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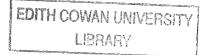
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"An investigation of specific structural techniques used by the Miles Davis Quintet on selected live recordings from 1964-1965."

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Abstract

This dissertation intends to deconstruct and analyse specific structural techniques employed by members of Miles Davis' second great quintet, which consisted of Wayne Shorter, Herbie Hancock, Ron Carter, and Tony Williams.

The motivation behind the selection of structural techniques as the basis of this dissertation lies in its ability to clearly articulate a large aspect of the group's amazing flexibility as an ensemble.

The specific areas of analysis are: tempo feel changes, tempo fluctuations, and texture changes.

The recordings in focus are 'Autumn Leaves' from the album 'Miles In Berlin', and three selections from the influential live recording of two nights from the *Plugged Nickel* jazz club in Chicago in December of 1965.

An analysis of 'Autumn Leaves' will look at tempo fluctuations and texture changes. This will be presented in graphic format, and specific musical excerpts will be included to highlight how the ensemble achieves these changes and create interest.

From the *Plugged Nickel* recordings, an analysis of two ballads, 'Stella By Starlight' and 'I Fall In Love Too Easily' will look at the group's treatment of tempo feel changes.

Additionally, analysis will be conducted of tempo fluctuations that occur during Shorter and Hancock's solos on 'No Blues' from the second night of recording. Again, these tempo alterations will be presented in a graphic format, and excerpts will be provided to demonstrate specific techniques used by the band in achieving these changes in feel or speed.

A discussion of the possible influences on the group around this time - musically and socially - will be included as a way of contextualising the musical approaches of the group.

Further, a discussion will be included focusing on two pieces from the author's graduating recital, discussing the level of success in applying techniques similar to those that Davis' quintet applies on the recordings in focus.

Introduction

The Miles Davis Quintet of 1964-68, which consisted of Miles Davis on trumpet, Wayne Shorter on tenor saxophone, Herbie Hancock on piano, Ron Carter on bass, and Tony Williams on drums, was one of the most groundbreaking and influential groups in jazz history. Their treatment of simple musical materials such as jazz standards and basic jazz forms demonstrated a remarkable level of flexibility in their ensemble playing. This was achieved with harmonic developments, new methods of motific development, rhythmic variety, group improvisation, increased interaction, flexibility with structure, and an uncanny musical empathy.

However, to try and explore all of those areas is far too extensive for the purposes of a dissertation of this size, thus only structural techniques will be explored.

It could be said that the group had two personalities, one in the studio, and one on the stage. Studio recordings were always made up of original compositions, and contained groundbreaking improvisational and ensemble concepts, most notably 'time no changes'; the idea of consistent time keeping throughout the solos from the bass and drums, with very little to no piano accompaniment, with no set harmonic basis in the accompaniment or soloing.

On the other hand, the live recordings of the group are made up mainly of jazz standards and jazz originals by Miles Davis and other bebop composers. Further into the group's existence, more and more original compositions by members of the quintet were included in their live repertoire. The musical freedom the group displayed in the studio was certainly an influence on the live recordings, but also the flexibility developed from extended amounts of time performing live might have influenced the approach taken in the studio as well.

For the purposes of this dissertation, only live recordings of jazz standards and one Miles Davis original (although based on a traditional jazz form being a 12 bar blues) will be explored, as it is fascinating to see how the band demonstrate their flexibility in a live setting.

To date, there has not been an extensive amount of research completed which deals specifically with this particular formation of musicians (although the two main dissertations to date that deal with it are exceptionally thorough). This paper's author has had a long listening relationship with the recordings in focus, and feel they have strong potential for analysis. Despite often being difficult and at times convoluted, it is possible to explain some of the methods the group used to create the music's flexibility and the 'interactive possibilities of this style of music.' [Murray, 2001, p5]

One of the most striking features of Davis' group was their ability to make music that was exciting and had organic, spontaneous interaction that could continually surprise the listener with its unpredictability and freshness, whilst still retaining a very unique, contemporary style.

Jazz musicians often express a desire to emulate this group's feeling of flexibility in their own musical settings, and as such, the developments made by all of the individual musicians of the group are still being emulated to this day. Moreover, the quintet has become a common reference point for instruction in creating cohesive musical units. For example, in the author's experience with working with various jazz ensembles, as soon as the quintet is mentioned, there is a collective feeling amongst the musicians to pursue the idea of trying harder to keep the music interactive and keep your ears open and feel free to expect the unexpected.

As Miles Davis said, 'play what you know, then play above that' [Davis/Troupe, 1989, p439]. This could be interpreted as the idea of developing as strong a technical foundation as you need to fulfil your musical goals, but to always be prepared for the unknown, and be willing to make strong music out of that unknown.

All of the members of the quintet are fine examples of this. Technically they are not just proficient - they are extraordinary - and in a collective setting they draw on each other's extraordinary qualities to inspire their own creativity, and the effect is always profound.

Some of their methods will be brought to light and formally discussed through structured analysis of structural techniques, using graph format, specific musical excerpts. The creative implications and musical and social background behind the their music making at the time will also be discussed.

Chapter 1. The Quintet

1.1 Miles Davis the bandleader.

It is important to talk briefly about Miles Davis' ability as a band leader to contextualise the recordings in focus, as his process of selecting band members had a profound effect on the musical outcomes.

Miles Davis (1926-1991) was without question one of the greatest jazz musicians and bandleaders in the history of jazz music. Since 1945, Davis played with the most talented jazz artists, the most well known being the pioneer Charlie Parker, and his widespread acclaim aided his ability to recruit talented musicians into his bands. Being a part of one of Miles Davis' bands meant there were healthy amounts of gigs, many chances to record as Davis always had a recording contract with one label or another, opportunities to tour overseas due to international acclaim, and financial security, as he charged high fees and paid his band well.

Davis had an amazing ability to assemble groups that were not only commercially successful, but were also ground breaking in not only their interpretation of jazz standards and original compositions; but also making developments in interpreting form, and developing new styles of interaction. This is a credit to Miles' ability to recruit certain players whom he thought would complement or contrast each other in successful ways.

Davis' first famous quintet was formed with this concept in mind. Though tenor saxophonist John Coltrane's style was substantially different from his own, Davis was able to see the potential for the group's sound, as Coltrane's style would put his style in greater contrast, highlighting his unique qualities. All subsequent replacements to band members from 1955 onwards were carefully constructed choices by Davis to create a unique group sound.

1.2 The origins of the Second Quintet.

Around the beginning of 1963, Miles Davis was in a musical and professional limbo regarding a regular performing band. His rhythm section from 1958, Wynton Kelly, Paul Chambers, and Jimmy Cobb, were keen to leave the group, as they had been recording and performing often as a trio. Davis had also gone through many horn players since Coltrane had left in 1960, including Jimmy Heath, Sonny Stitt and Sonny Rollins; none of whom would stay in the band for very long, as Davis was not totally satisfied with their contributions to his overall concept of ensemble.

In 1963, Davis recorded a session in Hollywood with George Coleman on tenor saxophone, Victor Feldman on piano, Ron Carter, and Frank Butler on drums. This session would make up half of the album 'Seven Steps to Heaven', the other half of the record being recorded in New York with George Coleman, Herbie Hancock, Ron Carter, and Tony Williams. The session with Hancock and Williams has an immediately recognisable element of excitement to it, and cogency across the whole band that Davis certainly recognised:

"I knew right away that this was going to be a motherfucker of a group." [Davis/Troupe, 1989, p263]

The quintet with Coleman, Hancock, Carter and Williams would go on to record 'Live in Europe', recorded at the Antibes Jazz Festival in France, and a performance at Philharmonic Hall in New York City. Both of these recordings demonstrate an exciting new style of interpreting the Miles Davis songbook, with tempos being pushed to the limit, solos being extended to greater lengths, and the level of interplay being much more constant, both within the rhythm section, and between the rhythm section and soloist. Davis' playing is at a new level of technical facility, in that his fast tempo playing is much more fluid and rhythmically varied, and his upper register sounds more developed and is used more often.

Davis was however, still not convinced by his choice of tenor saxophone, and after rising tension in the group, George Coleman left in early 1964. Davis was pressuring Wayne Shorter, who was a member of Art Blakey's Jazz Messengers, to join his

group, but Shorter could not accept the invitation as he was committed to Blakey's group as musical director. The quintet toured Japan in April 1964, with Sam Rivers playing saxophone. Rivers was a much more spontaneous, forward thinking musician than someone like Coleman, and Davis' willingness to hire him suggests that he was looking for a more contemporary approach, reminiscent of the avant-garde jazz movement that began in the late 1950's, typified by musicians like Ornette Coleman, Cecil Taylor, Don Cherry, and John Coltrane.

1.3 The beginning of the Second Quintet

In September of 1964, Wayne Shorter agreed to join Davis' band, and their first performance was at the Hollywood Bowl in California.

He was obviously happy with his formation of this group:

"I knew that Wayne Shorter, Herbie Hancock, Ron Carter, and Tony Williams were great musicians, and that they would work as a group, as a musical unit. To have a great band requires sacrifice and compromise from everyone; without it, nothing happens. I thought they could do it and they did." [Davis/Troupe p273]

Davis felt he had assembled a fine quintet out of this combination of players, much like some of his famed previous groups. He felt the members had special qualities that would complement each other:

"If I was the inspiration and wisdom and the link for this band, Tony was the fire, the creative spark; Wayne was the idea person, the conceptualiser of a whole lot of musical ideas we did; and Ron and Herbie were the anchors. I was just the leader who put it all together...I knew I was playing with some great musicians that had their fingers on a different pulse." [Davis/Troupe p273]

Soon after a TV appearance on the Steve Allen show, the quintet embarked on a European tour, recording 'Miles In Berlin', live from the Philharmonie in Berlin for Columbia Records in September. Bootleg recordings (unauthorised recordings often for local TV or radio) from this tour survive, and it is evident that the band was moving into a new direction again with the addition of Shorter as they were exhibiting an even freer approach to the repertoire than any previous groups led by Davis including the previous group with George Coleman.

The band demonstrated amazing technical flexibility and ease, especially at very fast tempos, where they were still able to pull the rhythmic foundation around, and then return back to it in a very graceful way. Wayne Shorter and Herbie Hancock demonstrated incredible harmonic awareness, incorporating atonality and

chromaticism subtly into improvised melodies that harmonically match the underlying chord changes. Williams' style of drumming was certainly a departure from a typical 1950's jazz drumming style. His ride cymbal patterns were much freer, he used the hihats and bass drum sparingly, only employing them for dramatic effect, often with brutal aggression. He had a very driving rhythmic feel, always playing just ahead of the beat.

On ballads and medium swing pieces there was a freer approach from all members of the quintet to the time feel and texture. Rather than one consistent feel throughout a piece, the rhythm section was much more interactive with the soloist, adding various types of interjections and using silence and different techniques of tension and release to vary the texture.

In this group there are much less obvious attempts to outline form in a traditional way. The rhythm section would often play through multiple sections with either no obvious points of outlining where sections start, or they would collectively create those points together in the middle of a section.

The new quintet was obviously more spontaneous than any other group that Davis had assembled, and definitely steered Davis' concept of music making in a new direction.

1.4 Creative implications and external influences of structural techniques

Structural techniques are only one part of the overall unique musical approach of the Miles Davis Quintet, and are not necessarily the main or most important element in discovering the group's magic or the key to their success. It is the only area of analysis in this dissertation because, as mentioned previously, to try and extensively investigate and analyse all of the various techniques used by the quintet is a massive task, far beyond the constraints of this dissertation.

To paint the whole picture of the exceptional nature of the ensemble as a whole, one would have to undertake extensive analysis of harmonic development by Hancock and Shorter, the unique melodic inventiveness of Shorter, Williams' radical development of a new jazz drumming vocabulary in such a short amount of time, Carter's unique style of interplay, Davis' developments of new levels of expression, the group's attitude to contemporary music being influenced by events in African-American history around the early 1960s, the unexpected beauty in music sounding as if it is being pushed to it's limits, and the compositional style of members of the group.

However, the group's structural techniques are an important area to look at, as there is activity within this group at any point during a piece. The way the musicians work together to create a constantly changing, evolving basis for improvising is compelling, and the fact that they *allow* these things to happen freely and in a musical way, is what makes the group so unique. They allow themselves to shift the character of the music suddenly through a rapid change in tempo feel, or the speed of the tempo itself, and the soloists respond to these changes, encouraging the musical conversation by reciprocating the musical gesture.

Davis was obviously constantly thrilled by the quintet's ability to transform his established repertoire every night, and says in his autobiography,

The music we did together changed every fucking night; if you heard it yesterday, it was different tonight. Even we didn't know where it was all going to. But we did know it was going somewhere else and that it was probably going to be hip,

and that was enough to keep everyone excited while it lasted. [Davis/Troupe p278]

As Ashley Kahn says, with the new quintet (from 1964 onwards), 'Davis sought ever more freedom from structure.' [Kahn, 2000, p186]

There are musical and social factors to take into account around the time of the recordings in focus, as they may suggest reasons behind the new approaches taken by the members of the quintet. These will be discussed to contextualise the music.

The Influence of the Avant-Garde

Since 1958, avant-garde jazz had begun to make its way into the jazz mainstream, pioneered by such artists as Ornette Coleman, Don Cherry, Paul Bley, and Cecil Taylor, and developed in the 1960s by Albert Ayler, Archie Shepp, Eric Dolphy, John Coltrane and members of the Chicago-based Association for the Advancement of Creative Musicians.

The avant-garde movement was as revolutionary to jazz as bebop was roughly 15 years earlier, sparking polarisation amongst critics and musicians, through the way it questioned many of the established ideas regarding improvisation, including the role of harmony, composition, form, freedom of expression, style, and structure. In many ways it opened up possibilities for new levels of expression through challenging these ideas, and inevitably it influenced many groups, even ones that were not typically defined as avant-garde.

The Miles Davis Quintet was one such group, for the fact that while they did not fully embrace the ideals of the avant-garde, they applied them in subtle ways.

Davis was certainly conscious of the avant-garde influence on jazz and its listeners:

In 1965 the music people were listening to was freer than ever; it seemed like everyone was playing out. It had really taken root. [Davis/Troupe, p283]

Tony Williams and Wayne Shorter were the two players in the quintet that most

leaned towards the avant-garde. Williams' first two albums, 'Life Time' and 'Spring', contained mainly free-jazz based material, and at a younger age, Williams had worked with Sam Rivers and Jackie McClean, both of whom were greatly influenced by the avant-garde movement. Williams brought this freer ideal to Davis' quintet almost immediately, and this was perpetuated with Davis' encouragement.

Williams made the mid-1960s Davis group unstable, not only by his own impetuosity and independence of line but by drawing in Carter and Hancock into activity – crescendos, pedals, alternate meters, doubled or halved time – that opposed the soloists and left them suspended or contradicted. [Litweiler, 1984, p124]

Shorter's harmonic and melodic approach often resembles the angular melodic content and irregular phrasing that many avant-garde musicians used. Shorter also recorded with Grachan Moncur in July, 1964, with much of that album's material being based on free-improvisation.

Shorter never fully embraced the avant-garde or free jazz, however, as he would instead write in a more complex style of composition, instead of abandoning form. Davis says of Wayne Shorter:

Wayne has always been someone who experimented with form instead of someone who did it without form. That's why I thought he was perfect for where I wanted to see the music I played go. [Davis/Troupe, p273]

Ornette Coleman's group at the time treated structure in another different way, by doing away with most of the previous forms and ideals of structure. Solos were open free improvisations based on a loose theme, and structurally, there were no specific chord progressions, no specific time signatures, and less section-based forms.

Of experimenting with form, Davis said in an interview with Les Tomkins in 1969:

Oh, you have some kind of form. You have to start somewhere. I mean, otherwise we'd all be living outdoors. You have walls and stuff, but you still come in a room and act kinda free. There's a framework, but it's just—we don't want to overdo it, you know.

It's hard to balance. Sometimes you don't even know if people like it or not.

Other groups around this same time, like John Coltrane's group, were developing new structural techniques, but in Coltrane's group's case, they were using longer, more open forms often consisting of one chord to improvise over, and the interest was in the level of intensity and spirituality of the overall musical result. Saxophonist Joshua Redman suggests a point of comparison between the two:

If you listen to Miles's group at the time, you hear something that was much more conscious – they're much more explicit about the way they're subdividing the beat, superimposing one rhythmic feel over another. With Coltrane's group, there's this feeling of freedom and turbulence – whether they're playing off triple feels or duple feels – but in a completely flowing and organic way. It's so implicit. [Redman in Kahn, p78]

Davis says specifically of Shorter, but could also be applied to the whole group,

Wayne also brought in a kind of curiosity about working with musical rules. If they didn't work, then he broke them, but with a musical sense; he understood that freedom in music was the ability to know the rules in order to bend them to your own satisfaction and taste. [Davis/Troupe p274]

The Possible Influence of the Civil Rights Movement

The surrounding social climate surrounding the group is an important aspect to take into account.

The biggest developments in African-American civil rights occurred from 1955 to 1968, especially from the start of the 1960s. Many avant-garde musicians in the 1960s were aligned with the Black Nationalism movement, and there was a persistent opinion that jazz was 'black' music.

The ages of the members of the group in late 1964 was: Hancock, 24; Shorter, 31; Carter, 27; and Williams, 19. One can imagine that there may have been a rising

consciousness in regards to black rights especially amongst young African-American jazz musicians.

One of the key features of jazz from early on in its development is a sense of urgency, and the capability of the music to draw upon social struggles or situations that can be conveyed in the music. Despite much struggle, the early 1960s marked progress for the civil rights movement towards integration and equal rights for African-Americans.

Musical developments in jazz, particularly the rise of the avant-garde in the early 1960s, were intricately linked to broader social and political developments. As perhaps the longest-running site of an integrationist subculture in U.S. history, the social changes in the jazz scene since the 1920s serve as a good indicator of the possibilities for racial parity, with the developments of the early 1960s being perhaps the most promising in this regard. [McMichael, 1998, p378]

This combination of being advanced jazz musicians and young African-Americans living in a very emotionally charged and pivotal moment in history, in addition to playing music that is intended to be fresh and have a connection with social events, one could imagine it would result in a degree of non-conformity in their musical approaches.

Olly Wilson in his article "Black Music as an Art Form", states six conceptual approaches similar between African music and African-American music. Of particular interest is that two of these are quite similar to some of the structural techniques utilised by the Davis Quintet:

"...4) There is a tendency to create a high density of musical events within a relatively short musical time frame-a tendency to fill up all of the musical space. 5) There is a common approach to music making in which a kaleidoscopic range of dramatically contrasting qualities of sound (timbre) in both vocal and instrumental music is sought after. This explains the common usage of a broad continuum of vocal sounds from speech to song." [Wilson, 1983, p3]

Adding Davis to the Combination

Needless to say, throughout Davis' career, he attracted controversy concerning many aspects of his life, and led an eclectic and 'colourful' private life, along with voicing many outspoken, yet often changing or contradicting opinions in regards to various groups of people, including white Americans and avant-garde musicians.

To investigate the direct links between Davis' mental stability and the specific related musical outcomes would be an impossible task, but discussing it briefly can add another piece to the puzzle of how the group arrived at this subtle style of non-conformity.

Davis' mental state around this time might possibly have been compromised by his cocaine addiction, which had begun to impact on his relationship with his family around early 1964. This had spiralled into a bigger problem in late 1964, when he began having hallucinations, was constantly irritable from pain from sickle-cell anaemia, and was drinking a lot of alcohol.

Davis' music often displays an indefinable duality of the overtly emotional and severely unemotional, often occurring at the same time. This concept came into its maturity in the mid 1950s, especially on many of the ballads from the 1956 Prestige sessions, and on albums like Miles Ahead, Porgy and Bess, Kind Of Blue, and Sketches of Spain.

There is something unique about the 1960s quintet, as they take this approach even further by playing in an exuberant manner, whilst pushing the structural foundations to the point of danger or disintegration. This group was searching for new levels of expression, much like Davis' ballad style in the 1950s searched for the pinnacle of expressive beauty, yet at times could come across as severely impersonal. These dualities surround much of Davis' music, and are one of the features of his style that make him so truly inimitable.

The cold climate of Davis' music took on a more loaded feeling around this period, no doubt because of influences from his personal life, the avant-garde movement, and the

civil rights movement. At times the music can come across as powerful yet faceless, exciting and emotional, then straight to a cold and angry feeling.

His quintet's reorganization [sic] of techniques serve not to integrate but to accentuate the disparate emotional qualities of his music. [Litweiler, p125]

...the unit is primarily interested in creation of atmosphere, and the atmospheres are so indistinct as to propose the absolute interchangeability of emotion – or else dispassion. [Litweiler, 126]

Chapter 2. Structural Techniques

Structure is certainly one of the most important aspects of performing and listening to music. To understand the structure of a piece of music aids in the understanding of the conception of its initial composition, as well as being a helpful tool for applying musical ideas. This concept is as prevalent in classical music as it is in jazz, although the way in which it is expressed in the latter is in more of a spontaneous manner; rather than a pre-determined, rehearsed approach.

A thorough understanding of form is important when performing jazz, as it helps the performer keep in the right place within the form whilst improvising, whilst also aiding the organisation of ideas, for example, when a new musical idea should be introduced or ways thematic material is developed. Most groups pre-1960 would play in a way that clearly outlines the form, and the structure would very rarely be obscured.

In jazz music pre-1960, most compositions played by jazz musicians; whether they were songs from Broadway shows or films, or original jazz pieces, were based on one of a few different types of forms: AB, AABA, ABAC, or ABCD.

Apart from original compositions by jazz musicians being constructed with different types of forms, jazz groups in the early 1960s were beginning to play in a way that would blur the traditional outlines of form. Improvisations began to avoid the clear-cut melodic phrasing, which would begin when a new section of the form would start. Rather, they began to improvise melodies that would, for example, start several bars before the end of a chorus or section of the form, and would play continuously over it and into the next section, sometimes leaving more silence, or playing uneven phrase lengths.

Ideas of texture and intensity were beginning to break away from the often used formula of solos beginning with low intensity and reaching a climax somewhere near the end of the solo then rapidly declining in intensity.

The role of the drums was also changing, by becoming much more interactive with

soloists. The idea of having a purely consistent drum accompaniment throughout a piece was being replaced by changes in texture, more spontaneity, and more dynamic variety. Tony Williams was one of the pioneers of this style of drumming.

Drummers such as Tony Williams and Dannie Richmond...drew upon the work of their predecessors, notable Max Roach, in developing a "melodic" conception that situated percussion timbres and rhythms at the foreground of musical texture. [Lewis, 2008, p38]

Carter employed new techniques of breaking up the regular style of bass playing. The main precursor to this style was Scott LaFaro, who is known for his work with the Bill Evans Trio. 'Two-feels' (generally 2 bass notes played in each bar, on beats 1 and 3) and four-feels (generally four notes to a bar) were broken up more often with melodic interjections. In many ways the role of the bass was becoming more interactive than ever before, becoming more of a melodic instrument rather than simply a time-keeping instrument.

Tempo feel changes, which take up a large part of this dissertation, and the techniques associated with using them were not an entirely new concept in the 1960s. The change from original tempo to double time was a technique often used previously by many artists in ballads to provide a different underlying basis for improvising. Davis' band developed this to a far greater extent, which will be discussed in Chapter 3 of this dissertation.

So what could possibly be considered a disregard for form and tradition was instead a reaction against a very clear-cut way of playing improvised music. Musicians that were very technically able did not feel the need as strongly as before to outline forms in a way that would simply keep their fellow musicians together and provide some definition.

Moreover, strict approaches to form were perhaps getting in the way of musicians achieving an organic flow and flexibility in their improvisations.

Texturally, musicians were striving to create a higher level of variation, as another

way of creating interest and using the underlying musical structure as a starting point for interactive ensemble playing.

A notable case of this was Wayne Shorter, who for years had played with groups that were focused on playing a high-energy, structurally tight and controlled style of jazz. Prior to joining Davis' group, Shorter had played with the Maynard Ferguson Big Band and Art Blakey's Jazz Messengers. Of his tenure with Blakey, Shorter says:

Art Blakey was more like a "show," geared towards a show-like experience each night... [Coolman, 1997, p12]

And of his arrival in the Davis quintet:

'With Miles, I felt like a cello, I felt viola, I felt liquid...' [Carr, 1999, p198]

2.1 Selecting specific techniques

Within the area of structural techniques, this dissertation will look at tempo feel changes, tempo fluctuations and textural changes.

All of the techniques are presented in graphic format, and will be discussed in different ways. First, the creative implications and backgrounds of the techniques will be discussed, then in the analysis sections, they will be discussed in overall terms, then more specific terms, providing specific examples of how they are achieved.

'Tempo feel changes' refers to the transitions to and from *rubato*, single time, double time, triple time, and quadruple time over the course of a piece. At some points within a piece, two of these tempo feels will be played at the same time. These examples are presented in graph format, to illustrate visually the group's transitions between the feels.

'Tempo fluctuations' refers to the way the rhythm section speeds up or slows down over the course of a solo or whole piece. Specific moments when a member of the band suggests or leads the band in the transition to a new tempo will be explained, as it is possible to discuss the methods of the group achieving these transitions. Tempo fluctuations over a whole piece are presented in line graph format to see the effect very clearly.

'Textural changes' refers to the choices the members of the group make to change the density and intensity of the music, and also the specific musical techniques that add to the variety of the overall texture. Some of these include for the piano: the type of accompanying (which will be referred to as 'comping' throughout) rhythms (short, long, rubato, repeated); for the bass: type of accompaniment (2 feel or 4 feel), the type of interjections (dramatic or melodic); drums: materials (brushes or sticks), type of interjection (dramatic or melodic) rhythmic repetition, rhythmic density; and soloists: silence, melodic or dramatic interjections and melodic repetition. This will be displayed in different graph formats with a detailed list of textural techniques, and the way they are used collectively and individually will be discussed.

2.2 'Autumn Leaves'

'Miles In Berlin' contains many examples of the new approach to structure that this group would maintain and develop over the next 4 years, and the most interesting selection on the album is 'Autumn Leaves'. The performance contains tempo fluctuations and texture changes.

For a lead sheet of 'Autumn Leaves', including the chord progression, see Appendix 1.

2.21 Tempo fluctuations

For a graphic representation of the tempo fluctuations in this piece, see Appendix 3.

'Autumn Leaves', from here on referred to as 'Autumn' contains many tempo fluctuations, and the overall direction is the tempo getting slower over Davis' solo, and then gradually getting faster from the end of his solo onwards.

Davis introduces the tempo at roughly 190 bpm, and seems to be pushing the rhythm section along in his first couple of phrases. This could be a discrepancy in the idea of the tempo of the piece, or it could perhaps be an issue concerning stage position setup. As Davis introduces this piece with no count-in, the first trumpet melody is the only cue the rhythm section have to gather a tempo, and they most likely agreed on a tempo themselves, however, it does not seem to be the tempo Davis wants. The only discrepancy with this theory is that the rhythm section pull the tempo back time and time again.

Davis relaxes into the rhythm section's tempo for a moment at the start of the second A section, but soon after sounds like he is pushing the rhythm section along again. He finally concedes when the rhythm section settle on a tempo 2 bars from the end of the first chorus (0:41), as he plays a melody that grips into the rhythm section's groove very convincingly, or in jazz vernacular, 'digs in'.

During Davis' solo, the tempo continues to gradually get slower by small increments.

There is no obvious decision by members of the group to necessarily slow the tempo down; it simply appears to be an organic movement in tempo.

Davis plays a specific melody that indicates the end of his solo on 'Autumn' (4:23). From this point the tempo gradually gets faster.

2.22 Textural changes

For a graphic representation of the textural changes in this piece, see Appendix 2.

'Autumn' contains many interesting choices by the members of the quintet in creating textural variety. There is a conversation-like construction of textures present, where sometimes the members of the group will be opposing each other texturally and will be conversing in a heated manner, with quick exchanges of musical ideas. At other times the rhythm section members agree on creating a texture and will follow a similar idea together and develop it. Ultimately, the members of the quintet use many different textural techniques to display different methods of tension and release.

Another fascinating thing about the quintet's treatment of 'Autumn' is the sheer amount of textural variety. This level of unsettling activity is actually exciting for the soloist, and encourages or at times *forces* musical dialogue and increased interaction.

Generally, the sections that feature Davis are more texturally varied than Shorter, Hancock and Carter's solos. As can be seen in an overall view of the chart provided, Davis' sections feature more frequently changing textures, whilst the others contain longer periods of one texture.

Silence

Silence can be one of the most unifying factors in improvised music due to its profound effect on the texture and density of the ensemble. [Murray, p56]

On 'Autumn' all members of the quintet except Carter utilize silence in either their comping or soloing. Silence can be viewed in many different ways. From a soloing

perspective, it can be a way of simply waiting for a musical reaction from your other group members; it can be a dramatic textural technique to heighten tension and leave group members and audience alike waiting for a resolution of hearing noise; or it can display a cool temperament to delivering ideas.

From an accompanying perspective, namely a rhythm section perspective, it is again used in various ways. It lightens the overall density, which can be useful for highlighting the soloist so their subtleties can be brought forth. It is also a tension-creating device, as the effect of re-entering will have added drama.

Hancock demonstrates this extensively throughout the 3rd chorus, where he alternates sparse/silence periods with melodic interjections. His comping is quite light, and only thickens the texture with interjections in response to the soloist. Extended periods of silence from Hancock occur again in the 5th, 12th, and 13th choruses.

Like Hancock, Williams uses silence for extended periods of time, which provide great contrast to when he re-enters. The most effective example on 'Autumn' is the period of silence in the 5th chorus. In this chorus, Davis' playing becomes quite introspective and intimate, and Williams sees this as a sign to lighten the texture drastically, along with Hancock, who is silent for roughly the same duration of time. Both re-enter with comping around the second bar of the 6th chorus with strong dynamics and feeling, thus providing an even greater contrast to the silence. From this point on, Williams is not silent except for periods of time in the 12th and 13th choruses, in the 12th, behind Carter's solo, and then in the 13th, as the piece is gradually coming to an end.

Noticeably large changes in texture

Davis plays a melody that indicates the end of his solo (end of the fifth chorus/start of sixth chorus) on 'Autumn'. This type of melody can be heard on previous recordings, 'Miles In Europe', and 'Live at Philharmonic Hall (The Complete Concert)'. This melody, which is very rhythmically precise and has a deep 'groove', indicates to Carter to change to a four-feel in the bass and Williams to switch to sticks instead of brushes.



Fig 1. Davis' rhythmically compelling melody that initiates a large change in texture. (4:23)

These events that occur transform the texture of the accompaniment from a relatively light feel behind Davis' solo to a much more straightforward, less sporadic texture for the saxophone solo.

The overall texture behind Davis' solo is constantly changing and more unpredictable, whether it is repeated figures that the soloist may 'hook' into, or the varying types of interjections being contributed in a conversational style.

For Shorter's solo, there is a fuller, heavier texture, with the bass playing a four-feel and the drums playing through whole choruses with a similar dynamic, and subtly increasing the rhythmic density within that consistent feel.

This transition between Davis and Shorter's solo is the most dramatic and noticeable texture change of the whole piece.

Rubato

The group's technique of using a 'rubato' rhythmic feel when comping takes on a few different appearances in 'Autumn'. 'Rubato' could be simply defined as comping without any real discernible rhythm, but rather a semi-melodic accompaniment in the space of one or two bars. It creates a feeling of tension and uncertainty to the rhythm, and when the successive figure is one that is in time, it acts as the release of that tension. Texturally, it acts as a slightly 'out-of-focus' fragment of music, and the change back to discernible rhythm is the regaining of focus.

Hancock and Carter barely play any figures that could be considered rubato throughout 'Autumn', however there are many points where they subtly obscure the rhythm through hemiolas, unpredictable syncopations and laying phrases back. The only phrase by Hancock that could be considered as rubato is an interjection that he produces within the last two bars of the eighth chorus. It is a quirky figure of four notes that gets played 3 ½ times. It resembles a 4 note group in a subdivision of triplets repeating every 5 triplet quavers, but it is played in a way that disguises the real rhythm, played slightly behind the beat.



Fig 2. Hancock's melodic interjection played in a semi-rubato manner. (7:12)

It adds a small amount of instability, and encourages Shorter to play an exclamatory melody that quotes the 'Autumn' melody, and then Hancock resolves all of this instability with a strong, widely-spaced chord on the fourth quaver of the first bar of the ninth chorus.

Williams uses rubato much more extensively throughout this piece, mainly when he is playing brushes. In the first two A sections of the first chorus, he uses rubato in the last two bars of each section. This has the effect of stalling the flow of the accompaniment, and then picking up the pace when the start of the section begins again. In the C section, he lightly moves the brushes around the snare drum just to create a quiet raspy underlying texture that does not suggest any tempo.

Tension/Release

There are several moments where there are great amounts of tension built up, either over a short section of 2 bars, or a long build up lasting at least a whole section of the form.

Hancock demonstrates this in the last 4 bars of the second chorus, by repeating a

sharp, short hemiola that repeats every 3 eighth notes (1:29). He releases this at the start of the 3rd chorus. A similar technique is used in the last eight bars of the fourth chorus, a repeated figure, quite short and widely voiced is used, and then at the top of the form of the fifth chorus, the range is lowered to create less tension (3:12-3:25). Again near the end of the 7th chorus, Hancock plays a figure that he repeats for 6 bars, then releases with a long chord at the start of the 8th chorus (6:08-6:18).

The most notable collective use of tension is the large build up from the middle of the B section of the 9th chorus. The rhythm section plays a figure together that creates a static texture, being repeated with no intended direction and with disregard for the original chord changes from the B section onwards. The group crescendo gradually to a loud dynamic and then the figure is released at the start of the 10th chorus (7:33-8:13). This small episode comes about from a repeated shuffle-like figure in the bass 2 in the 7th bar of the ninth chorus, which Williams locks into. In the second A section, Hancock begins to repeat a densely voiced dissonant chord, and as previously mentioned, the rhythm section sustain this feeling to a point of high intensity. Throughout this section, Carter plays a repeated pedal note, Hancock plays a 3/8 hemiola, with a long-short pattern, and Williams plays in a rhythmically dense manner, almost resembling a solo, and hooks onto Hancock's hemiola 10 bars from the end of the chorus. All of these techniques occurring at the same time make this section the most dramatic of the whole piece.



Fig 3. Hancock's 3/8 hemiola, which is repeated many times (7:30-8:12)

Repeated figures

In their accompaniment, the rhythm section members will often use a repeated figure that lasts anywhere from within one bar to 4 bars, or even during the strongest example of this, which was previously mentioned, can last roughly 16 bars. The technique of repeating a small figure is a tension-creating technique, as it creates a

static texture of which the duration the listener is unsure of, and makes them desire some kind of variety or release.

Hancock uses this technique by playing a quiet melody that has a plaintive quality due to its simplicity and starkness in the B section of the twelfth chorus:

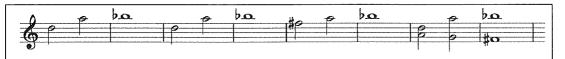


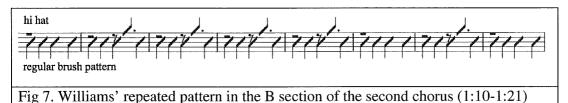
Fig 5. Hancock's repeated melody, with slight variation from the seventh bar of the B section to the end of the fourth bar of the C section of the twelfth chorus. (11:49-11:59)

Carter uses this technique in the same place in the piece, starting at the B section of the twelfth chorus:



Fig 6. Carter's repeated figure, with slight variations. From the B section to the end of the fourth bar of the C section of the twelfth chorus. (11:37-11:59)

Williams displays this technique in the second chorus, with a repeated figure in the hihat:



In a sense, all of these examples are methods of thematic development, they have slight variations whether it is added notes, or the use of silence to balance to the melody.

Collective rhythm section rhythmic figures

At times the rhythm section locks in together with a rhythmic figure, providing unity and strength as an accompanying unit, as well as enhancing the level of group interaction. As far as texture is concerned, these are moments when the level of communication has the effect of unifying the texture instead of three or four strands co-existing, which creates tension, and then when those strands unravel, there is a feeling of resolution.

A good example is in the last two bars of the third chorus (2:25), where Hancock, Carter and Williams almost telepathically go straight into a 3 over 4 pattern with an internal 3 over 2 pattern.

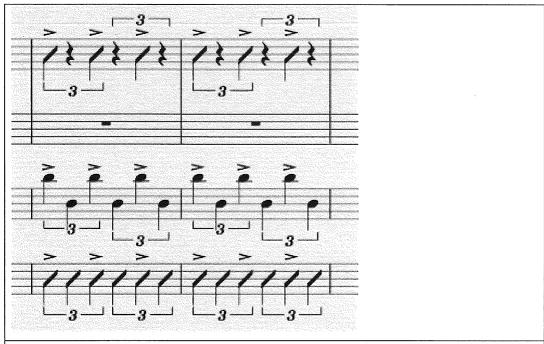


Fig 8. Piano, bass and drums lock into this triplet figure in the last two bars of the third chorus.

Another example is in the last 4 bars of the fourth chorus, the off beats of beats 2 and 4 become a hook for the piano and bass, and Williams accentuates the on beats of 2 and 4, creating a dense yet cohesive rhythmic texture.



Fig 9. Davis' repeated melody with rhythm section interaction underneath gaining more intensity the closer to the next section. (3:12-3:24)

In the last bar of the B section of the seventh chorus (6:02), the rhythm section lock into playing off beats together, as that rhythm is suggested by Shorter.

Soon after this, they lock into this rhythm together in the last 6 bars of the chorus (6:08-6:18):



Fig 10. Repeated figure by rhythm section. Note: the eight notes are performed straight (not swung) in this instance. (6:08-6:18)

Melodic/Dramatic Interjections

Most of the dramatic interjections are contributed by Hancock, who displays a wide range of small phrases of great variety and interest. Some are harshly struck, widely-voiced chords, some are atonal ascending and/or descending figures, some are chromatically or parallel moving sequences, and some are blues-based.

Here are several varying melodic interjections to demonstrate the technique:



Fig 11. Last two bars of the first A section in the third chorus (1:44) This is a sequence of a descending major second, transposed up a semitone each successive time.



Fig 12. Repeated three-note figure in the last two bars of the first A section in the fourth chorus. (2:39)



Fig 13. Third and fourth bars of the first A section of the fifth chorus. This appears to be an atonal melody. (3:29)



Fig 14. Third and fourth bars of the second A section of the fifth chorus. A simple chromatically descending sequence. (3:44)



Fig 15. Fourth and fifth bars of the first A section of the thirteenth chorus. Contains parallelism. (11:13)

Conclusions

Overall, this interpretation of 'Autumn Leaves' is a fascinating one, as it contains a great deal of activity in a relatively short period of time. There are constant fluctuations in tempo, at times they are noticeable but for the most part they are achieved subtly.

Texturally, there is much variety. At times an intense conversation-like interchange of musical ideas is heard, or a consistent texture takes over for a long period of time, and at times silence is used with great effect.

2.3 The Plugged Nickel

In December of 1965, Miles Davis was booked to play two weeks at the Plugged Nickel, a jazz club in Chicago. The group had taken about 8 months off (from April to November 1965) as Davis had been in hospital for surgery, and took time to recover. During this time, the other members were active recording and performing. When Davis' group came together in November, Ron Carter was not available, so he used either Gary Peacock or Reggie Workman for engagements in Philadelphia, Detroit, Washington DC, and New York. The performances at the Plugged Nickel were the first time the group was back to its complete formation, with Carter playing bass.

From the start of those engagements up until the point of the Plugged Nickel, the group had been developing techniques to enhance the repertoire, but those techniques were becoming predictable. Hancock says:

"...even within our very creative and loose approach to the music, everybody did things according to certain kinds of expectations. I know if I did this, Ron would do that, or Tony knew that if he did this, I would do that. It became so easy to do that it was almost boring." [Carr p108-109]

Apparently there was an attitude amongst the group that this engagement was to be a turning point for the group. An agreement amongst the group (except for Davis) was to attempt to change all of those ideas that were – as fresh as they sounded – becoming preconceived.

We had gotten to a peak and then it got so easy. We decided that we were going to start "anti-music." In other words, the idea was that the last thing that you would play would be what the other musicians expected you to play and just go in completely opposite directions. Destroy all the rules just to see what your psyche, your musical sensitivity would do with that. [Hancock in Coolman, p20]

Seeing as this was the last engagement the group had for the year, and the fact they had been getting comfortable with the musical approaches they had been using for the last month or so, it could be assumed that the group were more willing to try some

different approaches, and be more daring and loose with the repertoire. Shorter says of his musical reactions to the rhythm section:

"When I heard those guys dropping the bottom out from under me, I knew it was 'Go for it' time! I'd been in the group for a little over a year, and the next thing I knew we were way out there. It was like...this is what freedom means. The awareness was that the great responsibility converted into expression that sounded like a great adventure." [Shorter in Mercer, 2004, p110]

And of the success of this turning point, Shorter says:

"...the "arrival" [of the quintet's concepts] started to happen at the Plugged Nickel and we couldn't stop that arrival and everybody was celebrating individually in their own way. [Shorter in Coolman, p19]

The repertoire captured from the Plugged Nickel engagement is a mix of jazz standards, jazz originals (original compositions by jazz artists), and Miles Davis originals (pieces written and performed by Davis for previous recordings).

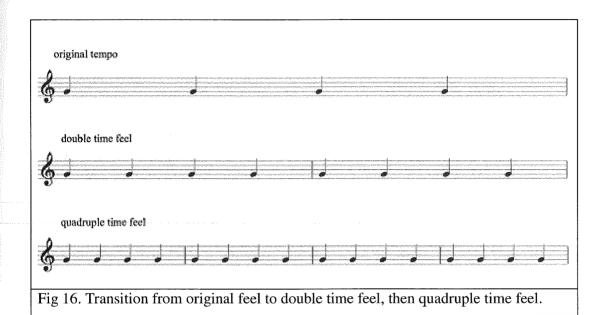
2.4 Tempo feel changes

Another structural technique related to tempo is the change of feel of the tempo. This means the changes between original feel, double time feel, triple feel, and quadruple feel. These changes are achieved by specific musical techniques by various members of the group. Excerpts of these techniques will be provided throughout.

Double time, triple time, and quadruple time

The changes between original tempo, double time, triple time, and quadruple time are a result of the changing of the bar subdivision over a set harmonic rhythm (harmonic rhythm will be explained in more detail from page 39). When the feel changes, the original tempo remains constant, but there is a feeling of the tempo being faster. For example, if the original tempo of a piece is 60 beats per minute (bpm), one 4/4 bar would contain 4 quarter notes at 60 bpm. That bar's length could potentially be split

up into 2 bars, thus resulting in 2 bars of quarter notes at a speed of 120 bpm, thus called double time. Likewise if that same original bar were to be split up into 4, it would contain 4 bars of 4/4 at a speed of 240 bpm, thus called quadruple time. Note that the original length of the bar at the original tempo has not changed. One bar of 60 bpm can contain 2 bars of 120 bpm, or 4 bars of 240 bpm. This can be shown like so:



Triple time feel works in a similar way. If one beat of a 4/4 bar at 60 bpm were to be split into three divisions, it would result in crotchets at a speed of 180 bpm. It is simpler to make the transition from double time to triple time, as it is possible to superimpose a triplet feel over two beats of double time (120 bpm), like so:

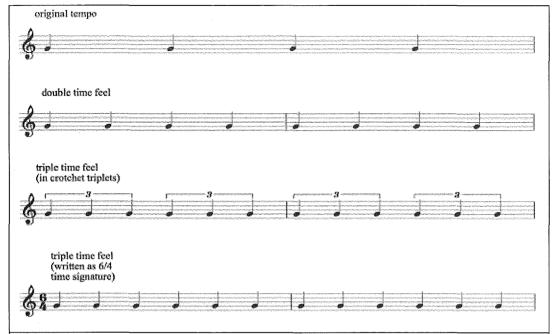


Fig 17. Transition from original tempo to double time, then to triple time, then written as 6/4 (the new implied time signature).

Harmonic Rhythm

Harmonic rhythm is defined as the length of time the underlying harmonic basis of a piece lasts, bar to bar. If the harmonic rhythm were to stay the same throughout the tempo feel changes, it could be demonstrated like so:

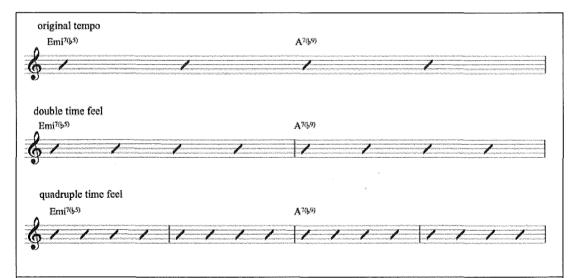


Fig 18. Bar 10 of 'Stella By Starlight'. Harmonic rhythm stays the same throughout the changes to double time feel and quadruple time feel.

If the harmonic rhythm stayed constant from original feel to double time feel, but did *not* stay constant through to the quadruple time feel, it could be demonstrated like so:

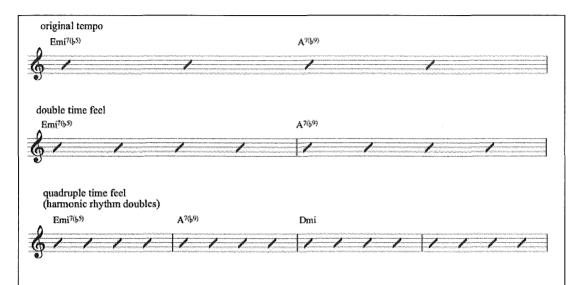


Fig 19. Bar 10-11 of 'Stella By Starlight'. Harmonic rhythm stays the same from original tempo to double time feel, but then doubles in the transition to quadruple time.

This above example occurs in the version of 'Stella By Starlight' analysed in this dissertation, and will be explained in more detail.

2.41 'I Fall In Love Too Easily'

The composition 'I Fall In Love Easily' which will be referred to as 'Love' was written by Jule Styne and Sammy Cahn in 1937, and first appeared in the film "Anchors Away" starring Frank Sinatra. The form could be considered AB, but essentially the piece is a through-composed form, and is 16 bars long. Davis originally recorded this piece in 1963 for the album 'Seven Steps to Heaven'. A lead sheet is provided as Appendix 4.

This piece goes through many feel changes, and an overall view of this piece shows an arc shape, with the fastest subdivision of the original tempo being contained roughly 2 thirds of the way into the piece. This piece contains feel changes going from rubato to ballad (original) tempo, double time, triple time and quadruple time.

For a graphic representation, see Appendix 5.

While the harmonic rhythm stays constant throughout the piece, different *tempo feels* occur over the top of that basis.

'Love' begins with a rubato introduction by Davis accompanied by Hancock. Carter introduces the ballad tempo (roughly 60 bpm) in the 5th bar (0:22). This feel is sustained for the rest of the chorus, but the feel changes to double time in the 5th bar of the second chorus (1:27), as it is suggested by Carter from the start of the second chorus and is then solidified by Davis in the fifth bar. This feel is sustained until the 5th bar (3rd bar of original tempo) of the fourth chorus (3:25), changes to original tempo, where Davis quotes the melody in almost its whole entirety, with embellishments, to end his solo. In the last bar of the chorus, he plays in double time again, and the rhythm section follows immediately (4:23).

This steady feel does not last very long, though, as Williams suggests a triple feel (4:38) for Shorter's solo. The triple time feel is not followed by Carter, and Hancock acts as somewhat of a middle ground between the two, playing a mixture of triple and double time comping figures. This creates a densely layered assortment of tempo feels at one time. This period of unease is resolved in the B section of the sixth chorus (5:54), with Shorter playing an exclamatory phrase that quotes the melody coinciding with a collective shift to double time.

As soon as the seventh chorus begins, Williams introduces a quadruple time feel (6:26) that is quickly picked up by Carter. This does not last long however, as Shorter suggests double time in the 4th bar (original ballad tempo) of the B section, and the rhythm section settle into double time in the fifth bar (7:09).

This feel is sustained for more or less the rest of the piece, although there are some more periods of layering of different feels. From the 5th to the 14th bar (double time feel) of the 10th chorus (9:36-9:53), Williams plays a triple feel underneath the double time feel of Carter and Hancock. Carter uses a similar technique in the last 2 bars of the seventh chorus and from the 3rd to 9th bar (double time feel) of the eleventh chorus (10:32-10:42). These two short periods are thematically linked as they follow a

similar melody.

In the ninth bar (double time feel) of the B section of the eleventh chorus (10:15), Williams and Hancock play a triple feel that is quickly picked up by Carter.

The tag is played twice and has a feeling of gradual disintegration, with all instruments loosening the feeling of the triple feel and going more towards a rubato feel.

'Love' contains many instances where a change in tempo feel is suggested by one member of the group, and is followed by one or more other members with differing reaction times. On the other hand, 'Love' also contains instant collective changes in feel, which suggests there could have been visual cues members of the group had, or could suggest an almost 'telepathic' communication amongst the group. This could be because of the amount the group played together, or the fact that since independent interjections were common, there could have been moments of coincidence where two members played a tempo feel change at the same time.

2.42 'Stella By Starlight'

The composition 'Stella By Starlight' which will be referred to as 'Stella' was written by Victor Young for the film "The Uninvited". Davis originally recorded this piece in 1958 and was released on '58 Sessions'. This is a through-composed form, or ABCD. The C section is considered and is also referred to as a bridge. A lead sheet is provided as Appendix 6.

'Stella' goes through less frequent feel changes as 'Love', but one difference between the two which is interesting to note, is the fact that the harmonic rhythm is altered. This occurs at the start of the second chorus, where the tempo feel becomes quadruple time, but the harmonic rhythm is doubled, so now one bar of original tempo feel becomes two bars of the quadruple tempo, not four. Or another way to look at it is, chord progression that occurred in the double time feel section is the same progression heard in the quadruple time feel section. In a sense this is a further structural alteration achieved by the group, regardless of if it is musically correct. This

same technique of doubling the harmonic rhythm is used on another version of 'Stella By Starlight' from the Plugged Nickel recordings.

For the purposes of this dissertation, and in keeping consistent with the key provided on the graphs, the tempo feel is always related to the original tempo, and not to the harmonic rhythm. The change in harmonic rhythm is clearly noted on the graph. This is because the interest in these pieces that deal with tempo feel changes is the departure from and relationship to the originally stated tempo. The originally stated ballad tempo is the basis of the mood and feeling of the overall piece, and the tempo feel changes are techniques to enhance and transform that original feeling. For a graphic representation, see Appendix 7.

'Stella' begins with a rubato introduction led by Davis and accompanied by Hancock. The B section introduces the ballad tempo of roughly 60 bpm. There is some confusion as to the placement of the chords in the B section, where Carter appears to be ahead of Davis, and Hancock sounds as if he is caught between the two. This confusion is resolved however, two bars from the end of the B section (0:59). The rhythm section suggests very strongly double time in the second half of the bridge, and Davis responds to the rhythm section's suggestions 3 bars (double time) from the end of the bridge (1:36):

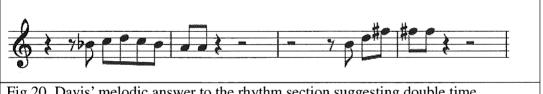
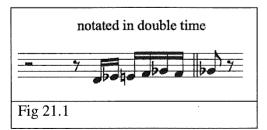
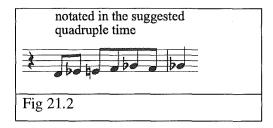


Fig 20. Davis' melodic answer to the rhythm section suggesting double time.

Davis continues to play phrases that strongly suggest double time throughout the D section. Davis suggests a quadruple time phrase at the beginning of the second chorus (2:13), and this is immediately supported by the rhythm section:





At this point, the harmonic rhythm changes to double it's original speed, so technically this quadruple time from the original tempo feel is now double time of the current harmonic rhythm, but as mentioned previously, the tempo feels in this analysis are defined in relation to the original tempo feel.

The quadruple time feel is sustained from the start of the second chorus to the middle of the bridge of the third chorus (3:47). At this point, Davis plays a melody that strongly suggests reverting back to the double tempo feel:



Fig 22. Davis' melody that shifts the tempo feel from quadruple to double time. (3:46)

In the middle of the A section of the fourth chorus (4:20), Davis plays a phrase which then suggests very strongly going back to the quadruple time feel:



Fig 23. Davis' melody suggesting a change from double time feel to quadruple time feel (4:20)

Shorter's solo begins in this tempo feel, in the middle of the B section of the fourth chorus (4:40). The quadruple time feel is sustained until the bridge of the seventh chorus (7:41), where Shorter plays an exclamatory phrase that encourages the rhythm

section to quickly revert to double time feel (original tempo according to the harmonic rhythm). The rhythm section had begun breaking down the rhythm around 2 bars before the bridge (7:39), and this appears to be a response from Shorter:

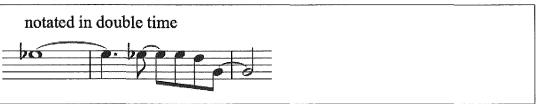


Fig 24. Shorter's exclamatory melody suggesting a change from quadruple time to double time (7:41)

Hancock's solo begins at the start of the eighth chorus (8:13), and there is confusion between him and Carter about the exact placement of the chords. It feels like Carter is ahead of him, and Hancock's chords do not really line up from about the 4th bar onwards. In the B section (8:47) Carter lays out, and Hancock continues unaccompanied, playing in a semi rubato, but noticeably double time tempo. The harmonic rhythm is returned to its original duration when Hancock plays unaccompanied. Carter and Williams join Hancock in the D section (9:55), Williams with a blatantly simple double time feel starting in the 5th bar (double time). The three play more cohesively from the beginning of the ninth chorus (10:29), with Carter and Williams providing a strong foundation and Hancock playing more rhythmically convincing.

This double tempo feel is sustained until the last D section of the piece. 2 bars before the end of the C section (12:04), Carter and Williams break up the consistent feel, with Williams playing out of time with the hi-hats, and Carter breaking his line into less notes. This makes the transition into the original ballad tempo smooth.

The piece ends in a loose, semi rubato, inconclusive manner (12:30-12:48).

Conclusions

Tempo feel changes are an interesting type of structural technique, as they alter the energy of a piece greatly. A change to quadruple time feel has a sense of urgency, as it

is almost a risky change for the rhythm section and soloist alike. It completely changes the basis of rhythmic subdivision, as the soloist at times must play rhythms and melodies that are twice as fast as the previous tempo feel.

The ways that Davis' quintet freely changes between these tempo feels range from smooth transitions to abrupt or sudden changes. These different types of transitions would keep the members always actively listening, which is the greatest feature of the group - the willingness of all of the members to adjust to another member's musical suggestions.

2.5 'No Blues'

The quintet recorded 'No Blues' once on each night, and the two performances are the two longest pieces from the whole recordings. The piece itself is a simple 12 bar blues form in the key of F. The group would also play another F blues on the Plugged Nickel recordings, 'Walkin', but that would always be played at a much faster tempo than 'No Blues', so to play 'No Blues' would be a conscious decision by Davis to let the group play on a simple blues form at an easy medium tempo. In the mid-1950s onwards, Davis would often include an F blues in each set, and it was often played in a neat and fairly predictable manner. In the case of the 1960s quintet he knew his group would be able to do very interesting things with such a simple type of chord changes and form, and the results were always unpredictable and exciting.

The reason for choosing to analyse the recording from the second night is because there is a greater display of tempo fluctuations than any other pieces from the recordings from the Plugged Nickel. This technique occurs only once in an obvious way on the Plugged Nickel recordings, on 'Go-Go (The Theme)' from the first set of the first night.

The tempo fluctuations in 'No Blues' are dramatic, and give the one piece a number of personalities and push the soloists into new territories and force them to react in a strong way. For the most part Williams is the one controlling the changes of speed, by being first amongst the rhythm section members to initiate a change in tempo. This could be because his instrument's sound is the most clearly defined, and is the clearest for the other members to pick up on any changes. Carter then acts upon Williams' initiation of a tempo fluctuation, and adjusts to maintain a strong foundation. Hancock often waits a moment before joining them, and then either adjusts to add a sensible harmonic addition to a fluctuating rhythmic foundation, or stays silent.

Shorter's solo

Shorter's solo is 34 choruses long, and lasts 6 and a half minutes (3:27-9:50). The overall range of tempo is from 138 bpm to roughly 334 bpm. Its overall tempo fluctuation path begins with the tempo at 190 bpm, gradually accelerates to roughly

334 bpm, then slows down to 138 bpm.

The tempo changes occur almost instantly, and there is a slight uncomfortable feeling during Shorter's first chorus, of Williams sitting slightly ahead of the beat. The first time it is clearly perceptible that the tempo is being pushed is roughly 4 bars from the end of Shorter's second chorus (3:51). Williams leads this first perceptible acceleration. Davis, who had just finished his solo, can be heard slightly off stage or off microphone being perplexed at this sudden change, and he flippantly plays along with the group for about 6 bars (3:56-4:02), playing off beat quavers.

Hancock is silent from the fifth chorus until the 31st chorus, making most of Shorter's solo chordless (no accompaniment from a chordal instrument). The deceleration in the 12th chorus (5:57) is achieved with relative ease, and settles in the 16th chorus. There are some minor fluctuations from the 20th to 24th choruses, but ultimately the tempo settled on in the 16th chorus lasts for a significant amount of time.

The deceleration from chorus 28 to 31 is not a gradual shift in measured increments, it is more of a disintegration of the elements holding the music together – Carter's bass lines begin to unravel from the usual 4 feel and the speed is not consistent. Williams takes this disintegration even further, beginning around 8:16, where he doesn't lock in tightly with Carter, and plays in a quickly-alternating in-time/out-of-time feel, in other words quasi-rubato. This disintegration as a form of deceleration is a unique approach. The resolution of arriving in a steady fashion in chorus 30 (8:58) as if nothing went awry is a fascinating moment to hear, and further highlights the group's unique skill of collectively pushing musical elements to their limits and returning from that in a graceful manner.

Hancock's solo

Hancock's solo is 23 choruses long and lasts 6 minutes (9:51-9:15:51). The range of tempo is 88 bpm to 210 bpm. It begins at 138 bpm, slows down to 88 bpm, then accelerates to 210 bpm.

The tempo and groove stay consistent from the end of Shorter's solo into the start of

Hancock's solo, although the tempo fluctuations begin close to the start of the solo. The first clearly discernible deceleration occurs around the third bar of Hancock's second chorus (10:19). It seems to be triggered by a blues-inflected melody that Hancock plays at that point. Its has a laid-back (played behind the beat) quality, and Carter and Williams take the laid-back approach even further by using it as a stylistic suggestion to decelerate. A new tempo is settled into in the 3rd chorus, but this only lasts about a chorus' length. At the very start of the 4th chorus (11:07), Carter pushes the tempo and Williams follows immediately.

The acceleration ends up arriving to a faster tempo than at the start of Hancock's solo. The tempo the group arrives at around the 8th chorus is roughly where the tempo will stay for the rest of the piece, even though it is faster than the original tempo of the piece. There are few fluctuations from this point to the end of the solo.

Chapter 3. Applying these techniques

In the author's own graduating recital, two selections attempted to demonstrate different structural techniques. A high level of success in applying these techniques in a successful, musical manner was not achieved, although it had been in rehearsals, but the process was an interesting one that made him examine the use of these techniques when applying them to pieces based on simple material. Techniques like the ones the Miles Davis Quintet used regarding structure are not the kind of thing that can be expected to work smoothly every time, especially if the group emulating them is either not a regular performing group, or contains musicians of differing musical opinions or backgrounds.

Futon Sensei

'Futon Sensei' is a 12 bar blues-form based piece that has tempo fluctuations in an organised, notated manner, as opposed to an instinctive, spontaneous manner.

The piece begins with an 8 bar intro in ¾ repeated twice, then the first section is a 24 bar blues in 3/4. 2 bars from the end of the form, an implied subdivision of 4 over 3 introduces the new tempo of the next section in 4/4, a 12 bar blues. 2 bars from the end of the form, a 6 over 4 (or 3 over 2) feel is implied, which becomes the new tempo of the next section, another 24 bar 3/4 blues. The same transition takes place again to launch into an even faster 4/4 12 bar blues. At the end of this form, the group loosely (yet intentionally) lands back in the original 3/4 feel.

The trumpet solo goes through the exact same tempo adjustments as the melody, with the last 4/4 section being an open repeat for continued soloing.

At the conclusion of the trumpet solo, the bass and drums play a collective solo, that is generally in time, but the instructions are to rapidly and randomly change tempos, in and out of 3/4, 4/4 and no set time signature. This was intended to echo the sometimes-elastic quality of the rhythm section of the Miles Davis Quintet, as they demonstrated ease in fluctuating tempos and swapping between different tempo feels.

The bass and drum solo settles in a fast 4/4 feel, and what occurs from now to the end of the piece is a gradual progression 'backwards', in that the piece includes tempo changes through metric modulation, but in the reverse order of the initial transitions from the beginning to the trumpet solo, so the tempo is now shifting from fast 4/4 to the original slow 3/4. After the bass and drums have settled on the fast 4/4 for a short amount of time, the trumpet plays a melody on the fast 4/4 12 bar blues section. The tempo shifts to a slower 3/4 24 bar blues by implying a 3 over 4 figure 4 bars from the end of the fast 4/4 form, then becoming the new tempo of the next section. 2 bars before the end of the 3/4 form, a 2 over 3 figure introduced the slower tempo of the next 4/4 12 bar blues Again a 3 over 4 figure is the figure for transition into a slower 3/4 section. The end of the piece ends with a gradual breakdown in tempo (getting slower) and texture (more and more fragmented melodic statemens).

This piece in a sense was intended to look at the idea of structural techniques, namely tempo fluctuations from opposing points of view, one being a carefully constructed method of precise rhythms that implied a new tempo, in other words, a metric modulation. On the other hand, there was the spontaneous, free nature of the open drum and bass solo that was intended to fluctuate in an un-rehearsed way.

For the most part, this piece came out effectively, but problems were the execution of the rhythms linking the sections in different tempos, thus creating unstable transitions and creating a loose, disorganised feeling, which was not the intention.

I Fall In Love Too Easily

The inclusion of 'I Fall In Love Too Easily' in the recital was in a sense a tribute to Miles Davis' 1960's quintet. The version in the recital was to be treated in a very similar way as the Plugged Nickel versions, with the same kind of tempo feel changes occurring, and a rubato intro.

In rehearsals, time was spent working on the transitions from original ballad tempo to double and quadruple time, and as a way of developing these techniques even further, methods were developed to shift to 8 times the original tempo feel, and this tempo feel change was intended to be used. To make sure the tempo at 8 times the original

feel was not unmanageably fast, the original ballad tempo was a very slow tempo. This made the quadruple feel quite relaxed.

However in the recital, cues made by certain members to go to 8 times the original tempo were not acted upon, so this development was never achieved. Because of the confusion surrounding this issue, the trumpet solo never really progressed anywhere.

Conclusion

There are obviously many elements at play in the performances selected for this dissertation, some of which are clearly recognisable to a listener, and some of which are difficult to isolate as factual evidence in regards to the way this ensemble arrived at the approach they took to altering and changing the appearance of simple structure-related concepts.

As mentioned previously, the area of structural techniques is only one piece of the large puzzle when looking at all of the developments made by the quintet. However it is an important piece as structure is such an important feature of music, and especially in jazz.

Primarily, there are the possible influences of the social and musical environment affecting the members of the group around the time of these recordings. That is, this environment may have contributed to a musical attitude of non-conformity, resulting in such interesting and at times drastic interpretations of structural limitations, like tempo, texture and feel.

To have the artistic confidence to alter the appearance of the underlying foundations such as tempo and feel, and to radically alter the more foreground structural items such as texture in a daring yet musical way, is a testament to the quintet's members' musical abilities, their willingness to change and their forward thinking attitudes, which are now emulated so widely.

Since that point, countless groups have emulated techniques introduced by the Miles Davis Quintet. Some interesting examples are: the VSOP group from the late 1970's through the 1980s, which consisted of the same members of the quintet and Freddie Hubbard, and then later including Wynton and Branford Marsalis as the horn players. This group never exhibited the same style or amount of freedom as the 1960s quintet, however they did display an amazing amount of flexibility and energy.

Another example is Wayne Shorter's current quartet, whereby the repertoire mainly

consists of original compositions by Wayne Shorter, but the treatment of the repertoire is always different in each performance. The members of the group engage in an extremely interactive style, with constant textural changes occurring. The ensemble plays many subdivisions of the original tempo, often changing between them rapidly.

In the examples, charts and graphs provided, it is clear to see the complex inner workings of the quintet, and the amount of activity at one point in a piece, or over a large sections of the piece, or in fact the whole piece.

Their extensive use of interaction, heightened communication, and daring musical ideas were the elements that made the structural techniques listed in this dissertation work so well. Their individual skills combined with amazing concepts of ensemble playing, contributed to the development of new levels of expression and new ideals of performance aesthetics. At times, the music can sound as if there is no regard for the construction, as the members freely alter the foundations, like form, tempo, and tempo feel; but it is that freeness that makes the band so incredible.

Finally, this quintet created new possibilities for ensemble playing, and the effects are still being felt today. No matter how many current groups attempt emulating this quintet, there will never be anything like it again. The unique combination of the particular style of musicianship of their leader Miles Davis, the social and musical environment of the early 1960s in the United States, the traditions they felt they had to uphold, and their own personal tastes is something impossible to emulate now, as the conditions are completely different.

Listening to this group provides an endless resource for musicians wanting to expand the possibilities of interactive ensemble playing, or to develop a new style of interpretation of simple materials, and to push themselves 'above what they know'.

Appendices

Appendix 1: Page 56: Lead sheet of chord progression of 'Autumn Leaves'.

Appendix 2: Pages 57-63: Chart of texture changes on 'Autumn Leaves'.

Appendix 3: Pages 64-66; Line graph of tempo fluctuations on 'Autumn Leaves'.

Appendix 4: Page 67: Lead sheet of chord progression of 'I Fall In Love Too Easily'.

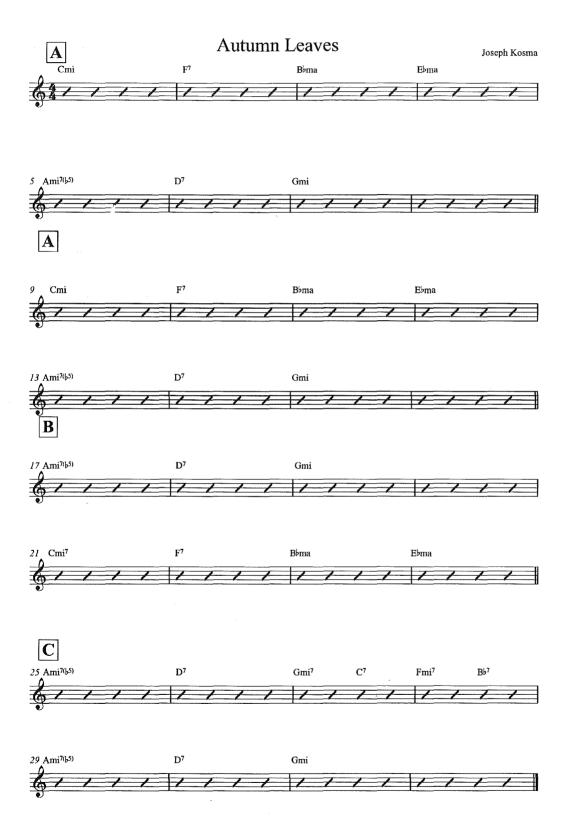
Appendix 5: Pages 68-69: Graph of tempo feel changes on 'I Fall In Love Too Easily'

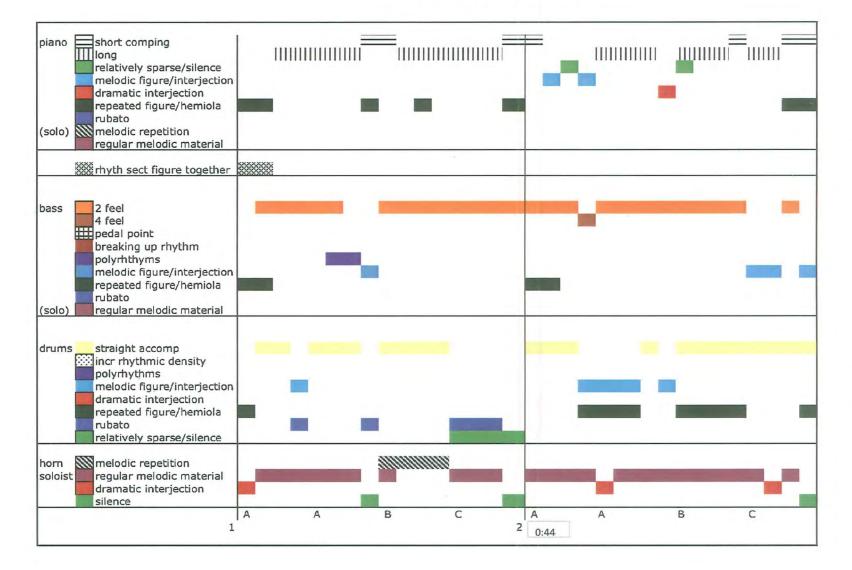
Appendix 6: Page 70: Lead sheet of Stella By Starlight.

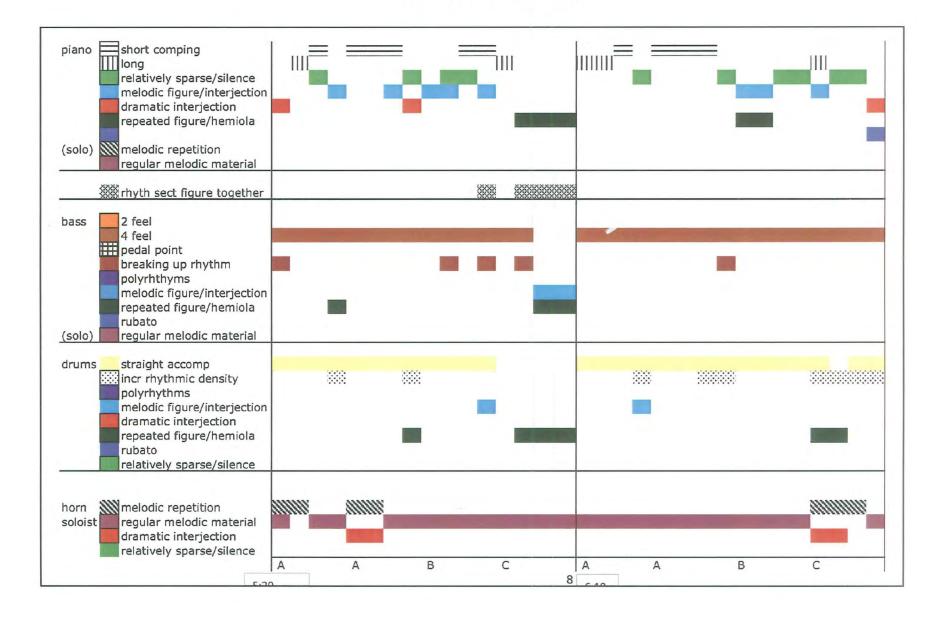
Appendix 7: Pages 71-73: Graph of tempo feel changes on 'Stella By Starlight'.

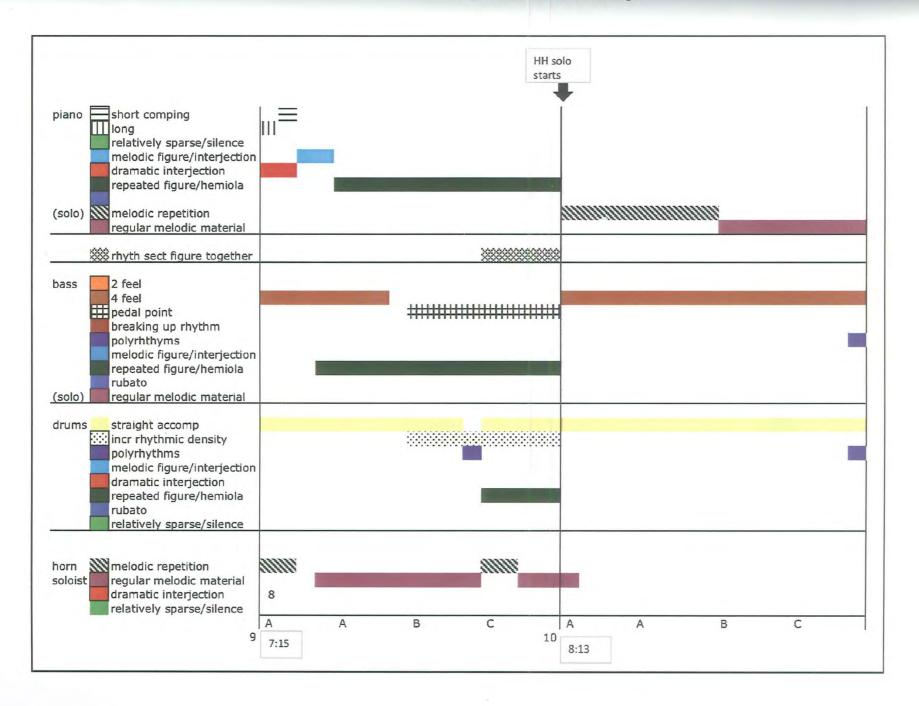
Appendix 8: Pages 74-75: Line graph of tempo fluctuations on 'No Blues'.

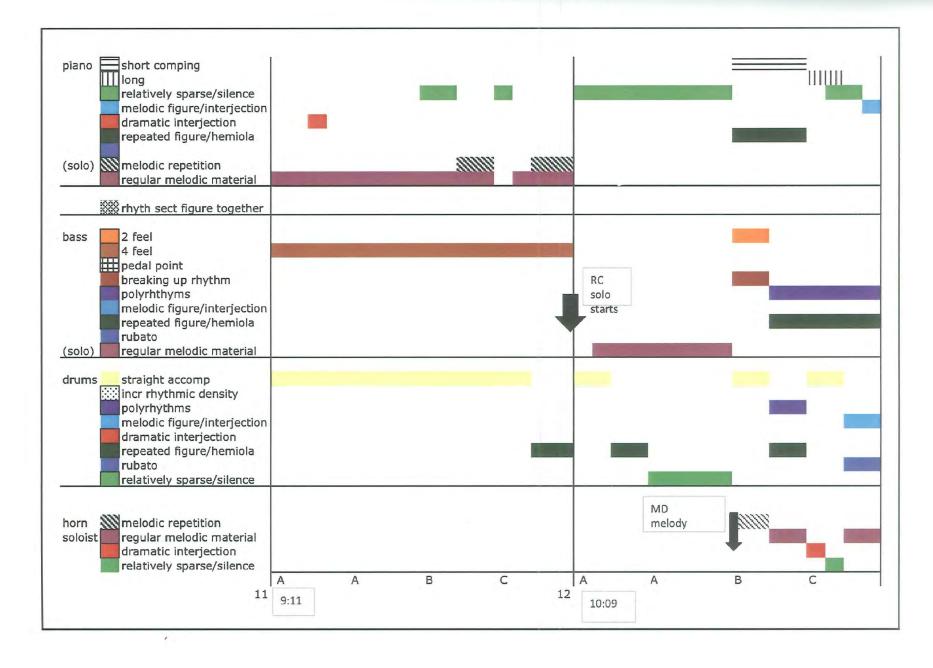
Appendix 1: Lead sheet of 'Autumn Leaves'.

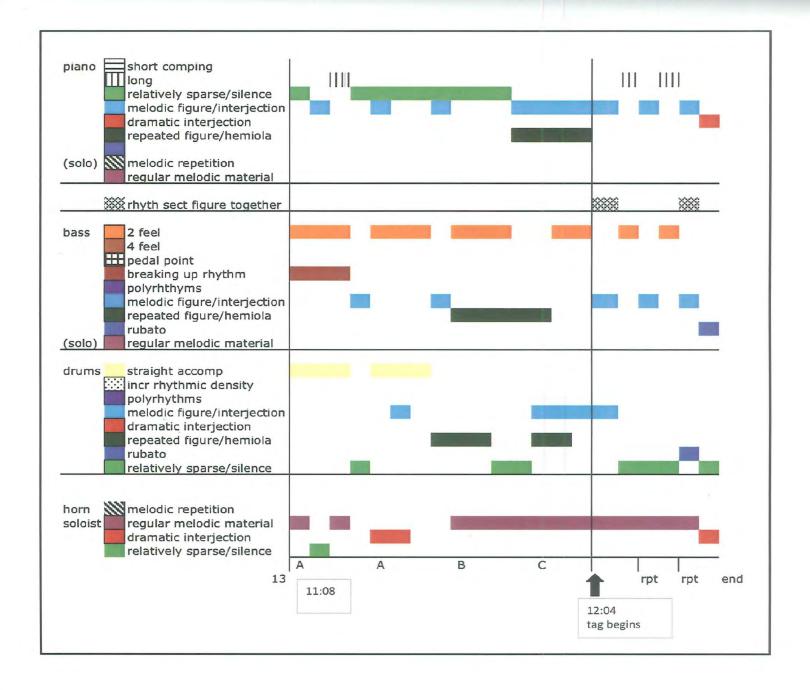


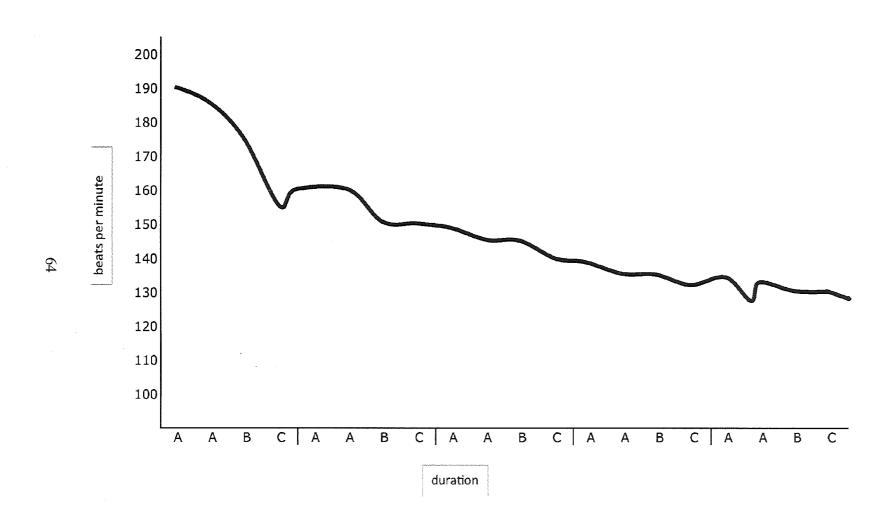


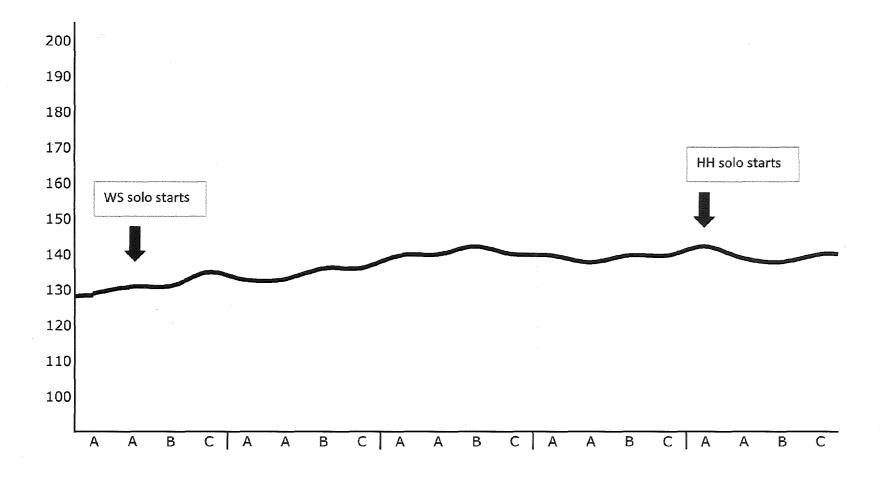


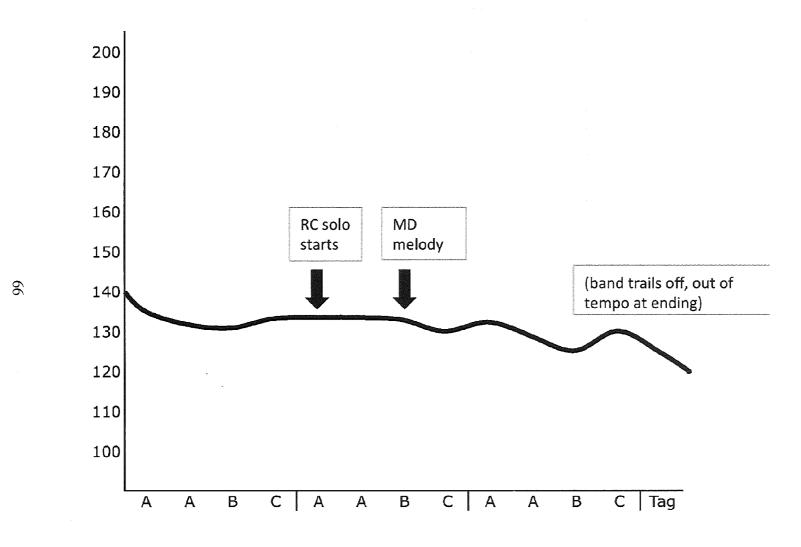






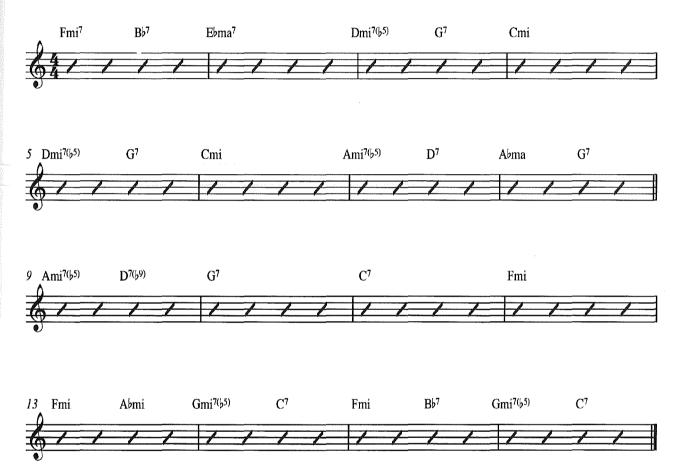






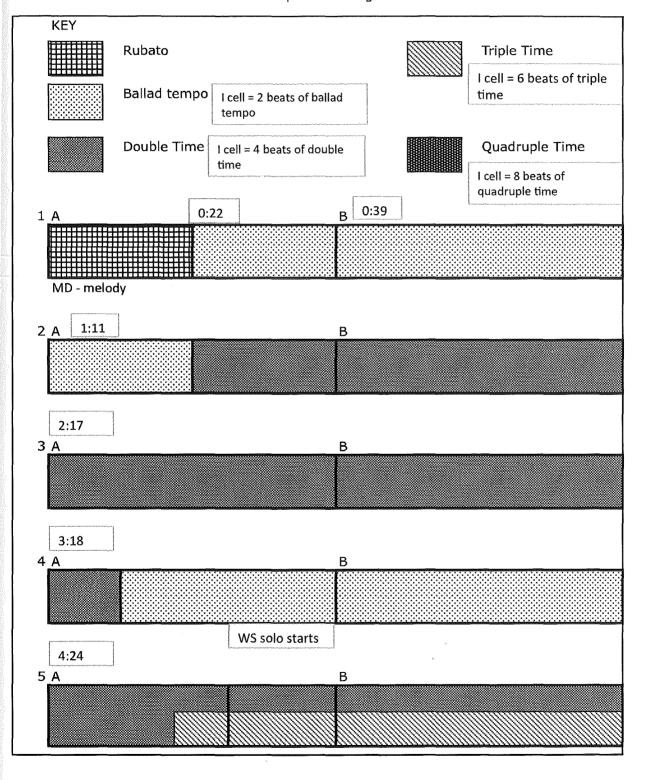
Appendix 4: Lead sheet of chord progression of I Fall In Love Too Easily

I Fall In Love Too Easily

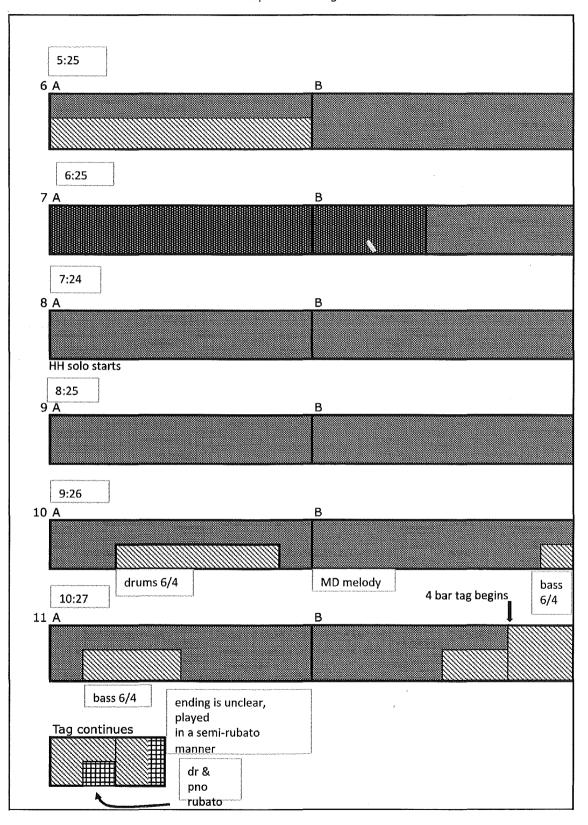


Appendix 5: Chart of tempo feel changes on I Fall In Love Too Easily

I Fall In Love Too Easily-Tempo feel changes



I Fall In Love Too Easily-Tempo feel changes

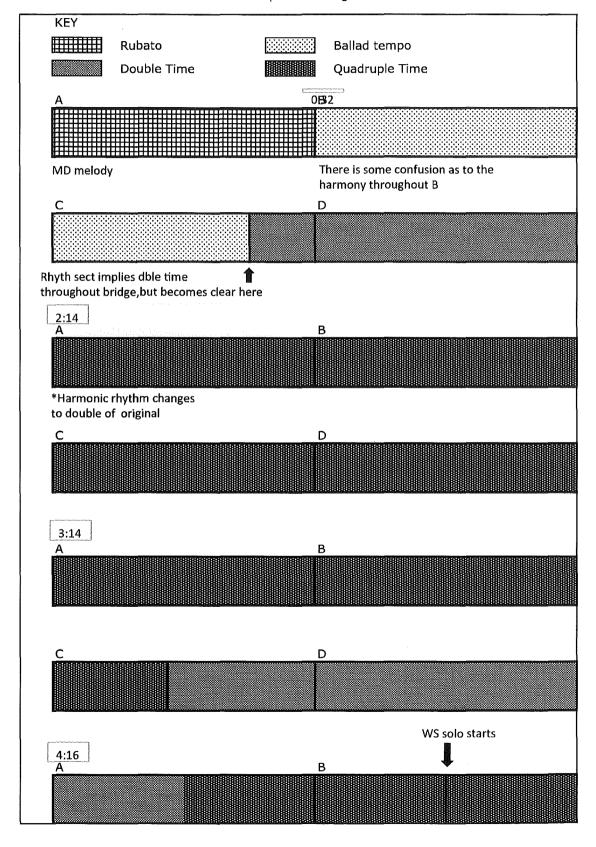


Appendix 6: Lead sheet of chord progression of Stella By Starlight.

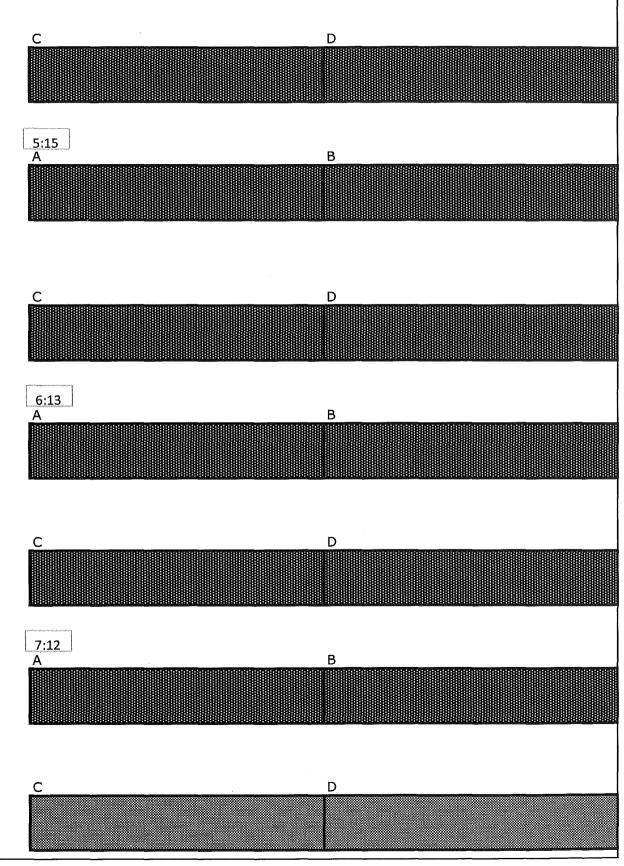
Stella By Starlight Victor Young A7(69) Cmi7 F⁷ Ab7(#11) Fmi⁷ Ebma⁷ В Gmi Dmi D^7 Gmi⁷ Ami7(65) 13 Fma⁷ Cmi G⁷ A7(69) Dmi7(65) B♭ma⁷

Appendix 7: Chart of tempo feel changes of Stella By Starlight

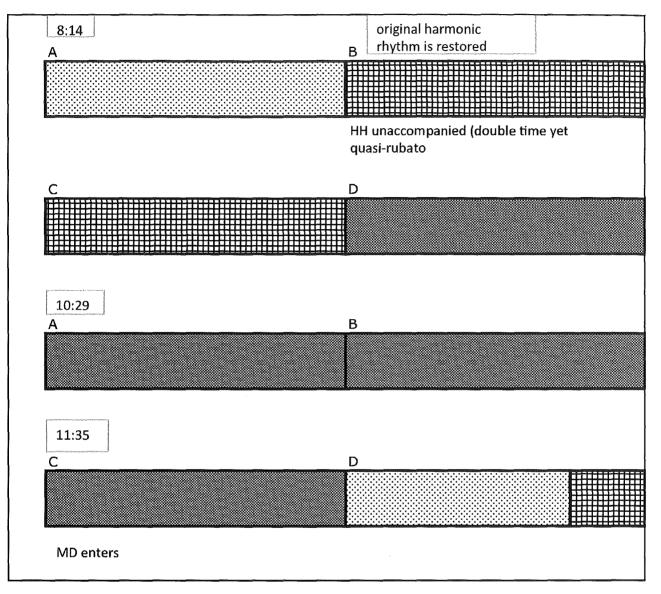
Stella By Starlight -Tempo feel changes

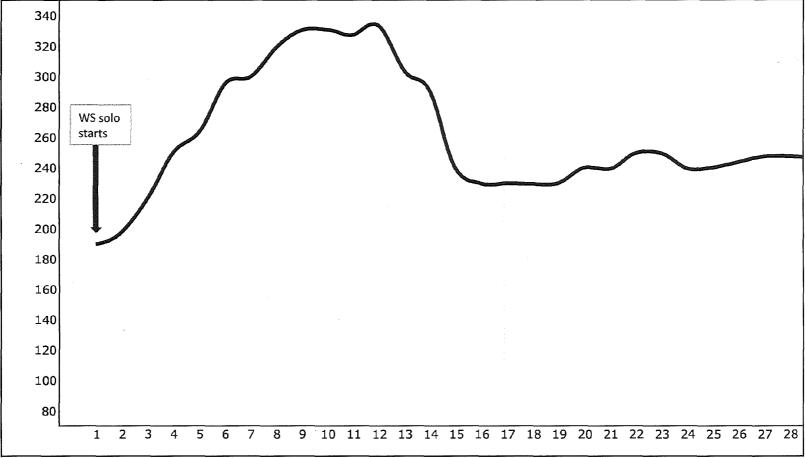


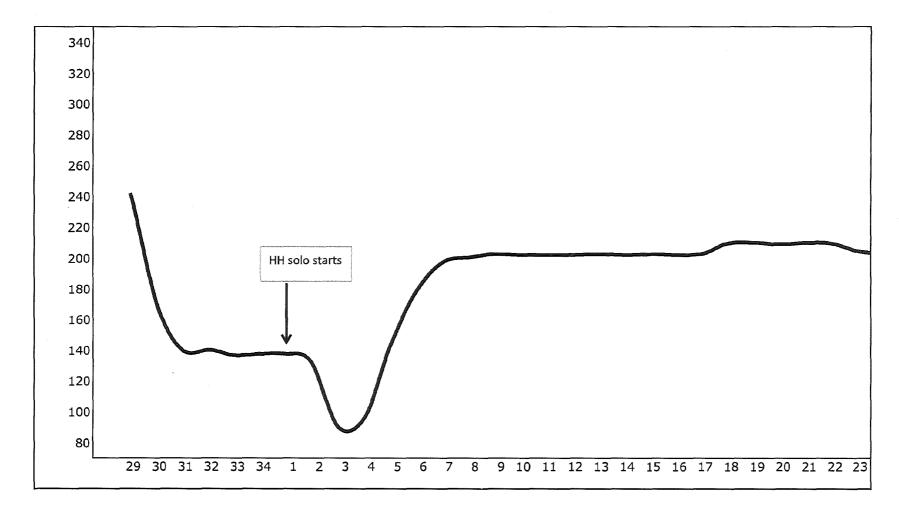
Stella By Starlight -Tempo feel changes



Stella By Starlight -Tempo feel changes







CD Track Listing

Disc 1:

Track 1: 'Autumn Leaves' Miles Davis Quintet. Recorded live at the Philharmonie, Berlin, September 14th, 1964. From the album 'Miles In Berlin' Columbia.

Track 2: 'I Fall In Love Too Easily' Miles Davis Quintet. Recorded live at the Plugged Nickel jazz club. From the box set 'Complete Live at the Plugged Nickel', disc 1. Columbia, 1997.

Track 3: 'Stella By Starlight' Miles Davis Quintet. Recorded live at the Plugegd Nickel jazz club. From the box set 'Complete Live at the Plugged Nickel', disc 1. Columbia, 1997.

Track 4: 'No Blues' Miles Davis Quintet. Recorded live at the Plugegd Nickel jazz club. From the box set 'Complete Live at the Plugged Nickel', disc 6. Columbia, 1997.

Disc 2:

Track 1: 'Futon Sensei' Callum G'Froerer. Recording from author's Honours recital, 28th October, 2009.

Track 2: 'I Fall In Love Too Easily' Callum G'Froerer. Recording from author's Honours recital, 28th October, 2009.

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