

EARLY JAZZ–ROCK

THE MUSIC OF MILES DAVIS, 1967–72

JARNO KUKKONEN

SIBELIUS ACADEMY JAZZ DEPARTMENT 2005

Submitted in partial fulfillment of requirements for the degree of Doctor of Music
Sibelius Academy
Jazz Music Department
Study Program in Performance
2005

Jarno Kukkonen
Sibelius Academy
P.O.Box 86
00251 Helsinki
FINLAND

e-mail: jarno.kukkonen@siba.fi

Abstract

This study examines various aspects of Miles Davis's music, the main subject being his *jazz-rock* phase between years 1967–72. On the macro level, I describe the study materials: Davis's recordings. From there I proceed to the micro level, analyzing selected pieces in greater detail. I explain Davis's renewal of the jazz tradition through his introduction of musical elements previously considered anomalous to jazz. From among these elements, I look for those that created coherence in Davis's early *jazz-rock* phase. The enclosed tables illustrate these elements and their appearance in Davis's music chronologically. I have also attempted to define the term *jazz-rock* and categorize certain pieces in Davis's repertoire.

Much of Davis's recorded music of the period was released as extended suites under generic titles without naming the separate movements that made up each entity. Besides examining the complexities involved when identifying Davis's pieces, this study illuminates the reoccurrence of certain musical motifs throughout several works and demonstrates how Davis reshaped others' compositions to suit his preferences, for example by omitting sections and simplifying their harmonic content.

The study shows that Davis gradually developed an approach to music that favored rhythm, interaction and tone color over harmony and melody; he eventually abandoned harmony and song forms as they are traditionally understood. Davis's way of making music was a process in which each performance created unique musical forms. As a jazz soloist he developed a strong rhythmic expressiveness that overshadowed any underlying harmonic content.

Transcriptions of the music studied are included

Keywords: Miles Davis, jazz styles, jazz-rock, rock-jazz, fusion, jazz composition, jazz improvisation

1	Introduction	4
1.1	Background.....	4
1.2	Object of study.....	4
1.3	Goals of study	5
1.4	Study materials and methods.....	5
1.4.1	Historical narrative.....	5
1.4.2	Transcriptions	6
1.4.3	Analysis	6
1.5	Semantic complexities of the term “jazz–rock”.....	6
1.5.1	Historical context	8
2	Miles Davis, a redefiner of jazz.....	9
2.1	“Hope it ain’t anyone I know.”	10
2.2	The two periods of Miles Davis’s 1960s quintet	11
2.2.1	First period of the 1960s quintet.....	11
2.2.2	Second period of the 1960s quintet.....	12
2.3	Early jazz–rock of Miles Davis, 1967–69	12
2.4	The studio sessions, 1967–69	14
2.4.1	Sorcerer and Nefertiti.....	15
2.4.2	“Circle in the Round”	16
2.4.3	Miles in the Sky	17
2.4.4	Filles de Kilimanjaro.....	17
2.4.5	“Directions”	19
2.4.6	In a Silent Way.....	20
2.4.7	Bitches Brew.....	23
2.4.8	“Great Expectations”	24
2.5	The concert band, 1967–69.....	25
2.6	The studio sessions, 1970–72	28
2.6.1	“Lonely Fire”	28
2.6.2	A Tribute to Jack Johnson.....	29
2.6.3	Live–Evil.....	30
2.6.4	On the Corner	31
2.7	The concert band, 1970–72.....	33
3	Elements of jazz–rock in Miles Davis’s studio recordings, 1965–69	37
3.1	Even eighths.....	38
3.3	Bass ostinato	39

3.4	Pedal point	39
3.5	Time-no-changes.....	40
3.6	Theme as interlude	40
3.7	Melodic ostinato.....	41
3.8	Electric guitar	41
3.9	Postproduction editing	42
3.10	Coloristic elements.....	44
3.11	Melody in the bass	45
3.12	Electric keyboard	45
3.13	Odd or changing meter	45
3.14	Electric Bass.....	46
3.15	Triadic harmony.....	46
3.16	Multiple keyboards.....	47
3.17	Percussion	48
3.18	Indian instruments	48
4	Characteristics in Miles Davis's pieces, 1969–70	48
4.1	Song titles.....	49
4.1.1	“Willie Nelson”.....	49
4.1.2	“Right Off”.....	50
4.1.3	“Yester Now”	51
4.2	The augmented scale	52
4.3	Polytonality	53
4.4	Rhythmic displacement	54
5	Development of a tune: Joe Zawinul's “Directions” in Miles Davis's performances, 1968–1971.....	55
5.1	November 1968, long intro on the second take.....	56
5.2	July 1969, double-time feel	56
5.3	March 1970, reharmonized head	56
5.4	April 1970, no intro	57
5.5	June 1970, funk ostinato, half-time feel	57
5.6	August 1970, another head reharmonization	57
5.7	December 1970, half tempo after Davis's solo.....	58
5.8	November 1971	58
5.9	Conclusions	58
6	Re-use of compositional material.....	59

6.1	Style categories	60
6.1.1	Vamp style.....	60
6.1.2	Rhythm and blues style.....	61
6.1.3	Pop style	62
6.1.4	Ethno style.....	62
6.1.5	Tone poem	63
7	Summary	64
7.1	Suggestions for further study.....	68
	Glossary	69
	References	71
	Books and articles	71
	Interviews	71
	Instructional Materials	72
	Recordings.....	72

Appendix 1

Musical examples

Appendix 2

Miles Davis's coded phrases

Appendix 3

"Yester Now"

Appendix 4

"Directions"

Appendix 5

Table 1: Elements of jazz-rock in Miles Davis's recordings, 1965-69

Table 2: Personnel on Miles Davis's recordings, 1967-69

Table 3: Personnel on Miles Davis's recordings, 1970-72

1 Introduction

1.1 Background

In this text the term *jazz-rock* describes a musical style that emerged in the United States and Great Britain in the late 1960s. *Jazz-rock* blends elements of rock, funk, ethnic music traditions – mainly Indian, South American and African – and other musical sources with contemporary jazz. The musical roots of *jazz-rock* lie primarily in the jazz tradition, while the rhythmic and coloristic characteristics of rock music provide a contrasting outlook radically different from what is generally understood as jazz. *Jazz-rock* is music that was played and developed by musicians familiar with the communicative, interactive and improvisational traditions of jazz.

Besides this text, which forms the thesis section of the Doctoral Degree in the artistic study program, the main part of these studies consists of five concerts in which I performed. Because I see this text as my contribution to ongoing discussions among jazz researchers within the global jazz community, I prefer to use established jazz terms that in many cases contain slang words; these are explained in the Glossary.

1.2 Object of study

The main object of this study is jazz-rock, a jazz style that emerged in recordings made by Miles Davis during the years 1967–72. Because many of the recordings were not released at that time, my study material consists only of Davis's recordings from that period that were legally released before 2005.

By late 1972 the style had established itself as an autonomous direction within the jazz tradition, and several books on the subject have been published in recent years. From the standpoint of the present study, the most important of these is Paul Tingén's *Miles Beyond-The Electric Explorations of Miles Davis, 1967-1991*. The only academic study concerning the subject that I have found so far is Victor Svorinich's article *Electric Miles: A Look at the In a Silent Way and On the Corner Sessions*.

1.3 Goals of study

My intention is to clarify the process that led to the synthesis of jazz with the instrumentation and rhythmic framework of rock in Davis's music. One goal of this study is to specify the musical elements in Davis's music, whose stature in jazz alone justifies the term *jazz-rock*. The presence of these elements creates unity – coherence – within the style. From the historical point of view this study also investigates the sequence of events that led to the formation of this style.

Through jazz-rock new ways of manipulating rhythm, harmony, form and tonal color were developed. Because these conventions differed radically from the traditional ways these musical elements had been previously treated in jazz, the style's connection to the jazz tradition was not always immediately apparent. My aim is to illustrate that jazz-rock contained enough essential characteristics of jazz to be considered a natural continuation of the jazz tradition.

1.4 Study materials and methods

1.4.1 Historical narrative

The recordings of Miles Davis during the years 1967–72, when early jazz-rock emerged as a clearly recognizable phenomenon, is examined chronologically. When charting Davis's musical progress, I have attempted to identify his most important contributions to the seminal formation of jazz-rock. The source materials for the historical narrative are the books and articles listed in the Glossary.

Davis was naturally not the only musician involved in the emergence of the genre. I have chosen him not only because of his importance in the development of jazz-rock, but also because I performed and became acquainted with his music in one of my five postgraduate concerts. I have also interviewed three important jazz artists who, although they never worked directly with Davis, were involved in the early development of the jazz-rock style: Michael Gibbs, Ron McClure and Randy Brecker. These interviews have served as a sounding board, confirming or disproving some of my assumptions while introducing new information and insight into the subject matter.

1.4.2 Transcriptions

The musical transcription process was divided into three stages: The first stage consisted of listening to all the study materials: the recordings listed in Table 1. Through the listening process I formulated a set of criteria to determine which material would be transcribed. In the second stage I selected the material, focusing on. I tried to find archtypical examples that unambiguously demonstrated each musical phenomenon in question. For this, I relied on intuitive knowledge based on my experience as a jazz musician and teacher. Physically transcribing and notating the selected material constituted the third stage.

1.4.3 Analysis

When analyzing the musical examples, one of my objectives has been to identify the musical elements originating outside the jazz tradition, explaining the specific characteristics of melody, harmony, rhythm, form and color that are common to various pieces or performances and create coherence within Davis's jazz-rock style. The appearance of these stylistically generic elements is listed chronologically in Table 1.

I have not used any specific method to analyze the notated musical examples. My analyses are primarily concerned with the relationship of melody to harmony, as well as Davis's use of rhythm. Besides describing certain improvising devices that were essential for Davis's musical expression, I also briefly discuss the expansion of the melodic, harmonic and rhythmic vocabulary of improvisation in jazz-rock, as well as the differences between various recorded versions of certain pieces.

1.5 Semantic complexities of the term "jazz-rock"

Several terms, such as "jazz-rock," "rock-jazz,"¹ "jazz-funk" and "jazz-rock fusion"² have been suggested for the various styles that ultimately became known by the generic term "fusion." As was

¹ Nicholson 1998, xiii–xiv

² Gridley 1994, 327–28

the case with the terms cool jazz,³ bebop and hard bop, it is likely that journalists initially established their widespread acceptance.

Several books on the subject, such as *Jazz–Rock: A History*⁴ and *Jazz–Rock Fusion—The Players, The Music*,⁵ utilize the term “jazz–rock.” Because this seems to be the most prevalent literary practice, I have used it throughout this text. Before proceeding however, a brief clarification of these terms and their actual meanings is in order.

The terms “jazz–rock” and “rock–jazz” have been used loosely as synonyms to describe music containing elements from jazz and rock. Following the linguistic logic in which the first word of a compound defines an overall category determined by the second word, “jazz–rock” would be comparable to terms like “heavy rock,” “punk rock” and others that subcategorize rock music. Following this analogy, the term “rock–jazz” would be parallel to terms like soul-jazz,⁶ free jazz⁷ and “Indo–jazz” that define subcategories of jazz.

The term “jazz–funk” only applies to a fraction of the styles within jazz–rock, mainly those typified by certain works by Miles Davis and John McLaughlin – that took their rhythmic frameworks from funk music. The music of Mike Gibbs, Keith Jarrett or Gary Burton, for example, has little to do with funk.

The term “fusion” was generally used in the early days of jazz–rock as a broad category. It has later been used widely – particularly in the USA – to describe commercially-oriented music containing elements of rock and jazz, sometimes also called “pop–jazz.” The term “fusion” also refers to other musical combinations than those of jazz and rock.⁸ Jazz and rock were themselves originally fusions of elements from several musical traditions. The common denominator for the applicability of the term “fusion” is the simultaneous presence of elements from the traditions of both rock and

³ Gridley 1994, 174

⁴ Nicholson, 1998

⁵ Coryell & Friedman, 1978

⁶ See Glossary

⁷ See Glossary

⁸ The term appeared on a few album names in the mid–1960s. Wes Montgomery’s *Fusion: Wes Montgomery with Strings* combined a jazz quartet and string orchestra. Joe Harriott’s *Indo–Jazz Fusions* featured a jazz quartet and an Indian ensemble.

jazz that clearly dominate an overall sonic picture occasionally embellished with elements from other musical traditions. In conclusion, “jazz–rock fusion” is a fusion of fusions.

“What fusion music fused was the atmospheric tendencies of modal jazz with the rhythm patterns of rock”⁹

1.5.1 Historical context

Jazz had been fused with other musical styles long before there was a music called “rock.” Charlie Parker and Dizzy Gillespie experimented with Afro–Cuban rhythms in the 1940s. Classical composer Igor Stravinsky wrote his *Ebony Concerto* for clarinetist and bandleader Woody Herman in the 1930s. The *Third Stream* movement of the 1950s was a further attempt to combine the compositional approaches of contemporary classical music with the improvisatory and rhythmic components of jazz. Combinations of jazz and Indian music emerged almost simultaneously in Great Britain and the USA during the early 1960s. Attempts to combine jazz with the folk and country & western idioms were presented in albums by Grant Green¹⁰ and Gary Burton¹¹ released in the 1960s.

Several jazz artists, including Herbie Mann, Grant Green, Ramsey Lewis, Wes Montgomery, Bud Shank, Gabor Szabo and Steve Marcus, attempted to boost their record sales by performing and recording jazz-flavored instrumental “cover” versions of the pop songs of the day. Out of this activity evolved a style that became known as “pop–jazz” or “soft jazz.” By the end of the decade new and larger venues for performing rock, such as promoter Bill Graham’s Fillmore East and Fillmore West, had been established. The first large-scale rock festivals took place in Monterey in 1967, then in Woodstock, the Isle of Wight and Altamont in 1969. Jazz artists were forced to watch from the sidelines as their rock colleagues reached wider audiences and earned more substantial incomes. Clive Davis, the Vice President of Columbia, Miles Davis’s recording company, suggested to Davis in 1969 that to reach larger audiences he should play large rock venues and

⁹ John Litweiler 1984, in Kirchner 1997, 235

¹⁰ *Goin’ West*, 1962

¹¹ *Tennessee Firebird*, 1966

support rock bands.¹⁴ After his initial rejection, Davis accepted the idea and played at rock venues as an opening act for rock bands such as *The Steve Miller Group* and *Santana*.

2 Miles Davis, a redefiner of jazz

Miles Dewey Davis was born on 26 May 1926, in Alton, Illinois. He moved to New York City in September 1944 to study music at the Juilliard School of Music. The jazz clubs of Harlem and the famous 52nd Street won over the academic studies and Davis dropped out of the school after one year.¹⁵

Miles Davis joined Charlie Parker's band in 1945, performing and recording with that group until December 1948. Davis made the first recording under his own name in August 1947.¹⁶ Before leaving Parker, he had met arranger Gil Evans, who would become his close associate in the years to come. Davis and Evans assembled a nonet in the autumn of 1947. They recorded a landmark album, *Birth of the Cool*, that would establish the new genre of *cool jazz*. Noteworthy is that Davis's lineups, starting with this nonet, were often racially mixed and featured white, as well as subsequently South American, Indian and Asian, musicians.

Davis continued to work on his own throughout the 1950s and early 1960s, leading bands and recording with small groups that featured the top jazz musicians of that time: His recordings of 1956 – *Relaxin'*, *Cookin'*, *Steamin'* and *Workin'* – with a quintet featuring John Coltrane, Red Garland, Paul Chambers and "Philly" Joe Jones – constituted an archetype for the *hard bop* style of the late 1950s. This group is often referred to as *the first great quintet* of Miles Davis.

Davis's collaboration with arranger Gil Evans continued with the making of the album *Miles Ahead* in 1957. Here Davis was a featured soloist backed by a 19-piece orchestra. Included among the jazz compositions was a classical piece, "The Maids of Cadiz," by Leo Delibes. Evans arranged it for trumpet and jazz orchestra. The next collaboration between Davis and Evans also fused elements of classical music and jazz on the album *Sketches of Spain*, which featured the "Adagio" movement from Joaquin Rodrigo's guitar concerto *Concierto de Aranjuez*. Their next production was the album *Porgy and Bess*, an instrumental version of George Gershwin's opera.

¹⁴ Tingen 2001, 83

¹⁵ Tingen 2001, 28

¹⁶ *Miles Davis All Stars* (Savoy S5J 5500)

Davis's album *Milestones*, released in 1958, anticipated a new harmonic direction for jazz: *modal jazz*.¹⁷ On the bridge of the title track Davis introduced the use of an extended modal texture, as opposed to a conventional tonal cadence, as the harmonic basis for improvisation. His next album, *Kind of Blue* (1959), became the archetype of modal jazz. On the piece, "Blue In Green," the harmonic rhythm was augmented and diminished during the performance. On "Flamenco Sketches" the soloists cued each harmonic change. Davis would develop these performance techniques further during his jazz-rock period. These albums also featured tonal and functional harmonies.

2.1 "Hope it ain't anyone I know."

This is how Davis's trumpeter colleague Blue Mitchell reacted upon hearing Davis's "Honky Tonk" at a blindfold test arranged by Down Beat magazine in 1970.¹⁸ Mitchell's sentence articulates the confusion that Davis's jazz-rock caused among his colleagues. The following quote reflects jazz critics' prevailing attitudes towards Davis's music at the time:

"Davis's music became progressively trendy and dismal...His albums of recent years...prove beyond any doubt that he has lost all interest in music of quality."¹⁹

The progressively diminishing importance of harmonic progressions is evident when examining Davis's compositions chronologically through the 1960s: "Milestones" (also known as *old* "Milestones"), "Miles" (also known as *new* "Milestones"), "So What," "Miles Runs The Voodoo Down," and so forth.

What were the principles underlying Davis's jazz-rock phase in 1967–72? Why did Davis, a longtime leader in his field, with a musical history beginning in the 1940s, seem to turn his back on his own achievements and the principles of jazz? Why did he relinquish harmonic progressions? Why did he choose to utilize "monotonic" bass ostinatos as the basis of his music instead of the variation provided by a walking bass? Why did Davis abandon the use of traditional musical forms? What was the purpose of dissonance and noise in his work? These are some of the questions I hope to answer in this study.

¹⁷ See Glossary

¹⁸ Tingen 2001, 108

¹⁹ Stanley Crouch 1990, in Kirchner 1997, 234–235

2.2 The two periods of Miles Davis's 1960s quintet

Miles Davis formed his *1960s quintet* (also known as his *second great quintet*) in September 1964 with saxophonist Wayne Shorter, bassist Ron Carter, pianist Herbie Hancock and drummer Tony Williams.²⁰ With this group Davis expanded his expressive range by integrating elements of *free jazz* and rock into his prevalent vocabulary of modal and tonal jazz.

The group's output may be divided in two distinctive periods. The *first* period began in January 1965 and consists of the quintet's acoustic recordings. The material recorded during this period consists primarily of pieces written by his sidemen, especially Shorter. The *second* period of the 1960s quintet began in December 1967 and lasted until the group's dissolution in July 1968. During that time Davis assumed a key role as the main composer of the repertoire.²¹

2.2.1 First period of the 1960s quintet

As the anthology *Miles Davis Quintet, 1965–68*, reveals, the quintet utilized recording studios to rehearse and shape its repertoire. During the first period, they experimented with different tempos, meters and forms. This is important from the standpoint of this study because these ideas were subsequently utilized and refined in Davis's jazz-rock approach during the second period of the quintet. Several new musical concepts began to emerge with increasing frequency in Davis's recordings after 1965 through the new material composed primarily by his sidemen. Most of the material featured on the four studio albums of 1965–67 (*E.S.P.*, *Miles Smiles*, *Sorcerer* and *Nefertiti*) was melodically and harmonically a combination of modal and tonal elements.²²

The rhythmic framework of these compositions remained primarily within the conventional triplet-feel of jazz aesthetics, although the group's rhythmic interaction was on an exceptionally

²⁰ Tingen 2001, 35

²¹ Tingen 2001, 38

²² Tingen 2001, 38

high level. Davis's first released recording utilizing an *even-eighth groove*,²³ "the rock beat," was the piece "Eighty-One" on the album *E.S.P* in 1965.

2.2.2 Second period of the 1960s quintet

During the second period Davis included conventions from rock and soul styles, such as *bass vamps*²⁴ or ostinatos, *even-eighth* rock beats and *open forms*²⁵ into his music. These were combined with the conventions of traditional jazz improvisation. The latter includes the entire tradition of jazz from tonal and modal melodic-harmonic expression and rhythmic triplet feel to free, out-of-tempo collective improvisation. The music became stripped of its harmonic content, bringing the players' rhythmic interaction to the fore. Occasionally, no steady groove was present at all, resulting in meditative music in which the bass functioned as a pedal point or *drone*²⁶ that reflected the influence of Indian music.

2.3 Early jazz-rock of Miles Davis, 1967–69

In this chapter I will briefly outline the main changes in Davis's music that took place between the years 1967 and 1969. Before 1967 Davis had cautiously experimented with different ways to break away from the traditional conventions of jazz by the use of pedal points, melodic ostinatos, bass ostinatos, "time-no-changes,"²⁷ variations of forms during performance and even-eighth rhythms. The recording of "Circle In The Round" in December 1967 introduced many of the essential non-jazz elements used by Davis from early 1968 onwards. Until then, most of the elements in Davis's music had relied primarily on the jazz tradition.

Harmonically, the use of pedal point and bass ostinatos became the only reference points for a tonal center. Repetitive ostinatos in the bass were combined with repetitive melodic riffs and phrases. This multi-level repetition created form through rhythmic cycles. Chord progressions were gradually eliminated. Consequently the melodic-harmonic tension relied on the players' abilities to

²³ See Glossary

²⁴ See Glossary

²⁵ See Glossary

²⁶ See Glossary

²⁷ See Glossary

improvise over the pedal point and against each other. It was now up to the players to adjust the level and duration of tension by improvising lines and chord progressions that would resolve to the tonic of the pedal point.

The rhythm section gradually became the center of the music. Because the pieces contained no pre-established harmonic progressions, the forward motion of the music relied largely on the players' interaction within the repetitive *grooves*.²⁸ These grooves were modeled after the rock and soul music of the day and were often rhythmically based on even eighth-note phrasing instead of the triplet phrasing customary in jazz. The creation of rhythmic tensions and releases over a relatively static backdrop was an essential element of this improvisational style.

The repetition of melodic motifs – using them as ostinatos – reversed the traditional roles of soloist and accompanist. This contributed to the emancipation of the rhythm section and promoted its equality within the ensemble.

The pieces' forms were often created on the spot, whether in the studio or on stage. The recording studio became Davis's musical laboratory. It was no longer only a place to document musical achievements; it became a place to manipulate the recording process itself. Postproduction editing became an important part of the compositional process. At this stage, postproduction was limited to cutting and pasting the tape and adding electronic effects to the music; overdubbing was not yet a common practice during this period. On stage, the musical forms were shaped through use of predetermined "coded" phrases that propelled the music forward.

The instrumentation evolved from traditional acoustic instruments to the amplified instruments associated with rock music. The number of instruments also grew increasingly to the point where two rhythm sections were present simultaneously with three keyboards and several wind instrument soloists. Before the end of the decade, Indian and South American instruments were added as coloristic elements into this dense musical texture. Davis began to use certain of these instruments for purely coloristic purposes, without any significant melodic, harmonic or rhythmic function.

Completely free episodes were juxtaposed against more arranged musical sections. Of all the prewritten material, Davis used only the sections he believed were essential for his musical concept and eliminated everything else, a practice that occasionally created an illusion of unpreparedness

²⁸ See Glossary

among the jazz critics of that period. Much of the music recorded was never included on the albums released at that time. It is worth noting that it was primarily the composed musical sections that were cut from the releases; the original albums concentrated primarily on the improvised portions of the music. A consequence of this practice was that the prewritten parts' function was to establish a mood. Once Davis achieved the mood, it was the improvising that followed – the essence of jazz – that mattered and was what he retained. Much of the previously unavailable material has been subsequently released, shedding new light on the subject. Because Davis's recording companies still possess substantial amounts of unreleased material, it is likely that further "undiscovered" sessions will be released in the future.

2.4 The studio sessions, 1967–69

New musical concepts began to appear with increasing frequency in Davis's recordings after 1965. It should be noted however that most of the material featured on the four studio albums of the 1960s quintet released during 1965–67 (*E.S.P.*, *Miles Smiles*, *Sorcerer* and *Nefertiti*), consisted of harmonically complex compositions by members of the quintet, most notably Shorter and Hancock. The compositions frequently contained modal as well as tonal elements, while their rhythmic framework remained strictly within traditional jazz aesthetics.

Themes were often played more than twice at the beginning and end of each piece, deviating from standard jazz practice. Themes were also occasionally played behind soloists as melodic ostinatos, and as interludes between solos. At times themes and solos were left completely or partially without harmonic accompaniment.

From December 1967 onwards, Davis would augment his regular group by bringing in guest musicians for his studio recordings.²⁹ Taking advantage of the various editing capabilities provided by the studio setting, he also began to exercise more control over the music by composing most of the recorded material and by shaping the musical material brought in by other composers to suit his preferences. At times there might be ten guest musicians, none of whom were members of Davis's current working band, in the studio. With few exceptions – the pieces "Spanish Key," "Sanctuary" and "Miles Brings The Voodoo Down," that had been played live – the musical material recorded in these sessions was totally new. Naturally, many of the recorded pieces would subsequently find their way into Davis's concert repertoire.

²⁹ See Appendix 5, Tables 3–5

Adding extra rhythm section players to the ensemble enabled Davis to “deepen the bottom end of the music, to make the bass line a little stronger.”³⁰ Bass lines often functioned as the only precomposed melodic parts of the pieces and were sometimes doubled by other instruments. The *vamp*³¹ gradually became the music’s binding factor, allowing the drummer, keyboard players, the guitarist, the percussionist and the horn players to react against it and against each other. Davis explained that he wanted to strengthen the African elements in his music: “I started putting the backbeat in the drums out in front and on top of everything, like in African music.”³²

The following chronology is an analysis of the changes in Davis’s musical output during the period; the focus is on the recordings that were essential for Davis’s artistic renewal.

2.4.1 *Sorcerer and Nefertiti*

The album *Sorcerer*, recorded in May 1967, featured Wayne Shorter’s “Masqualero,” in which the rock element was again manifested in the even–eighth groove. Other distinctive features included the use of pedal point with a superimposed Phrygian mode. At the same time Davis also began to reverse the traditional roles of soloist and accompanist and to expand the improvisatory element of jazz by assigning it to unexpected instruments. The album *Nefertiti*, recorded in June 1967, featured Shorter’s piece of the same title. On “Nefertiti,” Davis brought drummer Tony Williams to the forefront to improvise over the repeated melody of the piece. The rendition contained no other solos. This may be seen as an essential phase that promoted the equality and emancipation of the rhythm section. It happened almost accidentally, as a result of rehearsing the piece’s theme in the studio.³³ This repetition of a theme as melodic ostinato behind soloists is also illustrated on Shorter’s “Fall” on the aforementioned album.

Davis used themes as interludes between solos, as the renditions of Shorter’s “Pinocchio” on *Nefertiti* and “Limbo,” on his next album *Sorcerer*, demonstrate. On Hancock’s “Sorcerer,” Shorter and Davis play 8-bar solo phrases in turn – “trading eights” in jazz parlance – before playing the theme as an interlude that leads into Hancock’s piano solo.

³⁰ Tingen 2001, 42

³¹ See Glossary

³² Davis and Troupe 1989, 267

³³ Belden 1997, 83–83

Davis often interpreted the themes – played in unison with Shorter – in a rhythmically liberal manner, forcing Shorter to follow him as a “shadow.” This was a routine Davis had learned while working with Charlie Parker in the 1940s: “When Bird would play a melody, I’d play just under him and let him lead the note.”³⁴

2.4.2 “Circle in the Round”

The 4 December 1967 recording session may be seen as a turning point in Davis’s new musical direction. As noted earlier, the session marked the beginning of the *second* period of the 1960s quintet. In this session, Davis initiated his search for a different keyboard sound by trying a celesta, played by Herbie Hancock, on the piece “Circle In The Round.” The melody of this extended composition, repeated several times, is also used as an interlude between solos. The piece was not issued until the release of a compilation with the same title in 1979. “Circle in the Round,” also the first recorded piece edited extensively by Davis’s producer Teo Macero, initiated a period in which the manipulation of tape became an important phase between the actual recording of the music and the finished product.

On “Circle in the Round,” Davis also utilized the electric guitar – played by Joe Beck – for the first time in his recordings. Harmonically, “Circle in the Round” has a Spanish flavor. Stylistically, it is closer to folk than to rock music. This and the following session also featured a special coloristic element, overdubbed tubular bells. Davis also assigned more coloristic – as opposed to a melodic, rhythmic or harmonic – role to the celesta and guitar.

After experimenting with a celesta, Davis also tried out other keyboards. On his next recording session held 28 December 1967, Davis utilized the electric piano in his music for the first time. Herbie Hancock played a Wurlitzer electric piano and a Clavinet on Davis’s *boogaloo*-type³⁵ composition “Water On The Pond”. Davis tried an electric harpsichord on 12 January 1968, resulting in the piece “Fun.” These two pieces are more Latin- than rock-influenced and both have precomposed bass parts. Neither was released until 1981 in the compilation *Directions*.³⁶ This was

³⁴ Carner 1996, 8

³⁵ See Glossary

³⁶ Tingen 2001, 41–45

the phase during which prewritten bass melodies – intros, interludes, and ostinatos – became an increasingly important feature in Davis’s music.

2.4.3 *Miles in the Sky*

Ron Carter first introduced the electric bass in Davis’s music on the 17 May 1968 session that yielded the piece “Stuff” for the album *Miles in the Sky* released later that year. This was the first session in which Herbie Hancock used the *Fender Rhodes* electric piano,³⁷ an instrument that would henceforth become an essential element in the sound of Miles Davis’s music. “Stuff” is a soul–jazz composition with a boogaloo rhythm. With “Stuff,” the *groove* became the focus of Davis’s music for the first time.³⁸ “Stuff” was Davis’s first released piece spliced together from different takes.

Regarding the other pieces on the album, Williams’s “Black Comedy” and Shorter’s “Paraphernalia” remain within the modal/free–bop idiom established earlier by the quintet. “Black Comedy” is however the first piece with an odd–time signature recorded by Davis; it features three different time signatures: 4/4, 5/4 and 6/4. “Paraphernalia” features the first guitar solo, played by George Benson, appearing on a Miles Davis’s recording. After the session Davis asked Benson to join his band, but Benson declined the offer.³⁹ Davis’s “Country Son” is mixture of contrasting grooves and tempos featuring sections in waltz time, free *rubato* time, regular jazz time and a boogaloo groove. Noteworthy is that *Miles in the Sky* contains only four pieces, whereas the previous albums had at least six pieces each. The practice of allowing the pieces to develop continued to the point where each side of an album was filled by a single extended composition.

2.4.4 *Filles de Kilimanjaro*

The unaugmented 1960s quintet’s last studio sessions took place from 19–21 June 1968, producing three pieces – “Petits Machins (Little Stuff),” “Tout De Suite” and “Filles de Kilimanjaro (Girls of Kilimanjaro)” – for the album *Filles de Kilimanjaro*. Ron Carter continued to play the electric bass. Two additional tracks completed the album on 24 September when Chick Corea replaced Hancock on electric piano and Dave Holland replaced Carter.

³⁷ Belden 1997, 99

³⁸ Tingen 2001, 43

³⁹ Szwed 2002, 268

One of these, the slow *tone poem*⁴⁰ “Mademoiselle Mabry (Miss Mabry)”, features harmonic characteristics of that era’s pop music, including pure major triads (Appendix 1, Examples 2 and 3), as opposed to the more complex chords utilized normally in jazz. Two chordal segments of the song closely resemble the opening passage of Jimi Hendrix’s rock ballad “The Wind Cries Mary” (Appendix 1, Example 4). “Mademoiselle Mabry (Miss Mabry)” has no melody of its own, only an extended, repetitive and unconventional chord cycle with shifting time signatures. The bassist Dave Holland, a newcomer to the group, played the acoustic bass on this and the forthcoming sessions until January 1970.

Although *Filles de Kilimanjaro* contains no postproduction edits or extra musicians, the changes occurring in Davis’s musical thinking are already evident. The pieces contain many more precomposed details than his previous albums. A soul groove with a repetitive bass ostinato and open-ended solo form is present on “Frelon Brun (Brown Hornet),” in which the written bass line is doubled by the electric piano. The theme of “Petits Machins” – recorded earlier as “Eleven” by Gil Evans, but credited here as co-written by Davis and Evans – is in 11/4 time. The solo section is an open form in 4/4 time and features two separate pedal points. As a jazz composition, it most closely resembles the music of the first period of the 1960s quintet on this album.

An African influence is obvious in the rhythms and the diatonic melody of the title piece “Filles de Kilimanjaro (Girls of Kilimanjaro).” Contrary to what is stated in the liner notes, no acoustic piano is heard on this album. Three different electric pianos – Wurlitzer, RMI and Fender Rhodes – are used instead. According to the album cover, Davis composed all the pieces on *Filles de Kilimanjaro* except for “Petits Machins”.

Davis’s first recording session utilizing two keyboards *simultaneously* took place on 11 November 1968. This recording featured Chick Corea on a Wurlitzer, and Herbie Hancock on a Fender Rhodes electric piano. The two resulting tracks, “Dual Mr. Anthony Tillmon Williams Process” and “Two Faced,” were not issued until 1976 as part of the compilation *Water Babies*.

Another session held the following day yielded the piece “Splash,” released on *Circle In The Round* in 1979. The complete take, subsequently released on *The Complete In a Silent Way Sessions*, reveals that the piece contained much more composed material – an extended intro with a unison

⁴⁰ See Glossary

bass line, polyrhythmic sections, chord progressions, and an ending – than the first released version.⁴¹

2.4.5 “Directions”

On Davis’s next studio session held 25 November 1968, three electric keyboards – Wurlitzer and Fender Rhodes electric pianos and an organ played by Hancock, Corea and Joe Zawinul – were used simultaneously for the first time. The group recorded Davis’s “Splashdown,” a piece that was only released later on the compilation, *The Complete In a Silent Way Sessions*. The composition features Motown–influenced parallel dominant seventh chord harmonies and several approaches to a groove that occasionally resembles a tango. The same group recorded Zawinul’s *tone poem*⁴² “Ascent,” primarily in slow waltz time, two days later. “Ascent,” with its slow tempo, changing time signatures, extended form, unpredictable harmonic progressions and absence of a composed melody, is conceptually related to “Mademoiselle Mabry”. The three keyboards’ layering produces a thick harmonic texture. “Ascent” marked the first time tenor saxophonist Wayne Shorter recorded on the soprano sax, an instrument he would be playing with increasing frequency.⁴³ “Ascent” represents an early model for the “mood music” style that later became known as “*ambient*.”⁴⁴

This was the first time Davis recorded a composition by Joe Zawinul; the result was two versions of “Directions,” a tune that later become an opener for Davis’s concerts. Davis’s opening solo statement on the first version features a descending three–note motif that reappeared later, for example, on “It’s About That Time” (lead line of Example 5 in Appendix 1) on the album *In a Silent Way*. The solo section of the piece consists of a bass ostinato (Appendix 1, Example 7). Joe Zawinul later provided Davis with many other compositions (“Pharaoh’s Dance,” “Orange Lady,” “In a Silent Way,” “Double Image,” “Early Minor”) thus becoming – after Shorter and Hancock – his most trusted composer. Zawinul was the first European musician extensively employed by Davis, although he never joined Davis’s concert band.⁴⁵ This was also drummer Jack DeJohnette’s first studio session with Davis.

⁴¹ This was a typical pattern for Davis’s releases after 1967: After the initial recording an edited version was released some years later. The unedited original recording was released afterwards, even a decade or two after the edited version.

⁴² See Glossary

⁴³ Belden 2001, 52

⁴⁴ See Glossary

⁴⁵ Tingen 2001, 53–54

I interpret the “Directions” session as a preparation for the *In a Silent Way* session that followed on 18 February 1969, and that also featured the three different keyboards played by the same persons. These early experiments with bass vamps and thick harmonic textures – “Ascent” and the two versions of “Directions” – were released for the first time on the compilation *Directions*, in 1981. Chick Corea recalls: “Once, he... played these three triads: C major, E major and Ab major triad...and said: ‘Play that.’”⁴⁶ Corea and Zawinul play these triads over an E pedal point behind the wind instrument soloists on these versions of “Directions.” This is a *multi-tonic* idea in which the octave is subdivided into three tonal centers a major third apart. The notes of these three triads also form a symmetrical scale known as *the augmented scale*.⁴⁷

This also marks the point when Davis began to play in keys more associated with the guitar and rock music, such as E major. Bob Belden states that “The key of E was central to progressive rock music; Hendrix’s pieces like ‘Purple Haze’ are basically in the key of E.”⁴⁸ This is essentially true because rock musicians tended to write songs in keys utilizing the open strings of the guitar. However because Hendrix had a habit of tuning his guitar down a half step, many of his songs, including “Purple Haze,” are in fact in the key of Eb. The retuning facilitated string bending with the fairly thick strings in use at that time. The lighter strings used widely today were not yet available.

2.4.6 *In a Silent Way*

On *In a Silent Way* the concepts explored by Davis on a few of his previous recordings – ambient moods, postproduction editing, rock elements, free elements, open forms, pedal point, multiple keyboards, thick harmonic textures – were for the first time clearly focused. All the material for the album was recorded between 10:00 a.m. and 1:30 p.m. on 18 February 1969. Davis added British guitarist John McLaughlin to the previous group, assigning him the role of a main soloist. Joe Zawinul switched to a Hammond organ, while Corea and Hancock remained on electric pianos.

The tendency towards extended performances beginning with *Miles in the Sky* continued on *In a Silent Way* with one piece per each album side. “Shhh/Peaceful,” as it was originally released,

⁴⁶ Belden 2001, 36

⁴⁷ See Chapter 4.2.

⁴⁸ Belden 2001, 56

builds on a two-note bass motif that was played and varied by bassist Dave Holland. “In a Silent Way/It’s About That Time” is a suite in which “It’s About That Time” is bracketed by a section of “In a Silent Way” at the beginning and end. The album had two earlier working titles, *On The Corner* and *Mornin’ Fast Train from Memphis to Harlem*.⁴⁹

Only the third section of Joe Zawinul’s 3-part tone poem “In a Silent Way” was used. Davis stripped the section of its chord progressions, leaving only an E pedal point, and the theme was given a *rubato* rendition. The band had rehearsed the song as a *bossa nova*, using Zawinul’s original chords, but Davis was dissatisfied with the result. Holland recalls Davis’s treatment of the musical material:

“I don’t remember Miles ever playing someone else’s piece the way they had written it...If there were many chords, he’d just have the bass play one note underneath all the moving chords...He did this with Zawinul’s ‘In a Silent Way’ and also Shorter’s ‘Sanctuary.’”⁵⁰

“It’s About That Time” consists of three different sections: two bass lines (Appendix 1, Examples 5 and 7) and the descending harmonized melodic motif familiar from “Directions” (Appendix 1, Example 6). The piece is credited to Davis but Zawinul claims to have composed all the sections.⁵¹ The harmonized melodic motif occurs with both bass vamps. The keyboards imitate the first, short bass vamp while the guitar doubles the second, longer bass line. Regarding the third section, Belden states that “the tonality is definitely F Mixolydian.”⁵² The bass line clearly outlines a cadential progression of two chords: F dominant seventh to Bb dominant seventh with a rhythmic emphasis on the F chord that occurs on the first bar of the two-bar phrase (Appendix 1, Example 7). Thus, the tonality changes to Bb Mixolydian in every other bar.

Rhythmically, the drums and bass hold “It’s About That Time” and “Shhh/Peaceful” together; the static, repetitive grooves emphasize the unresolved harmonic tension. The four differently-colored harmony instruments interact against the grooves and against each other. The two-note bass ostinato of “Shhh/Peaceful” acts as a drone, recalling the Indian influence, while the harmonic layers of the three keyboards and guitar provide a dense texture. A rich stratification is present in the music: the rhythmic basis of the drum beat and bass groove, the soloists’ melodic lines, dense

⁴⁹ Svorinich 2000, 92

⁵⁰ Tingen 2001, 57–58

⁵¹ Tingen 2001, 310

⁵² Belden 2001, 69

harmonic textures and the coloristic interaction between chordal instruments. The drums and bass maintain a fixed element against which the rest of the band reacts. The musicians also communicate with each other within this rhythmic framework. Davis often used the verbal expression “to play off of something.” Regarding the music recorded here, my interpretation is that the musicians are “playing off” the given bass figures and drum grooves, thus responding to and completing the musical suggestions offered.

The total amount of new music recorded for the session clearly exceed two hours. For the final product, it was cut to 27 minutes and then re-edited by repeating certain sections, bringing the total length of the album to 38 minutes.

On *In a Silent Way*, Davis used his former drummer Tony Williams instead of DeJohnette. Williams’s playing was confined to maintaining the steady grooves. Davis’s solo on “Shhh/Peaceful” opens with a motif related to the one used on “Directions” and “It’s About That Time.” The original working title for “Shhh/Peaceful” was “Mornin’ Fast Train from Memphis to Harlem.”⁵³

Davis had dropped the electric guitar for one year before reintroducing it on *In a Silent Way*. Guitarist John McLaughlin used a rock-type approach for the instrument, utilizing string bends and subsequently various electronic effects. This was more to Davis’s liking than the more linear jazz-flavored styles of Joe Beck, George Benson or Bucky Pizzarelli. McLaughlin was probably the first guitarist to deliver the kind of sound and approach to the music that Davis was looking for. He remained active in Davis’s recording groups until June 1972, after which he was replaced by Reggie Lucas, both in the studio and in concerts.

On the 20 November 1969 session, the personnel of *In a Silent Way* was maintained, except for the drummer, who was now Joe Chambers. The session resulted two pieces: Davis’s “The Ghetto Walk” and Zawinul’s tone poem, “Early Minor.” I see this session as a continuation of the *In a Silent Way* session whose purpose was to obtain more material for the album. This conception sheds some light on the speculation about Davis’s preparation for the recording. Davis had asked Zawinul to bring in some new music on the morning of the previous recording session held two days earlier.⁵⁴ This has been misinterpreted as Davis’s spontaneity and unpreparedness for the

⁵³ Belden 2001, 14, 65

⁵⁴ Tingen 2001, 57

recording session. The fact that Davis had two new pieces on November 20th, with which he was planning to continue, clearly removes these doubts.

2.4.7 *Bitches Brew*

The recording of what would become Davis's landmark album *Bitches Brew* began on 19 August 1970. Davis had reserved three days of studio time for the recording of a double album. *Bitches Brew* has since achieved a paradigmatic status as an archetype; it is the jazz-rock album to which reference is most often made whenever a prime example of this style is cited. On the first recording day, the same personnel used on *In a Silent Way* were present except for Herbie Hancock and Tony Williams. Davis brought in Harvey Brooks, the bassist of the rock group "The Electric Flag" on electric bass, to play alongside Dave Holland, who remained on the acoustic bass. The group was augmented by Bennie Maupin on bass clarinet and by Lenny White on a second drum set. Two percussionists, Don Alias and James Riley, were also present. Besides being the first time that Davis included percussion players, it was also his first session utilizing two rhythm sections playing simultaneously.

The session began with Davis's five-part suite, "Bitches Brew," three parts of which ended up on the album. Two of these parts made up a piece of the same title and the third part was included as a separate piece retitled as "John McLaughlin." The piece "Bitches Brew" features a long rubato introduction (Appendix 1, Example 9). In the postproduction phase, it was manipulated by adding electronic delay to Davis's trumpet sound. The piece continues with a two-bar bass ostinato in a medium slow groove (Appendix 1, Example 10). After this, the *lost quintet*⁵⁵ augmented by the two percussionists re-recorded Shorter's "Sanctuary," a piece that Davis previously recorded in February 1968.

On the second day, the same twelve musicians assembled in the studio to record Davis's "Miles Runs The Voodoo Down." This time percussionist Don Alias ended up playing Lenny White's drum set alongside Jack DeJohnette.⁵⁶ No other pieces were recorded that day.

On 21 August, the third studio day, Larry Young augmented the ensemble on electric piano. Davis's "Spanish Key" and Zawinul's "Pharaoh's Dance" were taped. On "Spanish Key" Davis

⁵⁵ See Glossary

⁵⁶ Tingen 2001, 66

reintroduces the concept of *coded phrases*⁵⁷ within a studio setting. Davis had first tried the idea on his piece, “Flamenco Sketches,” on the album *Kind of Blue*, from 1959. There the soloist signaled each harmonic change with a phrase in a new key. The order of chords was predetermined, but because the number of bars was not preset, a new form was created with each performance of the piece. Almost every chord change of “Spanish Key” has its own coded phrase.

Davis’s band had already played “Miles Runs The Voodoo Down,” “Sanctuary” and “Spanish Key” in concerts, as recordings of the performances at the Juan–Les–Pins Festival at Antibes, France, on 25–26 July 1969 attest. The version of “Sanctuary” on *Bitches Brew* is spliced from two takes, whereas “Miles Runs The Voodoo Down” and “Spanish Key” are single takes.⁵⁸

Compared to the static and precarious atmosphere of *In a Silent Way*, *Bitches Brew* contains considerably more interactive playing. Brooks’s electric bass holds down the grooves, while Holland’s acoustic bass plays a more coloristic, complementary role. Maupin’s improvisations on bass clarinet, confined primarily to that instrument’s lower register, add another coloristic element. The two or three Fender Rhodes keyboards create a dense harmonic texture different from the one on *In a Silent Way*, where a Hammond organ was used as third keyboard. The dense textures of *Bitches Brew* contain more harmonically and rhythmically free elements, and occasional rubato sections, than *In a Silent Way*. McLaughlin retains the same clean sound and “guitaristic” concept as he did on *In a Silent Way*. The use of a second drummer and two percussionists creates multidimensional rhythmic layers that form the basis for the music.

2.4.8 “Great Expectations”

Davis’s next recording took place on 19 November 1969. Participating in the session with Davis were Hancock and Corea on electric pianos, Steve Grossman on soprano saxophone, Bennie Maupin on bass clarinet, Ron Carter on acoustic bass, Harvey Brooks on electric bass, John McLaughlin on guitar, Billy Cobham on drums and Brazilian percussionist Airto Moreira. Here Davis employed Indian musicians for the first time: Khalil Balakrishna on sitar and tamboura and Bihari Sharma on tabla and tamboura. Davis continued to use either or both Indian musicians on his

⁵⁷ See Appendix 1

⁵⁸ Tingen 2001, 68

recording sessions until 6 February 1970.⁵⁹ A new characteristic of this session was the omission of improvised solos.

The piece “Great Expectations” consists of two separate tunes, Davis’s “Great Expectations” and Zawinul’s tone poem, “Orange Lady (Mulher Laranja)” (Appendix 1, Example 13). Macero edited the theme to form a single piece. “Great Expectations” is an even–eighth groove in 7/4 time that introduces Indian and Brazilian elements for the first time in Davis’s music. “Great Expectations” is based on a repetitive bass ostinato. Davis and Maupin play a repeated melodic sequence over it in octaves with a rubato feel for a total of 18 times (Appendix 1, Example 11). No melodic improvisation takes place until the last few repeats, when Davis varies the theme slightly. It is reminiscent of “Nefertiti,” because the melody acts as a melodic ostinato. The improvisatory activity is present in the rhythm section, particularly in the activity of the Indian instruments, Ron Carter’s bass fills, and the harmonic interaction between the two keyboards. The piece is significant because with few exceptions Davis did not explore odd–time signatures (see Table 1). It was released on the album *Big Fun* in 1974.

The texture of “Orange Lady (Mulher Laranja)” is colored by the droning tambouras, the characteristic sound of sitar and echoed trumpet. The Indian instruments were used as a decorative background element, another color, within the dense texture. These elements recall the ambient soundscape that began on “Ascent.” Davis modified Zawinul’s composition, using the first melodic section as an intro, omitting the next composed phrase, then repeating the first section and modulating over a pedal point. The structure was played repeatedly with a sustained, meditative and rubato feel. No solos were included. At the end of the modulated section, Davis added a three–chord sequence as an interlude. In the middle of the piece there was a section with bossa nova rhythm. It was played and repeated by the rhythm section alone before the entire group restated the main theme.

2.5 The concert band, 1967–69

Tenor saxophonist Joe Henderson joined Davis’s band for three months in January 1967. During 1966–68, Davis tried out different personnel in his rhythm section, including bassists Miroslav Vitous, Ron McClure, Paul Chambers and Eddie Gomez, pianist Chick Corea and drummer Jack

⁵⁹ Tingen 2001, 75

DeJohnette. Chick Corea and Dave Holland joined Davis's band in the summer of 1968 to replace Hancock and Carter, thus marking the end of the 1960s quintet. Their recording debut with Davis was the 24 September 1968, session that yielded two tracks for the upcoming album *Filles De Kilimanjaro*.

In June 1968 Holland was playing with vocalist Elaine Delmar as a sideman for pianist Bill Evans – who had drummer Jack DeJohnette in his band – at Ronnie Scott's Jazz Club in London. Davis came to London for a short vacation, heard Holland and hired him on the spot to replace Ron Carter, who preferred not to travel and who left the quintet in July 1968. When Dave Holland replaced Carter, he first played the acoustic bass only. He switched to the electric bass on the 27 January 1970, session to record the tracks "Feio" and "Double Image." Although he usually played the electric instrument thereafter, he occasionally used the acoustic bass in concerts. Holland recalls: "I still played acoustic bass on *Bitches Brew*, and I volunteered to play the electric bass after that because I felt the music needed it."⁶⁰

Drummer Jack DeJohnette replaced Tony Williams in Davis's band in the beginning of 1969. Corea recalls: "When Jack came the music really started to change" and about the concert recordings: "They were more like free music with an occasional vamp in it."⁶¹ DeJohnette's first studio recording with Davis had been the November 12, 1968, session, that resulted Joe Zawinul's compositions "Ascent" and "Directions."

The lineup consisting of Davis, Corea, Shorter, Holland and DeJohnette is often called the "lost quintet," because the group never recorded in a studio without additional musicians. Some concert recordings documenting this group have however survived, most notably the album *1969 Davis: Festiva de Juan Pins* [sic].⁶² With this lineup, Davis's concert repertoire of standards and originals changed rapidly. The elements of rock – such as even-eighth rhythms and extended jams based on an underlying bass vamp – that had appeared occasionally in the works of the 1960s quintet became progressively more dominant in the music. The group also took free collective improvisation much further than the "time-no-changes" approach of the 1960s quintet. The new repertoire of the band

⁶⁰ Tingen 2001, 52

⁶¹ Tingen 2001, 112

⁶² The title of the original Japanese issue is misspelled. *Festival de Juan-Les-Pins* would be linguistically correct.

featured pieces that consisted of one or two bass vamps, with or without thematic sections, and open forms.

The Brazilian percussionist Airtó Moreira joined Davis's concert band on 12 December 1969, making it a sextet. Moreira stayed with Davis until July 1971. Instead of being a rarity, a percussionist became commonplace in jazz groups after Moreira's stint with Davis.⁶³ Davis used the electric guitar occasionally in his concerts, beginning with the tryout of Sonny Greenwich, on 1–6 December 1969. John McLaughlin occasionally followed Greenwich from February 1970 onwards.

Davis introduced several fresh compositions in the band's concerts, such as "Directions," "Spanish Key," "Sanctuary," "Miles Runs The Voodoo Down" and "It's About That Time" At the same time, Davis still kept some older originals, like "So What," "Milestones" and "The Theme." Jazz standards such as "I Fall In Love Too Easily," "Round Midnight" and originals of the 1960s quintet like "Masqualero," "Footprints," and "Agitation" remained in the group's repertoire.

Sometimes during the 1960s Davis began to perform long, uninterrupted sets as suites in which he linked various pieces seamlessly with so-called *coded phrases*. A coded phrase is a melodic motif from the piece that Davis wanted to move on to. Appendix 2 illustrates some of these coded phrases, the first three of which occur in transcriptions from Davis's aforementioned concert recording at Juan-Les-Pins in 1969. The first example demonstrates the phrase that Davis used to cue in the piece, "Miles Runs The Voodoo Down". The piece followed Zawinul's "Directions," the opening number in the suite. The transition from "Directions" is similar to what is heard on the album *Black Beauty*, recorded on 10 April 1970. "Miles Runs The Voodoo Down" continues with a cadence leading to a bass ostinato. Davis used the melodic section, the 3-bar repetitive melodic ostinato of "It's About That Time," to initiate the piece. The coded phrase of "Sanctuary" is a fragment from the piece's melody. Shorter's "Sanctuary" was the only ballad – actually a slow waltz – in Davis's concert repertoire at the time. The fourth example is a phrase that Davis used to transition into a certain groove. The phrase, a rhythmic-melodic motif that Davis repeated, varied and transposed, is an excerpt from the suite "Funky Tonk" heard on the album *Live-Evil*. Besides "Funky Tonk," the piece had other titles such as "Inamorata" and "Agharta Prelude Dub."⁶⁴ The coded phrase of Davis's "Bitches Brew" is a downward arpeggio consisting of a C minor triad with

⁶³ Tingen 2001, 113.

⁶⁴ Tingen 2001, 122 and 141

an added major third, played in *tempo rubato*. Davis began “Willie Nelson,” with its characteristic rhythmic motif of two consecutive sixteenth notes, on the album *Black Beauty*. Davis played the first melodic phrase of his “Spanish Key” to begin the piece in his concerts.

2.6 The studio sessions, 1970–72

The rate at which Davis’s personnel turned over accelerated during the first part of the 1970s. Although the following fairly detailed account may seem tedious, even confusing to the non-specialist reader, I believe there are two important reasons for including all the musicians associated with Davis’s recordings. By the early 1970s Davis had achieved the status of a leader in his field. Consequently, even a single appearance in a recording by Davis added a tremendous boost to a musician’s professional career. The other reason is that, as revealed by the session logs, Davis’s tendency to rely less on jazz musicians became increasingly evident. By the end of 1972, Davis had sidemen with highly diverse backgrounds; some were rock musicians, some represented ethnic music styles, while many had no prior jazz experience.

2.6.1 “Lonely Fire”

Davis recorded two extended tracks on 27 January 1970: “Lonely Fire” and David Crosby’s “Guinnevere.” There is some controversy about the composer of “Lonely Fire.” The liner notes of *Big Fun* and *The Bitches Brew Sessions* credit the piece to Davis, but Paul Tingen claims that Joe Zawinul composed it.⁶⁵ “Lonely Fire” continues the line begun with “Nefertiti” in 1967. Its meditative theme is repeated extensively, functioning as a melodic ostinato and foil for improvisation. “Guinnevere” was released in 1979 on *Circle In The Round*.

Shorter’s “Feio” and Zawinul’s “Double Image” were taped the next day. Another version of “Double Image,” recorded on 6 February, ended up on the album *Live–Evil*, later released in 1971. Two sections of Zawinul’s “In a Silent Way” were also recorded as separate versions, retitled as “Recollections” and “Take It Or Leave It,” and treated as melodic ostinatos.

The personnel lineups of these sessions were large, consisting – with minor exceptions – primarily of the same musicians who had played on the previous “Great Expectations” sessions. “Feio,” the

⁶⁵ Tingen 2001, 79

first version of “Double Image,” “Recollections” and “Take It Or Leave It” were not released until 1998 on *The Bitches Brew Sessions*.

2.6.2 *A Tribute to Jack Johnson*

Beginning on 18 February, the number of musicians involved with Davis’s recordings decreased dramatically. On “Willie Nelson,” a tune built on a bass vamp, Davis used a septet that included Maupin, Corea, DeJohnette, Holland, McLaughlin, and a second guitarist, Sonny Sharrock. This was the first time Davis used two guitarists simultaneously. Part of “Willie Nelson” was used on the track “Yester Now” for the upcoming album *A Tribute to Jack Johnson*. The piece was re-recorded on 27 February with a quintet consisting of Davis, Steve Grossman, DeJohnette, Holland and McLaughlin. This lineup also taped “Go Ahead John” on 3 March, which was released on the album *Big Fun*. Wayne Shorter joined the group briefly for a session on 17 March. Here Bennie Maupin replaced Steve Grossman and one track titled “Duran,” was recorded. Like the second version of “Willie Nelson,” “Duran” was released on *Directions* in 1981. The album *Bitches Brew* was released in April 1970. Davis’s studio albums of the 1970s, after *Bitches Brew*, were compilations of pieces from several recording sessions with different lineups.

Davis booked a quintet of himself, Grossman, McLaughlin, Cobham and bassist Michael Henderson to record the soundtrack for a documentary about the boxer *Jack Johnson* on 7 April. Henderson was a soul musician who played with Stevie Wonder’s band. Although he had no jazz background and only played the electric bass, he would become the rhythmic anchor of Davis’s next lineup. Henderson recalls: “Davis said to me that he wanted me to hold the band down. He wanted me to hold it together.”⁶⁶

The album consists of two extended tracks, “Right Off” and “Yester Now.” Both include several separately recorded sections that were spliced together by Teo Macero. The genesis of “Right Off” is quite fascinating. The opening section of “Right Off” was basically a studio jam in the key of E by the rhythm section that began while Davis was still in the control booth. Davis joined the group with his trumpet and McLaughlin modulated to Bb. Because this went unnoticed by Henderson the music remains in two keys momentarily. At 7’05” McLaughlin comps using the opening chords of his piece, “The Dance of Maya,” which was recorded later by his band, *The Mahavishnu Orchestra*.

⁶⁶ Tingen 2001, 104

An insert of Davis playing into a ring modulator was cross-faded between the solos. Grossman solos after Davis while the music remained in Bb.

During the performance Herbie Hancock, who happened to be passing by, took a look into the recording studio. Davis waved him in and pointed towards a *Farfisa* organ.⁶⁷ Engineer Stan Tonkel plugged in the organ and Hancock started to play. This is how Hancock became, completely unintentionally, an important part of the recording. The fourth section of “Right Off” (Appendix 1, Example 14) – At 18’30” – is a bass riff in Eb based on Sly Stone’s “Sing a Simple Song” (Appendix 1, Example 15). After this, the band returns to the initial groove in E.

The opening section of “Yester Now” has a bass ostinato identical to the bass part of James Brown’s “Say It Loud, I’m Black And Proud, Part 1” (Appendix 1, Example 16). Two inserts from “Shhh/Peaceful” from *In a Silent Way* interrupt the groove between 12’23” and 14’12”. Davis overdubbed an unaccompanied trumpet solo over fragments of “Shhh/Peaceful”. “Yester Now” continues with a part of the piece “Willie Nelson,” from February 18” (Appendix 1, Example 17). “Yester Now” ends with a fragment from an old film score, *The Man Nobody Saw*, with a spoken narration about Johnson overdubbed by the actor Brock Peters.

Although it is a soundtrack, *A Tribute to Jack Johnson* offers a prime example of the complexities involved in Davis’s recording concept at the time. The basic tracks were embellished with additional tracks, effects, overdubs, fade-ins and crossfades. The original piece titles were ignored in favor of new titles for the entire compilation. Davis’s process of making the music in the studio was highly instinctive, as the inclusion of the unprepared jam and the unexpected appearance of Hancock clearly demonstrate.

2.6.3 *Live–Evil*

On 19 May a single track “Honky Tonk” was recorded. In the studio with Davis were session bassist Gene Perla, Billy Cobham, McLaughlin, Moreira, and a new keyboard player, Keith Jarrett, on electric piano. Davis’s old bandmate Hancock was again present on Clavinet. “Honky Tonk” became a staple in the concert repertoire of Davis’s next lineup until 1973. The studio version was released on the compilation *Get Up With It* in 1974. Two days later, on 21 May, DeJohnette was

⁶⁷ Szwed 2002,309

back on drums on the track “Konda.” In this session, Bennie Maupin’s bass clarinet replaced a bass. “Konda” was released on *Directions* in 1981.

Two rubato renditions of the themes “Nem Um Talvez” and “Little Church,” by the Brazilian composer Hermeto Pascoal, were recorded on 3-4 June. These were included on Davis’s next album *Live–Evil*. The track “Selim” on the same album is actually another take of “Nem Um Talvez” recorded on the same date.

Live–Evil was released in 1971. The album was a combination of concert and studio tracks, including a concert version of “Honky Tonk” and two new pieces, “What I Say” and “Funky Tonk.” The concert tracks were taken from the last two sets of a three-set concert performed at The Cellar Door in Washington D.C. on 19 December 1970. Teo Macero edited the material into four suites: “Sivad,” “What I Say,” “Funky Tonk” and “Inamorata and Narration by Conrad Roberts.” He also mixed some studio material with the concert tracks. For example, he inserted a section from the studio version of “Honky Tonk” into the middle of “Sivad.” Pascoal’s short and meditative pieces were inserted between the long and hard-driving concert suites.

After the tracks with Pascoal, Davis had an almost two-year recording hiatus. He would not go into a recording studio until April 1972, when he overdubbed a trumpet solo on a track titled “Red China Blues.” This is an oddity in Davis’s discography. Stylistically, the piece is a fairly commercially oriented rhythm and blues instrumental. The backgrounds for the piece were recorded on 9 March by a studio band featuring drummers Bernard Purdie and Al Foster, bassist Michael Henderson, guitarist Cornell Dupree and a brass section.⁶⁸ “Red China Blues” was released on *Get Up With It*.

2.6.4 *On the Corner*

The recording of Davis’s studio album *On The Corner* took place between 1 June and 7 July 1972. The exact discographical details are so far unknown. The player list is extensive and includes at least Corea, Hancock, Harold Williams and Lonnie Liston Smith on keyboards, McLaughlin and David Creamer on guitars, Henderson on bass, DeJohnette, Al Foster and Billy Hart on drums, Collin Walcott or Khalil Balakrishna on sitar, Dave Liebman and Carlos Garnett on saxophone, James Foreman, Don Alias and Badal Roy on percussion, and Paul Buckmaster on cello. The

⁶⁸ Tingen 2001, 323

production utilized overdubs of handclaps, bells, whistles and other percussion and trumpet parts. Multidimensional polyrhythmic layers and coloristic textures embellish the music, otherwise based on simple bass vamps. The coloristic textures were achieved with various electronic effects, synthesizers and Indian instruments. All these components formed a complex background against which the soloists could react.

In *On The Corner*, Davis reversed his practice of including several pieces under one title; here the album has several pieces with different titles for sections based on the same riff. Side one of the original issue consists of the tracks “On The Corner,” “New York Girl,” “Thinkin’ One Thing And Doin’ Another” and “Vote For Davis,” all parts of the same jam. On side two, different takes of the vamp “Black Satin” were issued as “Black Satin,” “One And One,” “Helen Butte” and “Mr. Freedom X.” Buckmaster recalls that he modeled “Black Satin” on Davis’s singing.⁶⁹ When *On The Corner* was released in the autumn of 1972, its funk grooves and cartoon cover drawings of Corky McCoy were aimed at the young black audience. This promotional tactic however failed; despite its dancability, the music was obviously too complex or “spacey” for the youth to grasp.

Paul Buckmaster is British cellist and composer whom Davis had first met in November 1969. Besides his training in classical music, he had an interest in jazz and rock. Buckmaster later wrote arrangements for the Rolling Stones and David Bowie, and composed soundtracks for films.⁷⁰ Buckmaster stayed at Davis’s house as a guest several times and introduced Davis to the music of Karlheinz Stockhausen. He also composed music for Davis; one of his compositions is “Ife,” recorded by Davis on 12 June 1972. Lonnie Liston Smith, who played briefly in Davis’s band before Cedric Lawson, is featured on organ. “Ife” remained in Davis’s concert repertoire until his long withdrawal from performing in 1975. Buckmaster recalls: “My idea was to alternate these street rhythms with long spaces without rhythm.”⁷¹ Soon afterwards, Davis applied the concept to his concerts. He would stop the band, play clusters on the organ and then cue the band to restart the groove.

Bassist Henderson and percussionist Foreman were the only members left from the previous group. The new band included saxophonist Carlos Garnett, the Indian sitar player Khalil Balakrishna and

⁶⁹ Tingen 2001, 133

⁷⁰ Szwed 2002, 321–322

⁷¹ Tingen 2001, 132

percussionist Badal Roy. All had taken part in the *On The Corner* sessions. Other new permanent members were drummer Al Foster, keyboard player Cedric Lawson and guitarist Reggie Lucas.

The new lineup recorded the track “Rated X” on 6 September. Davis did not play trumpet, contributing only dense organ clusters on the track. “Rated X” features a tight but somewhat restless groove that is randomly stopped and restarted, obviously by cues from Davis. Davis’s organ clusters fill the breaks. Stockhausen and Buckmaster might have influenced “Rated X”. Buckmaster thought he might alternate street rhythms with Stockhausen-like abstractions. As he recalls:

“The whole idea was based on creating a kind of ‘cosmic pulse’ with great abstractions going on around it. I said something to Miles like, ‘Things are either off or on. Reality is made of a sequence of on and offness.’ A crazy idea. But what I meant was that a sound doesn’t mean anything unless it has a silence preceding it or coming after it, or next to it.’⁷²

“Rated X” is difficult to categorize as jazz. The piece has no melodic element except for the repeated two-note bass ostinato (Appendix 1, Example 18). The primary elements of “Rated X” are rhythm and texture; musical communication is present only in the stop–start dialog. The track was released on *Get Up With It*, but the piece was first featured on the upcoming concert album “In Concert,” which also included “Ife” and material from *On The Corner*.

On 29 November a track named “Agharta Prelude” was taped. “Agharta Prelude” is in fact the vamp and melodic phrase titled earlier as “Funky Tonk” on *Live–Evil* (Appendix 2, Example 4). The last session of 1972, held on 8 December, yielded the track “Billy Preston,” essentially a funky two-bar bass ostinato with a short melodic phrase.

2.7 The concert band, 1970–72

It is interesting to note how the pieces in Davis’s concert repertoire had changed and developed by 1970. The tempo of “Directions” had almost doubled since the first studio version and the same happened to “Masqualero,” whose solo form was varied from ABA to AABA.

⁷² Szwed 2002, 323

Dave Holland switched to mostly electric bass for the concerts beginning in January 1970. The year 1970 began with personnel changes in Davis's concert ensemble, resulting in the disbanding of the "lost quintet."

Wayne Shorter left the band on March 1970. His last concerts with the band were at the Fillmore East, New York, on 6 and 7 March. The concerts were recorded by Columbia and later released as *It's About That Time: Miles Davis Live at the Fillmore East*. Shorter was replaced by 18-year-old Steve Grossman for concerts at the Fillmore West in San Francisco, on 9–10 April, right after the recording of the soundtrack *A Tribute to Jack Johnson*. The latter of these concerts was recorded in its entirety for the album *Black Beauty*, released only in Japan in 1973. Grossman had already participated in several of Davis's recording sessions from November 1969 onwards and he only stayed in the concert ensemble until the end of July 1970.

The edited concert suite of *Black Beauty* contains collective free improvised sections interspersed with thematic fragments or vamps between the themes, the use of a wah-wah pedal by Dave Holland on electric bass, as well as "spacey" electronic effects created by Corea with a ring modulator on the Fender Rhodes.

Keith Jarrett joined Davis's group as a second keyboard player in May 1970. Jarrett was DeJohnette's bandmate from Charles Lloyd's quartet of 1966–68. The Charles Lloyd Quartet was highly popular globally during its lifetime and both Miles Davis and Tony Williams have acknowledged its influence on their playing. It was one of the first bands to perform on rock venues and to include components of rock in its jazz performances. Like Davis and Cannonball Adderley, the band recorded several concert albums.

Jarrett's studio recording debut with Davis was the track "Honky Tonk," taped 19 May 1970. This is the track about which fellow trumpeter Blue Mitchell later remarked: "Hope it ain't anyone I know."⁷³ Jarrett played mostly organ in the band while Corea stayed with the electric piano. Davis put them on the opposite sides of the stage where they could not hear what the other one was doing. The practice might be one of Davis's preconceived concepts to influence the psychology of a performance. Randy Brecker comments: "He did not want them to hear each other, he wanted them to react to *his* playing."⁷⁴ The lineup is well documented on *At Fillmore: Live at the Fillmore East*,

⁷³ Tingen 2001, 108

⁷⁴ Brecker 2002

recorded between Wednesday, 17 June and Saturday, 20 June. Teo Macero edited each concert into a single extended suite for the album. The suites had generic titles such as “Wednesday Miles” and “Thursday Miles”. The sets are somewhat jumbled due to heavy editing. For example, a 29-second fragment of “Bitches Brew” is inserted in between two edited cuts of “Directions.” Chick Corea occasionally plays a second drum set during these performances.

Alto saxophonist Gary Bartz replaced Grossman at the end of July 1970. It is worth noting that no Miles Davis studio recordings featuring Gary Bartz exist. On 29 August the band played at *The Isle of Wight Festival* in Great Britain. Excerpts of this concert ended up in a film documentary about the festival, *Message To Love*. A longer section titled “Call It Anything” ended up in an album about the festival. Davis’s entire performance has now been released on DVD.⁷⁵ The titles of Davis’s concert albums were confusing because the actual titles of the pieces were not included. Because the themes were often short fragments or bass vamps they left the impression of unprepared jamming for listeners unfamiliar with the idiom.

Holland and Corea left Davis in late August to form a new band “Circle,” with Anthony Braxton and Barry Altschul, to play free jazz. After Corea’s exit, Jarrett remained as the only keyboard player, alternating between organ and electric piano.

Searching for a replacement for Holland, Davis first tried Miroslav Vitous for a few concerts in early September until Michael Henderson joined the concert band as a permanent member on 13 September 1970. Henderson remained until Davis’s long pause in 1975. Henderson was the first musician from outside the jazz community to join Davis’s band. Trained as a Motown session player, he became responsible for holding down the sustained grooves and bass ostinatos that characterized much of the music played by this band. Yet at the time Davis asked him to join, he did not know who Miles Davis was.⁷⁶ Henderson’s first studio session with Davis had been on 7 April 1970, resulting in the music for the soundtrack *A Tribute to Jack Johnson* that was released in the summer of 1971.

This lineup was Davis’s first “real” jazz–rock band. Soul and funk grooves would now continuously pervade his music. He started to use a *wah-wah* pedal on his trumpet at this time. Randy Brecker claims that Davis picked up the *wah-wah* after hearing Brecker use it with the group

⁷⁵ *Miles Electric: A Different Kind of Blue* (EE39020)

⁷⁶ Tingen 2001, 104

“Dreams” at The Village Gate in New York.⁷⁷ Percussionist James Riley, who had participated on the *Bitches Brew* sessions, was added to the band for a few weeks as a second percussion player in October 1970. The group was augmented occasionally with guitarist John McLaughlin, for example at the concert performed on 19 December 1970 at The Cellar Door in Washington D.C. This concert was recorded and parts of it ended up on the album *Live-Evil*.

Davis added several new pieces to his concert repertoire: “Honky Tonk,” “Funky Tonk,” “What I Say” and “Yester Now” (from *A Tribute to Jack Johnson*). Shorter’s “Sanctuary” took over as the closing theme at the band’s concerts by the end of 1970.⁷⁸ Eventually Davis dropped the standards and older originals altogether, making “Directions” and “Sanctuary” – the opener and the closer – the oldest compositions in his concert repertoire. The group’s performance concept concentrated on developing and varying its grooves, which often broke into rubato sections or interludes resembling the expression of collective free jazz. Davis led the performances with his “coded phrases” whenever he needed to change the direction of the music.

The band with Bartz, Jarrett, Henderson and Moreira lasted until early 1972. DeJohnette left the group in July 1971 and was replaced by Leon Chanler for an upcoming European tour. When the tour started in October, two percussionists, James Foreman and Don Alias, replaced Moreira. Alias had taken part in the *Bitches Brew* sessions.

Chanler only stayed until March 1972, after which DeJohnette returned for a few concerts. After him Davis tried out Ramon Fulwood, the drummer of the band “Parliament/Funkadelic,” on a few concerts. Soon afterwards Jarrett and Bartz left, and the lineup split permanently. Davis did not perform until 29 September when he introduced his new lineup at New York’s Philharmonic Hall.

The instrumentation had changed; bassist Henderson and percussionist Foreman were the only members left from the previous group. The new band included saxophonist Carlos Garnett and two Indian musicians, sitar player Khalil Balakrishna and percussion player Badal Roy, from the *On The Corner* sessions. Other new members were drummer Al Foster, keyboard player Cedric Lawson and guitarist Reggie Lucas. The latter three had also already recorded with Davis shortly before their first concert performance with the group. That concert, performed at New York’s Philharmonic Hall, was recorded and released as *Miles Davis In Concert*.

⁷⁷ Brecker 2002

⁷⁸ Tingen 2001, 114

The band introduced recently recorded pieces such as “Rated X,” “Ifé” and “Black Satin,” as well as older numbers like “Right Off,” “Honky Tonk” and “Sanctuary.” “Rated X,” replaced “Directions” as Davis’s concert opener in 1972.⁷⁹ The lineup based its music on the funk grooves introduced by the previous band. Over the bass ostinatos, Davis added African polyrhythmic layers, introduced on *On The Corner*, as well as the coloristic Indian-flavored components that he had experimented with in the studio briefly between 1969 and 1970. Lucas was the first guitarist with a permanent status in Davis’s band. His role was predominantly that of an accompanist, a component of the rhythmic texture.

3 Elements of jazz–rock in Miles Davis’s studio recordings, 1965–69

In this chapter I examine certain musical elements that appeared in Miles Davis’s *studio* recordings between 1965–69 and that later became characteristic in his jazz–rock phase. I return to the year 1965 because it was then that Davis began to utilize even eighths, “the rock beat,” in his music for the first time. Some of the elements had appeared in his music even earlier, while others were introduced for the first time during the years in question. By the end of 1969, Davis had essentially introduced all the characteristic elements of his jazz–rock phase. The chapter is an overview, not a detailed study.

The formative process of jazz–rock in Davis’s music began with appearance of elements – previously for the most part associated with rock and soul music – that were considered anomalous to the existing jazz tradition. Besides rock and soul influences, *free jazz* and various ethnic musical styles (Indian, Brazilian, African) also became a characteristic part of Davis’s jazz–rock phase.

The chapter mainly explains Table 1 and the musical examples cited in Appendix 1. Table 1 lists the pieces chronologically, from the top down, in which the anomalous musical elements appeared during the period. Because several recorded versions of certain pieces are available, the text refers only to the version listed in Table 1. The musical elements are introduced in the top row from left to right, in order of appearance, each one in its own column.

⁷⁹ Tingen 2001, 143

3.1 Even eighths

The category of even eighths refers to pieces whose predominant rhythmic framework and phrasing were based on *even* eighth notes instead of the jazz idiom's conventional triplet-based "swing" eighths. Davis's first released recording utilizing an even–eighth groove was the piece "Eighty–One" on the album *E.S.P* in 1965. After that, it would be more than two years before Davis tried even eighths again. The next occurrence was with Wayne Shorter's "Masqualero." From early 1968 onwards, even eighths became established as the prevailing rhythmic framework in Davis's music.

3.2 Open form

The term *open form* here refers to pieces with varying degrees of formal variety: *augmented* form, *variable* or *flexible* form and completely *open* form.

Davis began to augment the song form already on his piece, "Deception,"⁸⁰ in 1950. Although credited to Davis, "Deception" is in fact his modification of George Shearing's "Conception." Shearing's composition is an AABA form with 12-bar A sections and an 8-bar bridge. Davis modified the harmony and inserted a pedal point (the dominant of the key) into the last 6 bars of the A sections. He also extended the A sections to fourteen bars by adding a two-bar cadence at the end of each section. Using an existing song form and modifying it melodically and harmonically was a standard practice employed by bebop musicians in the 1940s. The modification of an existing song form by adding extra bars was however somewhat new.

Davis had experimented with *variable* form already in 1959 on the ballad, "Blue In Green," from *Kind of Blue*. "Blue In Green" featured augmentations and diminutions on an unconventional 10-bar song form. Davis's "Flamenco Sketches" on the same album featured a predetermined chord sequence, but the improvising soloist cued each chord change. Because the number of bars per chord was now entirely up to the soloist, a new formal element – the chorus length – was created during each solo. Davis used the same concept later, for example in 1965 in his piece "Agitation" from the album *E.S.P*, and in 1969 in his "Spanish Key" from *Bitches Brew*. On *Sorcerer*, the form of Wayne Shorter's "Masqualero" is ABA. This form was maintained during Davis's solo, but stretched during the composer's solo – either intentionally or not. The form of Shorter's

⁸⁰ Miles Davis: *Birth of The Cool*

“Pinocchio” on *Nefertiti* was likewise abandoned during Davis’s solo, but maintained during Hancock’s solo.

The 1966 album *Miles Smiles* featured three pieces with completely open solo forms: Shorter’s “Dolores” and “Orbits,” and Eddie Harris’s “Freedom Jazz Dance.” Davis later combined open forms with bass ostinatos, beginning with the piece “Directions” (Example 8) in late 1968. The forms of the compositions of that period that had an established formal structure often differed from traditional song forms and had uneven metric structures. Joe Zawinul’s “Ascent” had a 43-bar form and Davis’s “Mademoiselle Mabry (Miss Mabry)” had 19 bars.

3.3 Bass ostinato

The bass ostinato or vamp gradually became the element that held the key and the rhythmic–harmonic framework of Davis’s music together. The presence of a strong, repetitive bass ostinato allowed the musicians to improvise against it and against each another within its framework. Prewritten bass lines occasionally functioning as the only precomposed melodic parts of the pieces, were often doubled by other instruments. Occasionally, the bass functioned as a pedal point or drone, reflecting the influence of Indian music.

Ron Carter’s piece “Mood” on the album *E.S.P* was probably the first work recorded by Davis in which a repetitive composed melodic accompaniment figure in the bass – the bass ostinato – was evident. Wayne Shorter’s “Footprints” (Appendix 1, Example 1) featured a continuous bass ostinato placed within the context of a reharmonized 12–bar *minor blues* form. The bass ostinatos of later pieces like “Directions” and “It’s About That Time” (Appendix 1, Examples 5–7) resemble the ostinatos of soul and funk pieces owing to their even eighth grooves and open forms.

3.4 Pedal point

Davis’s use of pedal point can be traced back to the aforementioned piece “Deception”. Davis modified the harmony of the piece and inserted a pedal point, the dominant of the key, into Bars 7–12 in the 14-bar A sections. In 1956 Davis added an interlude with a pedal point into his version of Dave Brubeck’s “In Your Own Sweet Way.”⁸¹

⁸¹ Miles Davis: *Workin’*

The 1960s quintet's rendition of Eddie Harris's "Freedom Jazz Dance" in 1966 included a constant pedal point combined with an open form. A pedal point also dominated Shorter's "Masqualero," but unlike "Freedom Jazz Dance," the piece had an established form and a predetermined chord progression. From the mid-1960s onwards the pedal point gradually became an essential component of Davis's music, up to the point where it became the only reference for a tonal center.

3.5 Time-no-changes

On Shorter's "Orbits" and "Dolores," the quintet developed its approach towards the so-called "*time-no-changes*"⁸² playing style. After these pieces' thematic statements, the solo sections were completely open without any predetermined harmonic content or formal structures. The time-no-changes approach is a subcategory of free jazz. The musicians' thorough knowledge of harmony is evident in this type of playing. Although they do not use preset *changes*,⁸³ they appear to improvise them as they play, occasionally creating the illusion of preset chord changes.⁸⁴ On certain pieces, the time-no-changes approach was combined with conventional forms. For example, Davis's solo on Shorter's "Pinocchio" was based on the time-no-changes approach. In his solo, Shorter followed the piece's harmony only during the first chorus, abandoning it thereafter. Only during Hancock's solo were the form and harmony maintained throughout.

3.6 Theme as interlude

During 1967 and 1968 Davis occasionally used the pieces' thematic fragments as interludes between improvised solos, but seems to have subsequently abandoned the practice. Davis often interpreted the themes – usually played in unison or octaves with Shorter – in a rhythmically free manner, forcing Shorter to follow him as a "shadow." It was a routine Davis had learned while working with Charlie Parker in the 1940s: "When Bird would play a melody, I'd play just under him and let him lead the note."⁸⁵

⁸² See Glossary

⁸³ See Glossary

⁸⁴ Kirchner 1997, 170–71

⁸⁵ Carner 1996, 8

3.7 Melodic ostinato

Davis's use of themes as interludes paved the way for their repetitive use as melodic ostinatos. The first time this took place was probably on the recording of Shorter's "Nefertiti" in June 1967. On "Nefertiti" Davis reversed the traditional roles of soloists and accompanists, bringing drummer Tony Williams to the forefront to improvise over the tune's repeated melody. This rendition, containing no other solos, may be seen as an important step that emphasized the equality and emancipation of the rhythm section. This occurred almost accidentally, resulting from a rehearsal of the piece's theme in the studio.⁸⁶ The repetition of a theme as a melodic ostinato behind improvising soloists was employed on Shorter's "Fall" on the same album. The melody of Davis's "Great Expectations" (Appendix 1, Example 11) from 1969 was repeated throughout the piece with a meditative, out-of-tempo feel superimposed over the steady pulse of the rhythm section and varied only slightly by Davis.

3.8 Electric guitar

The 4 December 1967 recording session can be considered a turning point in Davis's new musical direction. From that session onwards, Davis used additional musicians on all his recordings during that period. On this session Davis augmented his quintet with guitarist Joe Beck, marking the first time that he had ever used an electric guitar in a recording studio. Davis used the instrument on six different recordings between 4 December 1967 and 16 February 1968. Besides Beck's two sessions, he used George Benson on three and Bucky Pizzarelli on one.

These guitarists favored a traditional clean sound and hollow bodied instruments; except for Benson, they were relegated to providing sparse accompaniments and doubling the bass line an octave higher. It would appear that it was not until Davis discovered John McLaughlin that he found the qualities that he was looking for in a guitarist: the sound and vocabulary of a rock guitarist combined with a jazz player's fluency. After discovering McLaughlin, Davis utilized the electric guitar continuously. McLaughlin first used a hollow bodied instrument with Davis but soon switched to solid body electric guitar – the kind associated with rock – and began to use various electronic effects.

⁸⁶ Belden 1997, 83–83

3.9 Postproduction editing

Miles Davis's producer Teo Macero first used certain techniques for editing recordings in the late 1950s and early 1960 on the albums *Porgy and Bess* and *Sketches of Spain*; these were the fruits of Davis's cooperation with composer–arranger Gil Evans. On these albums postproduction editing was limited to the overdubbing of parts and solos, as well as the cutting and pasting of the tape to obtain an ideal version of the precomposed work in question – not to recompose completely new musical forms, as would later be the case. Macero also edited some small group pieces, notably “Drad–Dog” and probably “Teo” (later retitled as “Neo”) on the album *Someday My Prince Will Come* in 1961.⁸⁷ Davis gave Macero the freedom to experiment with the recorded material and as a result the music was given new forms. Macero claims that his habit of editing extended “suites” from several compositions had an impact on Davis's concert performances. Indeed, Davis's recorded concerts with the “lost quintet,” beginning in 1969, support Macero's assertion. For his part, Davis had already initiated the practice of cueing in a new piece by introducing an upcoming song's melodic motif on the trumpet as early as December 1965, as the album *Live at The Plucked Nickel* demonstrates.⁸⁸

A turning point in the reshaping of the recorded music was the editing of the piece, “Circle in the Round,” recorded on 4 December 1967 but not issued until it was included on the compilation *Circle in the Round* in 1979. Stan Tonkel assembled this first released version in 1967.⁸⁹ Subsequently Macero edited the piece in 1968 by combining sections from several takes.

Davis's next recordings – most notably the pieces “Water On The Pond,” “Fun,” “Side Car” and “Splash” – document his change of direction towards a more rock-oriented approach. These pieces were also manipulated in the postproduction phase and were not released until 1979 (“Side Car” and “Splash”) and 1981 (“Water On The Pond” and “Fun”). The tone poem “Ascent” from November 1968 was spliced together from three different takes and issued in 1981 on *Directions*. The first released Miles Davis composition using extensive “cut and paste” edits was the track

⁸⁷ Chambers 1998, 31

⁸⁸ The origin of the practice of *coded phrases* might be here.

⁸⁹ Tingen 2001, 305

“Stuff” on the album *Miles in the Sky* in 1968. This was followed by the track “Mademoiselle Mabry” – the only edited track on *Filles de Kilimanjaro* – that was released in 1969.

Postproduction editing played a key role in the assembly of Davis’s album *In a Silent Way*. A new feature was that each side of the album consisted of a single extended track, titled “Shhh/Peaceful” and “In a Silent Way/It’s About That Time” respectively. Macero assembled each track by combining various takes and sections. Many other concepts introduced by Davis on his previous recordings – rock elements, free jazz episodes, open forms, pedal points, bass ostinatos, multiple keyboards, thick harmonic textures – were for the first time clearly crystallized on *In a Silent Way*.

As the collection *The Complete In a Silent Way Sessions* reveals, “Shhh/Peaceful” had at least three other sections – a unison bass line (Appendix 1, Example 12), a unison melody played by Shorter, McLaughlin and Davis, and a short harmonic progression – besides those included on the version originally released. It would appear that Macero preferred to use the material that resulted after the musicians had already been playing for a while and had become comfortable with the groove; this allowed the music to develop to a certain point. The fact that the original released version consists of material from the end of each take supports this interpretation.

Each of the two longest tracks – “Pharaoh’s Dance” and “Bitches Brew” – on Davis’s next album *Bitches Brew* filled up one side of the double album and consisted of numerous edited sections. “Pharaoh’s Dance” in particular was thoroughly recomposed by Teo Macero. He made tape loops by repeating certain short sections at the beginning, thus creating thematic statements from fragments of improvised music. The released version of “Pharaoh’s Dance” contained a total of 18 edits. Zawinul’s original theme only appeared at the very end of Davis’s version.

Concert albums were also edited. On *Live–Evil*, primarily a concert recording except for a few short studio pieces, Macero inserted a cut of a studio version of the piece, “Honky Tonk,” in the beginning of the concert version of the same piece. The four concerts that constitute the double album *Live At The Fillmore* were likewise compressed into four suites. On *Live At The Fillmore*, Macero performed some “brutal” edits, such as the insertion of 29 seconds of “Bitches Brew” into the middle of the piece “Directions” in the first suite titled “Wednesday Miles.”⁹⁰

⁹⁰ Tingen 2001, 116

Davis often pre-edited certain pieces composed by others before recording them. Macero continued the editing process, essentially editing music already edited by Davis. In short, the editing room was now being used to recompose musical works from pre-recorded materials. The traditional approach was to record performances of composed musical works. Now musical form was being determined *after* it had been played, not before; one could say that the music was “postcomposed”. Besides the editing techniques described above, Macero created loops by repeating certain sections of recorded music that were used in the final product. These can be heard for example in the beginning of Zawinul’s “Pharaoh’s Dance” on *Bitches Brew*.

On his concert albums, Davis gave up the use of song titles, preferring instead to call the sets, each of which filled one side of a long-play record, by generic names such as “Thursday Miles” (recorded on Thursday) and “Friday Miles” on *Live At The Fillmore*. On *Black Beauty* the sets were titled as “Black Beauty, parts I–IV.” Davis now left it up to the listener to identify the different themes and vamps contained in these suites.

The practice of making each album side an interrupted flow of music was however not new in jazz. Davis’s big band album of 1958, *Miles Ahead*, was basically a continuous suite. Gil Evans’s arrangements were constructed so that each piece led to the next one, either directly or with an interlude. John Coltrane’s album of 1964, *A Love Supreme*, is another important uninterrupted jazz recording. On *A Love Supreme*, each album side features two parts of a four-part suite played uninterruptedly.

3.10 Coloristic elements

Davis began to use certain instruments coloristically as pure sounds or effects. His search for a different keyboard sound begun with the tryout of a celesta on the piece “Circle In The Round,” played by Herbie Hancock. There the celesta and the electric guitar were used coloristically without any specific melodic, rhythmic or harmonic function. Overdubbed tubular bells provided an additional coloristic element. From the piece “Directions” onwards the coloristic element was often present as a thick chordal texture provided by multiple electric keyboards. Davis later used various Indian instruments, percussion, slide guitar, organ, synthesizers, drum machines and electronic effects as coloristic elements, or “grit”, that functioned as a textural dissonance and balancing force in relation to a sterile and clean studio sound.⁹¹

⁹¹ Tingen 2001, 154

3.11 Melody in the bass

On certain pieces the main melodic function was assigned to the bass. Bass melodies were often doubled in unison or octaves with other instruments such as electric guitar, electric piano or organ. Guitarist Joe Beck doubled the bass line on Davis's *boogaloo*-type⁹² composition "Water On The Pond." On the first part of Davis's "Shhh/Peaceful" (Appendix 1, Example 12) on *The Complete In a Silent Way Sessions*, the organ doubled the bass melody. The bass ostinatos of "It's About That Time" (Appendix 1, Examples 5–7) used the same practice. Prewritten bass melodies – intros, interludes and ostinatos – became an increasingly important feature in Davis's music during the period.

3.12 Electric keyboard

After "auditioning" the celesta on "Circle In The Round," Davis began to search for electronic substitutes for the acoustic keyboards. On "Water On The Pond" Davis utilized the electric piano in his music for the first time; Herbie Hancock played a Wurlitzer electric piano and a Clavinet in the piece. Davis also used an electric harpsichord on the piece "Fun." The piece "Stuff" on the album *Miles in the Sky* was the first recording where Hancock used the Fender Rhodes electric piano.⁹³ Beginning with that recording, Davis abandoned the acoustic piano altogether; he used three different electric keyboards – Wurlitzer, RMI and Fender Rhodes – on his next album *Filles de Kilimanjaro*. On *In a Silent Way* he utilized a Hammond organ in addition to two electric pianos. Subsequently he usually preferred the Fender Rhodes, whose sound became a characteristic element in his music.

3.13 Odd or changing meter

Tony Williams's "Black Comedy" on the album *Miles in the Sky*, Davis's first recorded piece with an odd-time signature, featured three different time signatures: 4/4, 5/4 and 6/4. Davis's "Country Son," a mixture of different grooves and tempos, featured sections in waltz time, free rubato time,

⁹² See Glossary

⁹³ Belden 1997, 99

regular jazz time and a boogaloo groove. The thematic section of “Petits Machins” on *Filles de Kilimanjaro* was in 11/4 time. The solo section was an open form in 4/4 time featuring two consecutive pedal points. The piece was co-written by Davis and Gil Evans. Evans subsequently re-recorded it as “Eleven” on his album *Svengali*.

Davis’s “Great Expectations” is the only piece examined here that employs a constant odd-time signature throughout; it features an even-eighth groove and a time signature of 7/4. Davis’s “Splash” has shifting time signatures in thematic sections, as well as a solo section in 5/4 with one bar in 6/4. Zawinul’s “Ascent” is a slow waltz with momentary four-beat bars. Davis’s “Mademoiselle Mabry (Miss Mabry)” is for the most part in 4/4, but includes momentary metric shifts into 5/4 and 3/4.

3.14 Electric Bass

In 1968, Ron Carter introduced the electric bass into Davis’s music in the piece “Stuff” for the album *Miles in the Sky* released that same year. “Stuff” may be characterized as a soul-jazz composition with a boogaloo rhythm, a groove that became clearly focused in Davis’s music for the first time.⁹⁴ After the three pieces in 1968, Davis ignored the electric bass for a while, later reintroducing the instrument – played by the rock bassist Harvey Brookson – on the album *Bitches Brew* where it supplemented the acoustic bass played by Dave Holland. After 1969 Davis abandoned the acoustic bass completely in his recordings and utilized the electric instrument only.

3.15 Triadic harmony

Davis’s slow *tone poem*,⁹⁵ “Mademoiselle Mabry (Miss Mabry),” (Examples 2, 3) featured the harmonic characteristic of that era’s pop music, including pure major triads, as opposed to the more complex chords utilized normally in jazz. Two chordal segments of the song closely resemble the opening passage of Jimi Hendrix’s rock ballad “The Wind Cries Mary” (Appendix 1, Example 4). “Mademoiselle Mabry (Miss Mabry)” has no recognizable melody of its own except for a single short phrase. The extended piece consists of a repetitive and unconventional chord cycle with

⁹⁴ Tingen 2001, 43

⁹⁵ See Glossary

shifting time signatures. Occasional pure triads are found on a few of Davis's later pieces, such as "Corrado" as well as on "Joe Zawinul's "Ascent."

3.16 Multiple keyboards

Davis first used two keyboards simultaneously on 11 November 1968 in a session that featured Chick Corea on Wurlitzer and Herbie Hancock on Fender Rhodes electric piano. The results – "Dual Mr. Anthony Tillmon Williams Process" and "Two Faced" – were issued in 1976 as part of the compilation *Water Babies*. The interaction between the two keyboards was fairly cautious on these pieces.

On Davis's next studio session, held on 25 November 1968, he used three electric keyboards simultaneously for the first time; Hancock and Corea played the Wurlitzer and Fender Rhodes electric pianos respectively and Joe Zawinul played the Hammond organ on Davis's "Splashdown." The simultaneous presence of so many keyboards contributed significantly to the overall color of the music. The same group recorded Zawinul's "Ascent" two days later. On "Ascent" the three keyboards' layers produced a dense chordal texture. This session, the first time Davis recorded Zawinul's compositions, yielded two versions of Zawinul's "Directions." On these two takes, the organ doubled the bass line while the two Fender Rhodes pianos took turns accompanying the soloists.

It would appear that on *In a Silent Way* the roles of the same three keyboard players were less defined and more spontaneous. This might have been due to the players' having gotten used to communicating within the new sonic environment; the bolder interaction against the grooves and each other proves the point.

The album *Bitches Brew* contained no organ; Larry Young was the third keyboard player, replacing Hancock on Davis's "Spanish Key" and Zawinul's "Pharaoh's Dance." The simultaneous presence of two or three Fender Rhodes pianos without an organ created a thick harmonic texture slightly different than what is heard on *In a Silent Way*.

3.17 Percussion

Bitches Brew was Davis's first album utilizing percussion players in a small band context. Two percussionists, Don Alias and James Riley, augmented his recording group. It was also the first time Davis experimented with two complete rhythm sections playing simultaneously. After *Bitches Brew* the use of percussion players became more common in jazz groups.⁹⁶

3.18 Indian instruments

Davis did not actually absorb the pure elements of Indian music, such as *ragas* (melodic shapes) or *talas* (rhythmic cycles), but used Indian instruments primarily to embellish his music. On "Great Expectations" Davis employed Indian musicians for the first time: Khalil Balakrishna on sitar and tamboura, and Bihari Sharma on tabla and tamboura. Davis continued to use either one or both of them on all of his subsequent recordings until February 1970. "Great Expectations" contained no solos; the improvisatory element was present in the rhythm section, particularly in the activity of the Indian instruments, the bass fills and the chordal interaction between the two keyboards. "Great Expectations" was released on the album *Big Fun* in 1974. Davis utilized the sitar and tamboura for pedal points or drones alongside one or two basses from November 1969 through 1972.

4 Characteristics in Miles Davis's pieces, 1969–70

Davis's pieces of that period consisted primarily of a single or a few bass ostinatos and short melodic–rhythmic motifs. Davis's practice at the time was to play uninterrupted sets in his concerts, effecting the transition from one piece to the other with so-called *coded phrases*.⁹⁷ He released several concert albums during the period in which the individual pieces were not identified. Instead, an enigmatic title such as "Friday Miles" or "Call It Anything," was given to each album side. The

⁹⁶ Tingen 2001, 4

⁹⁷ See Appendix 1

latter might describe Davis's attitude towards song titles at the time. Only recently have the producers of his reissues made an effort to identify and indicate the titles of the albums' separate themes.

Davis's concert practice influenced his studio recordings of that period; his studio albums consisted of side-long suites containing several themes and vamps grouped under one title. Furthermore, his producer Teo Macero mixed material from studio recordings with the recordings of concert performances. The succeeding chapter describes the various ways Davis utilized his musical materials.

4.1 Song titles

Typical of Davis's thematic thinking during the period was the naming of his pieces after persons he knew or admired. Pieces named after famous boxers were "Ali," "Sugar Ray," "Johnny Bratton," "Archie Moore," "Duran" and "Jack Johnson." Pieces named after musicians were "John McLaughlin," "Willie Nelson" and "Billy Preston."

4.1.1 "Willie Nelson"

Davis's "Willie Nelson" illuminates the ways he shaped his music during that period. The first recording of "Willie Nelson" took place on 18 February 1970. The piece consists of three elements: a bass ostinato and two melodic motifs (Appendix 1, Example 19, thematic phrases 1 and 2). The tonal center of each element is C. The bass ostinato (Appendix 1, Example 19, vamp 1) remains almost intact throughout the performance, except for slight variations made by bassist Dave Holland.

The ostinato was also used for the second part of the piece "Yester Now" (Appendix 1, Example 17) on the album *A Tribute to Jack Johnson*, and also appeared on many of Davis's concert recordings of the 1970s. Davis himself utilized this motif as a coded phrase to move ahead from the piece "Bitches Brew" on "Saturday Miles," the fourth album side of *Live at Fillmore: Live at the Fillmore East*, after an unsuccessful attempt to move on by using the piece's main coded phrase (see next paragraph).

The first motif of “Willie Nelson” is a triplet-based blues phrase (Appendix 1, Example 19, thematic phrase 1). Guitarist John McLaughlin modulated the phrase randomly up a fourth and back, as illustrated in Bars 5-7 in Example 1. The motif never reappeared after this recording, supporting the assumption that McLaughlin might have improvised it during the recording session. The second motif consists of two consecutive sixteenth notes falling on the beat (Appendix 1, Example 19, thematic phrase 2). Davis varied the pitches of the motif while keeping the rhythm intact. Because the phrase is treated differently each time, Steve Grossman, who played soprano saxophone on the session, probably had to follow Davis on the spot. The second motif was used as the main coded phrase of “Willie Nelson” on Davis’s concert performances.⁹⁸ As a musical idea, it is more rhythmic than melodic.

Davis recorded a variation of the bass ostinato as a different take (Appendix 1, Example 20, vamp 2). This “Willie Nelson” is a unison line built on a C minor pentatonic scale. The concert recording of *Black Beauty* explicitly demonstrates the correlation between the two ostinatos. Dave Holland makes a smooth transition from the first ostinato to the second through a connective ostinato (Appendix I, Example 31). The second ostinato appeared as the third part of the aforementioned “Yester Now” (Appendix 1, Example 17).

Davis re-recorded “Willie Nelson” on 27 February 1970, taping two versions of the piece. The first take introduced a new bass ostinato (Appendix 1, Example 21, vamp 3) and a new thematic motif (Appendix 1, Example 21, thematic phrase 3). This time the tonal center was B natural. The bass ostinato of the second version (Appendix 1, Example 22, vamp 4) was a combination of ostinatos 1 and 3.

4.1.2 “Right Off”

As Paul Tingen points out,⁹⁹ the opening ostinato of Davis’s “Right Off” (Appendix 1, Example 14) is modeled after a bass riff utilized in *Sly and the Family Stone*’s piece “Sing a Simple Song”¹⁰⁰ (Appendix 1, Example 15). This is true in several respects. The motivic identity between beats one to three on the first bar of “Sing a Simple Song” and beats two and four on the first bar of

⁹⁸ See appendix 1; also: Miles Davis: *Miles Davis Live at the Fillmore East (7 March 1970), It’s About That Time*

⁹⁹ Tingen 2001, 107 and 317

¹⁰⁰ Sly and the Family Stone: *Stand!*

“Right Off” is self-evident. The melodic material of both ostinatos is based on the minor pentatonic scale. The rhythmic placement and the length of the phrase are however different. On “Sing a Simple Song” the riff lasts two bars. On “Right Off,” the riff takes three bars before it is repeated.¹⁰¹ Davis reused the ostinato in his concerts during the 1970s. It reappeared as “Slickaphonics” on *Miles Davis In Concert* from 1971 and as “Theme From Jack Johnson” on *Agharta*, a later concert album from 1975.

The renaming might stem from the fact that Davis had used the ostinato as the third part of the piece “Right Off” on *A Tribute to Jack Johnson*, in which the key of the riff is Eb, whereas on the concert versions it is E natural. The ostinato appeared as late as 1985 in the intro of the piece “One Phone Call” on the album *You’re Under Arrest* and as an opener in Davis’s concert performances of the 1980s.

4.1.3 “Yester Now”

The piece “Yester Now” found on *A Tribute to Jack Johnson* consists of three separate sections edited by Teo Macero. The bass ostinato of the first part of “Yester Now” is a direct replica of the bass line of James Brown’s “Say It Out Loud, I’m Black And I’m Proud, part I” (Appendix 1, Example 16). Davis improvises over a chord progression that repeats over the ostinato (Appendix 1, Example 23). The two bass ostinatos previously recorded under the title of “Willie Nelson” are used as the second and third parts of “Yester Now” (Appendix 1, Example 17).

A transcription of Davis’s first five solo choruses over the first section of “Yester Now,” including guitar and bass parts, is shown in Appendix 3, Example 1. Besides the actual pitches, I have attempted to indicate Davis’s dynamics and articulations. The piece’s accompaniment consists of two elements, the bass ostinato and a chord progression. Chord symbols are shown only on the first chorus of the Appendix. The bass ostinato is built around a Bb pedal point. The chord progression is not a functional one; several different chord types are introduced over a pedal point in a fixed order. This type of harmony is known as *modal interchange*.¹⁰² However a few tonal cadences, such as the progression from Bb7 to Eb, may be found over the pedal point.¹⁰³ “Yester Now” begins with an ostinato played by the electric bass. After a few repetitions of the ostinato figure, John

¹⁰¹ Davis extended the riff with an extra bar in his concerts, making it four bars long.

¹⁰² See Glossary

¹⁰³ Bar 12

McLaughlin enters and plays the chord progression once on the electric guitar before Davis begins his solo. Drummer Billy Cobham enters in the middle of the third chorus; his entrance sounds improvised.

The chorus length of the piece varies in each chorus and ranges between 20 and 28 bars. This happens as a result of changes in the harmonic rhythm of the chord progression taking place during each repetition, even though the chord sequence is defined. McLaughlin and Davis appear to be out of sync in places because Davis's note choices in his solo lines do not always correlate with McLaughlin's chordal accompaniment.¹⁰⁴ These points raise the question of whether or not Davis had planned the flexibility of the form. On the other hand, Davis's strong rhythmic expressiveness makes his pitch choices almost irrelevant.

The chordal accompaniment contains a few rhythmic gestures that appear to be nearly identical in each chorus, creating coherence within the progression.¹⁰⁵ Davis's solo has considerable dynamic variety and exploits expressive devices such as vibratos, slides, lifts and drop-offs. He juxtaposes short rhythmic motifs against longer melodic lines and efficiently uses silence between phrases throughout the solo. Because the album is a soundtrack for a documentary about a boxer, a programmatic analogy to boxing comes to mind; Davis's short rhythmic motifs could be interpreted as a boxer's punches, while the long notes might describe a boxer's slower movements in the ring.

4.2 The augmented scale

The third thematic phrase (Example 21, thematic phrase 3) of "Willie Nelson" is based on a symmetrical scale built on alternating augmented and minor second intervals. In jazz study materials, this scale is called *the augmented scale*.¹⁰⁶ It is a melodic and harmonic device that Davis utilized repeatedly as an improvisational and compositional tool throughout the period being studied. Before Davis's efforts, composer Oliver Nelson had utilized the scale in the bridge section of his piece "Hoedown" on the album *The Blues And The Abstract Truth*.

¹⁰⁴ See Bars 34–36, 50–52, 64–65, 98–99 and 123–124 of Appendix 2

¹⁰⁵ Compare Bars 9, 29, 83, 111 and 138; 12, 33, 60, 87, 116 and 143; 18–20, 41–42, 68, 96–98 and 150–151.

¹⁰⁶ Ricker and Weiskopf 1993

Chick Corea recalls that during an unidentified recording session, Davis asked him to play three triads: E major, G# major and C major.¹⁰⁷ Combining the pitches of the triads results in the augmented scale. These chords are present, over an E pedal point, on Davis's two studio versions of Joe Zawinul's "Directions." He developed his opening solo phrase of the first studio version of "Directions" into the main melodic motif of "It's About That Time" (Appendix 1, Example 6). Example 24 in Appendix 1 is a fragment of Davis' solo on "Directions," at 1'10" to 1'22," on the suite "Funky Tonk" from the album *Live-Evil*. All notes of the E augmented scale are present; additionally, Davis uses two extra tones, F# and D natural, in his lines. "Directions" is the opening part of the suite. The augmented scale is also present in the bass ostinato and the coded phrase of "Bitches Brew" (Appendix 2, Example 5). The chord at the fourth bar of the first part of the piece is built from four of the six tones of the C augmented scale (Appendix 1, Examples 9 and 10).

The scale may be seen as consisting of three tones, a major third apart, that form an augmented triad, and a chromatic leading tone below each one. Some of Davis's pieces suggest the use of three tonal centers organized by dividing the octave into three equal parts. This is called the *three tonic system*.¹⁰⁸ The key centers of the first section of his "Go Ahead John" (Appendix 1, Example 25) are a major third apart. John Coltrane had used this *multi-tonic* idea extensively on several of his compositions, beginning with "Giant Steps" in 1959. Coltrane also used the three-tonic system in his solos to build superimposed harmonies over pedal points from 1959 onwards¹⁰⁹.

4.3 Polytonality

Polytonal situations are fairly common in jazz owing to the way the music is made. All melody and harmony players are familiar with the manipulation of predetermined "basic" chord progressions, and an ability to reharmonize instantly is one of the jazz musician's basic skills. Composed polytonality is however relatively uncommon in jazz. Examples of predetermined polytonal situations however exist in certain pieces, for example Herbie Hancock's "Eye of The Hurricane" and "Little One."

¹⁰⁷ Belden 2001, 36

¹⁰⁸ Garcia 1979, 33

¹⁰⁹ Coltrane's solo on "Limehouse Blues," on the album *Cannonball and Coltrane* recorded on 3 February 1959 with Miles Davis's band without the leader, might be his first recording employing the three-tonic system in a polytonal manner.

Davis's music of that period features a considerable number of polytonal situations; some are predetermined while others occur spontaneously. The bass ostinato of the second version of "Willie Nelson" (Appendix 1, Example 22, vamp 4), alternates between the tonal centers of C and B natural. Because they occur simultaneously with the thematic phrase, the musical end result suggests polytonality. The version of "Right Off" on *A Tribute to Jack Johnson* begins with a shuffle in the key of E. Before Davis joins the rhythm section, McLaughlin modulates to Bb. Unaware of this, bassist Michael Henderson continues to play in E until Davis's solo is well underway. But Davis skillfully strikes a balance between these two tonal centers, located a tritone apart, because his note choices fit both tonalities. Stuart Nicholson calls Davis's entrance "one of the great moments in jazz."¹¹⁰

Davis's version of Joe Zawinul's "Double Image" suggests a polytonal approach. All thematic phrases are played over a G pedal point, but none of the phrases seem to have G as a tonal center. This is due to Davis's construction of this version; he superimposed Zawinul's melodic phrases over an ostinato based on a G pedal point regardless of the initial harmonic situations in Zawinul's composition (Appendix 1, Example 26). John McLaughlin's guitar improvisations, played over the aforementioned elements, are based on the tonal center of F#. A polytonal situation consisting of three superimposed tonal centers results. On Davis's "Rated X" from 1972, the rhythm guitar plays an E dominant seventh chord with an augmented ninth over a bass riff built from the pitches Bb and Db (Appendix 1, Example 18).

4.4 Rhythmic displacement

On *A Tribute to Jack Johnson*, the second bass ostinato of "Willie Nelson" may be interpreted as beginning on a downbeat (Appendix 1, Example 27). This is due to drummer Jack DeJohnette's accentuation of beats two and three on the snare drum. On *Black Beauty* the ostinato begins on an upbeat (Appendix 1, Example 28). The phrase is thus rhythmically displaced, compared to the version on *A Tribute to Jack Johnson*. Davis's utilization of the rhythmic displacement of a riff may also be found in several versions of the first bass ostinato of "Willie Nelson" (Appendix 1, Examples 29 and 30).

¹¹⁰ Nicholson 1998, 117

5 Development of a tune: Joe Zawinul's "Directions" in Miles Davis's performances, 1968–1971

In 1959 pianist Joe Zawinul met Miles Davis in New York. Davis invited Zawinul to join his band, but Zawinul declined the offer.¹¹¹ He never joined Davis's band. Instead, Davis used him as a studio keyboard player and composer on many recordings from November 1968 until February 1970.

Zawinul joined Cannonball Adderley's sextet in 1961¹¹² and became its main arranger and composer. He composed the band's commercially most successful piece, the soul-jazz classic "Mercy, Mercy, Mercy." Other soul-jazz pieces that he contributed included "Country Preacher" and "Walk Tall."

Zawinul visited his home country, Austria, during the winter 1966–67 and composed about ten pieces, including "In a Silent Way," "Orange Lady," "Ascent" "Pharaoh's Dance," "Early Minor," "Doctor Honoris Causa," "Double Image" and "Directions."¹¹³ Before the holiday Zawinul had composed several pieces that have such common attributes with "Directions" as bass ostinatos and even-eighth rhythmic feels. These include "74 Miles Away," "The Scavenger" and "Rumpelstiltskin."

"Directions" featured the basic elements that would characterize Davis's music of his jazz-rock period: a repetitive bass ostinato combined with a groove based on even eighth notes. Davis made two studio recordings of "Directions" in November 1968. The versions were not released until its appearance on a compilation, also titled *Directions*, in 1981. The piece however became his concerts' opening number from mid-1969 until the disbanding of his sextet in November 1971.¹¹⁴ The development of *Directions* is well documented on several concert recordings made during that period. Initially the piece had three parts: an introduction, a theme and a solo section. The solo

¹¹¹ Glasser 2001, 67

¹¹² Glasser 2001, 73

¹¹³ Glasser 2001, 187

¹¹⁴ Tingen 2001, 113

section is based on a bass ostinato in the key of E (Appendix 1, Example 8). The following comparison of the different versions demonstrates the ways in which Davis altered the piece's form, tempo, rhythmic feel, harmony and bass ostinato.

5.1 November 1968, long intro on the second take

The main difference between the studio versions is that the first take begins directly with the theme. The second take has an extended intro that may be divided into two parts. Davis most probably did not use the first part of the intro afterwards because it is not included on any of his released concert recordings. From this point on, all references the intro refer to its shorter version. The tempos of the studio recordings vary from 164 to 172 beats per minute. The basic time feel is four beats per bar, with even eighth notes as the basic rhythmic value (Appendix 4, Example 1).

5.2 July 1969, double-time feel

On two previous concert versions, recorded on 25 and 26 July 1969 at Antibes, France,¹¹⁵ Chick Corea begins the intro as an unaccompanied solo on electric piano. The rest of the rhythm section then joins him on the first repeat of the intro phrase. This leads to the theme that is then followed by solos. The bass ostinato has a double-time feel in relation to the basic pulse (Appendix 4, Example 2). The note values of the bass ostinato are sixteenth notes, as opposed to the eighth notes of the studio versions. Other components of the piece are also played with a double-time feel. The tempo of the concert version is 128 beats per minute. The comparable tempo, if the bass ostinato was perceived as consisting of eighth notes, would be 256 beats per minute.

5.3 March 1970, reharmonized head

Davis played two concerts on 7 March 1970, both of which were recorded.¹¹⁶ On the first concert, the piece begins with the bass ostinato. Davis joins the bass, soloing over the ostinato. The piece then proceeds into the intro, followed by the theme and solos. The sixth and seventh bars of the

¹¹⁵ Miles Davis: *1969 Miles—Festiva De Juan—Pins*

¹¹⁶ Miles Davis: *Miles Davis Live at the Fillmore East (March 7, 1970) It's About That Time*

theme are reharmonized on both sets with A/Bb and Bb/B chords respectively (Appendix 4, Examples 5 and 6).

On the second concert the piece begins in a more improvised manner. DeJohnette begins alone on drums. Davis, Corea, Moreira and Holland join him in that order. The bass ostinato of the piece is nearly unrecognizable, although Corea and Holland play a figure that resembles it beginning at around 2'00''. The theme is played twice beginning at 2' 27''.

5.4 April 1970, no intro

On Davis's concert recording of 10 April 1970, the intro is omitted.¹¹⁷ The piece begins with the bass ostinato that is followed by the theme before the band moves on to the solo section. The tempo varies between 142 and 152 beats per minute.

5.5 June 1970, funk ostinato, half-time feel

On 18 June 1970, the bass ostinato is shortened into a more 'funky' riff (Appendix 4, Example 3). The new ostinato consists of the first half of the original figure. As the piece develops, bassist Dave Holland plays fills in the otherwise empty second bar of the phrase. The fills lead back to the ostinato figure. From the summer of 1970 onwards, the band halved the piece's tempo after Davis's solo (Appendix 4, Example 4). The contrasting time feels of the piece are present on the suites "Wednesday Miles" and "Thursday Miles."¹¹⁸ Although the suites contain only edited sections of the piece, the cuts are nevertheless taken from the same performances. On "Wednesday Miles" an insert of "Bitches Brew" interrupts the piece.¹¹⁹ On "Thursday Miles" DeJohnette shifts into actual double time at 4' 40.''

5.6 August 1970, another head reharmonization

On an unreleased video of Davis's concert at Tanglewood, Massachusetts on 18 August 1970, the sixth bar of the theme has a reharmonization different from the one played at the concert on March

¹¹⁷ Miles Davis: *Black Beauty: Miles Davis at Fillmore West*

¹¹⁸ Miles Davis: *Live at Fillmore: Live at the Fillmore East*

¹¹⁹ Tingen 2001, 319

7th. The B seventh chord with a suspended fourth (B7sus4) is replaced by a tritone substitution, an F major seventh chord with an augmented fifth (FMaj7#5), (Appendix 4, Example 7). This is the result of an upward chromatic movement – instead of the previous downward movement – in the bass from the preceding bar. B, the dominant of the key of E, is added as the bass note of the last chord of the melody (Cmaj#4). Similar reharmonizations are also present on Davis's performance at The Isle of Wight rock festival on 29 August 1970.¹²⁰

5.7 December 1970, half tempo after Davis's solo

The version of the piece in the suite "Funky Tonk"¹²¹ recorded on 19 December 1970 clearly illustrates the change into half time (Appendix 4, Example 4). After Davis has finished his solo at 4'53'', the band shifts into half tempo for saxophonist Gary Bartz's solo. After the change, the initial tempo of 164 beats per minute splits into 86 beats per minute.

5.8 November 1971

The last version of "Directions" compared here was recorded in Belgrade on 3 November 1971.¹²² Leon Chancler played drums on Davis's European tour. By now Davis's band had two percussionists, Don Alias and James Foreman. The piece begins on congas at 180 beats per minute. Davis, Jarrett, Chancler and Henderson enter and establish the groove in the key of E before Henderson settles into the short bass ostinato. When Davis moves into the theme, nobody seems to notice it at first. After Davis's solo, he restates the theme. Again, the groove settles into half time for Bartz's alto saxophone solo.

5.9 Conclusions

A comparison between the tempos of the second studio version of "Directions" and the opening tempo of the suite, "Funky Tonk" indicates that the tempo doubled in two years. Whereas the basic unit of the pulse was initially an eighth note on the studio version, in the beginning of "Funky

¹²⁰ Miles Davis: *Miles Electric—A Different kind of Blue*

¹²¹ Miles Davis: *Live—Evil*

¹²² Miles Davis: *Another Bitches Brew* ¹²³ Belden 2001, 71–72

Tonk” it is a sixteenth note. After the subsequent shift into half time on “Funky Tonk,” the tempo is almost identical to that of the studio recording. The chordal harmony of the thematic section was reharmonized slightly and the endings of the piece were varied. Usually the last solo led into a completely free improvised section. The solo section provided Davis with an open environment to experiment with his improvising ideas. With only a bass ostinato implying a tonal center, the soloing was not restricted by a predetermined harmony, and the absence of chord progressions left room for rhythmic interaction between the players. Less harmony meant more room for rhythmic expressiveness at the surface of the music. As with all of Davis’s work, the processual nature of his working methods manifested itself in the development of “Directions.” Whenever he took a new piece into his concert repertoire, he began the process of reshaping it.

6 Re-use of compositional material

In this chapter I describe Davis’s recycling and reshaping of musical material. He recycled the same chord progressions through various pieces and reshaped others’ compositions to suit his preferences. Davis’s waltz “Circle” on *Miles Smiles*, of 1966, was based on the chord progression of his “Drad Dog” from 1961. “Drad Dog” in turn was based on “Blue In Green,” credited to Davis, but actually composed by Bill Evans.¹²³ Davis often used only a section or a phrase of a composition and turned it into a separate piece. He made three different versions of Joe Zawinul’s ballad, “In a Silent Way.” For the version used on the album *In a Silent Way* he only used the middle section of the piece’s three parts. He renamed the two remaining sections as “Recollections” (the opening section) and “Take It or Leave It” (the closing section) and recorded these later as separate pieces. Both were released on *The Complete Bitches Brew*. Zawinul recorded the complete “In a Silent Way” on his album *Zawinul* in the way he had originally intended it.

Zawinul’s “Orange Lady (Mulher Laranja)”¹²⁴ (Appendix 1, Example 13) offers a prime example of Davis’s reuse and treatment of musical material composed by others. On his recorded version of “Orange Lady” Davis used the first section of the piece over an E pedal point, as he had done with “In a Silent Way.” He omitted the next section and later recorded it as “Yaphet.” He then repeated the first section, modulating up a major second as in Zawinul’s original version. At the end of the

¹²⁴ Weather Report recorded “Orange Lady” on their first two albums (*Weather Report*, *I Sing The Body Electric*). The albums contain the studio and live versions of the tune.

repeat Davis added a tag, a three chord sequence, that he later recorded as a separate piece, “Corrado.” Although Macero used “Orange Lady” as the middle section of Davis’s piece “Great Expectations” for the album *Big Fun*, Zawinul received no composer credit in the album’s liner notes.

Davis often eliminated the harmony and played the thematic sections randomly over a pedal point or bass ostinato. Besides “In a Silent Way” he did this on Zawinul’s “Double Image” (Appendix 1, Example 26), the aforementioned “Recollections” and Wayne Shorter’s “Feio.”¹²⁵ These are all included on *The Complete Bitches Brew Sessions*. Davis’s “Funky Tonk” consists of one repeated and transposed rhythmic/melodic riff, a so-called “coded phrase,” (Appendix 2, Example 4), that later evolved into “Agharta Prelude” when another phrase was added. During Davis’s concert performances, motifs from different pieces sometimes converged spontaneously and simultaneously, as “Agitation” and “Willie Nelson” on the album *Black Beauty* clearly demonstrate.

6.1 Style categories

What follows is an attempt to categorize certain compositions of the period into five subcategories or genres – *vamp style*, *pop style*, *rhythm and blues style*, *ethno style* and *tone poem* – based on the characteristics described below. The common denominator for the first four genres is the backbeat of rock. The phrasing on the pieces is for the most part based on an even subdivision of the beat, typically an eighth note-based rhythmic framework. The characteristics of several categories naturally overlap on many pieces.

6.1.1 Vamp style

Characteristics of this genre include the constant use of a pedal point, drone or bass ostinato. In certain pieces the bass ostinato is the only unit of form. This sometimes results in a static harmony without any predetermined cadential resolutions. Certain pieces feature predetermined harmonies superimposed over the pedal point (“Two Faced”). The bass ostinato sometimes underlines cadential movement (“Bitches Brew”). Both a chordal and formal framework is present on certain pieces (“Masqualero”). Some pieces feature elements of rhythmically free (“Ife”) or variable

¹²⁵ Shorter rerecorded “Feio” as “Moto Grosso Feio.” The melody eventually became a section of the song “Ana Maria” on the album *Native Dancer*, in 1975.

(“Yester Now”) sections over an underlying groove. Pedal points resembling the drone of an Indian tamboura are found on Davis’s “Shhh/Peaceful” and “Great Expectations.” Many pieces have a vamp–style solo section while others have more traditionally structured thematic sections.

“Masqualero” (Shorter)

“Directions” (Zawinul)

“Filles De Kilimanjaro” (Davis)

“Frelon Brun” (Davis)

“Two Faced” (Shorter)

“It’s About That Time” (Zawinul)

“Shhh/Peaceful” (Davis)

“Bitches Brew” (Davis)

“Miles Runs The Voodoo Down” (Davis)

“Spanish Key” (Davis)

“Pharaoh’s Dance” (Zawinul)

“Great Expectations” (Davis)

“Yester Now” (Davis)

“Ifé” (Davis)

“Go Ahead John” (Davis)

6.1.2 Rhythm and blues style

These pieces have blues–derived and gospel–influenced harmonies based on the continuous use of cadences consisting of dominant seventh chords.

“Eighty–One” (Davis–Carter)

“Stuff” (Davis)

“Frelon Brun” (Davis)

“Splash” (Davis)

“It’s About That Time” (Zawinul)

“Go Ahead John” (Davis)

6.1.3 Pop style

This style utilizes harmonic elements from pop or rock music, such as pure triads, intermingled with seventh chord-based jazz harmonies.

“Tout De Suite” (Davis)

“Mademoiselle Mabry” (Davis)

“Splashdown” (Davis)

“The Ghetto Walk” (Davis)

“Early Minor” (Zawinul)

“Corrado” (Davis)

“Trevere” (Davis)

“Go Ahead John” (Davis)

6.1.4 Ethno style

The characteristics of this genre include changing or odd-time signatures. The use of odd-time signatures was not new in jazz; Paul Desmond’s popular “Take Five” utilized a meter of 5/4 and Dave Brubeck’s “Blue Rondo a la Türk” on Brubeck’s 1959 album *Time Out* was in 9/8. John Handy’s “Theme X” from *The Second John Handy Album* (1966) is in 5/4. Trumpeter/composer Don Ellis was using time signatures like 19/4 and 11/8 by 1966.¹²⁶ Neither was the idea of changing time signatures new. “Joshua” by Victor Feldman – recorded by Miles Davis on his 1963 album *Seven Steps to Heaven* – has sections in 4/4 and 3/4. Certain pieces like “Directions” and “Petits Machins” use changing and odd-time signatures only in themes. Solo sections on these mostly consist of simple vamps or bass ostinatos in 4/4. “Great Expectations” is a theme played in free time over a bass ostinato in 7/4. The ethnic influence is limited to rhythm and color on these works; no obvious ethnic melodic influence is present. The ethnic style definitely had a life of its own later in the music of *The Mahavishnu Orchestra* and *Billy Cobham*, where the extensive use of odd-time signatures was the norm rather than the exception.

¹²⁶ Nicholson 1998, 289–290

“Ascent” (Zawinul)

“Directions” (Zawinul)

“Petits Machins” (Davis–Evans)

“Shhh/Peaceful” (Davis)

“Great Expectations” (Davis)

6.1.5 Tone poem

“Tone poem” is a generic term borrowed from classical music describing programmatically titled symphonic compositions of one movement. Miles Davis used the term to describe the slow-tempo ballads of that period. Tone poems in jazz, like their classical counterparts, usually have programmatic titles. The moods or events suggested by the titles are described by auditive, musical means, in other words soundscapes. Tone poems frequently have extended and unconventional forms.

Certain of these tone poems, with their suspended and dreamy feel created by slow tempos, coloristic textures (“Ascent”), pedal points (Davis's versions of Zawinul’s “In a Silent Way” and “Orange Lady”) and repetitions of a melodic phrase (“Lonely Fire”) could be considered the precursors of the “ambient” style. Zawinul’s tone poems, like their classical counterparts, often have programmatic titles.

“Ascent” (Zawinul)

“Mademoiselle Mabry” (Davis)

“Sanctuary” (Shorter)

“In a Silent Way” (Zawinul)

“Early Minor” (Zawinul)

“Lonely Fire” (Zawinul)

“Orange Lady” (Zawinul)

7 Summary

Reissue producer Bob Belden claims that Miles Davis's major influences during his early jazz-rock years were Betty Mabry, Tony Williams and Joe Zawinul. Betty Mabry, who was much younger than Davis and whom he married briefly, turned Davis's attention to extramusical interests. She convinced Davis to change his on-stage wardrobe from traditional black suits to more modern, hippie-style outfits. Together with Williams she encouraged him to listen to the black rhythm music of the day, rock and soul. Mabry introduced Davis to Jimi Hendrix, musically and personally, and to the music of Sly Stone. Williams gradually worked the boogaloo rhythm into a considerable part of Davis's music beginning with the track "Eighty-One" in 1965 and ending with the album *In a Silent Way* in 1969.¹²⁷ Zawinul provided Davis with challenging new musical material that fit perfectly with his change of direction.

Davis's role as a composer increased significantly during the period. Of all the released tracks recorded during the first period of the 1960s quintet (1965–July 1967), seventeen titles were composed by Shorter, five by Davis (including two co-composed with Ron Carter), four by Hancock, three by Carter and two by Williams. During the second period of the lineup (from December 1967 to September 1968) Davis took a more active role as a composer. Of the fifteen pieces released so far, he provided nine, including "Petits Machins" and "Stuff," that were co-written with Gil Evans. Three pieces were composed by Hancock (including "Teo's Bag," credited to Davis, and the incomplete takes of "I Have a Dream" and "Speak Like a Child"), two by Shorter and one by Williams. Of all the fourteen released separate pieces by the "lost quintet" (from 24 September 1968 to 21 August 1969) – including the *In a Silent Way* and *Bitches Brew* sessions, although these sessions featured extra musicians – nine were by Davis, five by Zawinul (including "It's About That Time," although credited to Davis) and one each by Shorter and Williams.

From 1967 onwards Davis gradually stripped the music of its harmonic content and moved towards a more rhythmic expressiveness emphasizing the interaction among the members of his band. He derived models for the rhythmic basis – the "groove" – from the rock, soul and funk music of African-Americans. He enriched the sonic texture with ethnic and electric instruments, utilizing various electronic devices to manipulate the instruments' basic tone colors. Further coloristic

¹²⁷ Belden 2001, 28–29

influences – the use of “noise” or “grit” and thick clusters – came from avant-garde classical composers such as Karlheinz Stockhausen and Krzysztof Penderecki.¹²⁸ By the end of 1972, he had integrated African polyrhythmic elements and Indian components into his music permanently.

Davis began as a blues-influenced player and gravitated towards bebop after hearing Charlie Parker and Dizzy Gillespie, although he never achieved the technical virtuosity of Gillespie or Clifford Brown. The year 1949 marked the culmination of Davis’s bebop phase; in the early 1950s, his playing style would become more mellow and spare. In the early 1960s the bebop influence could still be heard, but by *Four And More* in 1964 it had all but vanished. When Shorter’s and Hancock’s compositions became part of his band’s new repertoire, the new harmonic content demanded a change in the players’ approach. Because several pieces were harmonically free and required a time-no-changes approach from the soloists, the bebop vocabulary gradually lost its relevance. In his electric period any remaining vestiges of the bebop idiom had completely disappeared from Davis’s playing.

During the period Davis repeatedly questioned the existing jazz tradition’s established practices and offered various alternatives for their renewal. Davis’s perceptions of other non-jazz musical genres – rhythm and blues, rock, soul, classical, ethnic – enabled him to discover elements that could be applied to the jazz tradition. He seems to have had no prejudices regarding the kinds of elements that could be combined to expand his musical expression. For Davis, introducing the unexpected and making it the expected seemed like a natural thing to do in his jazz-rock phase.

In the various aspects of his music, Davis introduced elements previously considered anomalous to jazz. These included rhythm (unconventional time signatures and changing meters, alternating even eighth phrasing with triplet phrasing and grooves), harmony (triadic “pop” harmony, harmonies reduced to a pedal point, a complete rejection of chordal harmony), form (elasticity, augmentation and diminution, open forms), tone color (expanded instrumental palette, number of instruments, unconventional ways of using instruments), the treatment of thematic material (using themes as interludes or ostinatos, assigning thematic material to the bass, eliminating thematic material altogether), the recording process (using the studio as creative laboratory, uninterrupted recordings of studio sessions), postproduction editing (additional effects, recomposition of pieces from different takes and sections) and production (side-long tracks, uninterrupted flow of music).

¹²⁸ Carner 1996, 107

Miles Davis preferred open forms. His tendency to use only a minimum amount of composed material became more pronounced during the period. The practice enabled – and forced – the musicians to develop musical forms during performances. The absence of harmonic cadences required the musicians to build up tension through means other than tonal tensions and resolutions. Davis explains:

“...I figure, when whatever I wanted to write is finished, I stop.... What’s complete to me might not be complete to your ear; ’cause I never resolve anything that way.”¹²⁹

He criticized jazz composers for making a finished product:

“Whenever Joe or somebody would bring in something they wrote, I’d have to cut it all up because these guys get so hung up with what they write. They think it’s complete the way they write it.... You write to establish a mood. That’s all you need. Then we can go on for hours. If you complete something, you play it, and it’s finished. Once you resolve it, there’s nothing more to do. But when it’s open, you can suspend it.”¹³⁰

He gave many kinds of advice for improvising, for example:

“It’s easy to play a cliché. A cliché should be your musical foundation, but it shouldn’t be what you do.”¹³¹

I interpret Davis’s statements to mean control over musical tension through the conscious avoidance or prolongation of melodic–harmonic resolutions. When a jazz soloist plays a line or chord that does not correlate with the background at that moment, he creates melodic–harmonic tension. If he chooses not to resolve the tension, the resolution is left to the listener’s imagination. Davis was known for his enigmatic verbal expression. He seldom, if ever, gave any explicit instructions for his band members about the music to be played.

Davis tried his hand at making complex compositions, but was obviously dissatisfied with the results because none of them were ever released during his lifetime. In a 1974 interview he explained his experiments with polyrhythms:

¹²⁹ Carner 1996, 120

¹³⁰ Tingen 2001, 61

¹³¹ Carner 1996, 138

“I think it’s time people changed where they put the melody. The melody can be in the bass, or a drum sound, or just a sound. I may write something around one chord. I may write something around a rhythm. I always place the rhythm so it can be played three or four different ways. It’s always three rhythms within one...It’s almost like Bach. You know how Bach wrote.”¹³²

Although the Bach comparison might seem far-fetched, one possible interpretation is that Davis was alluding to the presence of simultaneous rhythmic layers in his and Bach’s music.

Davis emphasized the improvisatory nature of his music by progressively removing predetermined thematic and harmonic materials. By doing so he was following free jazz, the latest stylistic direction of jazz at the time. The emancipation of melody and harmony in Davis’s music began with his experiments utilizing the time-no-changes approach. It continued in his jazz–rock phase, where the soloists were liberated to improvise harmonies over bass ostinatos. The rhythmic conventions of rock and soul gradually displaced the established rhythmic elements of jazz. Davis facilitated this change in the rhythmic framework by bringing musicians who had no jazz experience, but who were familiar with the aforementioned styles, into his band.

By introducing different instruments, electronic effects, and using more than one of the same instruments simultaneously, Davis amplified the overall color of his music. The size of his recording ensemble grew progressively from five to fourteen persons during the period. The conventional elements of the jazz tradition that remained intact in Davis’s jazz–rock phase were the melodic–rhythmic vocabulary of improvisation and the ever–present interactive communication between the ensembles’ musicians.

From today’s perspective – in 2005, after 35 years – it is fairly easy to perceive the impact jazz–rock had on the subsequent development of jazz. It proved that the jazz tradition was able to absorb extremely diverse elements. Jazz-rock was probably the first major jazz style developed by artists with completely different musical and ethnic backgrounds. Some major contributors to the style already had a musical background in the jazz tradition, while others had grown up among the first “rock generation” in the 1950s and developed an interest in jazz after learning the basics of music through another stylistic language. Through jazz-rock several European and other non-

¹³² Kirchner 1997, 204

American musicians cooperated with American musicians in a way never before seen in any previous jazz style.

7.1 Suggestions for further study

With this study I have tried to demonstrate, analyze and categorize the music of Miles Davis during his first electric period. During the writing process, it soon became clear that the vast amount of study material offers a wide range of possibilities for further research.

Davis reconstructed several pieces and, by omitting all the material he found irrelevant, was obviously searching for the essence, the core element, of each piece. Additional comparisons between original compositions and Davis's versions would illuminate his role as arranger.

Comparing the metamorphosis of "Directions," as it was discussed here, with alterations made to other pieces played by Davis in his concerts during the period – for example "It's About That Time" or "Bitches Brew" – would lead to a deeper understanding of Davis's musical processes over an extended period of time.

Additional transcriptions and detailed analyses of, for example, phrase lengths, phrase placements within a form, ways of creating melodic–harmonic tensions and resolutions, as well as other aspects of Davis's solos during the period would illuminate his treatment of the melodic line in relation to harmony and rhythm. Because John Coltrane and Miles Davis had both utilized the three-tonic system to organize the harmonic content of their music, it would be interesting to find out if Davis also used the idea for improvising over a pedal point, as Coltrane had done already in 1959. Davis's solo work during his second great quintet, especially on the time-no-changes pieces, seems to have served as a launchpad for his excursions over pedal points during his jazz-rock period. Aside from being a fascinating topic for a jazz researcher, a study of how Davis's playing *without* predetermined harmonies affected his soloing *with* chord progressions or a pedal point – or vice versa – would help us gain a deeper understanding of Davis's musical development.

Glossary

Ambient. Traditionally, music contains melodic, rhythmic and harmonic sequences. Ambient primarily surrounds the listener with an *ambience*, an aural backdrop, a sonic space. The means for achieving this “meditative” space include an intensive use of delay and reverb, repetitive patterns or ostinatos and the absence of a recognizable melody.

Boogaloo. A popular dance beat of the mid-1960s that combined syncopated Latin bass and drum ostinatos with soul songs. The boogaloo rhythm was used frequently in *soul-jazz* pieces.

Changes. The chord progression of a composition.

Drone. A pedal point. In Indian music the drone is commonly produced by the *tamboura* (also known as *tanpura*), a stringed instrument gently strummed throughout the performance. “The function of the drone is to sound the tonic constantly.”¹³³

Free Jazz. A category of jazz styles whose common denominator is the absence of predetermined chordal harmony and/or a regular rhythmic pulse. The first pioneer of free jazz was pianist Lennie Tristano in the late 1940s. The term became widely established with saxophonist Ornette Coleman’s album *Free Jazz* in 1960.

Groove. A term referring to the rhythmic concept of a composition or performance formed by different rhythmic layers (“Latin groove,” “even–eighth groove”). It is also used as synonym for “swing” to describe a feeling of dancability achieved by a player or players within a musical performance (“The pianist had a good groove”).

Lost quintet. Davis’s post-1960s quintet, lasting from August 1968 to April 1970, that consisted of Davis, Corea, Shorter, Holland and DeJohnette. The group is called either the “lost quintet” or “last quintet,” because it never recorded in the studio without additional musicians. It was also Davis’s

¹³³ Massey 1993, 133

last quintet lineup. Concert recordings documenting the group, for example the album *1969 Miles: Festiva de Juan Pins*, have however survived.

Modal Interchange. Jazz harmony in which chords are borrowed from the parallel modes of the key. The practice probably began with the borrowing of chords from parallel minor or major keys and was later expanded to include other parallel modes.

Modal jazz. In modal jazz the harmonic content is characterized by use of modes instead of the tonal chord progressions found in earlier jazz styles. The fairly sparse harmonic rhythms usually found in modal jazz pieces allow the soloist to stay within one mode over an extended period. Developed by Miles Davis and John Coltrane in the late 1950s, modal jazz can be considered a counter-reaction to the frequently changing harmonic progressions that were first created by bebop musicians and later taken to the limits of human capacity by John Coltrane in pieces such as “Giant Steps”.

Open form. A musical form without a predetermined number of bars. An open form may be extended, variable or left completely open-ended. This should not be confused with augmented or diminished forms in which the length of a musical section is changed precisely by doubling or halving the number of beats per bar.

Soul-Jazz. A jazz style of the early 1960’s that brought gospel-flavored call and response patterns as well as melodic-harmonic frameworks into the rhythmic context of jazz, often utilizing the boogaloo dance beat or another even-eighth rhythmic feel.

Time-no-changes. “Time-no-changes” or “free bop” is rhythmic communication with musical phrases. It differs from completely free improvisation in that the rhythmic motion – the tempo – of the music is maintained, while the harmonic content and form are not preplanned. The pieces’ thematic material (intervals, melodic and rhythmic motifs) is often used as the basis for improvisations.

Tone poem. A generic term borrowed from classical music describing programmatically titled symphonic compositions of one movement. Miles Davis used the term primarily to describe the often extended and unusual forms of Joe Zawinul’s ballads. Tone poems in jazz, like their classical counterparts, usually have programmatic titles. The moods or events suggested by the titles are described by auditive, musical means, in other words soundscapes.

Vamp. A chordal pattern or bass ostinato repeated indefinitely.

References

Books and articles

Belden, Bob (1997), Liner notes for *Miles Davis Quintet, 1965–68*

Belden, Bob (1998), Liner notes for *The Complete Bitches Brew Sessions*

Belden, Bob (2001), Liner notes for *The Complete In a Silent Way Sessions*

Carner, Gary (1996), *The Miles Davis Companion*, New York. Schirmer Books

Chambers, Jack (1998), *Milestones – The Music and Times of Miles Davis*, New York. Da Capo Press

Davis, Miles & Troupe, Quincy (1989), *Miles – The Autobiography*, New York. Simon & Schuster

Glasser, Brian (2001), *In a Silent Way – A Portrait of Joe Zawinul*, London. Sanctuary Publishing

Gridley, Mark C. (1994), *Jazz Styles – History and Analysis* (5th Edition), New Jersey. Prentice–Hall

Kirchner, Bill (1997), *A Miles Davis Reader*, London & Washington. Smithsonian Institution Press

Massey, Reginald & Jamila (1993), *The Music of India*, London. Kath and Averill

Nicholson, Stuart (1998), *Jazz–Rock: A History*, New York. Schirmer Books

Svorinich, Victor (2000), *Electric Miles: A Look at the In a Silent Way and On the Corner Sessions*, Annual Review of Jazz Studies # 11, Lanham, Maryland. Scarecrow Press

Szwed, John (2002), *So What – The Life of Miles Davis*, New York. Simon & Schuster

Tingen, Paul (2001), *Miles Beyond – The Electric Explorations of Miles Davis, 1967–1991*, New York. Billboard Books

Interviews

Brecker, Randy (2002), Interview with the author

Instructional Materials

Garcia, Russell (1979), *The Professional Arranger Composer, Book II*, Hollywood, California.

Criterion Music Publishing

Ricker, Ramon and Weiskopf, Walter (1993), *The Augmented Scale in Jazz*, New Albany, Indiana.

Jamey Aebersold Jazz

Recordings

Coltrane, John

Giant Steps, Atlantic SD-1311-2, 1959

A Love Supreme, Impulse MCAD-5660, 1964

With Julian “Cannonball” Adderley

Cannonball and Coltrane, EmArcy 834588, 1959

Davis, Miles

Miles Davis All Stars, Savoy S5J 5500, 1947

Birth of the Cool, Capitol CDP 30117, recorded 1949–50, released 1954

Workin’, Prestige OJC-296, recorded 1956, released 1957

Relaxin’, Prestige OJCCD-190-2, recorded 1956, released 1957

Cookin’, Prestige OJC-128, recorded 1956, released 1956

Steamin’, Prestige OJC-291, recorded 1956, released 1961

Miles Ahead, Columbia/Legacy CK 53225, recorded 1957, released 1957

Porgy and Bess, Sony SRCS 5699, recorded 1958, released 1959

Kind of Blue, Columbia/Legacy 85245, recorded 1959, released 1959

Sketches of Spain, CBS/Sony CSCS 5142, recorded 1959–60, released 1960

E.S.P. Columbia/Legacy CK 46863, recorded 20–21 January 1965, released 1965

Miles Smiles, Columbia/Legacy CK 48849, recorded 24–25 October 1966, released 1967

Sorcerer, Sony SRCS 5708, recorded 3 August 1962, 16, 17 and 24 May 1967, released 1967

Nefertiti, Columbia/Legacy CK 46113, recorded 7, 22–23 June and 19 July 1967, released 1968

Miles in the Sky, CBS/Sony 32DP 728, recorded 15–17 May 1968, released 1968

Filles de Kilimanjaro, Columbia/Legacy ACK 86555, recorded 19–21 June and 24 September 1968, released 1969

In a Silent Way, Columbia/Legacy ACK 86556, recorded 18 February 1969, released 1969

Bitches Brew, Columbia/Legacy C2K 65774, recorded 19–21 August 1969, released 1970

A Tribute to Jack Johnson, Columbia/Legacy CK47036 recorded 18 February and 7 April 1970, released 1971

Live–Evil, Columbia/Legacy C2K 65135, recorded 3–4 June and 19 December 1970, released 17 November 1971

At Fillmore: Live at the Fillmore East, Columbia/Legacy C2K 65139, recorded 17–20 June 1970, released 1971

Black Beauty: Miles Davis at Fillmore West, Columbia/Legacy C2K 65138, recorded 10 April 1970, released 1973 in Japan, 1997 in the USA

On the Corner, Columbia/Legacy C2K 63980, recorded 1, 6 June and 7 July 1972, released 1972

In Concert: Live at Philharmonic Hall, Columbia/Legacy C2K 65140, recorded 19 November 1972, released 1973

Big Fun, Columbia/Legacy C2K 63973, recorded 1969–72, released 1974

Get up with It, Columbia/Legacy C2K 63970, recorded 1970–74, released 22 November 1974

Water Babies, Columbia/Legacy ACK 86557, recorded 1967–68, released 1976

Dark Magus: Live at Carnegie Hall, Columbia/Legacy C2K 65137, recorded 30 March 1974, released 1977 in Japan, 1997 in the U.S.A

Agharta, Sony SRCS 9128/9, recorded 1 February 1975, released 1975

Pangaea, Sony SRCS 9130/1, recorded 1 February 1975, released 1975

Circle in the Round, CBS/Sony CSCS 5340/1, recorded 1955–70, released 1979

Directions, CBS/Sony CSCS 5135/6, recorded 1960–70, released 1981

1969 Miles: Festiva de Juan Pins, Sony SRCS 6843, recorded 25 July 1969, released 1993

The Complete Live at the Plucked Nickel 1965, Columbia CXX 66955, recorded 1965, released 1995

The Complete Bitches Brew Sessions, Columbia C4K 65570, recorded 1969, released 1998

It's About That Time – Miles Davis at Fillmore: Live at the Fillmore East (March 7, 1970), Columbia/Legacy C2K 85191, recorded 1970, released 2001

The Complete In a Silent Way Sessions, Columbia C3K 65362, recorded 1968–69, released 2001

It's About That Time – Miles Davis in Montreux 1969,¹³⁴ JD 1294, recorded 25 July 1969, released 2000

The Complete Jack Johnson Sessions, Columbia C5K 86359, recorded 18 February – 4 June 1970, released 30 September 2003

You're Under Arrest, Columbia CK/PCT40023, 1985

The Miles Davis Story, Columbia Music Video CVD 54040, 2001

Miles Electric: A Different Kind of Blue, Eagle Rock Entertainment EE39020, 2004

Sly and the Family Stone

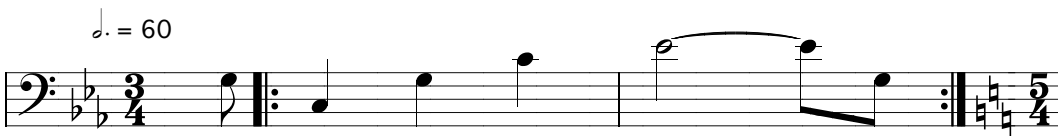
Stand, Epic EK 26456

1969

¹³⁴ This is identical with Sony SRCS 6843, recorded in Juan–les–Pins (sic).

Appendix 1: Musical examples

Example 1: “Footprints”



Example 2: “Mademoiselle Mabry,”
bar 1

$\text{♩} = 72$

Example 3: “Mademoiselle Mabry,”
bar 5

Example 4: “The Wind Cries Mary,” bar 1

$\text{♩} = 72$

Example 5: “It's about That Time,” vamp 1

$\text{♩} = 130$

Example 6: “It's about That Time,” vamp 2

Example 7: “It's about That Time,” vamp 3

F⁷ B^b7 F⁷ B^b7

Example 8: “Directions”

$\text{♩} = 86$

Example 9: “Bitches Brew,” part I

Tempo rubato

Example 10: “Bitches Brew,” part II

$\text{♩} = 96$ C⁷ B⁷ E⁷ B⁷

Example 11: “Great Expectations”

$\text{♩} = 76$ Play melody freely

Example 12: “Shhh/Peaceful”

♩ = 120

♩ = 120

Chords: $E\flat 7$, $D\flat 7$, $F 7$, $A\flat \text{maj} 7^{(+5)}$, $F \text{maj} 7^{(+5)}$

Example 13: “Orange Lady (Mulher Laranja)”

Tempo rubato

(A)¹ $B\flat \text{m} 7 / E$ $B \text{m} 7 / E$

(A)² $E \text{maj} 7 / F\sharp$

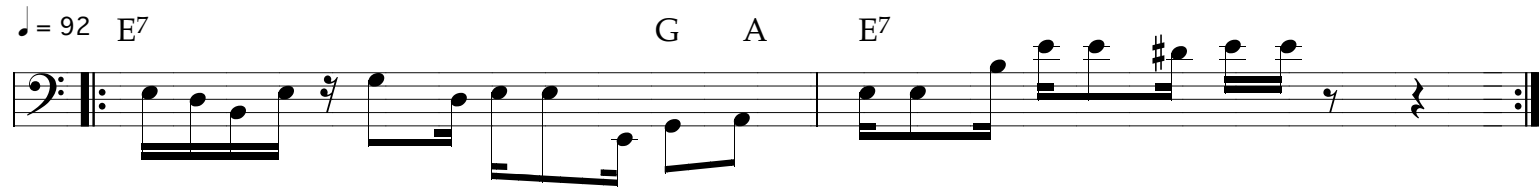
Chords: $B\flat$, G , $E\flat 7 \text{ alt.}$

Chords: $B\flat \text{m} 7 / E$, $B \text{m} 7 / E$, $E \text{maj} 7 / F\sharp$, $B \text{m} 7 / F\sharp$, $B \text{m} 7$, E / D , $C\sharp 7$, $F\sharp \text{m} / C\sharp$, $B\flat$, G , $E\flat 7 \text{ alt.}$

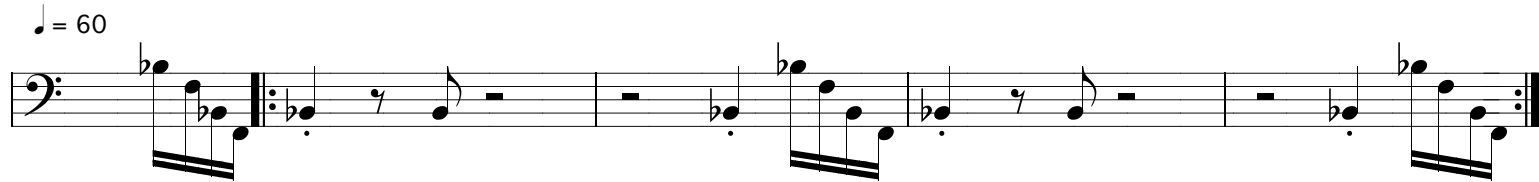
Example 14: “Right Off,” part I



Example 15: “Sing a Simple Song”



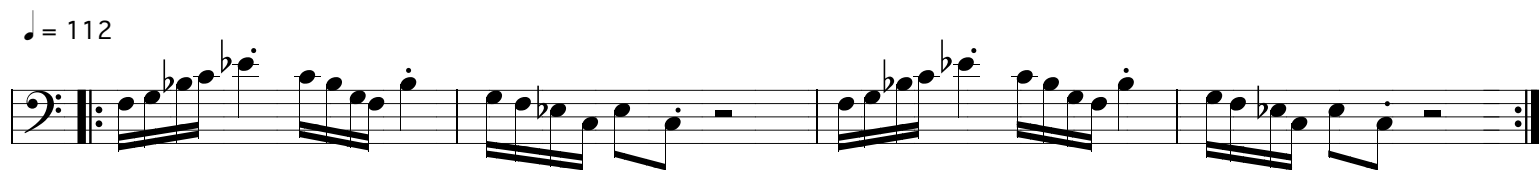
Example 16: “Yester Now,” part I. Also known as “Say It out Loud, I’m Black and I’m Proud, part I” by James Brown



Example 17: “Yester Now,” part II. Also known as “Willie Nelson,” part I



“Yester Now,” part III. Also known as “Willie Nelson”, part II



Example 18: “Rated X”



Example 19: "Willie Nelson"

$\text{♩} = 112$

Theme phrase 2

Theme phrase 1

Vamp 1

Example 20: "Willie Nelson"

Vamp 2

Example 21: "Willie Nelson"

♩ = 112

Theme phrase 3

Example 21 shows a musical score for "Willie Nelson". The tempo is marked as ♩ = 112. The score consists of two staves. The top staff is labeled "Theme phrase 3" and contains a melodic line starting with a whole rest, followed by a quarter note G#4, an eighth note A4, a quarter note B4, and a half note A4. The bottom staff is labeled "Vamp 3" and contains a bass line starting with a whole rest, followed by a quarter note G2, an eighth note F#2, a quarter note E2, and a half note D2. The key signature has one sharp (F#) and the time signature is 4/4.

Example 22: "Willie Nelson"

♩ = 112

Example 22 shows a musical score for "Willie Nelson". The tempo is marked as ♩ = 112. The score consists of two staves. The top staff is labeled "Vamp 4" and contains a melodic line starting with a whole rest, followed by a quarter note G#4, an eighth note A4, a quarter note B4, and a half note A4. The bottom staff is labeled "Vamp 4" and contains a bass line starting with a whole rest, followed by a quarter note G2, an eighth note F#2, a quarter note E2, and a half note D2. The key signature has one sharp (F#) and the time signature is 4/4.

Example 23: "Yester Now"

♩ = 60

Example 23 shows a musical score for "Yester Now". The tempo is marked as ♩ = 60. The score consists of four systems, each with two staves. The first system is labeled "Bb7" and contains a melodic line starting with a whole rest, followed by a quarter note G#4, an eighth note A4, a quarter note B4, and a half note A4. The second system is labeled "D/Bb" and contains a melodic line starting with a whole rest, followed by a quarter note G#4, an eighth note A4, a quarter note B4, and a half note A4. The third system is labeled "Bbdim7 Bb7 Eb/Bb" and contains a melodic line starting with a whole rest, followed by a quarter note G#4, an eighth note A4, a quarter note B4, and a half note A4. The fourth system is labeled "Bbm7" and contains a melodic line starting with a whole rest, followed by a quarter note G#4, an eighth note A4, a quarter note B4, and a half note A4. The key signature has two flats (Bb, Eb) and the time signature is 4/4.

Example 24: Davis's solo on "Directions," a fragment

♩ = 120

E pedal

The musical score consists of two staves. The top staff is in treble clef and the bottom staff is in bass clef. The tempo is marked as ♩ = 120. The key signature has one sharp (F#). The piece is titled 'E pedal'. The notation includes various note values, rests, and a pedal point in the bass staff.

A musical score for the song "The Rose Tree". It consists of two staves: a treble staff and a bass staff. The treble staff begins with a treble clef and a key signature of one sharp (F#). The bass staff begins with a bass clef. The music is written in a common time signature (C). The melody in the treble staff starts with a quarter rest, followed by a quarter note G4, a quarter note A4, a quarter note B4, a quarter note C5, a quarter note B4, a quarter note A4, a quarter note G4, and a quarter note F#4. The bass staff starts with a quarter rest, followed by a quarter note G3, a quarter note A3, a quarter note B3, a quarter note C4, a quarter note B3, a quarter note A3, a quarter note G3, and a quarter note F#3. The melody in the treble staff continues with a quarter note E4, a quarter note D4, a quarter note C4, a quarter note B3, a quarter note A3, a quarter note G3, a quarter note F#3, and a quarter note E4. The bass staff continues with a quarter note D3, a quarter note C3, a quarter note B2, a quarter note A2, a quarter note G2, a quarter note F#2, a quarter note E2, and a quarter note D2. The melody in the treble staff ends with a quarter note C4, a quarter note B3, a quarter note A3, a quarter note G3, a quarter note F#3, a quarter note E4, a quarter note D4, and a quarter note C4. The bass staff ends with a quarter note C3, a quarter note B2, a quarter note A2, a quarter note G2, a quarter note F#2, a quarter note E2, a quarter note D2, and a quarter note C2.

The first system of the musical score for 'The Rose Tree' consists of two staves. The upper staff is in treble clef and contains a melody starting with a quarter note G4, followed by a quarter note F#4, a quarter note E4, and a half note D4. The lower staff is in bass clef and contains a bass line starting with a whole rest, followed by a quarter note G2, a quarter note F#2, a quarter note E2, and a half note D2. The key signature has one sharp (F#) and the time signature is 4/4.

Example 25: “Go Ahead John”

♩ = 116

The musical score is written for piano on a grand staff (treble and bass clefs). It begins with a tempo marking of quarter note = 116. The score is divided into two sections: 'TIL CUE' and 'ON CUE'. In the 'TIL CUE' section, the bass clef has a whole note G2, and the treble clef has a whole rest. In the 'ON CUE' section, the bass clef has a whole note G2, and the treble clef has a whole rest. The 'ON CUE' section is further divided into four measures. The first measure has a whole note G2 in the bass clef and a whole rest in the treble clef. The second measure has a whole note G2 in the bass clef and a whole rest in the treble clef. The third measure has a whole note G2 in the bass clef and a whole rest in the treble clef. The fourth measure has a whole note G2 in the bass clef and a whole rest in the treble clef.

TIL CUE

ON CUE

D \flat A B \flat

Example 26: "Double Image"

 $\text{♩} = 72$

(A)

G ped.

(B)

(C)

$G^{13(\flat 9)}/C$ $Cm^{(6/9)}$ $F\sharp m^{11}$

(D)

G ped.

Example 27.

el. guit.
el. bass

Example 27 is a musical score for electric guitar and electric bass in 4/4 time. The guitar part (treble clef) begins with a melodic line of eighth and sixteenth notes, including a flat. The bass part (bass clef) provides a rhythmic accompaniment with eighth notes and rests. The piece concludes with a double bar line and repeat dots.

Example 28.

Example 28 is a musical score for electric guitar and electric bass in 4/4 time. The guitar part (treble clef) features a melodic line with eighth and sixteenth notes. The bass part (bass clef) provides a rhythmic accompaniment with eighth notes and rests. The piece concludes with a double bar line and repeat dots.

Example 29.

Example 29 is a musical score for electric guitar and electric bass in 4/4 time. The guitar part (treble clef) is mostly silent, with a few notes in the first measure. The bass part (bass clef) has a melodic line with eighth notes and rests, including a flat. The piece concludes with a double bar line and repeat dots.

Example 30.

Example 30 is a musical score for electric guitar and electric bass in 4/4 time. The guitar part (treble clef) is mostly silent, with a few notes in the first measure. The bass part (bass clef) has a melodic line with eighth notes and rests, including a flat. The piece concludes with a double bar line and repeat dots.

Example 31.

Example 31 is a musical score for electric guitar and electric bass in 4/4 time. The guitar part (treble clef) is mostly silent, with a few notes in the first measure. The bass part (bass clef) has a melodic line with eighth notes and rests, including a flat. The piece concludes with a double bar line and repeat dots.

Appendix 2: Miles Davis's coded phrases

1969 Miles—Festiva de Juan Pins

Note similarity between coded phrases 1, 2 and 5

1. “Miles Runs the Voodoo Down”

-this transfer from "Directions" is also similar on *Black Beauty*, April 10, 1970

rubato



2. “It's about That Time”



3. “Sanctuary”



Live-Evil

4. “Inamorata/Funky Tonk”



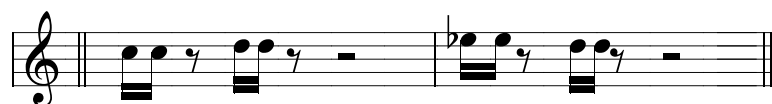
Miles Davis at Fillmore

5. “Bitches Brew”

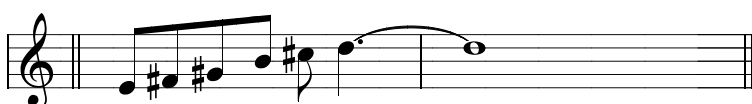


Black Beauty

6. “Willie Nelson”



7. “Spanish Key”



appendix 3

Yester Now

Slow groove ♩ = 60

Miles Davis

Trumpet

Electric Guitar

Electric Bass

A

The first system of music is in 4/4 time with a key signature of two flats (Bb and Eb). The tempo is marked 'Slow groove' with a quarter note equal to 60 beats per minute. The section is labeled 'A' in a box. The Trumpet part has a whole rest for the first measure and a whole note Bb in the second measure. The Electric Guitar part has a whole rest for the first measure and a half note Bb in the second measure. The Electric Bass part has a whole rest for the first measure and a half note Bb in the second measure.

3

Tpt.

E. Gtr.

E. Bass

Bb7

The second system of music starts at measure 3. The Trumpet part has a whole rest for the first measure and a whole note Bb in the second measure. The Electric Guitar part has a whole rest for the first measure and a half note Bb in the second measure. The Electric Bass part has a whole rest for the first measure and a half note Bb in the second measure. The key signature remains two flats.

6

Tpt.

E. Gtr.

E. Bass

D/Bb

C/Bb

F/Bb

The third system of music starts at measure 6. The Trumpet part has a whole rest for the first measure and a whole note Bb in the second measure. The Electric Guitar part has a whole rest for the first measure and a half note Bb in the second measure. The Electric Bass part has a whole rest for the first measure and a half note Bb in the second measure. The key signature remains two flats.

10

Tpt.

E. Gtr.

E. Bass

Bb0 Bb7 Eb/Bb

The fourth system of music starts at measure 10. The Trumpet part has a whole rest for the first measure and a whole note Bb in the second measure. The Electric Guitar part has a whole rest for the first measure and a half note Bb in the second measure. The Electric Bass part has a whole rest for the first measure and a half note Bb in the second measure. The key signature remains two flats.

13

Tpt.

E. Gtr.

E. Bass

B^bm⁷

17

Tpt.

E. Gtr.

E. Bass

G/B^b F[#]/B^b A^b/B^b

21

B

Tpt.

E. Gtr.

E. Bass

mf

25

Tpt.

E. Gtr.

E. Bass

pp

29

Tpt.

E. Gtr.

E. Bass

33

Tpt.

E. Gtr.

E. Bass

37

Tpt.

E. Gtr.

E. Bass

p

41

Tpt.

E. Gtr.

E. Bass

45 **C**

Tpt.

E. Gtr.

E. Bass

mf *mp* *pp*

49

Tpt.

E. Gtr.

E. Bass

p *mp*

53

Tpt.

E. Gtr.

E. Bass

ppp *pp*

57

Tpt.

E. Gtr.

E. Bass

61

Tpt.

mp *f*

E. Gtr.

E. Bass

drums enter

65

Tpt.

mf

E. Gtr.

E. Bass

69

Tpt.

E. Gtr.

E. Bass

72

D

Tpt.

E. Gtr.

E. Bass

76

Tpt.

E. Gtr.

E. Bass

Measures 76-79. Tpt. has a melodic line with a trill on measure 76 and a sharp on measure 79. E. Gtr. has a complex arpeggiated pattern. E. Bass has a steady eighth-note bass line.

80

Tpt.

E. Gtr.

E. Bass

p

Measures 80-83. Tpt. has a melodic line with a dynamic marking of *p*. E. Gtr. has a complex arpeggiated pattern. E. Bass has a steady eighth-note bass line.

84

Tpt.

E. Gtr.

E. Bass

mp *mf*

Measures 84-87. Tpt. has a melodic line with dynamic markings of *mp* and *mf*. E. Gtr. has a complex arpeggiated pattern. E. Bass has a steady eighth-note bass line.

88

Tpt.

E. Gtr.

E. Bass

Measures 88-91. Tpt. has a melodic line with a double bar line on measure 91. E. Gtr. has a complex arpeggiated pattern. E. Bass has a steady eighth-note bass line.

92

Tpt.

E. Gtr.

E. Bass

96

Tpt.

E. Gtr.

E. Bass

pp

100

Tpt.

E. Gtr.

E. Bass

E

f

mf

103

Tpt.

E. Gtr.

E. Bass

f

pp

107

Tpt.

E. Gtr.

E. Bass

111

Tpt.

E. Gtr.

E. Bass

p

115

Tpt.

E. Gtr.

E. Bass

119

Tpt.

E. Gtr.

E. Bass

f

123

Tpt.

E. Gtr.

E. Bass

mf

127

F

Tpt.

E. Gtr.

E. Bass

mp

131

Tpt.

E. Gtr.

E. Bass

mf

135

Tpt.

E. Gtr.

E. Bass

3

139

Tpt.

E. Gtr.

E. Bass

p

Measures 139-142. Tpt. has a melodic line starting with a grace note. E. Gtr. has a sustained chord with a *p* dynamic. E. Bass has a rhythmic pattern of eighth notes.

143

Tpt.

E. Gtr.

E. Bass

mf mp

3

Measures 143-146. Tpt. has a melodic line with a triplet. E. Gtr. has a sustained chord with a *mf mp* dynamic. E. Bass has a rhythmic pattern of eighth notes.

147

Tpt.

E. Gtr.

E. Bass

f

Measures 147-150. Tpt. has a melodic line with a *f* dynamic. E. Gtr. has a sustained chord with a *f* dynamic. E. Bass has a rhythmic pattern of eighth notes.

150

Tpt.

E. Gtr.

E. Bass

Measures 150-153. Tpt. has a melodic line. E. Gtr. has a sustained chord. E. Bass has a rhythmic pattern of eighth notes.

Appendix 4

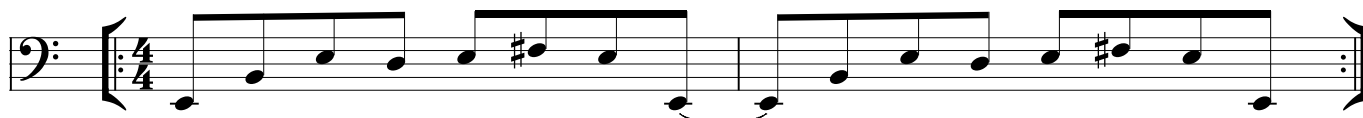
“Directions”

bass ostinato

©Joe Zawinul

1. original bass vamp

1/4 = 164-172



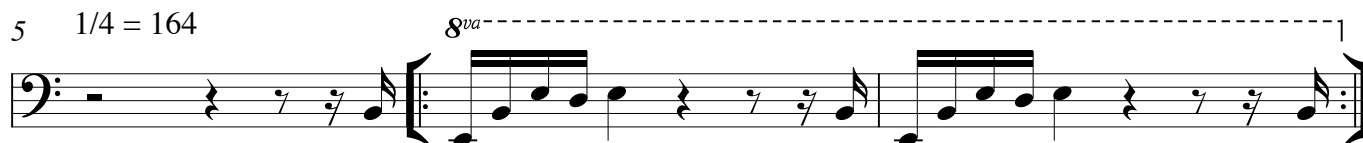
2. double-time feel bass vamp

1/4 = 128-152



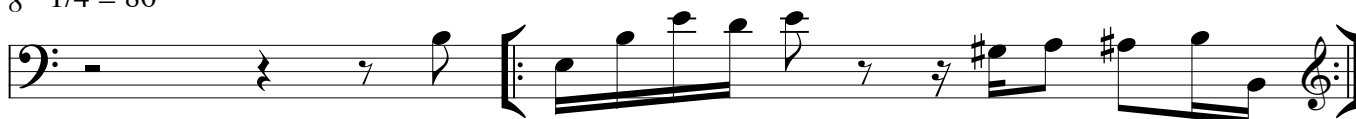
3. “funky” bass vamp

5 1/4 = 164



4. Half-time bass vamp on “Funky Tonk”

8 1/4 = 86

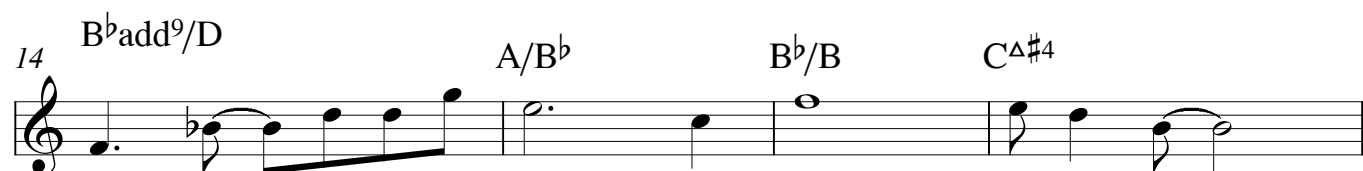


Theme, bars 5-8

5. Studio, November, 1968



6. Fillmore, March 7, 1970:



7. Tanglewood, August 18, 1970:

