Melodic Drumming in Contemporary Popular Music: An Investigation into Melodic Drum-Kit Performance Practices and Repertoire

A project submitted in fulfilment of the requirements for the degree of Master of Arts

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Declaration by the candidate

I certify that:

- This thesis is entirely my own work
- Due acknowledgement has been made where appropriate
- The work has not been submitted previously, in whole or in part, to qualify for any other academic award
- The content of the thesis is the result of work which has been carried out since the official commencement date of the approved research program

Candidate's signature:

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Abstract

This project is an investigation of melodic drum-kit practices in popular and contemporary music. The development of melodic drum-kit playing techniques has helped create a more inclusive role for drum-kit players within ensembles and has increased the potential for drum-kit players to present solo elements in performance. The project artefacts of my research are six compositions presented on CD. They demonstrate performance and compositional techniques that encourage a melodic approach to drum-kit performance.

My research involved several methodological approaches these included: a) professional practice-based research, b) music composition and transcription, c) interviews with significant musicians familiar with drum-kit melodic practices and d) elements of autoethnography.

I refer to particular drum-kit performance techniques and practices such as mirroring, thinking melodically, spatial relationships between drum-kit instruments and ensemble players, as well as, internalising melodic and harmonic ideas and being in the moment. I have shown in my compositional project that melodic elements in drum-kit performance and composition encourage a broader and more inclusive role for drummers in improvised performance. This is evident in the ensemble versions of compositions submitted as part of this study.

Artifacts

- 1. CD 1, recording of six project compositions featuring drum-kit performance element only
- 2. CD 2, recording of six project compositions featuring drum-kit and ensemble performance
- 3. Scored transcriptions of the six project compositions

Introduction

1.1

The musical sounds and styles created by players of the drum-kit commonly used in Jazz and popular music of the 20th and 21st centuries broadly relate to two performance roles. The first involves drummers as the central rhythmic creators within musical ensembles. The second role involves drummers as the 'keepers of tempi': that is, drummers whose role is to maintain a metrical pulse.

Both roles are important to popular music-making in the western tradition. However, during the 1940s and 1950s a style of drumming associated with the jazz style *be-bop* allowed drummers much more musical scope. *Be-bop* involved drummers thinking beyond the role of 'time-keeper' and encouraged them to explore musical ideas on the drum-kit more closely associated with melody. The melodies created by *be-bop* musicians were highly rhythmical in nature and hence could be translated to the drum-kit.

For reasons I shall demonstrate in my exegesis this drumming performance style declined from the peak of *be-bops* popularity in the latter half of 1940s to mid-1950s. Suffice it to state here that the popularity of rock and roll, (a popular dance craze of the 1950s) required drummers to simplify their musical vocabulary and return to the role of 'keeper of the tempi'. This, however, did not end the evolution of a melodic language for drumkit players.

In terms of world music genres the idea of pitched and melodic percussion is not new. For example, Gamalan music of Bali or Tabla players of the North Indian musical tradition both genres make use of fixed pitch tuning. However, my project focuses on practices associated with jazz and popular music drum-kit performance and the creation of melodic elements in composition, which have evolved during the last fifty years.

Further advances in jazz such as the 'cool school' pioneered by Miles Davis and later freer directions pursued by jazz musicians, were a constant challenge for drummers.

The central focus of my project is a folio of musical compositions conceived to encourage the exploration of "melodic drumming" by solo drummers as well as other musicians. By melodic drumming I refer to drum-kit performance and related techniques, which facilitate the creation of melodic elements in performance and composition for drum-kit players. This folio of work will contribute to new repertoire for contemporary drummers and will be supported by this exegesis.

1.2

Rationale

The rationale for my research involves exploring ways of broadening the role of drum-kit players in contemporary ensembles and to expand the opportunity to play a more active part in the compositional process. My focus has been to explore 'organic time', rather than metronomic time. 'Organic time' includes elements of pathos and emotion that often require the time to emerge non-metrically, rather than the performance of strict metronomic repetitions.

The role of the 'time-keeper' involves the drummer supplying a constant rhythmical flow, allowing other ensemble players to be layered on top of the drum part. This layering approach is used extensively in modern commercial music-making.

The important point is that although the drummer is involved in a musical process, they are mainly functioning as 'time-keepers'. I maintain that the drum-kit is the last contemporary instrument to evolve melodically. With this in mind I have explored techniques and performance styles within my project work that facilitate a more inclusive performance-compositional role for drummers. My folio of compositions show a diversity of musical applications utilising a melodic approach to drum-kit composition and performance.

1.3

Melodic drumming

Melodic drumming, as mentioned above is a term I use to describe drum-kit performance and related techniques, which facilitate the creation of melodic elements in performance and composition for solo drum-kit performers. That is, melodic ideas become a more central focus for compositional development and improvisation. This shifts the usual emphasis on the role of drummers from the two rhythmic related roles described in the introduction to that of creators of melody. For most drummers a sense of musical identity relates to their role as creators of dynamic subtleties and rhythmical intensities to music.

However, I feel that the experimentation and inclusion of melodic devices in contemporary drumming is in keeping with the musical compositional climate of our time. That is, rather than viewing drumming solely as a 'time-keeping' device, the role traditionally played by drummers, I believe there are infinite possibilities for drummers to expand their musical vocabulary. I am not advocating that the traditional role of drummers, or their playing techniques be abandoned, rather I am seeking to expand it.

Thus, the focus of this project is to explore the melodic potential of drum-kit performance, through improvisation and composition. The melodic and harmonic structures presented in the compositions were composed from the drum-kit. Performing the drum-kit part first, then adding the other instruments later ensured that the melodic-harmonic content emanated from the drum-kit. As I shall show, tuning the drum-kit to specific notes and exploiting tonal variations whilst in performance changes the melodic/harmonic function of the drum-kit within the ensemble.

1.4

Key research question

My primary research question was: To what extent can drum-kit performance and composition practices include melodic elements?

Secondary questions included:

1. How can melody be voiced on the drum-kit?

- 2. What techniques are needed to realise melodic drumming?
- 3. To what extent can compositions involving melodic drumming be inclusive of other instrumentalists?

1.5

Methodology

Methodological approaches included: a) professional practice-based research, b) music composition and transcription, c) interviews with significant musicians familiar with drum-kit melodic practices and d) elements of autoethnography.

My research methodology is informed fundamentally by my professional practice and that of my peers. Participants involved in this study were contemporary drummers and other performers involved in the creation of melodic elements for solo drum-kit performance in solo or group composition.

a) Professional practice based research

I have been a professional drum-kit performer for over thirty years. Many of my performances take place in studios and community venues. Through my professional practice I have acquired a performance skill-base informed by compositional and performance knowledge set in a broad Australian popular music context.

Discussing arts practice as research Sullivan comments on the importance of studio and community spaces and describes these musical environments as "robust sites of inquiry" he observes:

Artist's studios and other such places used for the creation and critique of new knowledge are theoretically powerful and methodologically robust sites of inquiry. In practitioner research, the artist-theorist can be seen as both the researcher and the researched... Settings such as those opened up by digital environments, cultural collaborations and community spaces are creating new

places for creative and critical inquiry that offer opportunities for different forms of research and scholarship... Artists explore these places in ways, which disrupt assumed boundaries. (Sullivan, 2005, p.111)

My research and project relate to changes in social awareness about assumed boundaries in the Western cultural perception of drum-kit performance. Although Sullivan refers to visual arts practice I agree with his view that sites of artistic action (including music performance based action) are places and spaces that offer opportunities for different forms of research and scholarly reflection. It is in these sites that much of my professional research is conducted and developed.

b) Musical composition and transcription

The central aim of my work is to explore and extend the potential role of drum-kit performance in a contemporary context. My project folio of compositions for drum-kit explores drumming techniques that facilitate the creation of melodic elements in contemporary drum-kit performance. A variety of stylistic genres in melodic drumming practices are reflected in the compositions.

The compositions are accompanied by scored representations of the music. As part of this study two CDs of the performed compositions are presented: 1) a complete ensemble recording and drum-kit realisation. 2) drum-kit tracks only. The two sound recordings explore processes, which involve melodic drum-kit playing in a solo context and in an ensemble setting.

I have realised scored transcriptions of each of the compositions to facilitate their recreation by other performers. The capacity of notated transcription to accurately represent all nuances contained in a composition is limited. However, as List (List, 1974, p. 375) comments, "The evidence indicates that transcriptions made by ear in notated form are sufficiently accurate" [for the recreation by others].

I devised notation that represents the melodic nature of the compositions as accurately as possible. The notation I adapted is similar to piano notation in that the drum-kit part is split between the treble and bass clef. Drum-kit notation is traditionally scored in bass clef. However, due to the melodic nature of my compositions I believe scoring the melodic parts in treble clef and the non-fixed pitch drum-kit parts in the bass clef gives the most accurate scored representation of the music. The drum-kit is not generally scored with actual pitches, rather the instruments that make up the drum-kit are assigned their own space within the staff. For example, the bass drum is usually notated on the first space of the bass clef, the snare drum on the third space, hi-hats and cymbals on the top of the staff and the toms within the second and fourth spaces.

I believe that maintaining this system facilitates ease of reading and is the most familiar notation to drum-kit players. The melodies and fixed pitches are notated in the treble clef, thus clearly representing the fixed and non-fixed pitch elements contained in the compositions.

c) Interviews

I interviewed six key practitioners in the field of contemporary music-making. Criteria for the selection of the interviewees included: 1), being still active in the contemporary music performance scene, 2) being experienced improvisers and 3), having extensive teaching experience in contemporary musical practises. Their contemporary practice is important because their opinions reflect current trends of melodic elements in jazz and improvised musical practises. The interviewees are still active in music performance, and their insights are formed from lived experience in contemporary music-making. I shall refer to these interviews throughout this exegesis.

Drummers interviewed include David Jones, Andrew Gander and Jim Black.

Gander's approach to drum-kit performance involves the study of significant drummers and assimilating their sound and techniques into his own musical expression. Black perceives the relationship between drums and cymbals as "intervallic". In this way Black perceives, his drum-kit performance style as melodic. In their teaching role they have

contributed significantly to the exploration of contemporary performance drum-kit techniques.

d) Autoethnography

Autoethnography is a qualitative social research method through which the researcher documents her or his ethnic background and social history. Ellis describes autoethnographic writing as writing which

conveys the meanings you attach to experience. You'd want to tell a story that readers could enter and feel a part of. You'd write in a way to evoke readers to feel and think about your life and their lives in relation to yours, you'd want them to experience your experience as if it was happening to them. (Ellis, 2004, p.24)

Russell (1999), discussing film making observes:

A common feature of Autoethnography is the first person voice-over that is intently and unambiguously subjective. ...the multiple possible permutations of [voices] generate the richness and diversity of autobiographical film making. (Russell, 1999, p.9)

Following Russell, I acknowledge that elements of my texts are 'unambiguously subjective' but note that they are contextualised in evidenced and documented events.

Further, autoethnography is a genre of writing and research that connects the personal to the cultural, placing the self within a social context (Reed-Danahay, 1997). Placing the self within a social context is an important aspect of an improvising musician's life. Acquiring a personal musical voice is a life-long process and connecting that personal musical voice in a culturally relevant way is an important aspect of a contemporary musicians work.

The autobiographical discussion below relates to my own practice as a musician and how life experience has lead me to conclusions formed in my research. As such the autobiographical elements discussed below span years of my professional practice and relate to autoethnographic processes.

2 Autobiographical context

2.1 Early influences

I became interested in music, and drumming in particular, from the age of six years. At home I was surrounded with music. My father was a musician and bandleader. In 1966 I began regular public performances as a member of his band after he purchased a hotel in the city of Leeds in the north of England. Around this time I began drum lessons and acquired a basic knowledge of drum-kit playing techniques with Jimmy Hanley the drummer in my father's band and had the opportunity to practice and experiment with these techniques through regular performance.

My musical identity formed during this early period of my life. Lessons in musical performance were learned on the bandstand. I was severely reprimanded for any musical indiscretions made, such as losing my place in the music or not playing in time with the rest of the ensemble. The most valuable lessons I learned during this period were that each musical performance was unique and a strong performance technique was necessary to maximise the feeling of the music. Looking back on this point of my musical development helped me trace the evolution of my present-day performance techniques and musical attitudes.

My family migrated to Australia from England in September of 1968 and up until my mid-teens most of my music-making involved accompanying my father who played the button accordion in Melbourne and other Australian states. We played usually as a duo consisting of button accordion and drums. The repertoire my father and I performed in those days was a combination of traditional Irish music and contemporary popular songs.

2.2 Duo performance

It was due to the fact that there were only two of us that I became increasingly aware of the melodic possibilities of drum-kit.

Green comments on the duo relationship by saying;

The simplest partnership in music exists between two people playing a duet together. The duo ensemble is an ideal demonstration of the principle of entrainment, which can then be applied to more complex ensembles. (Green, 2003, p. 27)

Playing as a duo demands special attention is given to dynamics and the spontaneity of musical expression. For example, it is important when playing a gently delivered passage to leave enough rhythmical space and yet support the other musician, thus maximising the potential of the musical performance.

The use of rhythmical patterning in contemporary drumming is accepted as standard practice. In a duo setting, much variation and flexibility of rhythmical patterning is needed to maximise musical expression and spontaneity between the two performers. It is important to respond to space and dynamics during a performance, as these become essential elements in achieving a satisfactory balance between two instruments. I shall return to notions of spatial and dynamic elements of melodic drumming.

2.3 Traditional Irish influences

My father and I performed a great deal of Irish traditional music. Traditional Irish music has a quality that could be expressed as 'fire'. It is best understood by the way Irish musicians sometimes interpret time, particularly dance-time. The rhythm of the music must be able to sustain the dancer's movements. My father once referred to a drummer, who had difficulty in maintaining a consistent time-feel, by saying that "He had no air". He meant that the drummer experienced difficulty in creating a sense of buoyancy in his playing, an essential element in the performance of all Irish dance music. Jigs, Reels,

Hornpipes all require musicians to play in such a way as not to "stick the dancer's feet to the floor" (Jordan, 2004, pers, comm).

Ballads are another important part of Irish culture and traditional music repertoire. Here, the emphasis is on the lyric, rather than the tempo or intensity generated through the time-feel, as is the case when performing Jigs and Reels. The ballad demands a very different approach from a drummer in that it is important not to obscure the lyric or instrumental melodic content by playing too loud or cluttering up the music with unnecessary complexity. The challenge for drummers in playing ballads is to create a mood for the song as well as rhythmically supporting other members of the ensemble. This is best done using a minimalist approach. This is also true for the jazz ballad. That is, focusing on the slow underlying rhythm of the song and leaving as much space as possible whilst still maintaining a sense of stability and security in the time-feel. These ideas are reflected in my project composition Last Ballad.

2.4 Teaching experience

As my interest in music deepened I sought a formal education at the Victorian College of the Arts, Melbourne, in 1983. Here I later lectured in improvisation as well as principal study drum-kit until the year 2000. I also contributed to the contemporary music scene both locally and internationally.

During my time at the Victorian College of the Arts I was encouraged by my colleagues to make musical decisions that related directly to my personal perspective of musical performance, rather than follow any formula developed by other musicians. From these experiences I developed practices in contemporary music-making and drum-kit performance that focused on inclusive interplay within ensembles. Certainly during this period my approach to improvising as a soloist and as an ensemble player involved a melodic focus. Indeed the melodic content of my music- making has been central to the evolution of my personal style of drum-kit performance, as was my on going experience of differing music styles and how different musical instruments relate to each other sonically, particularly to the drum-kit. The above outline of autobiographical events and

experiences, which contributed to my musical development, are paralleled with my experience of drum-kit performance repertoire and techniques. These techniques evolved in the Western European jazz scene in the twentieth century. I shall now discuss the evolution of drum-kit performance and refer to key contributors to the evolution of melodic drumming.

3 Historical context

3.1 Early developments

The evolution of the drum-kit began in the music of street marches and the marching bands of New Orleans, United States of America. Within the first few decades of the twentieth century the drum-kit had become an integral part of popular music-making, supplying colour and rhythmic spirit to the emerging theatre and jazz scene. The early 20th century was a significant period for the development of drumming and rhythmic invention in popular music. Popular drum-kit developments can be traced to the mid-19th century. Mc Peek, observes

In 1838 the New Orleans *Daily Picayune* remarked that New Orleans's love of brass bands amounted to 'a real mania'. On Sundays parades began early, their number and fervour increasing as the day wore on... Many free blacks [freed from slavery] were given a formal musical education and by 1840 they had organised a philharmonic society and had a theatre of their own. Following the Civil War black marching bands were popular, and their music constituted one of the foundations for the growth of jazz. (Mc Peek, 1954, pp.67-68)

The American Civil War ended in 1865. The army disposed of large numbers of musical instruments that had no further military use. The availability of brass band instruments to improvising musicians of that period helped later define the musical blend that was to become known as jazz. Mc Peek (1954) comments further:

Although elements of a jazz style developed in several urban centres of the USA, the earliest consistent such style arose in New Orleans; hence the city is generally regarded as jazz's birthplace, with NEW ORLEANS JAZZ its first manifestation as an independent genre. (Mc Peek, 1954, p.167)

In the early 1900s musicians (most of whom came from the outdoors marching band tradition) began to perform music in-doors with increasing regularity, especially in the brothels and bars of the red light district of Storyville New Orleans USA.

The marching band musicians introduced the basic instruments of the modern-day drum-kit with their combination of field bass drum, snare drum (a double headed drum with wire strands attached to the bottom head). Drummers were employed to play music derived from the ragtime tradition (a jazz piano style) indoors. This change in venue enabled the drummers to collect and play percussion instruments they no longer needed to transport. In this way more exotic instruments were added to the drummer's kit such as tom-toms from China, cymbals from Turkey as well as wood blocks, cowbells and a variety of other percussive sounds. This was a musically innovative time.

3.2 Drum-kit instruments

The invention of the bass drum pedal was an important development in the evolution of the drum-kit in that for the first time a drummer could perform rhythms that would have previously required several musicians to perform.

The bass drum added another melodic voice to the drum-kit and phrasing between bass drum, snare and toms became common performance practice. By phrasing, I refer to the creation of musical shapes in real performance time.

The introduction of the hi-hat component completes the make-up of the early drum-kit. The first models, known as the *Lowboy*, comprised of two cymbals played by applying downward pressure with the left foot. The later invention of the *Hi-Hat* stand in 1937 was achieved by simply raising the height of the cymbals. This enabled a drummer to execute rhythms with the use of both hands and feet – rhythms that up until that point were

impossible to be performed by one musician. The inclusion of the bass drum pedal and the hi-hat cymbal completed the standard drum-kit as it is played today.

The basic drum-kit formula requires the drummer to play cymbals, snare drum and toms with hand held sticks, brushes, or mallets. The feet are used to play the hi-hat cymbals and bass drum. Thus I refer to a standard drum-kit as including a bass drum, a snare drum, two or more toms, a hi-hat and at least one cymbal (see figure 1). These configurations of sounds enable a drummer to play most common rhythms and timbres associated with contemporary Western popular music-making. Below is a diagram of the modern drum-kit.

Figure 1



4 Significant contributors to melodic drumming in popular music

There is not space in this exegesis to comment on all the drummers who played a significant role in the development of drum-kit performance in western popular music and especially melodic drumming techniques. However, special mention must be made of the contribution of Warren 'Baby' Dodds, Buddy Rich, Max Roach, Art Blakey, Paul Motion, Tony Williams and Jack De Jonette. Below is a brief chronological description of the contribution made by each of the drummers.

4.1 Warren 'Baby' Dodds

Dodds was one of the first professional drum-kit performers to emerge from the marching bands in the 1900s in the USA. Before Dodds other available members of the ensemble performed the percussion parts. If the ensemble had the desired front line instrumentation then any additional musicians would play the 'traps'. The 'traps' are commonly understood as a collection of percussion instruments, consisting of bells, whistles, and assorted percussion instruments and was the precursor to the drum-kit.

It is understandable that frontline players (saxophone, trumpet, clarinet) would take a dim view of being demoted to the rhythm section since it was commonly understood that a theatrical element was also required from the percussionists. I believe the perception of the drummer playing the role of the buffoon still exists today. Dodds was one of the first drummers to make the transition from the marching band tradition to seated drum-kit performance and I believe that he brought dignity to the professional drummer's role.

Robinson (1980) comments on Dodd's achievements

Dodds was the most important jazz drummers of the New Orleans style, and his equipment and technique became standard. His basic style derived from the pressroll, [the press role is performed by applying pressure to each stick in an alternative continuous rhythm on the snare drum] which he used with remarkable ingenuity and drive, but he was also noted for introducing colouristic effects on the floor-tom, cymbals and other auxiliary pieces. His most important work was

done in the 1920s with King Oliver (when Dodds occasionally played melody parts on a slide whistle) and Louis Armstrong; his style can best be studied from two recorded performances of 1946, *Spooky Drums and Maryland*, with his own explanatory narration, and from a recorded account of his technique (Robinson, 1980, p.519).

Typically Dodds solos feature four beats to the bar on the bass drum, eighth notes played on the rims as well as syncopated rhythms on the toms. Dodds solo techniques created polyrhythms and strong melodic effects. Drumming techniques created by Dodds during this early period of drum-kit evolution are still a central core of modern drumming language.

Dodds describes his method of tuning his drums as "tuning it up the way I think it should be" (Dodds, 1947). Further information will be given later on tuning in relation to melodic drumming. Dodds was a major influence on the early drum-kit performers; indeed, the use of the broken triplet feel, (see figure 2) and the fundamental time-feel of jazz drumming, has been accredited to him.

Figure 2



In terms of innovations in instrumental timbre Dodds use of different textures derived from playing on the rims of the drum, his use of cowbells, wood blocks and cymbals struck with a stick made him one of the most innovative drummers of his time.

He was one of the first drummers to employ the use of short drum solos in an ensemble setting. Other performance techniques developed by Dodds included finishing off solos by adding climactic decorative flourishes and punctuating musical statements in response

to other soloists. Most importantly to this exegesis, he developed a playing style that was melodic even though his playing retained many elements from the marching band tradition.

In summary, Dodds is recognised as a pioneer in the evolution of the musical application of drum-kit performance techniques. As Dodds came from the marching band tradition it is understandable that much of his musical vocabulary emanated from this genre. His use of press-rolls and rhythmical accents that defined the marching band tradition were fundamental to the development of his drum performance practices and the emerging musical style known as jazz. Dodds was recognised as a musician who outlined shape and form of early jazz composition and as a performer who shaped harmonic and melodic events performed by his musical colleagues, thus significantly contributing to the evolution of melodic drum-kit performance technique and style.

His influence on drum-kit performance has remained to the present day. Another early performer, Art Blakey, did much to further the direction pioneered by Dodds.

4.2 Art Blakey

Blakey sought out, and included in his performances, musicians from other musical cultures who introduced new melodic elements to the jazz repertoire. White Describes Blakey's performance style as being

...characterized by an even and predictable implication of pulse on the sock cymbal, (hi-hat) providing a strong, flexible sense of metre while allowing him to create polyrhythms and participate on an equal footing with the [other ensemble] instrumentalists. Ironically, his implied rhythmic precision was perhaps the most important factor leading to the exploration of 'melodic' drumming, in which pulse is less explicit, in the 1960s and 1970s. (White, Grove Dictionary of Musical Instruments, 1980, p.776)

Blakely's time-feel was precise and executed with great clarity. In common time he stressed the second and fourth beat with the Hi-hat and expressed a sense of urgency through this way of anticipating rhythmical placement. Blakey's drumming style included a consistent Hi-hat pulse, as well and a use of long press-rolls that led in and out of musical sections. This second feature of Blakeys performance style is recognition of Dodds' influence in that both musicians used the press-roll to great effect, as I do. The press -roll is a drumming technique used to create a long note, an important element in melodic drumming. I shall discuss this technique in more detail later.

It is Blakeys solo work, however, that made him an important figure in the development of melodic drumming. He had the musical ability to communicate spontaneously with other members of his groups. He did this by using a similar melodic language and rhythmical placement to the other members of the ensemble. Indeed, Blakey displayed a musical freedom that allowed him to create melodic elements in his drumming; often using mallets [drum sticks with soft tips], which gave his soloing a distinct flavour. Blakey's later work increasingly involved combining Cuban, African and South American stylistic elements.

Finally it must be noted that Blakey was responsible for introducing younger musicians to melodic drumming practices. Max Roach, another innovative contributor to the evolution of melodic drumming was a contemporary of Blakey and a drummer widely noted for his melodic approach to drum-kit performance.

4.3 Max Roach

Maxwell Lemuel Roach, (1924-2007) American jazz drummer, percussionist and composer was a major contributor to the evolution of jazz music and a melodic performance style for drummers. He started his musical career as a vibraphonist before switching to drum-kit. Roach performed with many innovative musicians including Duke Ellington, Dizzy Gillespie, Charlie Parker, Charles Mingus and Sonny Rollins.

Roach was one of the pioneers of *Be-bop* drumming, recording the Savoy session (one of the first *be-bop* studio recording sessions) in 1945 with Charlie Parker; Parkers first recording under his own name. Roach took part in a series of recording sessions in 1948-50 with Miles Davis, which were later issued with the title *Birth of the Cool*. (Davis, 1949) The *Birth of the cool* album was an important directional change from previous bebop jazz performance style. The *Birth of the Cool* featured instruments such as tuba (John Bill Barber) and French horn (Junior Collins) and was orchestrated by arrangers Gill Evans, Gerry Mulligan and John Lewis. The music was not an immediate commercial success. However, it did herald a new softer and more melodic direction in jazz.

In 1952 Roach co-founded the record label Debut Records with bassist Charles Mingus. This label released a recording of a concert called *Jazz at Massey Hall*, featuring Charlie Parker, Dizzy Gillespie, Bud Powell, Mingus and Roach. Roach expanded the *be bop* formulae by exploring different time meters as demonstrated on the recording *Jazz In ¾ Time*, (Roach, 1957) recorded in 1957. Solo playing on this recording is reminiscent of Dodd's in that Roach plays an ostinato bass figure with the feet whilst freely improvising melodically with the hands. This formula of soloing freely with the hands over an ostinato foot pattern is still widely used today. The foot pattern acts as an anchor, whilst the hands are free to create melodic ideas on the toms, cymbals and snare.

In 1960 Roach composed the *We Insist! - Freedom Now Suite* (Roach, 1960,) followed in 1966 by *Drums Unlimited* (Roach, 1965), a recording of duo pieces with his then wife Abbey Lincon. These recordings are significant to the evolution of melodic drumming partly because the compositions feature the drum-kit so prominently.

Roach's performance style involved playing the drum-kit as a lead instrument and creating melodic variations. Roach played melodies and melodic motifs rather than conventional jazz time-keeping popular among other jazz drummers of that time.

Blakey and Roach continued the linage established by Dodds by playing solos comprised of snare drum roles and accents interdispersed with melodic toms and bass drum figures.

This format is still in use today. Drummer Tony Williams also continued and developed this tradition.

4.4 Tony Williams

Williams deserves a special mention as a significant contributor to the development of a melodic language for drummers. His advanced concept of 'time-play' (see later definition of time-play) and unique use of space (space refers to silence within musical passages) enabled him to perform melodic passages and musical shapes brilliantly. Williams would often phrase in a melodic style similar to a horn player or other melodic instrument. He was a technical virtuoso. The musical communication between the members of the Miles Davis ensemble (of which Williams was a member) was intuitive. The musical trust that existed between each member of the group enabled them to act spontaneously and without adhering to conventional ensemble performance roles. This expanded performance role enabled Williams' to create more detailed and longer musical phrases than other drummers of his time. His rhythmical innovations influenced many of today's leading drummers.

Williams tuned his drums in a conventional manner. That is, usually with the interval of a perfect 4th between the toms. Contemporary drummer Cindy Blackman noted that "Thanks to Max [Roach] and Tony [Williams], in terms of how they tuned their drums they [the drum-kit] have become a much more melodic statement" (Blackman, 2009).

During the late 1960s Williams became a member of the Miles Davis group. Members of this ensemble included Wayne Shorter (saxophone) Ron Carter (bass) and Herbie Hancock (piano). In this group Williams developed a performance style, which (in my opinion) has not being surpassed. This style involved a combination of inventive time-play and free melodic invention. His use of timbral colour, texture, rhythmical articulation and dynamic control, set a new standard at this time.

Williams developed his performance style under the direction of Miles Davis and further with his own band *Lifetime*. He was a major contributor to the fusion of jazz and rock elements in popular music performance. Williams stated

Everybody talks about *Lifetime* as being the first fusion band. But it was really a sort of a throwback to what was going on when I started out in Boston. Fusion, at least in its old jazz-rock form, was never mentioned by anybody. (Williams, 1997, p.2)

This statement illustrates that the musical development of ideas and playing techniques (including melodic ideas) of Williams were a natural evolution for him rather than a premeditated commercial consideration. Williams continued to perform and compose up until his death in 1997. He was part of a period of great musical innovation that defined future directions in improvised music, and developed a playing style that contributed greatly to the development of a melodic language for drummers.

4.5 Paul Motion

Motion, like Williams, used instrumental texture and colour to voice melodic ideas on the drum-kit but through a different means. Williams, a drum-kit virtuoso used his formidable rudimental technical facility to express melodicism within exquisite time-play. [I shall outline the nature of a rhythm pattern system known as 'rudiments' in my discussion on drum-kit education] Conversely Motion understated the rudimental aspect of his playing and explored ways of implying pulse differently from those found in rudimental drumming.

On a recent trip to New York (2005) I met Paul Motion and heard him perform as a member of the audience at the Village Vanguard. The dynamic of the ensemble (the volume of each individual instrument as well and their sonic relationship to one another) was beautifully balanced throughout the performance. That is to say, the relationship of sounds created by the ensemble and the flow of musical ideas from one musician to the other was executed with fluency and spontaneity.

The performance began with Motion playing an introduction on solo drum-kit. Motion improvised through the compositions. It must be noted that commencing the concert in this fashion set the musical parameters for the rest of the performance. The interplay between the ensemble members was spontaneously structured. By this interplay, I mean that the ensemble performed in a natural unaffected manner, free from clichés and responded to each other spontaneously. Motion has developed his melodic approach to drum-kit performance for over 50 years.

Braman notes:

He [Motion] developed a style of drumming that was interactive as well as melodic. Motion did not merely play time but rather exchanged musical ideas spontaneously in an equal partnership with the other members of the trio. This trio has had a lasting influenced on many musicians who perform in the trio format today and Motion is an important figure in the development of melodic drumming. (Braman, 1996, p.142)

Explaining how Motion avoids the 'time-keeper' role preferring to perform spontaneously within the trio, Braman continues:

By the time he was playing with Paul Bley (1963-4) and Keith Jarrett (1966-77). Motion had nearly eliminated the ostinato time-keeping patterns typically played on the ride cymbal and hi-hat and developed an unusually spontaneous approach in which the use of cliché figures was kept to a minimum. (Braman, 1996, p.142)

Drummers, especially melodic drummers, who take an active part in the compositional process, have the opportunity to include elements of their own rhythmic work. Braman supports this by saying

In the 1970s Motion began composing, first for the filmmakers Peter Watkins and Stan Vanderbeek, and later for his own groups. His writing, like Jarrett's, is eclectic, but tends to be more abstract, favouring structures that are paradoxically at once open and well organised like Motion himself in his drumming style. Motions groups employ varied textures of sound and an unusual diversity of musical concepts. (Braman, 1996, p.142)

Braman's comment on Motion's ability to play time without resorting to clichés or traditional use of ostinatos, illustrates two important features of Motion's playing. Firstly, Motion does not play patterns; rather he improvises in a continuous flow of musical ideas in real time. And secondly, by not playing patterns he is free to respond melodically and harmonically to the collective music-making.

Being an equal participant in the creation of collective music-making is central to my practice, my project and this study. The final drummer I shall refer to is Jack De Johnette.

4.6 Jack De Johnette

Jack De Johnette (born in Chicago in 1942) studied the piano from the age of four. He began playing drums in high school at age fourteen and continued piano lessons at the Chicago conservatory of music. De Johnette collaborated with many leading figures in Jazz, including, John Coltrain, Miles Davis, Ornette Coleman, Bill Evans, and Keith Jarrett.

De Johnette's drumming is highly inventive and melodic. I suggest this is due to his understanding of functional harmony as well as his natural melodic awareness. He has a firm understanding of the functional aspects relating to time-keeping a drummer must perform in an ensemble and yet he also explores melodic, harmonic and textural elements so important to this study. In 1968 De Johnette performed with Miles Davis on the album *Bitches Brew* (Davis, 1969) In the same year he recorded an album under his own name called the *The De Johnette Complex* (De Johnette, 1968) and later recorded duets with Lester Bowie and John Abercrombie (the album *Pictures*, (De Johnette, 1976, for

example) that featured the drum-kit as the central melodic instrument. This recording demonstrates De Johnettes melodic/harmonic inventiveness on the drum-kit. He achieved this using certain improvisation techniques, which I shall discuss later. They include open tom melodies played with mallets, cymbal melodies and intervallic interplay between bass drum, snare and hi-hat. Interestingly, for this recording De Johnette tuned his snare and bass drum a minor 3rd apart (see later discussion on tuning).

In the 1980s De Johnette enjoyed major success with his collaboration with Keith Jarrett and Gary Peacock producing the (Jarrett, K, Peacock, G, De Johnette, J, 1983, *Standards*, ECM, New York.) *Standards* albums. Here, De Johnette performs in a standard jazz setting spontaneously responding with the other members of the trio and soloing on the drum-kit whilst observing forms and structures that occur within the standard jazz repertoire. I shall discuss performance practice in relation to melodic drumming later.

De Johnette is still a major force in contemporary drumming, particularly in the world music scene where melodic drumming is significant. His latest collaboration with Gambian Kora player Foday Musa Suso produced the album *Music from the hearts of the masters* (De Johnette, and Suso,. 2005, as well as a recording for *of Om*, audio relaxation and meditation entitled *Music in the key of Om* (De johnette, 2004). De Johnette has explored the boundaries of contemporary drum-kit musical performance.

In summary, the evolution of a melodic language for drummers can be found in the work of Dodds, Roach and Motion through to contemporary drummers like Williams and De Johnette. Dodds' use of wood blocks and drum rims enabled him to play melodies featuring pitches other than just the basic drum tones. Blakey and Roach continued the development of a drumming style, which required four-way co-ordination using the feet, and use of the bass drum as an added melodic voice. This suited be-bop music in that be-bop melodies are usually highly rhythmical and can be played convincingly with the limited pitches available on the drum-kit. Motion and De Johnette favoured a performance style that expressed melody on the drum-kit through the use of textures and

colours. De Johnette balanced this textural approach with exquisite time-play. This balance of texture, colour and time-play has become a feature of contemporary melodic drumming.

5 Rudimental drumming

5.1 Educational context

Before discussing rudimental drumming in detail I shall contextualise the topic within my musical educational experience. Apart from the brief period of formal tuition mentioned previously in the autobiographical section, I am essentially a self-taught musician. I have, however, sought advice and direction over the years from many musicians, drummers and non-drummers whose willingness to share musical ideas and performance techniques have been pivotal to my personal and musical development. I shall now comment on current drum-kit education practices in Australia, their focus on rudimental techniques and how they differ from my own experience and to melodic drumming practices.

As discussed, my music education was largely informal, taking place amongst family musicians and as part of social and professional activity. Perhaps it is due to the fact that I was unfamiliar with the 'formal music' education processes found within schools that I perceived it as so removed from the music-making that I was familiar with.

The main difference I observed between my learning experiences in family and social music-making and of learning in more formal educational settings is the heavy focus given to playing technique in the latter. Rather than the ability to hear, feel and respond musically, the emphasis in much twentieth century and current drum-kit tuition is centred in particular on those techniques fostered in the system known as the International Rudiment System.

In fact this system includes mostly American practices and some created from snaredrum techniques from Switzerland (see below). This is not to say that a good drum-kit technique is not an important part of successful music-making. Indeed, I, like most drummers, make use of rudimental techniques in the creation of melodic material. However the ability to create and sustain a musical feeling (as well as appropriate metronomic time) throughout a song or composition is central to successful music-making and melodic drumming.

The heavy focus on the International rudiments system is still so pervasive I shall now outline issues concerning the system's place in drum-kit education and performance practice. I suggest that the rudiments system might be considered to be the antithesis of melodic drumming.

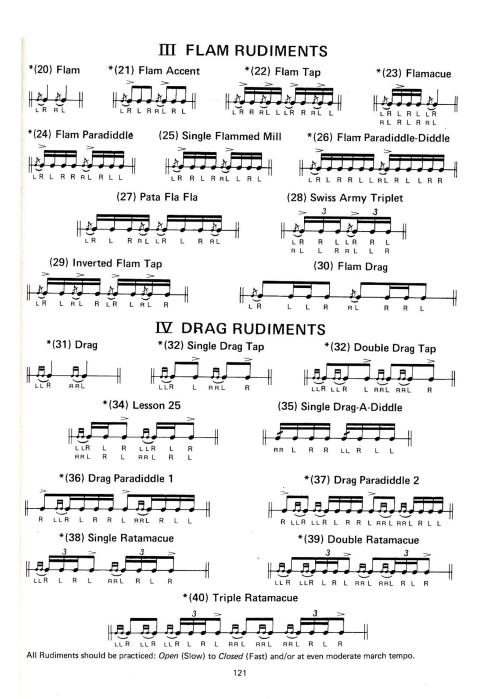
5.2 Rudimental drumming

Rudimental drumming involves the study and musical application of the International standard snare-drum rudiments. These rudiments are traditional standard performance techniques applied to the snare drum but also the rest of the drum-kit. Rudimental drumming emerged from the marching band tradition and includes the following techniques. (See figure 3)

40 INTERNATIONAL DRUM RUDIMENTS Reprinted by permission of the Percussive Arts Society, Inc. 701 NW Ferris, Lawton, OK 73507-5442 I ROLL RUDIMENTS A. SINGLE STROKE ROLL RUDIMENTS *(1) Single Stroke Roll (2) Single Stroke Four (3) Single Stroke Seven LRL **B. MULTIPLE BOUNCE ROLL RUDIMENTS** (4) Multiple Bounce Roll (5) Triple Stroke Roll C. DOUBLE STROKE OPEN ROLL RUDIMENTS *(6) Double Stroke *(7) Five Stroke Roll (8) Six Stroke Roll *(9) Seven Stroke Roll Open Roll *(10) Nine Stroke Roll (11) Ten Stroke Roll (14) Fifteen Stroke Roll *(13) Thirteen Stroke Roll II DIDDLE RUDIMENTS *(16) Single Paradiddle *(17) Double Paradiddle (18) Triple Paradiddle (19) Single Paradiddle-Diddle

* These rudiments are included in the original Standard 26 American Drum Rudiments.

120



(Rothman, 1983, pp120-121).

As can be seen the system involves not only the mastering of prescribed rhythmical patterns but also prescribed 'sticking' techniques (the ordering of left and right hand placement).

The rudiments are divided into roll (alternative hand strokes which create a sustained sound)), diddle (a double stroke), flam (a note/s preceded by a crushed note) and drag (also a flam but involving two preceding crushed notes) techniques

5.3 Buddy Rich and rudimental drumming

In the early part of the twentieth century drummers employed these rudiments to create much of their musical vocabulary. Furthermore, snare drum rudiments formed the basis for the development of drum-kit performance techniques in the first half of the Twentieth century especially in a jazz setting. Buddy Rich, a child prodigy, was widely recognised as a master of rudimental drumming. As Hosiasson observes:

Rich's technical prowess on the drum-kit is legendary.

Rich's playing is characterised by phenomenal speed and dexterity which made him one of the outstanding drummers of the 'swing' period. Favouring an extroverted style, he performed complex patterns with metronomic clarity and simpler lines with exquisite precision. (Hosiasson, 1980, p.838)

Rich's technique can be equated with terms such as virtuosic, athletic, precise and powerful. Whilst Rich's performances did not exclude melodic content, it featured complex rhythmical patterning to a great degree. He became a major role model for aspiring drummers. Thus, the centrality of international rudiments became all pervasive in drum-kit education in the second half of the twentieth century and remains so today.

Even in the current popular music scene power, endurance and speed are commonly understood as prerequisites for a formidable drum technique. These attributes are more commonly associated with sprinting athletes rather than musicians.

I believe the difference between a melodic approach to drum-kit performance and a rudimental approach, is that the melodic approach is in consistent referral to melodic or harmonic structures. This includes observing form and arrangement in live and recorded performances. Rudimental drumming however, involves performing pre-prepared rhythmical events that flow logically from one to another by varying rhythmical intensity.

5.4 Drum-kit examination repertoire

I believe that the majority of drum-kit examination pieces set in the Victorian Certificate of Education (recognised as a comprehensive collection of examination pieces for drum-kit performance in Australia) present limited opportunities for students to explore melodic ideas on the drum-kit. Further, there are few pieces in the drum-kit syllabus that specifically addresses the emotional aspect of the instrument. Rather the main body of works are technical studies along with sight-reading and rudimental exercises.

If we compare this imbalance with the syllabus of other instruments I believe that the drum-kit syllabus reflects an overly technical focus that distorts the role the drum-kit plays in contemporary music and which isolates drummers engaging in-group performance.

The pieces written for my project are not technical exercises. Whilst the compositions contain elements common to drum-kit performance practises, my primary objective in writing theses works was to compose music, not rhythmical exercises. Further, it is my hope that theses pieces will be played by drummers who are looking for drum compositions that have a musical context not merely a technical one.

6 Time-feel

6.1 The nature of time-feel

Time-feel refers to the durational nature of the tempo or pace of a composition and the light and shade provided by musical dynamics. Time-feel also relates to the timbral quality of sounds, as well as the intensity at which the time-feel is performed. Thus time-feel involves tempo, pace, dynamic s and timbre.

Time-feel is in fact, both things (time and feel) performed spontaneously. The feel of music refers to the spirit of the music; making meaning of the music, as well as the communicative emotional qualities of musical interplay. That is, durational elements join with all musical elements to create an emotional feel to a performance. Thus, the time or pulse of a musical performance has to be established and maintained to allow the full interpretation of a work to emerge.

Time-feel also represents a drummer's emotional response to musical-performance elements - not just measured metronomic repetitions. Spontaneous rhythmic variables (as mentioned above) involved in a jazz performance, make the jazz time-feel particularly challenging. Successive jazz styles and associated repertoire demand subtle variations of time-feel.

6.2 Drum-kit player responses to time-feel

Duggan agrees with this latter point and maintains that the performance of appropriate time-feel, and maintaining the "beat" are intertwined. He observed: "It is absolutely vital that the beat is kept" and the interplay has to be there, but the beat has to be there with intensity" (Duggan 2006, pers. comm). By intensity Duggan implied that the beat has to be interpreted with passion and concentration and time, rhythmical accuracy and note placement are integral factors in the communal understanding of pulse throughout ensemble performance.

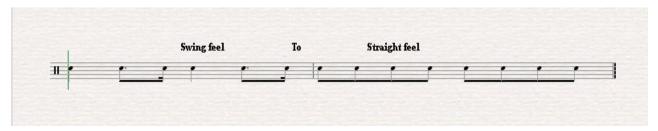
Whilst providing stability and a sense of security, playing time, from a drummers perspective, does not have to mean divorcing ones self from the ensemble musical dialogue.

The art of time-feel is in responding spontaneously to musical events occurring within the ensemble, whilst concurrently defining the form and shape of the composition. The musical possibilities are great. It is, however, the responsibility of every individual musician regardless of their chosen instrument to keep time and musical conversation alive. In this way, whilst it is important to perform music in time, it is also important to create the 'right' feel. A well-executed time-feel will bring to a performance a sense of authenticity and excitement. To participate actively in this communal process is one of my main musical motivations.

Time-feel can account for many differing renditions of the same piece of music. Indeed, different time-feels relate to different musical styles.

An example of the evolution of time-feel in popular music can be heard during a performance Chuck Berry's performance at the Newport jazz festival in the late 1950s. Berry, then an up and coming recording artist, was accompanied by some of the most well known jazz players of the day including the drummer Joe Jones. Jones played a traditional jazz time-feel to Berry's performance of his composition *Sweet Little Sixteen* (Berry 1958, February 24). In this performance Berry played a straight eighth feel rather than the swung eighth feel of the earlier jazz period, (see figure 2)

Figure 2



Jones played a swing jazz feel, a feature of mainstream jazz performance, whilst Berry used a straight eighth feel, now commonly performed by rock musicians. On this

occasion both time-feels were performed simultaneously thus heralding a new time-feel in popular music.

Another element of time-feel involves what Australian jazz drummer, Len Barnard, refers to as 'internal pulse' and 'external time' Observing how internal pulse and external time need to be combined Barnard commented:

.... Exterior time is firm, somewhat automatic and obvious. What comes from inside is more subtle. Interior time depends on instinct, particularly the capacity to adjust to the difference among players, while creatively blending them and pushing them.

A drummer's positive inner time impulses make possible, performances that are flexible, human and communicative. Drums are a musical instrument and if they're not musical they're terrible. (Barnard, 2005)

Here, Barnard defines crucial elements of time-feel and melodic drumming. According to Barnard, 'time-feel' involves 'interior' and 'exterior' time. Barnard defines exterior time as 'firm and obvious', referring to the collective interpretation of the time-play within the ensemble. Interior time according to Barnard is more 'subtle' as it comes from within. It is an instinctive aspect of time-play involving responding intuitively to the spontaneous developments of the time-play in musical performance.

Thus, time-feels are sculptured by the emotional, intellectual and conceptual needs of musicians who respond to unique events and musical attitudes of their time. The understanding of time-feel is important if a drummer wishes to play musical styles authentically and, of importance to this study, time-feel is a significant element of melodic drumming.

Focusing purely on the technical aspects of playing whilst in performance can remove musicians from the musical dialogue process. Gander points out that adherence to a

ridged approach to stating the time as a drummer can inhibit musical interplay. He feels that, "because of the nature of our instrument it will dictate the rhythmic way in which the music is played because we move so much more air" (A Gander 2007, pers. comm).

Thus Gander believes it is "important that drummers are extra sensitive and capable of being malleable" when playing with other people. He believes that insensitive drummers contribute to why some musicians "hate" drummers who dictate to members of an ensemble by a rigid patternistic approach to playing the drum-kit.

6.3 Time-feel and student drummers

The feeling and emotion evoked by music may go largely undiscovered by drum-kit students unless they are fortunate enough to have this aspect of musical performance encouraged and prioritised by their teachers. I shall illustrate this point by describing the usual process (in my experience) a new drum-kit student is likely to encounter. Firstly the correct way to hold the drumsticks will be explained, and then a rudiment will be introduced, along with some reading exercises or music theory. Finally a groove or pattern (usually a rock and roll pattern since these are the most basic) will be analysed and performed. This is a basic outline of a typical first lesson plan. My experience tells me that the student can be submitted to years of repetition of this process.

Working to achieve mastery of snare drum rudiments is an informative and essential process in the development of a strong drum-kit technique, as is striving to improve one's co-ordination and reading skills. However, focusing on slight patternistic variations, from week to week can frustrate a student and distort their conception of 'good' music-making. By 'good' music-making, I mean the feeling evoked by the music and the ability by the student to maintain this feeling and be "in the moment". For this reason I believe it is essential for every music student to have the opportunity to perform with other instrumentalists to explore their own musical creativity as often as possible.

Performing in group settings has two positive effects. First, students obtain immediate feedback on how their playing is being perceived by the other members of the ensemble.

Secondly, the student has the opportunity to learn aurally, adjusting their sound and feel, thus adapting to their musical environment. It is not my intention here to discourage the investigation of any musical practice. However, increasing the complexity of rhythms in a systematic way, along with focused development of complex co-ordination exercises can musically distance drummers from other instrumentalists and distort the student's perception of the important elements that facilitate successful musical performance.

6.4 The grid system

The most common complaint directed at drummers by other instrumentalists is that they play too loudly or play in an inappropriately complex manner. This is not surprising considering the focus of their practice and their often limited ensemble experience. Jim Black, during his visit to Australia in 2005, referred to the "grid" teaching philosophy employed in some European countries particularly Switzerland. The grid is a system of musical notation comprising of rhythmical and harmonic elements. This system is prevalent in Australian drum-kit teaching methodology (Black 2005, pers, comm) but in Europe the grid system is introduced at a later pedagogical stage.

The later introduction of the grid system encourages the student to enjoy an imaginative discovery of their musical nature. The student is not confined at an early stage of their musical development to focus primarily on playing in time or to perform in a patternistic way. Rather, the student is encouraged to respond spontaneously to musical stimuli.

This European model of early musical education is, in my opinion a far more effective teaching method in that it aligns the student with a good music-making principle, involving 'listening'. Once introduced to the grid the student has an opportunity to develop a natural curiosity about music, how they sound, as well as, a real sense of their musical ability.

6.5 Drum-kit playing in schools

Most children today do not experience music-making in their home. The depth of musical experience I refer to is usually found only in the school system. The school system is, for

many students the only opportunity to be involved in music-making; hence it is imperative that this experience be as meaningful and comprehensive as possible.

During the last six years I have been involved in teaching the drum-kit to primary and secondary school children. This is very different from my earlier teaching experience at the Victorian College of the Arts. Obviously primary students are beginners and not accomplished musicians. I have used the European role extensively in my teaching practise. The following anecdote illustrates how I approached a first drum-kit lesson with a young boy with learning difficulties.

I walked into a class of prep students with an average age of about six years old and asked to see a potential student. He looked nervous and unsure of what lay ahead. To further complicate things, the student had some learning difficulties, which made the situation more challenging. I engaged the student in series of activities that enabled him to experience the joys of playing the drum-kit whilst having no musical skills. I asked the student if he remembered what rain and thunder sounded like? He replied happily that he did, so I asked him if he could play the rain and thunder? He chose thoughtfully cymbal sounds to represent the rain and the toms and bass drum to play the thunder. This I believe stimulated the student's curiosity for further study. Requiring such a student to immediately engage with the rudiment techniques would not have been appropriate.

Financial and logistical problems such, as time restraints and room availability in schools, are great. Drum-kit tuition is usually conducted in a one on one format with little opportunity for the student to experience performance with other instrumentalists. This along with teachers focusing exclusively on a patternistic approach to drum-kit performance can distort a student's perception and how musical activities are experienced. Lone drummers in schools are rarely involved in ensemble playing. The feeling or intuitive nature of music is rarely explored, making it more difficult later in life for these students to adjust to musical challenges they will encounter in ensemble performance.

The situation is further complicated if the student is encouraged to study increasingly more difficult technical skills material (more complex patterns within more complex structures) without the necessary understanding or musicality to perform the material in an musical ensemble context. This can result in students experiencing confusion, or worse, disillusionment in their development.

6. 6 Beyond the grid

The performance of a simple rock drum pattern is not generally perceived as a difficult task. This is the starting point for most drum-kit students. However, many hours of practice is needed to perform a simple pattern and to realise successfully the subtle dynamic potential of each individual instrument that make up the drum-kit and its musical relationship to an overall drum-kit sound. Even more important is the ability to achieve a consistent time feel and sustain that time-feel throughout a composition, as well as interacting with other instrumentalists spontaneously. This is the essence of being an effective ensemble member and not the simple task that at first it seems.

Dave Weckl, an American drummer and 'clinician', known for his flawless drum-kit technique and mastery of the patternistic approach to drum-kit performance, sought advice from a teacher resident in New York City, Freddie Gruber.

Weckl felt he needed to expand his already considerable musical vocabulary. Producers would often ask him if he could loosen up a little, meaning rather than having a metronomic focus, adopt a more organic approach to the music to be performed.

I believe this shift from metronomic perfection to an organic performance style results from a need by musicians to expand and develop the communicative aspects of musical performance. A graph was constructed displaying a 'feel' analysis of various famous drummers to glean some insight into what made these drummers swing the way it did. Some of the drummers were found to play ahead of the beat, whereas others played on the back (or behind) of the beat. Weckl's graph revealed he had close to metronomicially perfect time. So if metronomic perfection and mastery of co-ordination and independence were the sole objectives of drum-kit performance why change. It is my understanding that

Weckl was searching for a more musically expressive performance style, involving both how the music feels to play and how the listener perceives his playing.

Weckl commented:

I was always trying to make the time feel better, but I never understood the way to go about it. For the biggest part of my career, I have been involved with playing relatively complicated music. It takes a certain amount of effort and concentration to play that music, and the idea for me was to try to get as close to perfect time as possible. That's the drummer's gig: you want the time to be rock-solid. (Weckl, 1998.)

A change in focus was necessary for Weckl to reach his musical potential. Weckl commented:

I called Freddie Gruber and I was practically yelling at him...

I felt like everyone had been keeping something from me for all these years. But I wasn't mad at Freddie, Weckl is quick to add, I was just angry and frustrated that I hadn't studied with him sooner and found out that there is another way to play the drums. (Mattingly, 1998, p.48)

I heard Dave Weckl live in performance with Mike Stern (Continental Hotel Melbourne 2002). Weckl's playing was a display of rhythmical mastery amidst relaxed organic composition; Weckl's willingness to change his performance style at this stage of his career indicates a creative flexibility.

In summary, formal drum-kit education involves regular lessons based on a teaching method that facilitates independence, imagination, creativity, co-ordination and technical proficiency. Unfortunately concepts that relate to feel, taste and imagination are often overlooked. A commonly held belief is that when the technical aspects of music performance are perfected then an individual mode of expression will emerge. This is rarely the case, in my opinion the feeling of music should be continually expressed and a balance maintained and developed between a drummers emotional feelings and their

technical ability. In short, it is important for drummers to have the ability to keep accurate time, but it is also important for drummers to be flexible and creative and not just perform measured repetitions.

7 Voicing melody on the drum-kit

7.1 Voicing and tuning

The idea of 'voicing melody' on a drum-kit relates to choosing specific pitches for each instrumental element of the kit. 'Voicing' may also involve creating a scale for a particular musical work or performance. In this way, 'voicing' here, refers to tuning decisions. Tuning the drum-kit for melodic drumming raises the following question, if a fixed pitch tuning is used, what pitches are to be used and why? In the following discussion I shall outline tuning practices I have found useful for the performance and compositional practices of melodic drumming.

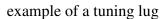
Melody can be voiced on the drum-kit using a range of techniques, some involving measurable pitches, others implying melodicism in other ways. Grabowsky describes pitch relationships in terms of melodic drumming thus:

Drums, although often lacking specific pitches, nevertheless... have pitch relationships one to another, and gradations of light and shade. When played with full attention to the same characteristics which define any 'musical' performance, i.e.; nuance, gesture, dynamics, form etc, they can be understood as melodic, even harmonic to the degree that actual harmonics are produced by the various instruments that make up a drum-kit. (Grabowsky, 2006, pers. comm)

I shall discuss nuance, gesture, dynamics and form in relation to melodic drumming later with reference to performance and compositional techniques. In the following discussion I shall outline drum-kit pitching issues.

A drum can be tuned to a specific pitch. Hence, tuning a number of drums of various sizes in a drum-kit creates melodic note-choice as well as intervallic relationships between multiple drums. This helps a drummer to make musical choices that are melodic as well as rhythmical. Figure 3 shows the tuning mechanisms of a drum.

Figure 3 tuning mechanisms of a drum.





There are six tuning lugs (threaded rods that tension the drumhead (a) see figure 2). These are used for tensioning the head to selected pitches by use of a key.

Unlike many other tuneable instruments there is no standard melodic tuning for the drum-kit. For example, fixed pitched instruments (such as the piano) are played according to their tuning and configuration. The usual practice for drum-kit players is to tension a drum to a desirable pitch and 'feel' that relates sonically to the music to be played, taking into account stylistic considerations: that is, drum sounds usually associated with a particular style of music. This is often a process of trial and error, much of which is required before a drummer decides to adopt a preferred tuning. Drummers have to make a choice as to what tuning they are going to use, and how their kits are to be assembled. They are free to choose which instruments make up their kits and how to tune the drum-kits. This presents drummers with many possibilities as to how drum-kits and their sounds can be arranged.

If specific pitches are used, then they must be compatible with other pitched instruments in the ensemble. Drum-kit pitches in popular music usually relate to concert pitch as well as. The following story about one of my past performances illustrates the effect drum-kit tuning can have on ensemble performance.

I was asked to sing three songs as part of a program put together by Bob Sedergreen (an Australian jazz performer and music educator) entitled *Six of the Best* (Chapel off Chapel, 2004). My opening number was a Duke Ellington/Jaun Tizal composition entitled *Caravan*. I had rehearsed the piece at home on my drum-kit and found the drum tuning complimentary to my vocal range. Since I was not required to play drum-kit on any other pieces I asked permission to use the drummer's kit. The tuning of the kit was loose and not accurately tuned to specific pitches. Because of loose pitching I found it extremely difficult to hold the melody vocally whilst accompanying myself on the drum-kit.

As drummers only have a limited number of tones available to them some key centres will be more compatible than others. It has been my experience that it is more important to relate the pitches and melodic textures that make up the kit to its self. That is, the

drum-kit should sound united and balanced sonically and harmonically. I often tune to the interval of an octave between two toms. This has two advantages – one, it is harmonically neutral and second it requires one tom to be tuned quite low while the other is high, facilitating maximum timbral expression with the economy of only two toms.

When tuning a double-sided tom the bottom head greatly affects the pitch. The top or 'batter' head also affects the pitch, but has a greater affect on how the drum feels to play. That is, a loosely tensioned head delivers more attack and feels flat when played delivering a softer feel thus enabling more dynamic variation to be achieved by the player. A tightly tuned drumhead will sound more pitched and is very responsive to percussive touch when struck.

David Jones commenting on his current drumming practices, which are mostly performed in a solo setting, and in particular the way he tunes his drums, said, "in the last two years particularly I have been pitching the drums to actual notes" (Jones, 2007, pers. comm).

Jones tunes his drums with the top and bottom heads tuned to the same note, however, in an attempt to get the note absolutely true, he believes that to get the tuning perfect it might be only one lug [the tuning device that tensions the drum head] that needs adjusting and that it is an "intuition thing." Tuning both heads top and bottom to the same note gives the drum a defined pitch as well as 'body' and breadth of tone. This approach is similar to the tuning used in tuning a twelve-string guitar. Pianos also have three strings for every note in the higher register adding body to the sound.

Some drum manufactures mark the inside of the drum shell with the note that the particular drum will resonate at, thus indicating to the player the maximum tone and sustain available from the drum.

The bass drum and the snare drum are not generally tuned to a specific pitch. The bass drum because of its function within an ensemble (defining or punctuating the bass register of the music) is more commonly used for producing percussive effects. However

it is common practice in contemporary dance music to pitch the bass drum to a specific tonal centre, creating a fundamental tonality that emanates from the bass drum part up.

Earlier jazz players such as Max Roach utilised this bass drum. He commonly tuned his bass drum to the tonality of the piece he was performing. However, he was an exception rather than the rule. It is important to note that the bass drum relates sonically to the overall drum-kit sound and establishes a melodic relationship within the drum-kit that encourages a four way co-ordinated melodic relationship. By four-way co-ordination I refer to the practice of playing musical phrases and passages using the bass drum and hihat independently and in combination with the hands.

The snare drum, because of its snare mechanism, rattles and vibrates when activated in performance and this can obscure the tonality of the drum. More often, the snare drum performs the important function of punctuating and elaborating the back-beat [beats 2 and 4 in a 4 beat measure] in contemporary popular music. A musical style determines what the snare drum sonic characteristics will be. In this way the pitch and tension of the snare drum are important factors in authentic performance of musical styles. The snare mechanism, if turned off, essentially makes the snare drum into another tom. It is interesting to note that with the snares released the relationship between the snare drum and the other drums becomes more melodic.

Finally, cymbals have been used to great effect by drummers since they were included into the drum-kit in the early 1900s. Cymbals are commonly used in contemporary popular music to punctuate musical passages or add sibilance and colour to the musical blend. Cymbals tend to have a pitch that is clearly audible. Played in combinations, cymbals can outline melodic passages very effectively. The tonal colour and pitch can be varied to great effect through the use of dynamics and the varying the position of stick contact with the cymbal being struck. Hence collections of cymbals have the potential to create varying melodic possibilities. In addition, each cymbal has a myriad of tonal qualities that can be manipulated by the drummer. A cymbal struck with a stick flat across the face will create many overtones and harmonics, voicing complex groups of overtones and implied harmonic colouring

Cymbals are a fundamental component of a drum-kit. They add colour and texture to the overall drum-kit sound and facilitate the creation of sustained notes on the drum-kit. These are an important function in the realisation of melodic drumming.

In my view drum-kit tuning (and performance techniques) have largely evolved due to drummers responding to melodic/harmonic material present in the music they performed. Barry Duggan, a major contributor to the Australian jazz scene, and a former head of jazz studies at the University of Adelaide, highlights the melodic nature of Max Roach's playing, commenting:

The people who I have seen playing in that style [melodic drumming] are players from Afro Cuban roots, Max Roach, I don't really know how that happened. Because he was an American - whether it was the way he tuned his drums or whether it was the innate musicality of that person. (Duggan, 2006, pers comm)

Jazz drummers, particularly Max Roach, used the interval of a perfect fourth between their toms [generally only two toms were used by the early jazz players]. This tuning has a melodic and harmonic openness, or neutrality, due to the perfect interval (the interval of a perfect 4ths is neither major nor minor).

The interval of a 4th also relates to functional harmony in popular music in that the chord sequences in be-bop music (for example) generally move in a cycle of 4ths, as do most popular songs from that period. The perfect fourth tuning enables drummers to solo within a melodic and harmonic tonality: notably not always the same tonality performed by other members of the ensemble.

As mentioned earlier, tuning the drum-kit can involves creating specific intervallic relationships and scales. Duggan (2006) commented on a how he observed a drummer whose kit was tuned to a major triad and was also not in concert pitch. This resulted in

the drum-kit being out of tune with the rest of the ensemble. After drum-kit solo passages other members of the ensemble detected an obvious shift in tuning back to concert pitch after they re-entered. Duggan's comments highlight the importance of tuning the drum-kit to pitches that are complimentary to other instrumentalists.

7.2 Early tuning experience in performance

My first experience playing a melodic role in a contemporary music ensemble setting was in 1987 (whilst performing with the Brian Brown ensemble for a documentary film entitled (*Beyond Elrocco*, 1990) involved creating my drum-kit to six open tones. The piano part of the composition to be performed entitled (*Woman in the Mirror*, Brown, 1985) consisted of slow chordal movement. In the absence of a piano player I chose to play the piano chords on the drums by using four mallets, a similar technique to that used by vibraphone players. The piano part moved between two chords, two of the notes were common to both chords; so six pitches in total were required to perform the piano part. I simply tuned the toms to six open tones The result, in my opinion, was an ensemble sound that added colour and drama to the piece as well as greatly expanding my role as the drummer in the ensemble.

Drummers, despite possessing their own unique musical vocabulary, have had to adapt their sounds in response to the western harmonic system most frequently used in popular music. Indeed, the central issue in using fixed pitch tuning for the drum-kit for most Western popular music, is how best to tune the drum-kit so that it relates to Western functional harmony. This was certainly the case for the jazz drummers in the early part of the 20^{th} century.

7.3 Tuning and the world music genre

Whilst referring mainly to Western European practices above, I note that fixed pitch, contemporary drumming styles can involve other tuning practices. These can be found in music associated with World Music, a well known musical genre that makes use of time-

feels and tuning systems from worldwide musical cultures, especially non-Western European cultures.

This is exampled by references in world music genres to drum-chime tuning practices from parts of Africa and Asia. Wachsmann (1969) observes:

Drum-chime [is a] a generic term for a set of drums tuned to a musical scale. In Africa, where drum ensembles are common, a line cannot easily be drawn between true drum-chimes (often tuned and arranged scale wise to cover one of more octaves) and sets of drums also carefully tuned to discrete pitches within the particular tonal system, and used for accompanying songs and dances with a variety of melodic and rhythmic patterns.

Drum-chimes occur in south and Southeast Asia and in east Africa. In north-central Sumatra a set called Atanging Plays a central role in the ritual orchestras of the Batak-speaking peoples, being accompanied by another drum, gongs and a shawm. Multi-octave sets placed in circular frames are used in traditional Thai and Burmese ensembles. In Burma the chime is called hsaing-waing or pat-waing. A set of tabla tuned scale wise and known as tablatarang is sometimes featured in concerts of north Indian classical music to accompaniment of ordinary tabla and the tambura (classical drone lute). In east Africa drums-chimes are known at Aksum (Ethiopia), in three places in Uganda (one being the former kingdom of Buganda where the entenga chime was one of the instruments of the royal court), and among the Sena and Mang'anja peoples of Mozambique, where the drumchime is called the likhuba of ntanda.

The entenga is a good illustration of a true drum-chime in that all but the largest three drums are used for playing a repertory of vocally derived melodies (the three largest provide a rhythmic accompaniment). The entenga's limited distribution and certain features (by no means common to all sets) have led scholars to speculate on links between African sets and those of Asia. Such features include

the use of long curved beaters and an association with xylophone-playing traditions. (Wachsmann, 1969 pp, 1-8)

These generic drum set-ups provide an example of how modern drummers assemble their drum-kits. The entenga features three drums that are played as a rhythmical accompaniment to the rest of the drum-chime. Other drums play melody material. This parallels the function of the modern drum-kit, in that the bass drum, snare and hi-hat serve as a rhythmical accompaniment to the toms and cymbals. Other than bass and snare and hi-hat interplay, all other sounds can be perceived as melodic.

Tuning a drum-kit precedes performance. Once the tuning has been achieved the kit and drummer are ready for the actual creation of melodic drumming ideas through performance techniques. I shall now discuss these techniques.

8 Melodic Drum-kit performance techniques.

8.1 Thinking melodically

I believe that to play the drum-kit melodically first requires the drummer to think melodically. That is, to respond to the melodic content of the piece being performed not just its rhythmical elements. This can be achieved in numerous ways. A useful example of this melodic thinking can be heard in Ari Hoenig's playing techniques. His performance of *slow blues* (Hoenig, 2007) features melodic drum-kit practices through manipulating the pitch of his drums with pressure from his elbow (pitch bending) whilst striking the drum with the opposite hand. Not all melodic drummers approach their playing in such a physical way. Simply by adhering to the form of a piece (the durational structure of a composition) and outlining or highlighting any melodic events that take place, or following and complimenting the melody by use of dynamic variations and timbral changes, will help achieve melodic material.

8.2 Mirroring

Another technique used to assist in creating a successful performance of melody by a drummer is to mirror the melody. This technique involves what I called 'implied' melody. That is, the drummer duplicates the exact rhythmic and dynamic note placement thus playing, in effect, a rhythmical/dynamic skeleton of a melody without playing the actual pitches themselves. By mirroring in this way a melody can be 'implied' by the drummer because the pitches created outline the melodic contour of the composition

The following anecdote about a rehearsal that took place at the Victorian College of the Arts in 1989 describes two very different melodic approaches to the same piece of music. I was a member of the Brian Brown ensemble along with Bob Sedergreen (piano) Geoff Kluke (bass) Judy Jacques (voice). Brown, leader and composer of the group, had just finished a new series of works that centred on the theme of the transportation of convicts to Australia from England in the late 1700s. During the first rehearsal we had the opportunity to play the music involving melodic lines played in complex rhythmical groupings super-imposed over ostinato bass lines.

After studying the pieces I decided to play the melodies exactly as they were written. To do this I designed a drum-kit consisting of nine small 6-inch toms tuned to a diminished scale (the rationale being that a diminished scale would give me the most melodic versatility in a variety of key centres). I then learned the melodies on the drum-kit locating each note in relation to the last until I could perform the entire piece fluently. Some notes were available as open tones whilst others had to be played by applying pressure with one stick and striking the drum with other varying the pressure until the note reached the desired pitch. I used this set up in a television series made by the ABC entitled *Jazz as now*, (ABC television, documentary, 1990).

On the day of the rehearsal I set up my drum-kit in the rehearsal room and waited for the music to begin. To my dismay the tempo of the piece was much faster than I had

anticipated making it impossible to use the technique I had practised. I had to adjust spontaneously and find another technique that would enable me to successfully perform the pieces. I used the technique mentioned above. That is, mirroring the melody on the drum-kit gaining melodic expression through dynamic variation and timbral effect, fortunately this change in technique resulted in a successful performance of the program.

As the above situation illustrates, depending on the musical context appropriate and useful techniques may vary considerably. In the above situation the tempo of the melodies to be played was too fast to be articulated successfully using only a pitch bend technique. The technique of mirroring the melody enabled me far greater fluency and ease of articulation at the faster tempo.

8.3 Spatial relationships

Finally, the arrangement of the drum-kit and the player's spatial relationship to it in terms of moving from left to right (or right to left as the case may be) contributes to the creation of melodic ideas. The drum-kit is usually arranged placing higher sounds to the left, thus descending in pitch towards the right. Performance of melodic ideas on the drum-kit involves more complex mobility and coordination since melody both ascends and descends.

An ascending melodic line common to melody players such as, singers and horn players, is not usually played by drummers. It is conventional practise for drummers to mainly descend when they play around the drum-kit, (high to low). This practice annoyed Jones (2007) as a young man. He commented, "They [other drum-kit players] were all doing the same thing" [play descending melodies] (Jones 2007, pers. comm).

Jones notes that he both ascends around the drum-kit as well as descends depending on the musical situation. The practice of ascending as well as descending around the drumkit contributes greatly in making drummers sound more melodic. In relation to drum-kit performance Jones and I agree that the modern drum-kit is the last of the ensemble instruments to evolve melodically.

In terns of ascending and descending performance techniques when playing a drum pattern it is important that the drummer be relaxed in order to be physically flexible or fluid. Similarly when playing a melodic ideas a drummer must be relaxed and be able to co-ordinate subtle changes between the hands and feet that are not common to drum-kit performance. This is particularly so when links from one musical section to another are made in the form of fills (improvised embellishments of time elements that lead an ensemble from one part of a composition to another) played on the tom toms.

In summary, melodic drum-kit performance techniques involve tuning drums to specific or relative pitches, manipulating pitches through pitch-bending, the use of rolls to create long durational notes and fills, implying melodic contour through use of kit timbral differences (from bass drum to hi-hat, for example), by mirroring techniques and dynamic manipulation to imply pitch shift.

9 Harmonic-rhythm

9.1 Internalising melodic and harmonic ideas

Drummers who are aware of the melodic and harmonic movement in musical composition benefit enormously. It is not essential that the chords themselves be able to be named. A melodic approach to soloing on a jazz composition by a drummer involves hearing or singing the melody internally. This internalisation greatly assists the drummer in playing a melodic solo even though they may not have specific pitches at their disposal. This internalisation of melody is another aspect of what I refer to as melodic drumming. I extend this internalisation of sound by drum-kit players to the area of harmonic progression. Indeed, hearing and responding to rhythmic and harmonic progressions (and their relationships) relates closely to melodic drum-kit performance.

Harmonic rhythm refers to the relationship between harmonic progression and rhythmic movement. Busoni (quoted in Craft, 1959) referring to the relationship between rhythm and melody observed

Melody... is a series of repeated rising and falling intervals, which are subdivided and given movement by rhythm; containing a latent harmony within itself and giving out a mood-feeling; it can and does exist independently of words as an expression and independently of accompanying parts as a form; in its performance the choice of pitch and of the instrument makes no difference to its essence. (Craft, 1959, p.122)

To hear and respond to harmonic progressions whilst playing non-fixed pitched instruments such as the drum-kit opens-up the possibility for harmonic and melodic performance perspectives for the drummer. Harmonic and melodic movement is used as a guide to compositional form. Piston and Devoto (1978) observed:

Frequency of root change and rhythmic quality of the changes are, then, the two main features of harmonic rhythm. When the harmony changes with much frequency the effect is apt to be one of restlessness. Widely spaced changes of harmony give the impression of breadth and relaxation. (Piston and Devoto, 1978, p.204)

Here, Piston and Devoto suggest that different harmonic rates of change create sensations of "restlessness," "relaxation" and "breadth." I argue that drummers who tune into the harmonic pace of a composition can collaborate with other players to help create these sensations.

In exploring further the relationship between harmony and rhythm Stephen Jay observed:

In an effort to understand the hidden design of the physical components of music, I have focused on the basic elements of harmony and rhythm, and their relationship to complex musical events. In doing this I have observed that harmony and rhythm are really the same "thing", happening at two radically different speeds. They are aspects of each other. Each of them work as music. They are translated analogously between their respective domains.

The two seemingly diverse elements are really the same physical phenomenon, following identical mathematical rules of consonance, and coincide in the effect of specific characteristics, across the range of their musical activity. (Jay,1999)

9. 2 Harmony and rhythmic time-play

Piston suggests that as harmony changes with much frequency the effect is apt to be one of restlessness; the same applies in rhythmic time-play. The absence of repetition in time-play creates tension, whilst repetitive time play induces relative 'relaxation'. The extended harmony and rhythmical complexity require a proportional degree of intensity to balance the musical ideas in real time.

Jay's research explores the physical relationship between harmony and rhythm.

Commenting further on the relationship between harmony and rhythm Jay observes:

The consonance of a harmony or a rhythmic pattern is also related to the duration of what is perceived by the listener to be one complete cycle. Interestingly, the natural complications, which result from adding notes to chords, multiply harmo-rhythmically in a dynamic range similar to the effect of harmony on the listeners emotions. This also occurs in increasing complexities as you move up the natural harmonic series by intervals. Just as certain rhythmic patterns appear to have natural downbeats, harmonic Intervals and chord combinations have root, or tonic notes. Harmony and rhythm sympathises, sustain and mutually vitalise each other.(Jay, 1999)

Jay's comment, that harmony and rhythm sympathises, sustains and mutually vitalises each other, accurately describes the relationship between drummers and other ensemble members in improvised performance.

10 The role of improvisation in melodic drum-kit performance

Improvisation is a vital element of my music-making and an important factor in melodic drumming. This study is not the place to discuss in detail the nature of improvisation. Suffice it to state here that by improvisation, I refer to spontaneous composition as opposed to fully prescribed and scored musical compositions. My project, as can be heard and seen, demonstrates both improvised and prescribed compositional elements.

10.1 Space and openness

A melodic approach to drumming can be applied to almost any musical situation. It is in improvised music, however, that the greatest potential for the inclusion of melodic elements in drum-kit performance exists. The non-predetermined aspect of improvised performance allows the musician space to explore new ideas. Through creative time-play, drummers can give an improvised performance a strong sense of composition, as well as reacting spontaneously to the musical interplay within the ensemble. It is the drummer's relation to spatial elements of a musical performance (when musical sounds move in space) that holds the most potential for melodic expression.

In open improvisation, that is when the drummer is not required to keep a tempo or play repetitive patterns, the possibilities to find new ways of contributing to the ensemble sound are great for drummers. A strong focus for improvisers is not to clutter the ensemble blend with unnecessary complexity, and to play with a musical sensibility. To illustrate this point I shall now describe my first professional encounter with free improvisation, which occurred in a Melbourne jazz club in 1983.

I was invited to take part in a performance with contemporary composer, improviser Brian Brown, who was at the time head of the improvisation department at the Victorian College of the Arts, Melbourne. Other colleagues present included Bob Sedergreen, piano and Geoff Kluke bass, both expert improvisers. Virgil Donarti, who has since received worldwide recognition as a drumming virtuoso, was also part of the ensemble. I was asked to join the performance session. As the improvisation began I became aware immediately that there was no communal pulse, time signature or key centre. I found this disconcerting and spent some time trying to find my musical bearings. This was for me unfamiliar territory. I felt both excitement and fear. The space and breadth for improvisation was vast.

My first task involved searching for a place to begin. Keith Jarrett described this feeling of searching for a place to start as "the point of entry" (Toms, 1997, p.73). In an interview with Michael Toms, Jarrett describes the start of a musical performance as a "jump"(Toms, 1997, p.81).

This is an apt description of that moment. During the remainder of the improvisation my main focus was on my own sound, playing whilst adjusting (where I could) to the other musicians, as well as trying to stay in a relaxed state. I was focused on my own sound as well as hearing the other members of the ensemble and in what could be described as an aural overview. The idea of focusing on your own sound as other musicians create their musical meaning around you is the reason I find improvisation of interest to melodic drum-kit performance.

Sidney Bechet, a jazz saxophonist, describes his earliest memories of the New Orleans brass band tradition:

You'd be standing there on Claiborne Avenue and the bands, they'd come closer to each other, keep coming closer, and you'd be hearing the two of them, first one in way, then the next. And then they'd get closer and you couldn't make them out

any more. And then they'd be right in together, one line between another, and then it was just noise, just everything all at once. (Bechet, 1997, p.138)

Here Bechet describes vividly spatial experience of music. He goes on to say the winner of these musical competitions, was the band that could focus on their own tune whilst not allowing the other band to distract them, since usually one of the bands would become confused and lose their tune and the competition. This situation is similar to my experience during the free improvised session mentioned earlier. Another significant experience in my development as an improviser occurred in the late 1980s in a Melbourne jazz club whilst accompanying Mike Nock, now head of the Jazz studies at the Sydney Conservatorium. During the rehearsal Mike communicated to me that he did not need the drummer to keep time for him and that I was free to express myself in any way I felt appropriate and not to feel restricted by the need to keep time.

10.2 Being in the moment

I was released from the time-keeper role and able to enter the spontaneous moment. This resulted in a creative performance that was not reliant on rhythmic clichés and the performance developed into one full of imaginative musical interplay. For successful improvisation the importance of listening and responding spontaneously during a musical performance cannot be over-emphasised.

Grabowsky describes ways that drummers can contribute to a successful musical performance, involving improvisation:

[Musicians] have to be in the moment and have an understanding of, and ownership of their own creative process, and therefore understand the creative processes of others. Elements that facilitate successful improvised performance are elusive and transient. However, the ability to be spontaneous whilst expressing ideas with a personal musical voice, is therefore an important element in achieving a successful musical/improvised performance. Keith Jarrett world-

renowned improviser/pianist describes creativity as the awareness of the potential of the moment. (Jarrett 1997, p.91) (Grabowsky 2006, pers. comm)

Improvisation has been pivotal to my musical development; improvisation is an area of musical expression that has afforded me the opportunity to explore my personal musical voice. I shall now describe briefly concepts that relate to improvisation and their application to melodic drumming and drum-kit performance.

10. 3 Drum-kit improvisational techniques for melodic drumming

The following improvisational techniques which faciliate melodic drumming are demonstrated in my project.

They are:

- 1) Cycle, patterns and ostinati
- 2) Punctuation, phrase and riffs
- 3) Melody, lyricism and 'breath'
- 4) Chords, intervals and harmonic structure
- 5) Movement, shapes, contours and line
- 6) Texture, colours and 'complexity'
- 7) Form, style and culture

10. 4 Cycles, patterns and ostinati

Cyclic patterning is a common human experience in natural and constructed environments. For example, cycles of the physical seasons and cycles of religious and secular rituals. These are aspects of the measurement of time. Cycles of rhythmic patterns are common in world musical practice. For example, in the Spanish flamenco compass cycle of twelve beats or the tala system in classical Indian music. Drum-kit players in Western popular music use cyclic drum patterning extensively.

Musical patterns do much to characterise musical styles. Furthermore, through the practice of drum patterning, drummers not only learn to co-ordinate the limbs of the body, they also acquire a rhythmic understanding associated with cultural and social identity.

A special mention must be made of ostinati - repeated rhythmic and/or melodic sequences. Ostinati, with their repetitive nature, can 'ground' changing elements occurring around them.

Musical styles, such as the Brazilian samba and bossa-nova samba, salsa from Cuba, Tango from Argentina as well as contemporary popular musical styles including jazz, rock, hip-hop and rap, have important cultural significance, serving a variety of social functions. Drum-kit players need to understand the cultural contexts of these patterns as well as studying the performance techniques needed to execute them.

There is, however, a great danger in relying too heavily on a patternistic approach to drum-kit performance. The interest in a musical dialogue can suffer if a patternistic approach to music-making is over done. There is something lacking when a musician is merely playing patterns rather than interacting spontaneously within the ensemble, and further, what at first seems exciting will soon lose its appeal if a listener detects only a patternistic approach.

Gander, Jones and I find it very difficult to listen to the 'drumnastic' approach to drumkit performance. The obsession with short sounds repeated in rapid succession quickly becomes monotonous and uninteresting and sometimes even disturbing. Jones finds beauty in the harmonic framework of composition, in that a composition moves from simple rhythmic placement to complex and back again, but still remains within the melodic/harmonic framework.

Thus drum cycles and ostinati patterns embody elements of physical performance technique, musical style and cultural identity.

10.5 Punctuation, phrase and riff

By punctuation I refer to the practice by drummers and other instrumentalists of shaping or outlining a musical event through cadential elements, dynamics, silences, pauses, phrasing and timbral variations. All these puncutuations help create melodic lines on the drum-kit. The 'external' dynamic, that is the over-all volume of the drum-kit in relation to the rest of the ensemble is of the utmost importance in terms of musical expression, as is the internal dynamic variation within the drum-kit sound (the volume of the drum-kit instruments in relation to one another). The manipulation of internal dynamics is fundamental to melodic drumming.

Phrasing is essential to melodic drumming because it is the basic means for musical contouring. Riffs (sequenced/repeated rhythm patterns) are a significant element of phrasing for drummers. Thus, punctuation, phrasing and riffs are central to solo drum-kit performance and melodic drumming.

10.6 Melody, lyricism and 'breath'

Melodic drumming in a solo context involves hearing a melody and voicing that melody on the drum-kit. Melodies take many forms, from rhapsodic themes to percussive intervallic play. Some melodic invention is more easily expressed on the drum-kit than others. Rhythmical melodies associated with jazz syncopation are well suited to the drum-kit perhaps because of (what I refer to as) the percussive nature of the music.

The more lyrical the melodic content in drum-kit performance, the more the focus shifts from that of a rhythmic study to melodic/vocal-type content. As Gander observed:

Lyricism in music and thus melodic drum-kit playing involves a form of musical phrasing similar to that used by wind instrumentalists. That is, wind players use breath and vocal-type inflection in creating phrasing and melodic lines. (Gander 2007, pers. comm)

I maintain that melodic drum-kit performance also involves this lyrical approach to phrasing on the drum-kit. Gander supports this idea above) and believes that to emulate breath in phasing is related to being human: we all have to breathe. (Gander 2007, pers. comm)

Whilst drum-kit performance obviously requires actual breathing to produce sound, breath is not the means for producing sound from the kit. This means lines or melodies can be much longer on the drum-kit, even continuous. There is, however, a practice of emulating the breath qualities of a horn player or singer, by rhythm section players (piano, guitar, and bass.) to facilitate a more melodic performance. This relates to creating a time-feel.

A deep breath is required to sustain a melody on a wind instrument with a large dynamic range or one that employs many complex intervals: the longer the phrase, the bigger the breath: for the drummer, the longer the phrase the bigger the emulation of the breath. This vocal style of breathing and phrasing adapted to the drum-kit is central to melodic drumming as is silence - both silence within a phrase and silence between phrases. I find it particularly helpful in shaping a melodic passage on the drum-kit to observe the silence between phrases and to dynamically shape the phrase from the silence. That is, the silence becomes the resting place or the 'tonic' of the overall harmonic key centre of the drum-kit. I demonstrate this concept by clapping hands, gradually increasing the volume of the claps and thus imply melody through the sound of increasing and decreasing volume. Increasing the volume suggests an ascending melodic line whereas, decreasing the volume suggest a descending melody. This dynamic manipulation is fundamental in shaping melodic phases on non-fixed pitch instruments like a drum.

10.7 Chords, intervals and harmonic structure

Chords are based on intervallic relationships within a melodic scale. As the underlying element of harmonic structures they help give shape to a musical contour within a composition: phrasing, cadential points, timbre etc. Drummers need to be in touch with

chordal movement in order to perform cohesively within an ensemble and to relate the movent to melodic-harmonic content.

The intervallic relationship between notes relates directly to dynamic and melodic manipulation on the part of the drummer. For example, the closer an interval is in relation to a tonal centre, the greater the intensity required to rhythmically balance the musical event by (in my practice) anticipating a beat or pushing the rhythmic flow onwards.

Cadential points are important musical signposts for drummers wishing to play in a cohesive ensemble context. They indicate melodic or harmonic resolutions within a composition, which the drummer creates through a rhythmic counterpart. I have already discussed harmonic rhythm above, however I repeat the interpretation of melodic/harmonic events is crucial to what I refer to as melodic drumming

Asked about how he relates to harmony and melody in performance Gander replied:

Once you have internalised the form of a piece of music, if you have a musical memory, you can hear what direction the music is going. Once you have a sense of how one chord relates to the previous one and implies the next one, you can then play through the music as opposed to just marking of points. (Gander 2007, pers. comm)

Here Gander refers to a musical punctuation and talks about his relationship to form, duration, harmonic and melodic shape in performance. He points out the importance of memorising a musical contour in order to "play through" as opposed to merely "marking of points" in a performance" (being the time-keeper) - marking key points in the musical shape.

Black also describes the melodic nature of his drumming as sequential and tonal. He comments on the intervallic relationship of his drumming as:

The instrument I play the most - the drum-kit...When I hear [a snare or a bass drum or a hi-hat] and they fall into a sequence I hear them as melodic, the up and down of something, the tone of something. (Black 2005, pers, comm)

The 'up' and 'down' referred to by Black translate in performance for drummers to the creation of soft 'low' sounds which imply a downward feeling whereas 'high' loud sounds imply an upward motion.

The concept of soloing on the changes or chords, involves drummers creating rhythmical interest whilst outlining the harmonic contour of the composition. By using rudiments and other rhythmic devices, and whilst observing form and cadence points in the harmonic movement, a drummer can outline the harmonic contour of a piece with great accuracy. Further, the melody can be simply the focus of the improvisation.

10.8 Movement, contours and lines

One of the primary functions of the drummer in an ensemble is to supply movement and energy to a music dialogue. Because the drum-kit plays almost continuously throughout most popular musical forms, the drummer is usually relied upon to supply the desired inertia to a musical event: that is, the amount of forward motion, or lack of momentum, which create movement, shape and contour in a musical performance.

The creation of contours (through the manipulation of dynamics along with high and low sounds, (bass drum and cymbals being at the opposite end of the spectrum), is a key drum-kit melodic practice. By contour I refer to the linear direction of rhythm and pitch. Again soft 'low' sounds produce a downward feeling whereas 'high' loud sounds imply an upward motion. Variations of loud and soft, high and low sounds produce melodic interest and a sense of movement.

10. 9 Textures, colours and complexity

The fact that drummers can assemble any instruments to make up their kit is unique, in that most other instruments come already assembled and often (not always) employ fixed

pitch tuning. As I have noted, the drum-kit although standardized, can be assembled and made up of any instruments the player wishes. Thus the drum-kit has great potential to supply much texture and colour to musical performances. Commenting on potential developments of drum-kits, Grabowsky suggests

Drummers will see their instruments as individuals, each drum and cymbal having its own special characteristics, and will design kits that express the musical personalities of the player, with multiple snares, or no snare, more found objects or hybrids, and a greater choice of cymbals, which might reflect East Asian traditions, with small gongs, slit drums etc playing more of a role. Hopefully the musical vocabulary of drummers will reflect more knowledge of non-African-American drumming or rhythmic traditions, particularly South Indian Balinese, Korean, Japanese, Pacific Islander and indigenous Australian. (Grabowsky 2006, pers, comm)

I shall now refer to one of my recent performances and recording experiences involving bass player (Gary Costello) and myself. We were working towards maximizing our musical roles and compositional potential. The eventual outcome of this session was a memorable event in my musical experience and one that illustrates the inherent complexity present during an improvised performance. Complexity in performance involves degrees of sonic detail created by performers. In preparation for a recording we were concentrating on getting a sound balance and making sure the recording levels were appropriate. Even after achieving a satisfactory instrumental blend the music we were performing was uninteresting, restrictive, non-imaginative and basically not creative. This was due to the fact that both Costello and I were role-playing. That is, we were merely keeping time.

I noticed the record pause button was still on and asked Gary to continue soloing while I re-checked the sound levels and released the pause button.

We continued playing, and this time we both soloed together adapting and responding to each other's movements. The result was a complex interplay between bass and drums and a successful improvisational performance. What changed in this successful musical process? I believe it was our approach to playing the music. The second performance involved a complex and dynamic interplay that involved a minimum reliance on mere time-keeping.

10.10 Form

The form of a composition (durational and spatial structure in music) is a major consideration for a melodic drummer. Internalising form relates to how drummers adhere to prescribed durational and spatial compositional structure in order to bring a sense of cohesions to a performance. This is a fundamental requirement for a drummer performing in an ensemble setting. It is essential for drummers to know where they are within a musical form in order to create and place melodic content.

10.11 Style

Specific performance techniques, instrumentation and form are attributed to musical compositions to refer to particular musical styles. Some styles are more suitable to melodic invention. For example, the openness (the time and space available for spontaneous composition) of modern jazz or improvised music allows the drummer much scope for a melodic and personalised approach to drum-kit performance. Pop music on the other hand relies on the drummer performing the role of time-keeper to keep the beat primarily for the purpose of dancing. This is not to say that pop or rock musicians are not creative or melodic. However, the more a drummer has to perform the function of time-keeping, the less space and time they tend to have for personal spontaneous expression. Cindy Blackman, Jazz drummer and member of the 'Lenny Kravits band' commenting on the difference between performing in a jazz context, to that of a rock situation observes "[You need a]...Totally different mindset, completely different. The headspace has nothing to do with a creative situation, not the same at all. (Blackman, 2009)

Interestingly, whereas I once maintained that popular dance forms provided less space for melodic drumming because of the function of the music, I am finding increasingly that recent composers and performers of popular dance music – especially in rap, hip-hop and house dance styles, are utilising more melodic drum-kit elements in their music. The same can be said of aspects of *world music*.

10. 12 World music

Jazz Guitarist, John McLaughlin, played a significant role in the popularisation of improvised elements of World music. In 1971 he formed the *Mahavishnu Orchestra*: an ensemble that featured a strong Indian influence. Mc Laughlin observed:

I was so lucky to have some lessons from Ravi Shankar and other masters of Indian music. I love India, its music and its spirituality, its religions. The spirituality is the music. You can't separate the two like you can in the west. (McLaughlin, 1997, p.138)

Here McLaughlin links improvisatory practices with spiritual practices. On a recent trip to New York I witnessed many examples of integrated *world music* elements during improvised musical performance. This integration of *world music* elements by improvisers is broadening the role for drummers and extending the potential for melodic drum-kit practices. Brian Eno, composer and musician integrates avant-garde and pop elements in musical his composition. He commented:

This kind of improvisational flexibility entails a continuous questioning of boundaries and categories, a refusal to accept that I want to see societies (and people) who know how to improvise, who can throw together a social mode (tuxedo and black Thai [sic] just for the evening, who can move fluently and easily between different social and personal vocabularies as the situation changes, who don't feel lost without the religious reassurance of "thisism" and "thatism". I see these people as hunter-gatherers in the great flux of the world's cultures, enjoying a rich diet of ideas and techniques and styles, creating their own special

mixes. There is no snobbism in this picture- no material too common or too exotic to be used. (Eno, 1997, p.167)

Eno's comments support my own experience that the future inclusion of elements in popular music-making from diverse cultures will extend the boundaries for improvising musicians. This inclusion of diverse elements from other cultures will expand the musical vocabulary available to drummers and encourage a more melodic, and thus a more inclusive, voice in contemporary musical performance.

10.13 Electronic fication and digitalisation of musical rhythm

The increasing use of electronic instruments in the 1960s and up to the 1980s had a direct influence on drum performance and sounds. At the same time a stylistic fusion between jazz and rock styles (jazz-rock) brought about changes in performance practices for drum-kit players including their use of melodic drumming techniques. It would be reasonable to say major record companies such as EMI, Warner Brothers and Sony influenced these changes to create and then access a popular music market rather than the jazz market. Key figures in the musical movement included, Ginger Baker (in the band, Cream) and Mitch Mitchell (in Jimi Hendrix's band) both mirrored the direction taken by contemporary jazz drummers particularly by Tony Williams (Miles Davis' drummer at the time). The emergence of jazz- rock or jazz- fusion reflected a move away from the jazz formulae and drum performance techniques associated with it.

That is, jazz ensemble players performed in a relatively stationary manner unlike rock performers whose style reflected outlandish kinaesthetic performance styles and contemporary clothing fashion. Musically, the most distinguishable features between jazz and the jazz-rock idioms can be heard in their stylistic sounds. Jazz-rock music is heavier, emulating the sonic practises preferred by rock musicians. Also the sounds were more technically produced due to the frequent use of amplification and electronic instruments. Electronic effects were used to enhance the instrumentation especially in the bass register and to increase use of synthesised or synthetic sound.

During this period, rather than the open natural sound of the drum-kit favoured by earlier jazz drummers, rock musicians gravitated to a more-dampened tone, better suited to being amplified. The time-feel associated with the jazz-rock musical style strongly relies on the bass drum, snare drum, hi-hat combination of sounds rather than the ride cymbal and a hi-hat favoured by jazz drummers. Rhythms used by jazz-rock drummers derived from the rock musical repertoire. However, the nature of the music was improvisational, borrowing much from earlier jazz performance techniques. The desire of jazz musicians to access rock audiences did much to establish this jazz-rock style.

Following closely on this development came the introduction of the drum machine: a machine capable of producing metronomically perfect drum sounds. Heavy use of this machine significantly dampened the use of melodic drum-kit playing in the recording studio especially for the creation of what came to be known as 'disco music', for the contemporary club dancing.

Thus, popular music of the 1970s and 1980s (especially dance music), increasingly used synthetically generated sound as well as mechanically generated rhythm. This period of popular music has continued to develop to the present day with many off shoots of the original musical form, including hip-hop, rap, trance, jungle, bass and drum, for example.

Interestingly, current directions in contemporary popular music favour more organic time-feels with less emphasis on metronomically perfect time and more focus on expressive interplay including melodic drumming.

11 Compositions and transcription

This section focuses on the musical compositions submitted as part of my project. I shall describe the six works in terms of melodic performance and compositional techniques discussed previously. I shall also suggest how these compositions contribute to drum-kit

repertoire and create opportunities for other drummers to explore drum-kit melodic practices.

The compositions are presented on two CDs and in score form. The first CD contains drum-kit only versions of the pieces. The second CD presents ensemble realisations of the drum-kit compositions. There are six tracks on each CD.

Before discussing the scored transcriptions later, I note that the transcription of the pieces composed for this project help reveal the melodic nature of my music-making. To transcribe the compositions, it was necessary to devise a notation that would accurately represent the music in written form. I chose to write the melodic parts in treble clef and the drum-kit (non-tuned) parts in bass clef. (drum-kit is usually written in bass clef.) This notation proved the easiest to read and to convey the melodic nature of the compositions.

My ordering of the compositions aims to introduce firstly the listener to basic melodic drum-kit music in *Blue South* and to conclude with a work *Last Ballad* linking the lyrical notion of ballad form to drum-kit repertoire for the first time. The order also creates both a flow and contrast of musical ideas.

The compositions are presented on both CDs and in score form in the following order:

- 1. Blue south
- 2. Celtic swing
- 3. Ode to New Orleans
- 4. Cohiba
- 5. Deep listening
- 6. Last ballad

11. 1 Blue south (Track 1)

Blue South was composed in response to the question how do you play the blues on a drum-kit? This question is central to my project and set the parameters for the rest of the compositional process. During my career as a professional musician I have performed the

blues in many forms and styles including *Delta blues*, *Be-bop blues*, *Swing blues* and *Country blues*. The question provoked me to explore how a drum-kit player might express the blues musically in a solo context? With no other instruments playing the melody or harmony, what techniques would be needed to accomplish this?

For *Blue south* I first decided on a fixed pitch tuning and number of drums. The drum-kit used for this project consisted of eight drums. I tuned the lowest drum first (a 16 inch tom tuned to Eb) seeking a full rich tone that sounded pitched and yet was tuned low enough to minimise any audible harmonic overtones. I tuned the drum at the lower end of its melodic range to maximise the depth of its timbral quality. I repeated the process with the seven other drums focusing on the intervallic relationship between them: The sizes of the drums used were 16 inch, 13inch, 12inch, 10inch, two 8 inch, and a 6inch tom. The 18inch bass drum was tuned to Bb whilst the 12inch snare drum was tuned to Eb.

Intervals were selected to invoke a feeling of the blues and suite the range of each drum. I also ensured that the pitched drums were sonically balanced with one other, that is, tuned to a similar tension. I created a pentatonic note scale comprising of the ascending notes Eb, F, D, Eb, G, Ab, and Bb. This was my drum-chime selected and sequenced by the hearing the intervals intuitively.

As an introduction to *Blue south*, I emulated two aspects of guitar blues style playing popular in United States in the early part of the 20th century: one, a trilled melody utilising minor intervals and two, *non-adherence* to a twelve-bar primary chord progression. The first melodic motif made up of a series of long notes is realised by the use of a press-roll technique on the toms. Cymbals add an accompanying texture. The tonal characteristic of cymbals has long been a major part my musical expression. By manipulating the way the cymbals were struck and varying different areas of the cymbals, different pitches and varied tones were used to voice the melody. These tones and textures answer and compliment the melodic theme played on the toms.

It was my intention to mirror the musical landscape of the blues from the Southern United States of America - the Mississippi delta. A sense of sparseness and an ease of pace was an important reference to me in creating the right time-feel. I established a slow broken triplet feel ostinato on the bass drum and hi-hat at letter B to create the necessary movement and time-feel to support the melody. The melodic line is played over the bass drum and hi-hat accompaniment using phrases common to early blues guitar repertoire. This is first heard in bar12 and continues as the main melodic theme throughout the composition.

Another technique used by blues guitarists is to syncopate rhythms across the bar to create an asymmetrical phrase-feel, a technique I used at bar 17 and throughout the composition. At letter C a 6/8 rhythm used by later blue players is introduced that is reminiscent of the rhythmic patterning of composer Charles Mingus. This is achieved using a duple feel played against a triplet rhythm. This duplet feel is re-introduced later at bar 52 and fused with the asymmetrical phrasing played earlier, until the two time-feels are sounded simultaneously. The piece comes to a close as the duplet rhythm is repeated and faded.

The ensemble version of *Blue south* demonstrates how melodic drumming becomes an integral part of an ensemble (in this case, drum-kit, bass and guitar) and how the improvisation of other ensemble members resembles the melodic and dynamic subtleties of the drum-kit part.

11. 2 Celtic swing (track 2)

This composition was inspired by an early musical memory involving an Irish pipe band performance. As members of the band marched, they swished their kilts from side to side in time with the music. This rhythmical swing generated by the band as they marched, was very powerful and left a lasting impression on me.

The fixed pitch tuning used for *Cetic swing* was assembled in a similar way to *Blue south*. However, I set about selecting a tuning that was versatile enough to be used in a variety

of tonal centres. The tuning for *Cetic swing* (and the remainder of the compositions) was Bb, bass drum, F snare drum, low toms to high, Eb, Ab, C, Eb, Ab and Bb.

The piece is introduced with a melody played on tuned toms. Short notes are either struck on an open drum or the pitch is manipulated by applying pressure to the head with one stick, whilst striking it simultaneously with the other, (up to 6 notes can be played comfortably on a each drum using the pitch bend technique). I observed this technique for the first time when used by visiting American drummer, Victor Lewis in the late 1980s at the Prince of Wales Hotel, Melbourne. Melodies containing long notes are produced by continuous press-rolls on the toms and shifting from one tom to another. The introductory melody was inspired by Irish poet Brendan Behan's ballad *The patriot game*: a poem about Irish patriotism in the twentieth century.

The composition is in four parts A, B, C, A. The first half of the introductory melody is played using press-rolls ascending and descending from drum to drum to create the melody. The second half of the melody evoked in me a Celtic feeling, so I chose to slur up to the notes (a kind of portameneto) to achieve what I call a more 'Celtic blues effect'. To be consistent in the performance of the melody, some open tones were played an octave apart, since this was the only way to perform the entire melody using open tones. Another important consideration in the performance of this introduction was to observe the dynamic subtleties of this romantic theme.

The hi-hat plays an important role during the introduction of *Celtic swing* and throughout the rest of these compositions. They are used the to add colour to the time-feel. The splashing of the hi-hat serves two functions. Firstly, it supplies a sense of movement used in response to the melody, and secondly it has a harmonic relationship to the melody as well as adding colour.

The introduction to the melody resolves to a low Ab held with a press-roll. The time-feel for the *Celtic swing* is then established. The piece moves to a marching band scene where a tom is played to emulate the rhythm played by the Irish pipe band mentioned earlier

(again the hi-hat plays an important role in setting up the time-play). I also punctuate the time with the bass drum and hi-hat to create more motion in the feel, similar to a feel created by the marching bands of New Orleans.

Once the 'swing' feel had been established the main theme is introduced- an Irish reel. The reel is based on a traditional Irish tune *Sally gardens (traditional)*; a tune I used to perform with my father as a child. The melody is played on the toms using the same technique used in the introduction (a combination of pitch bend and open drum tones). To voice the melody I played the actual notes, something that proved to be quite a challenge. The result was worth the effort. The *Celtic swing* feel is allowed to settle and the melody is repeated. The next section of the composition is again a march on the snare drum using long syncopated rolls with accents on the bass drum and hi-hat. This two bar phrase is played four times with an emphasis on the first beat like a bagpipe drone (incidentally something that the guitar and bass portrayed beautifully in the ensemble version).

The piece then evolves into an open improvisation inspired by the Bodhran players of traditional Irish music. The Bodhran is a traditional Irish frame drum. The head of the drum is struck with a short double-ended stick held in one hand, whilst the frame of the drum is held with other. I used rhythms associated with traditional Bodhran playing to establish a Celtic feel in the improvisation and developed the intensity of the solo, by using techniques more commonly associated with contemporary drum-kit performance. The improvisation builds to a climax and then settles. Eventually the march rhythm is reestablished and is allowed to continue until the rallentando reintroduces the opening

The ensemble version of *Celtic swing* is introduced by trilled toms 'performing' Behan's ballad *patriot game*. The rhythmical accompaniment performed in the drum-kit part, through the use of the hi-hat and cymbals is minimalist although rhythmically adequate. The use of synthesised bagpipes performed by the guitarist adds effective rhythmical colour. The melody played the second time leads into a solo section. An adaptation of a Celtic reel is used as the basis for a group improvisation. The improvisation is approached in a contemporary context similar to improvised group performance in a

modern jazz setting. The collective improvisation is linier and builds to a climax through the use of dynamic intensity. The coda and closing melody is a re-introduction of the opening theme featuring complex harmonic voicing based on overtones played on cymbals as the very last note. The ensemble realisation is a complete ensemble interpretation of the solo drum-kit composition.

11. 3 Ode to New Orleans (track 3)

This piece pays homage to the citizens and musicians of New Orleans. It was my intention to signify the suffering experienced by the people of that city during recent devastating floods. Melodic content in this piece has a melancholic feel.

The drum-kit explores the theme of the composition using bass drum, space drum (with the composition using bass drum, space drum).

The drum-kit explores the theme of the composition using bass drum, snare drum (with snares turned off) and multiple cymbals

The introductory melody is played on multiple cymbals based on the melodic contour of the main theme first heard at bar 7. The hi-hat part continues the cymbal colour through letter A and accompanies the repeated motif played on the toms. The improvisation section beginning at letter B examples 'implied' melodic drumming rather than voicing exact pitches.

I improvised on the melody focussing on non-pitched sounds similar to that used in a contemporary jazz setting. In this recording/performance, however, I did not consider turning on the snare mechanism and this resulted in the sounding of a clearly pitched F note on the snare drum which related back to the pitched theme played at bar 7. The melody that is played again, after the improvisation at letter C. Finally the melody is played using the open tones and pitch bend techniques first heard at bar 7.

11. 4 Cohiba (track 4)

This composition was named after my favourite cigar, Cohiba and indicates a Cuban inspiration.

My aim was to sound like an entire Cuban percussion section playing at once, so the introduction is high in energy and a complex blend of percussive sound. The introduction letter A comes to a complete stop, at which point the main theme is introduced bar 2. Played on the tuned toms. The theme is derived from the word Co-hi-ba based around three notes C, E and Eb. These notes facilitate a major and minor third sound for the theme. The melody is first played with a rubato feel and gradually moves into tempo. At this point letter B a 7/4 rhythm is established.

A second melody is introduced at letter C with a Caribbean feel in 7/4 time. At the conclusion of this cycle the drums play the 7/4 rhythm pattern first heard at letter B. Finally the *Cohiba* theme is restated at letter D.

The next section of the composition is an open Latin-type solo at letter E in a loose 4/4 time similar to the introduction. This section is used as a base for a group improvisation in the ensemble version and serves as a contrast to the 7/4 time-feel in the earlier sections. Colours and textures indigenous to the Cuban musical culture are explored. A second improvisation based loosely on a *Mozambique rhythm* played on the bell of a cymbal enters at bar 51.

Cuban percussionist Frank Malabe pioneered this adaptation of the *Mozambique* rhythm for the drum-kit during his collaboration with the drummers collective in New York City circa early 1980s. The performance of the *Mozambique* involves imitating bell patterns, cross stick (muted drum-head and rim sounds), bass drum and conga sounds. I moved the conga part through a series of drum tones, thus creating implied chordal changes. The composition then recapitulates to the 7/4 theme at bar 66 and fades out at bar 78.

11. 5 Deep Listening (track 5)

Part 1

This title of this composition refers to an Australian Indigenous term used to describe a

"...quiet and respectful deep listening. It also involves a symbiotic joining of the sacred and the secular, the metaphysical and the mundane, which coexist in everyday human experience" Dadirri (Atkinson, 2001, p1; Ungunmerr-Baumann, 1988 in Brundell [ed.], 2003).

In the same way that 19th century tone-poems directly referred to pictorial/visual ideas and drama through sounds I have created a sound-picture outlining key events relating to Australia's Indigenous and Non-Indigenous encounters and relationhips. To this small extent the music comments on social, political and cultural events between the 1800s – and present time.

Importantly, in creating this piece I acknowledge and pay respects to the Indigenous people of Australia.

Part 1 bars1-90 evokes my interpretation of pre-colonised times for Australia Indigenous people. Cymbal washes, complex harmonic overtones and long sustained sounds invoke an Australian landscape. The cymbal wash at the beginning of the piece is pitched and sets up a tonality of Ab. Other sounds and varied pitches against the cymbal wash contribute to the timbre of the sound-scape. These harmonic colours were emphasised and supported by the string part in the ensemble version. The drums struck with mallets and the rattles and clicking sounds played on the rims of the toms represent an ancient landscape. Due to the freedom inherent in the improvisational process, I enjoyed the space and time to compose spontaneously.

Part 2

Part two bars 1-101 begins with the snare drum played in a military fashion. The snare drum sound is meant to suggest something alien to indigenous Australian culture and is in

sharp contrast to the 'natural' musical landscape featured in part 1. The snare part becomes looser (more a dancing type march), reflecting the lifestyle of the early settlers and military personnel. The whole of part 2 presents a darker, more menacing aspect leading to an improvisation at bar 98. Intensity is sustained and built throughout the second part. A time change from the duple feel to triplet feel increases the tension. The cymbal drone continues and serves as a pad for the new time-feel at bar 96. Rapid-fire rudimental outbursts featured in the improvisation express, in a sound-scape narrative, the growing conflict between Indigenous and non-Indigenous people. The climax is realised by the use of fast single stroke rolls, a feature of military rudimental drumming. The time is allowed to settle into a closed press-roll at bar 99, and part 2 segues into part 3 with a sustained cymbal sound.

Part 3

Part 3 is a musical representation of contemporary life in multi-cultural Australia. Here I place all the musical elements that occurred in the first and second parts together to suggest that Indigenous and Non-Indigenous people in Australia today share an Australian heritage. To achieve this I based the improvisation around a modern funk drum pattern common to contemporary popular music. The cymbal wash continues throughout the final section of the piece to recall an indigenous presence. Also the snare drum part, used to signify the military presence in part two, is included. The bass part played on a low tuned tom was recorded and treated with digital effects to create a contemporary bass sound. Finally, I overdubbed more toms and rims to create a collage of sound utilising the sounds from in part one and two.

11. 6 The last ballad (track 6)

This composition is a ballad written for solo drum-kit. The ensemble realisation follows the drum-kit melody in a heterophonic manner. The introduction is a sketch of the melody, mirrored on the cymbals. To add to a sense of rhythmic fluidity rubato and accelerando techniques are used extensively. The opening phases involve cymbal harmonics achieved by striking cymbals on their edge with the stick vertical to the

cymbal. The melody is played on tuned toms using open pitches. Pitches are played with continuous press-rolls to extenuate the legato effect. The undulating sound of the rolls adds to a romantic feel. The bridge section end of bar 14 is played using pitch bend techniques and bending the melody up a major 3rd. A percussive accompaniment is supplied by the hi-hat splashed with the foot.

The improvisation on the tune is played using some of the non-pitched elements of melodic drumming on the drum-kit. That is, the creation of melodic contours via means of dynamic contrast, coupled with higher and lower cymbal and drum tones. The solo is played over a binary A B compositional structure. The melody is played again after the improvised solo section and concludes with a ritarando. This piece is dedicated to the late Gary Costello who played bass on the recordings used for this project.

12 Conclusion

The focus of my research has been to investigate melodic drumming in contemporary popular drum-kit performance and composition. The investigation reveals that drum-kit melodic performance and composition practices have been part of an evolutionary process. Further, development of melodic drum-kit playing techniques has helped create a more inclusive role for drum-kit players within ensembles and increased the potential for drum-kit players to present solo elements in performance.

The project artefacts of my research are six compositions. They demonstrate performance and compositional techniques related to melodic drumming for the drum-kit. The compositions are presented on two CDs. The first features the drum-kit part of the six compositions. The second presents the compositions as ensemble performances and demonstrate the extended role for drum-kit players within an ensemble setting. The compositions are also presented in score form to facilitate their on-going performance.

The project is supported by an exegesis outlining my research-project methodologies. An autobiographical section follows the autoethnographic and practice-based research

methods. In this section I noted how my professional practice, especially my melodic drum-kit practice, has been rooted in social and professional music-making over a number of decades. I made a special mention of duo performance experiences and traditional Irish music-making as factors which presented time and space opportunities enabling me to explore drum-kit performance ideas beyond the role of a time-keeper.

Informants interviewed for this study (drummers and other instrument players) revealed that they do perceive their performance practices as melodic, though each express it through different performance practices. In this way, their practices reflect different melodic drumming practices of drum-kit players during the last one hundred years.

An outline of key developments in drum-kit performance practices and discussion on contributions to the evolution of melodic drum-kit practices by key musicians provided a context for references about my (and others) melodic-drum-kit developments.

Time-feel is discussed as "time and feel performed spontaneously." The feel of music refers to the spirit of the music; making meaning of the music, as well as the communicative emotional qualities of musical interplay. That is, durational elements join with all musical elements to create an emotional feel to a performance. I maintained that understanding and entering into this area of drum-kit performance was a prerequisite for developing melodic drum-kit practices.

Similarly, an understanding of potential tuning systems for the drum-kit and willingness to explore their uses lay at the heart of melodic drum-kit practices.

I referred to particular drum-kit performance techniques and practices such as mirroring, thinking melodically, spatial relationships between drum-kit instruments and ensemble players, ascending and descending playing patterns, responding to harmonic and rhythmic elements of performance, internalising melodic and harmonic ideas and being in the moment as useful practices for the development of melodic drum-kit playing.

I described the importance of improvisation skills for melodic drumming and suggested techniques from my own professional practice which can be referred to by others drumkit players. As an educator my project contributes to potential melodic drumkit repertoire for young emerging musicians.

I have shown in my compositional project that melodic elements in drum-kit performance and composition encourage a broader and more inclusive role for drummers in improvised performance. This is evident in the ensemble versions of compositions submitted as part of this study.

The two CDs and the scored representations submitted illustrate the melodic nature of my drum-kit performance style, and that of my musical colleagues Steve Magnusson, Gary Costello and Greg Riddell.

Finally, my project compositions contribute new repertoire for drum-kit players who wish to explore their performance practices beyond that of the rudimental virtuoso time-keeper; especially for players wishing to explore melodic drum-kit techniques as a soloist and as an equal member of a musical ensemble creating music from a broad palette of sonic material.

Bibliography

Bechet, S. Quoted in Barron, F. Barron, A. & Montuori, A. *Creators On Creating: Awakening and Cultivating The Imaginative Mind*, Penguin Putman Inc, New York.

1997, Barnard, L. A. "Sluggsy", 2005, *Last Diary Entry*, Melbourne.

Berendt, J.E. 1997, *The Jazz Book*, Lawence Hill books, New York.

Blackman, C, *interview* ABC, http://www.abc.net.au/ru/musicshow/default.htm retrieved 21/01/2009.

Braman, C. 1996, *The New Grove Dictionary of Jazz*, Macmillan, London.

Craft, R. 1959, *Stravinsky in Conversation with Robert Craft*, Faber and Faber, New York.

Dale, R. 1980, *The World Of Jazz*, Phaidon Press Limited, Oxford.

Drum-kit image, p.20,

Ellis, C. 2004, The Ethnographic I: A Methodological Novel About Autoethnography, Alta Mira Press, Walnut Creek.

Eno, B. 1997, Quoted in Barron, F. Barron, A. & Montuori, A. *Creators On Creating: Awakening and Cultivating The Imaginative Mind*, Penguin Putman Inc, New York.

Green, B. 2003, *The Mastery of Music: Ten Pathways To True Artistry*, Broadway books, New York.

Holt, N. 2003, Representation, Legitimation, and Autoethnography: An Autoethnographic Writing Story. Leeds Metropolitan University, Leeds.

Hosiasson, J. 1980, *The New Groves Dictionary of Music and Musicians*, Macmillan, London.

Jarrett, K. 1997, Quoted in Toms, M. *The Well Of Creativity:* Hay House Inc, Carlsbad. Jay, S. 1999, *Harmonic Rhythm, Bass Player Magazine*, viewed June 2006.

http://www.stephenjay.com/articals/bassplayer199912.html.

List, G.1971, *The Reliability of Transcription: Ethnomusicology*, September 1974, pp354-377 Duke University, Durham, NC 27708.

Nachmanovich, S. 1990, Free Play, Jeremy P Tarcher, Inc, New York.

Mc Niff, Shaun. 1998, Trust The Process, Shambhala Publications, Boston and London.

Mc peek, G. 1954, *The New Groves Dictionary of Music and Musicians*, Macmillan, London.

Myers, T.P. 1999, *The Soul of Creativity: Insights into the Creative Process*, New World Library, Novato.

Williams, T. 1997, Quoted in Point, M., *the last Interview. Down Beat Magazine*, http://www.cs.cf.ac.uk/Dave/mclaughlin/art/final.html, viewed 9/05/08.

Piston, W. 1978, *Harmony:* Edited and expanded by Devoto, M. Victor Gollancz, London.

Redmond, L. 1997, When The Drummers Were Women, Tree Rivers Press, New York.

Reed-Danahay, D. 1997, Auto/Ethnography, Berg, New York.

Robinson, B. 1980, The New Groves Dictionary of Music and Musicians, Macmillan, London.

Rothman, J. R.1983, *Basic Drumming*, JR Publications, New York.

Sullivan, G. 2005, *Art Practice as Research: Inquiry in the Visual Arts*, pp71-113 Sage Publications, Thousand Oaks.

Wachsmann, K. 1969, *The Groves Dictionary of Music*, Macmillan, London.

White, C.1980, The New Groves Dictionary of Music and Musicians, Macmillan, London.

Weckl, D. 1998, Modern Drummer Magazine, New York.

Weckl, D. 1998, Quoted in Mattingly, Modern Drummer Magazine, New York.

Varela, J. 2001, Chano Pozo, Latin beat Magazine, Nov. 2001.

http://www.latinbeatmagazine.com/

Discography

Davis, M. 1969, Bitches Brew, CBS 460602 Los Angeles.

Davis, M. 1957, *Birth of the Cool*, Capital records, m11026 New York.

De Johnette, J. 1968, The De Johnette complex, Milestones, OJC New York.

De Johnette, J. 1976, Pictures, ECM, 1079 Oslo.

De Johnette, J. and Suso F. M. 2005, *Music from the hearts of the Masters*, golden beam produtions New York.

De Johnette, J. Jarrett, K. Peacock, G. 1983, Standards, ECM New York.

De johnette, J. 2004, *Music in the key of Om* record, golden beam productions New York.

Dodds, W. 1946, Maryland, disc 6006B/ MX New York.

Dodds, W. 1946, *Spooky drums*, disc 6007 melodisc epm New York.

Hoenig, A. 2007, *slow blues*, http://au.youtube.com/watch?v=jcbdwpggtp0. retrieved 1/2/2008.

Parker, C. 1945, Savoy Sessions, Savoy and Dial, New York.

Roach, M. Parker, C. Powell, B. Mingus, C. Gillespie, J. 1953, *Jazz at Massey Hall*, Debut records, New York.

Roach, M. 1957, Jazz in ³/₄ time, Emarcy sr80002 New York.

Roach, M. 1960, Freedom now suite- we insist, Candid cim 8002 New York.

Roach, M. 1965, Drums unlimited, Atlantic lp1467 New York.

http://www.cs.cf.ac.uk/dave/mclauchlin/art/final.html

Jazz as now, 1990, ABC, music documentary Melbourne.

Personal communication

Black, J. (2005). M. Jordan. Melbourne

Brown, B. (2006). M. Jordan. Melbourne

Duggan, B. (2006). M. Jordan. Melbourne

Gander, A. (2007). M. Jordan. Melbourne

Grabowsky, P. (2006). M. Jordan. Melbourne

Jones, D. (2007). M. Jordan. Melbourne

Jordan, M. (2004). M. Jordan. Melbourne





















