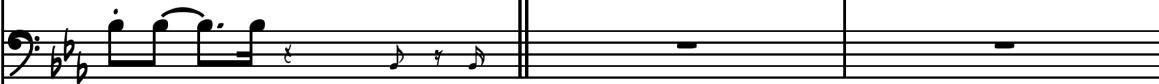
BASS 

DR. 

62 B_b7(SUS4) (63) Eb⁹

GTR. 

ORG. 

BASS 

DR. 

65

(67) Ab A^o Eb/Bb Ab⁷

GTR. (Treble clef, 2 sharps) 2 measures of eighth-note patterns. Measure 66 starts with a bass note, followed by a measure of eighth notes. Measure 67 starts with a bass note, followed by a measure of eighth notes.

ORG. (Treble and Bass clefs, 2 sharps) Measure 65: bass note. Measure 66: silent. Measure 67: bass note, then a measure of eighth notes.

BASS (Bass clef, 2 sharps) Measure 65: silent. Measure 66: bass note. Measure 67: bass note, then a measure of eighth notes.

DR. (None) Measure 65: silent. Measure 66: silent. Measure 67: silent.

69 Eb VAMP OUT, PLAY TO FADE

GTR. (Treble clef, 2 sharps) Measure 69: eighth-note chords. Measures 70-71: eighth-note patterns.

ORG. (Treble and Bass clefs, 2 sharps) Measure 69: eighth-note chords. Measures 70-71: eighth-note patterns.

BASS (Bass clef, 2 sharps) Measure 69: eighth-note chords. Measures 70-71: eighth-note patterns.

DR. (None) Measure 69: eighth-note chords. Measures 70-71: eighth-note patterns.

Rise To One

Slow straight Gospel feel ♩ = 70

Composed by Jesse Whiteley

C E^{mi}/B A^{mi} D^{mi} C B^b F/A C/G **5** C G/B

Solo piano intro

Melody as written on piano,
8va 2nd x on organ.

6 B_b^{13(#11)} A⁷ F^{mi}/A_b F^{mi6} C/G F C/G
fill, opt. ad lib

9 C G/B B_b^{13(#11)} A⁷ A_b¹³ C/G B_b F
Band in 1st x

[A^{7(b9)}] *mf*

13 **13** C E^{mi} A^{mi} C^{#o} D^{mi} C B_b⁶ F C

17 C D^{mi} C^{7/E} F G C D^{mi} C^{7/E} F C C/E F F/A
f

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1.
 C F/C C E_{mi} F E_{mi} D_{mi7} C/G
 21 (organ lead) (piano)

2.
 C
 Eb B_b/D C B_b F/A C/G Eb B_b/D C B_b F/A G_{mi7} C⁹
 25 voice selected note on top
 (piano, with full band) (solo organ)

29
 29 F E_{mi} D_{mi} C F E_{mi} D_{mi} C
 (Guitar solo)

33 C G/B B_b^{13(#11)} A⁷ F_{mi}/A_b C/G F F/G C G/B B_b^{13(#11)} A⁷
 Organ solo over A

39 A_b¹³ C/G B_b F 41 C G/B B_b^{13(#11)} A^{7(b9)} A_b¹³ C/G

44 B_b F 45 C E_{mi} D_{mi} B_b C E_{mi}
 f stop time feel, add fills

48 Dmi C/G F/G C Dmi Emi F G C F

51 C F C [53] Dmi A⁷/E Dmi/F D⁷/F# G⁷

play this range on piano, 8va on organ

54 Dmi A⁷/E Dmi/F D⁷/F# C/G Dmi A⁷/E Dmi/F G⁷(sus4) piano

56 C G/B B^b13(#11) A⁷ Fmi/A^b C/G
ad lib organ fills around the melody

59 Dmi A⁷/E Dmi/F D⁷/F# C/G F Emi Dmi⁷ C

rit.

62 E^b B^b/D C B^b F/A G^{mi7} F C (organ)

mp

Bibliography

“11-Year-Old Billy Preston & Nat ‘King’ Cole - Blueberry Hill 1957.flv.” [1957]. Video clip. Accessed March 7, 2013. YouTube. [www.youtube.com](http://www.youtube.com/watch?v=kxSHBIXfFPE),

Albertson, Chris. Liner notes. *The Complete Clef/Verve Count Basie Fifties Studio Recordings*. Count Basie and His Orchestra. Mosaic MD8-229. 2005, compact disc.

Alexander, Geoff X, and Doerschuk, Robert L. (Bob). “Historic Masters of Jazz Organ: burnin on the big bad B-3.” *Keyboard* 15 (May 1989): 42-54.

Amos, Alvin E. “The use of keyboard instruments in the religious services of selected Black Baptist churches in central Piedmont North Carolina.” Ed.D. diss., University of North Carolina, 1987.

Babiuk, Andy. *Beatles Gear*. San Francisco: Backbeat Books, 2001.

“The Beatles - Let It Be The Film (Full Version) with Rooftop Concert.” [1969]. Video clip.

Birnbaum, Larry. “Jimmy Smith: Sermonizing in the ‘70s (interview).” *Downbeat* 44 (December 15, 1977): 22-23.

Bourland, Gary N. “Jack McDuff: Blues~Roots Jazz Organ.” *Contemporary Keyboard* (September/October 1976): 8; 26-30.

Bowman, Rob. *Soulsville, U.S.A.: The Story of Stax Records*. New York: Schirmer Books, 1997.

Bowman, Rob. “The Stax Sound: A Musicological Analysis.” *Popular Music* 14.3 (1995): 285-320. Accessed December 23, 2009. JSTOR.

Brislin, Tom, and Rideout, Ernie. “Billy Preston: The Last Words.” *Keyboard* 32.8 (August 2006): 24-25. Accessed October 6, 2012. ProQuest.

Budiansky, Stephen. “Melodic Invention.” *Humanities* 21, 4 (July/August 2000): 21-23. Accessed October 12, 2012. ProQuest.

“Buckner, Ex-Hampton Pianist Hit Jackpot In Switch To The Organ.” *The Chicago Defender (National edition)* (1921-1967). Jun 25, 1955. Accessed November 9, 2012. ProQuest.

Chamberlain, Adrian. "Booker T. Never Tires of Green Onions." *Times - Colonist*, Jun 13, 2009. Accessed October 16, 2012. *ProQuest*.

Dean-Lewis, Tim. "Treading The Board: A Pedal Play—The Artistry Of Jimmy Smith in Performance." *Annual Review of Jazz Studies* 10 (1999): 195-219.

Doerschuk, Bob. "Billy Preston: From Ray Charles To The Beatles To A Solo Career." *Contemporary Keyboard* (February 1977): 24-25.

Doerschuk, Bob. "Booker T.: Beyond 'Green Onions': A Neo-Soul Recipe For The 1980s." *Contemporary Keyboard* (January 1980): 32-45.

Doerschuk, Bob. "Jimmy McGriff: 'jazz organ is alive and growing'." *Keyboard* (January 1984): 28-32.

"Doggett And 'Wild' Bill Davis Are Good Friends." *Atlanta Daily World*. May 27, 1955. Accessed February 5, 2013. *ProQuest*.

Doran, James M. *Erroll Garner: The Most Happy Piano*. Metuchen: Scarecrow Press. 1985.

Duke, Vernon. *April In Paris*, Arrangement transcribed and re-constructed by Jeff Hest. Glocca Morra Music and Vernon Duke Music Corp, 1999.

Fallico, Pete. "Jimmy Smith: NEA Jazz Master." All About Jazz. Last modified February 10, 2005. <http://www.allaboutjazz.com/php/article.php?id=16506#.UU85DqXWqsg>.

Fortner, Stephen. "Clonewheel Heaven." *Keyboard* 30, 11 (November 2004): 30-52. Accessed November 16, 2012. *ProQuest*.

Fulton, Champian. "The Transcendent Aesthetics Of The Block Chord Language." *Downbeat* 78. 9 (September 2011): 60.

"HammondWiki — Squabbling." Accessed December 11, 2012. <http://www.dairiki.org/HammondWiki/Squabbling>.

Hentoff, Nat. "A Jazz Master Remembers." *Wall Street Journal*, December 30, 2003. Accessed November 10, 2012. *ProQuest*.

"Fats Waller Plays Organ on Saturdays." *Atlanta Daily World*. May 6, 1934. Accessed October 12, 2012. *ProQuest*.

Irwin, Stevens. *Dictionary of Electronic Organ Stops: A guide to the understanding of the stops on all electronic organs*. New York: G. Schirmer, 1968.

Irwin, Stevens. *Dictionary of Hammond organ stops: An introduction to playing the Hammond organ—A translation of pipe-organ stops into Hammond-organ number arrangements.* New York: G. Schirmer, 1970.

“JIMMY SMITH MOANIN’.” [n.d.]. Video clip. Accessed December 31, 2012. YouTube. [www.youtube.com, http://www.youtube.com/watch?v=Jh4mfOYWcjY](http://www.youtube.com/watch?v=Jh4mfOYWcjY).

Kubik, Gerhard. “Bourdon, Blue Notes, and Pentatonism in the Blues: An Africanist Perspective.” In *Ramblin’ on my mind: New perspectives on the blues*, by David Evans, 11-48. Urbana, IL: University of Illinois Press, 2008.

Laidman, Janet Loretta. “The use of black spirituals in the organ music of contemporary black composers as illustrated in the works of three composers.” Ed.D. diss., Columbia University, 1989.

Liddle, Rod. “It is J.S. Bach who should claim royalties for ‘A Whiter Shade Of Pale’.” *The Spectator*, Nov 18, 2006. Accessed January 7, 2013. *ProQuest*.

MacLeod, John. *Arranging 5 & 6: A Course in Arranging and Orchestration For Big Band.* Toronto, [n.d.]

Matteo, Steve. *Let It Be.* New York: Continuum, 2004.

Mikael, Lars. “Captain-Foldback.com This Month: Vanessa Rodrigues.” Captain Foldback. last modified June 2007. http://captain-foldback.com/This_month/this_month_5.htm.

“Milt Buckner - Green Onions.” [n.d.]. Video clip. Accessed February 19, 2013. YouTube. [www.youtube.com, http://www.youtube.com/watch?v=f3RvcFNBxZ8](http://www.youtube.com/watch?v=f3RvcFNBxZ8).

“Milt Buckner, Illinois Jacquet, Jo Jones, part 1.” [1975]. Video clip. Accessed February 19, 2013. YouTube. [www.youtube.com, http://www.youtube.com/watch?v=kcxMqP-xZDo](http://www.youtube.com/watch?v=kcxMqP-xZDo).

Payzant, Geoffrey. “Performance And The Existence Of Art.” *The Dalhousie Review* 44 (1964): 83-95.

Rebennack, Mac. *Dr. John Teaches New Orleans Piano Vol. 3: Sanctifying the Blues.* Woodstock: Homespun Tapes, 1997.

Roberts, Kimberly C. “The Royal Treatment: Restored theater will revitalize South Street.” *Philadelphia Tribune*, February 11, 2003. Accessed February 2, 2013. *ProQuest*.

Rogers, Matt. “Jimmy McGriff (1936–2008): Beautiful Blues.” *Wax Poetics* 30 (2008): 24.

Rogers, Matt. "Soul Current: Organist and Memphis native Booker T. Jones was the life force of the Stax sound." *Wax Poetics* 35 (2009): 46-52.

Ryan, Kevin, and Kehew, Brian. *Recording The Beatles*. Houston: Curvebender, 2006.

Seymour, Gene. "Hard Bop." In *The Oxford Companion To Jazz*, edited by Bill Kirchner, 373-388. New York: Oxford University Press, 2000.

Suply, Doug, and Schweighardt, Ray. *Get Back: The Unauthorized Chronicle of the Beatles' Let It Be Disaster*. New York: St. Martin's Press, 1997.

Surowicz, Tom. "Organ Groovin' With Joey D & Brother Jack." *Downbeat* 61.7 (June 1991): 21-23.

Touzeau, Jeff. "From Green Onions To Holey Potatoes." *Pro Sound News, International* 31.3 (March 2009): 58. Accessed October 16, 2012. *ProQuest*.

Vail, Mark. *Keyboard presents The Hammond Organ: Beauty in the B*. San Francisco: Miller Freeman, 1997.

Vail, Mark. *The Hammond Organ: Beauty in the B (Second Edition)*. San Francisco: Backbeat Books, 2002.

Waller, Thomas Wright (Fats). *Thomas Wright "Fats" Waller: Performances In Transcription, 1927-1943*. Edited by Paul S. Machlin. Madison: A-R Editions, 2001.

Williams, Richard "The Hammond Was Mysterious, an Enigma'." *Guardian*, April 10, 2009: 5-5. Accessed October 16, 2012. *ProQuest*.

Discography

Anderson/Sloski. *Footwork*. Make It Real Records MIR 005. 2003, compact disc.

Basie, Count. *The Complete Clef/Verve Count Basie Fifties Studio Recordings*. Mosaic Records MD8-229. 2005, compact disc.

Basie, Count. *Count Basie And The Kansas City Seven*. Impulse! IMPD-202. 1996, compact disc.

Basie, Count. *Small Groups Studio Sides 1950-1952*. Universal/Saga Jazz 47167. 2006, compact disc.

The Beatles. *Let It Be*. Capitol/EMI Records C2 07777 46447 2 3. 1987, compact disc.

The Beatles. *Let It Be...Naked*. Apple Corps Ltd./EMI Records Ltd. 07243 595714 2 3. 2003, compact disc.

The Beatles. *Past Masters: Volume Two*. Capitol/EMI Records C2 90044. 1988, compact disc.

Booker T. & The MGs. *The Very Best of Booker T. & The MGs*. Rhino Records R2 71738. 1994, compact disc.

Buckner, Milt. *Rockin' With Milt*. Fresh Sound Records FSR-CD 511. 2008, compact disc.

Charles, Ray. *Genius+Soul=Jazz*. (also contains the LP *My Kind Of Jazz*). Rhino Records R2 72814. 1997, compact disc.

Charles, Ray. *Genius Loves Company*. Concord Records/Hear Music CCD-2248-2. 2004, compact disc.

Clooney, Rosemary. *Swing Around Rosie*. Coral Stereo CRL 757266. 2002, compact disc.

Franklin, Aretha. *Just Right Tonight*. From *Hey Now Hey: The Other Side Of The Sky*. Atlantic 7265. 1973, digital download.

Garner, Erroll. *Concert By The Sea*. Jazz Beat 506. 2007, compact disc.

Harris, Gene and McDuff, Jack. *Down Home Blues*. Concord Records CCD-4785-2. 1997, compact disc.

Harrison, George. *Concert For Bangladesh*. Capitol/EMI Records 35880. 2005, compact disc.

McDuff, Jack. *Hot Barbeque / Live!* (contains the LPs *Hot Barbeque* and *Live! At The Front Room*). BGP/Fantasy CDBGPD 053. 1993, compact disc.

McGriff, Jimmy. *The Best Of The Sue Years: 1962-1965*. EMI Music Distribution 3605492. 2006, compact disc.

McKenna, Dave. *A Handful Of Stars*. Concord Records CCD-4580. 1993, compact disc.

Preston, Billy. *16 Yr. Old Soul*. ABKCO Records. 2011, digital download.

Preston, Billy. *Soul Meeting*. Going For A Song GFS623. [n.d.], compact disc.

Smith, Jimmy. *Home Cookin'*. Blue Note CDP 7243 8 53360 2 7. 1996, compact disc.

Smith, Jimmy. *Back At The Chicken Shack*. Blue Note 4117. 1994, compact disc.

Smith, Jimmy. *Crazy Baby! The Incredible Jimmy Smith*. Blue Note TOCJ-4030. 1993, compact disc.

Smith, Jimmy. *Jimmy Smith Plays Fats Waller*. Blue Note 2153692. 2008, compact disc.

Smith, Jimmy. *Jazz Masters 29*. Verve 314 521 855-2. 1994, compact disc.

Smith, Jimmy. *God Rest Ye Merry Gentlemen*. From *Have Yourself A Jazzy Little Christmas*. Various Artists. Polygram Records Inc. 840 501-2. 1989, compact disc.

Waller, Fats. *Fats Waller at the Organ, Vol. 3: 1926-1929*. EPM HS151212. 1999, compact disc.

Appendix A: Research Participants and dates

Lance Anderson: October 24, 2012

Michael Fonfara: December 14, 2012

Denis Keldie: November 2, 2012

Tony Monaco: November 19 and December 3, 2012

Paul Shaffer: October 5, 2012

Appendix B: Audio recording session information

Musicians

Jesse Whiteley: Hammond C-3 Organ on all tracks, Piano on *Rise To One*.

Jeff Halischuk: Drums

Mitch Lewis: Electric Guitars

Terry Wilkins: Electric Bass on *Smokey's Hop* and *Rise To One*, String Bass on *Rain In July*.

Recorded January 25, 2013 at Wellesley Sound, Toronto.

Engineered by Jeff McCulloch

Mixed and edited by L. Stu Young