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THE EVOLUTION OF PAUL McCARTNEY'S BASS PLAYING 1965-67

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A thesis submitted to the University of Huddersfield in partial fulfilment of the requirements for the degree of Masters by Research

The University of Huddersfield

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TABLE OF CONTENTS

Introduction	3
Personal Background	5
Literature Review	7
1958-65	10
McCartney's Early Playing Style	11
Rubber Soul 1965-66	16
McCartney's Playing on the 'Help' Album	18
Motown and Stax Records Influences	18
McCartney's Bass Playing Throughout the Rubber Soul Period	19
Revolver 1966	28
Paul McCartney's Bass Playing Throughout the Revolver Period	30
Sgt. Pepper's Lonely Hearts Club Band 1967	37
Paul McCartney's Bass Playing During The Sgt. Pepper Period	38
Post Sgt. Pepper Bass Playing 1968-	51
Conclusion	52
Bibliography	54
Discography	56

Introduction

How Did Paul McCartney's Bass Playing Evolve During The Years 1965-67?

The Beatles are arguably the biggest, most successful pop music act in history. Literally thousands of publications have been printed about the group, covering almost every aspect of their lives and careers, both collectively and individually. 49 years after their demise as a band, they are still revered and discussed with the same amount of enthusiasm.

In 2009, *Guinness World Records* recognised McCartney as the "most successful songwriter," having written or co-written 188 charted records in the United Kingdom, of which 91 reached the top 10 and 33 made it to number 1 (Glenday, 2009 p.290)

During my career as a musician and tutor, the bass playing of Paul McCartney has been an ever present influence, though his song writing skills often overshadow his bass playing in terms of academic study. His influence is not lost on some of his most established bass playing peers, enough for Jaco Pastorius to cover McCartney's 'Blackbird' in 1981 and Will Lee to start his own Beatles cover band The Fab Faux, also stating "Paul taught the bass how to sing" (*Bass Player Magazine*, 1995). The legendary jazz-fusion bass player, Stanley Clarke, claimed McCartney's philosophy for melodic bass playing was a major influence on his own playing. Fellow lead singer/bassist, Sting, simply refers to McCartney as "The Governor" (Alstrand p.178).

However, the bass playing of Paul McCartney has seldom been cited as an influence by my students, or bass playing peers of a younger age. Could this be because McCartney's bass playing rarely, if ever, appears self indulgent, unlike the playing of many other bass legends? As Simon Frith states "bad musicians forget that 'good music' is a collective practice, and use the performance to show off their own virtuosity" (Frith p.57). Could this also be a result of McCartney always 'playing for the song'; creating bass lines so carefully and tastefully woven into the fabric of the piece, that they are easily undetected on first listening? A piece such as 'Penny Lane', with its array of techniques and musical devices, isn't cited nearly as much as 'Come Together' as a 'bass piece'. I would suggest that this stems from the lead nature of the latter, playing an independent line to the vocal, and high in the audio mix. This constant disregard of the sensitivity in bass playing, raises the question of 'what makes a good bass player?'

This thesis will focus on Paul McCartney's bass playing and its evolution during the years 1965-67: while his bass playing on The Beatles' albums from 1968-70 is certainly worthy of merit, it is 1965-67 that sees the rapid development of his playing style. I will take into consideration the inspirational sources, from the country and rock 'n' roll styles prevalent in his formative years to the soul, funk and Motown influences that emerge on *Rubber Soul*, to *Sgt. Pepper* and the culmination of his own sound, tone, style and impact as a bass player. Furthermore, my original transcriptions of McCartney's work in this period suggest a notable difference in his bass playing approach on songs he composed to those he did not, within The Beatles' canon.

Methodology

The mixed-method methodology employed in the thesis focuses primarily on what researchers term 'practice-based', or 'practice-led' research. This mixed-mode approach emerged after considering the literature currently available, and my own professional practice.

My access to the original recordings and stems of McCartney's work (provided by Beatles' recording engineer, Geoff Emerick), and the opportunity to perform those parts in a UK concert series that allow for an original investigation into McCartney's work "in order to gain new knowledge by means of practice" (Candy) that constitutes practice-based research. These isolated stems provide a unique insight into the finer details of McCartney's performances that are easily overlooked within a full ensemble mix.

My research will involve a careful musicological analysis of McCartney's performances, focusing on not only traditional musicology to produce transcriptions of selected pieces of The Beatles, from my chosen period (1965-67), these transcriptions will detail aspects of McCartney's playing, absent from many of the widely available scores. Critical analysis of McCartney's playing will support these transcriptions, to cover areas such as recording techniques and techniques on achieving the specific tonal qualities of the bass. The recorded quality of the bass and its tonal presence in the mix contributes a significant amount to the overall sounds of Beatle tracks around this period. To omit research of these details, by studying solely standard notation, would be overlooking a large proportion of McCartney's musical appeal.

Alongside this mixed-method of practical research, I will be drawing on knowledge previously acquired through my work as a musician and teacher. Whilst focusing on the playing of Paul McCartney, I shall be looking for comparisons in other styles of music, from Pop through to Jazz and Classical.

The aspect that focuses on practice-led research is an emphasis on my original transcriptions of the work, by ear, directly from the isolated original master recordings. These allow for a distinctive insight into McCartney's approach with specific reference to capturing the correct melodic and rhythmic notation but also the timbre, tonal and recording techniques that were utilised. This aspect of the thesis provides new knowledge, that has clear significance for those interested, not solely in McCartney's individual approach and his work with The Beatles, but on the wider significance of the bass guitar and its development in popular music.

Personal Background

I feel it is worth providing some background to my own personal musical career to give some contrast to the work I carried out to complete this research project.

My musical career commenced around the age of 15, playing guitar with the aid of tutorial books. I continued to play guitar for approximately two years before gradually switching to the bass guitar, due to a higher demand for bass in ensembles. Still self-taught, I would transcribe and learn classic jazz repertoire on both bass and guitar, building a knowledge of improvisation, theory and harmony. Although my playing might have benefitted from some structured, formal tuition, I feel that my self-tuition provided me several skills as a direct result. Through my experience of self tuition, learning occurs at a slower pace than with structured lessons. However, on occasion, this slower pace results in a more thorough learning. Much of my self-tuition was achieved through listening to albums and studying videos and pictures to identify various aspects of technique, such as left hand fretting positions, right hand picking techniques or simply where and how a chord was fretted. These methods led to much investigation into the material being learnt that would be omitted by simply sight-reading a transcription of the same piece. I often find, now that my sight-reading skills have developed to a high standard, that I do not commit pieces to memory as well when reading music, as when I learn from ear.

In 1996, I was offered and accepted a teaching position at Leeds College of Music, as bass tutor for the jazz degree course. Over the following 22 years, I have held teaching positions at Wakefield College, Hull College and Leeds University, and currently teach at both The Royal Northern College of Music and Huddersfield University. My performance career has continued to develop alongside my teaching career, and I am currently performing in the region of 180 concerts per year.

In 2016, I was approached by American producer, Stig Edgren, and original Beatles' engineer, Geoff Emerick, to participate in *The Sessions* project. The idea for *The Sessions* came from Stig Edgren's reading of Geoff Emerick's latest book *Here, There and Everywhere*. Edgren's concept was to create an onstage replica of The Beatles' main workspace – Abbey Road's Studio Two – in an arena/concert situation. Vivid recollections from Emerick's book would be played out by actors, singers and musicians in a life-size stage set of Studio Two, with the concert spanning the entire Beatles' career. A total of 27 musicians were used for the concert, in addition to seven singers and numerous actors. The ethos of the concert series was to recreate the original Beatles' recordings as closely as possible, using instrument models matching those that were used by The Beatles. A total of 54 different guitars and basses were used to achieve this, with myself playing a total of seven different basses. Due to the nature of the concert, every nuance was taken into consideration, even if the original cause of such nuances was a mistake. No notation was offered the rhythm section musicians for the performance, therefore it was my decision to transcribe this material, by ear, from the isolated stems of the instrumental tracks provided. Geoff Emerick worked closely with the musicians for the rehearsal period and first four concerts, to guide the

overall sound of the performances. The results of the preparation for this tour, and the performance of the concerts themselves, will be my main focus for this dissertation.

The objective of *The Sessions* tour (to recreate The Beatles' original recordings as closely as possible) required my transcribing some 63 songs, by ear, for the stage performance. I will be including some of these transcriptions in this thesis, along with short analytical transcriptions for various musical passages. In addition to this dissertation, additional live recordings from the sessions will be included for reference. These document an April 2016 recording from Dublin's '3Arena', directly recorded from the front-of-house mixing desk. Although I will be focusing on 1965-67 for this dissertation, I will include the whole concert performance for comparative analysis. Due to the nature of the concerts, some songs are reduced in structure from the original recordings (often omitting a verse, to shorten the piece overall).

Literature Review

Considering the amount of literature available on the subject of The Beatles, few articles or books have been written specifically focusing on Paul McCartney's bass playing style, techniques or influences.

As I started work with Geoff Emerick on 'The Sessions', members of the band and orchestra were advised to obtain copies of *The Beatles Complete Scores*, published by Hal Leonard. Although this publication had advantages for the orchestral players on the tour, the bass and guitar transcriptions included in the book suffer from extensive errors, providing little of the variation found in The Beatles' recordings. The nature and remit of *The Sessions* required me to play every variation on the recordings, even if this variation was a mistake. As a result, I found this book more of a hinderance than a useful tool.

The Hal Leonard company have also produced numerous transcription books of McCartney's bass lines from several albums and compilations, however these books lack the detail or subtle nuances required to replicate McCartney's playing accurately. The company also produces several *Play-Along* books with included CDs.

Many of the transcription books available at present do little to detail the way McCartney plays, other than pitch and rhythm. A large proportion of these books include tablature (notation indicating the instruments fret numbers rather than musical pitches), however this transference to tablature can be ill conceived for the performer, with some position shifts bordering on physically impossible. Little consideration is given to the tone of the instrument in these transcriptions. As I will explain in later chapters, the fretboard positioning that McCartney uses has a profound effect on the overall tone of the instrument. Not playing the bass in the more familiar lower positions, but using the lower pitched strings in a higher fretting positions gives a more pronounced, rounded sound. This is not addressed to any great length in these publications. McCartney's rhythmic intricacies are also omitted from these transcriptions, often failing to mention quaver characteristics of the musical passages (straight/swing). From performing these songs live, it was evident how much these details matter to the overall feel of the pieces, although they are easily overlooked when listening to the original recordings.

Bassmaster by Tony Bacon and Gareth Morgan benefits from being the only book containing interviews with McCartney on this specific area of The Beatles. This book does provide much insight into Paul McCartney's approach towards the bass and the influences he attributes to his development on the instrument. However, these memories are sometimes unreliable for the use of this project as McCartney's memory understandably has some discrepancies with regard to specific dates and events. To give an example, McCartney cites Jimi Hendrix as his main influence for his electric guitar playing on George Harrison's 'Taxman'. However McCartney's introduction to Hendrix (upon Hendrix's arrival in London) was over a year after the recording of 'Taxman'. Although the book makes for interesting reading, these inconsistencies in McCartney's memory often make the book unreliable for my research.

Dennis Alstrand's book, *The Beatles and Their Revolutionary Bass Player*, – the only other book solely dedicated to this subject matter – fails to stay focused on the intended research. Much deviation is evident with regards The Beatles' composition and cultural significance, whilst failing to discuss the relevant details of McCartney's playing. The book has a tendency to become sycophantic, hindering its critical or analytical standpoint, and relies heavily on quotes taken from Tony Bacon's book and personal emails from other leading bass players, offering little in the way of enlightening information.

Walter Everett has produced two *The Beatles as Musicians* books for Oxford University Press, discussing the periods of 1958-66 and 1966-69. Structured chronologically, these books focus on the writing, recording and performance of The Beatles' entire catalogue. However, the content has a tendency to stray more towards the compositional element of the material, or the cultural impact of the group and fails to analyse the musicianship of The Beatles, as Everett pledges to do. Much of the *Sgt Pepper* bass playing is analysed for the recording techniques used, as opposed to the performance or conception. No reference for instance, is given to the way McCartney and Ringo Starr perform together as a rhythm section or the influences they drew upon.

Geoff Emerick's book *Here, There and Everywhere*, being the inspiration for 'The Sessions', gives firsthand insight to the way The Beatles recorded and the work ethic in the studio. Emerick provides a balance of technical information, while retaining the spirit of the recording sessions. The detail of his use of limiters, microphone placement and developments in bass recording, enhanced my knowledge of the subject and assisted in the replication of the original material for 'The Sessions'.

Mark Lewisohn is recognised by many of his peers (Rodriguez, Emerick, Buskin) as a leading authority on the subject of The Beatles. His two books, *The Complete Beatles Chronicles* and *The Beatles Recording Sessions*, were indispensable to this project. Having access to EMI Studios and The Beatles' vaults of tapes, Lewisohn was able to compile a complete, chronological compendium of The Beatles' day-to-day career. *The Beatles Recording Sessions* also features an in-depth interview with McCartney, although references to his bass playing are brief. *The Complete Beatles Chronicles* encapsulates the entire career of The Beatles in a daily timeline, including live performance, recordings and tours. When investigating possible influential factors to McCartney's playing, these books provided me with exact dates on which to base a timeline for my studies. The books do lack specific details on what instruments were used and how they were recorded, but act as a reliable diary for events involving The Beatles.

Michael Francis Hannan's 2001 paper gathers much of its information from the previously mentioned books by Bacon, Lewisohn and Everett. Although Hannan provides a good source of information and some thought-provoking angles, his terminology of 'distinctively melodic/very melodic/special melodic' fails to prove, with any substance, what qualities would define McCartney's playing as 'melodic'. Hannan includes lists of 'remarkable and non remarkable' bass lines, which only provide subjective preferences.

Allan Moore's *The Beatles: Sgt Pepper's Lonely Hearts Club Band* relies heavily on the use of Schenkerian analysis. This form of analysis, with its focus on 'layers' and the arguably subjective method of tonal reduction, doesn't cover what I consider the essential aspects of McCartney's bass playing, or his contribution to both the compositional and recorded aspects of The Beatles' songs.

Dominic Pedler's excellent book, *The Song Writing Secrets of The Beatles*, whilst also focusing in part on Schenkerian analysis, expands this to be inline with The Beatles' music. Much of McCartney's harmonic approaches to the bass are analysed effectively, especially detailing McCartney's note choice in relation to shifting harmony. However, little information is provided about the instrumentation used by The Beatles or the tone produced as a result. Pedler's general writing on The Beatles' concepts of harmony and songwriting as a whole is excellent. For the purpose of reproducing McCartney's playing, Pedler provides little other than basic notation.

In Conclusion

While there is much material on The Beatles' music in existence, its focus is either of a more general nature: songwriting practice (Pedler), band scores (Hal Leonard) etc or on the specific musicological aspects of particular albums or periods such as *Revolver* (Rodriquez), *Sgt. Pepper* (Moore and Julien) or Walter Everett's in-depth focus on The Beatles' general non-specific musicianship. In the writing of bass-specific material, the focus of study often digresses into the broader realm of The Beatles' compositional skills, either lyrically or harmonically, failing to detail the finer characteristics of McCartney's bass performances. To my knowledge, and through my research, no single publication provides sufficient information to effectively reproduce the bass playing of Paul McCartney.

1958-65

Paul McCartney never intended to be the bass player in The Beatles. As he told *Bass Player Magazine*: “None of us wanted to be the bass player. It wasn’t the number one job, we wanted to be up front”. In 1958 he met his long time songwriting partner, John Lennon as a guitar player and kept this role in the band until 5th January 1961 (Lewinsohn Chronicles 1992 p.38). Before this, McCartney had been bought a trumpet by his bandleader father, Jim McCartney. As McCartney told Tony Bacon: “But I realised I couldn’t sing with the trumpet and I wanted to sing as well. So I asked my dad if he wouldn’t mind if I traded it in for a guitar” (Bacon p.14).

Stuart Sutcliffe (1940-62) was a Liverpool Art College friend of John Lennon. After winning a substantial amount of money for an art prize, both Lennon and McCartney persuaded Sutcliffe to spend the money on a Höfner 500/5 – a large German-made hollow bodied bass (Tony Bacon interview 1994). This led to Stuart Sutcliffe filling the role of the bass player in The Beatles, while McCartney focused on playing guitar, piano and singing. Paul McCartney himself stated to *Beat Instrumental Magazine* in 1964 the Sutcliffe was “a great bass-man!” However, some 30 years later, during the filming of the *Anthology* series, McCartney re-evaluates this statement by saying the band all had little confidence in Sutcliffe’s playing abilities (Beatles Anthology, BBC. 1994).

Sutcliffe’s departure from the group left The Beatles, once again, without a bass player. It was decided by the other members that Paul, being the most ‘musically educated’ should take over on the instrument (Bacon). After some persuasion, around January 1961 (just 10 years after the instrument’s invention), McCartney bought his first bass guitar from a Hamburg music shop. The Höfner 500/1 he purchased was to become an iconic symbol for The Beatles, being the first ‘violin bass’ the company produced.

It should be noted that I, like McCartney, am left-handed. From personal experience, I know how much left-handed people are forced, by society and practicality, to use their right hand for certain tasks. Therefore, a certain degree of ambidexterity is present before the playing of an instrument is even attempted. McCartney first tried to play the guitar right-handed, but struggled rhythmically: “Nobody talked about being left-handed. So I tried it right-handed and couldn’t get any rhythm, because it was all the wrong hand doing it” (Bacon p.15). The advantage of this ambidexterity is that, alongside using the dominant hand to rhythmically lead the performance, the non-dominant hand already has the muscular development needed to articulate notes on the fret board. McCartney told Tony Bacon he realised that true left-handed playing existed after seeing a picture of Slim Whitman playing (Bacon p.15). Being left-handed partly guided McCartney’s decision to choose the Hofner Bass, stating to Barry Miles “All I could really afford was about £30... so for about £30 I found this Hofner violin bass. And to me it seemed like, because I was left-handed, it looked less daft because it was symmetrical. Didn’t look as bad as a cutaway which was the wrong way. So I got into that.” (Miles p.74)

The following description of the bass is stated by Hofner “The bass was designed by Walter Höfner in 1955 and first shown to the public at the Frankfurt Musikmesse in the spring of 1956. It seems that Walter’s intention was to produce a bass guitar that would be appealing to

10

players of the upright bass (double bass) who no longer wanted to carry such a big heavy instrument around to play in beat and jazz groups. He also designed the bass so that the construction method would be familiar to the workers at Höfner who had been making violins for decades. So we got a bass that has the style and shape not unlike a classical stringed instrument and built in much the same way, hollow bodied, arched topped and a set in neck. Walter used components from the Höfner electric guitar line and adapted these for the bass, so it got the familiar ebony bridge, the wire tailpiece, the oval control panel, the black bar pickups”.

The Sessions gave me my first opportunity to play a Höfner ‘violin bass’, and, after playing mainly Fender instruments for the past 20 years, I was surprised at various characteristics of the bass. Due to its hollow design, the bass has an inherent hollowness to the tone, with quite pronounced low mid-range frequencies. Although, when played on its own, the instrument’s tonal properties sound somewhat ‘nasal’; when played as part of the ensemble, the inherent tone helps to create the authentic sound of McCartney from the period of The Beatles’ early recordings.

McCartney’s Early Playing Style

While I will be focusing on McCartney’s bass playing from 1965-67, I will briefly look at some of his early techniques that were foundations to his style from 1963-65.

Much of McCartney’s early influences were from rock ‘n’ roll and country music. During his teen years, McCartney drew inspiration from acts such as Chuck Berry, Little Richard, Carl Perkins and Elvis Presley, stating that when he heard the latter’s ‘Heartbreak Hotel’, “The Messiah has arrived!” (Spitz p.41)

These influences were assimilated rapidly into McCartney’s bass playing style. Early Beatles’ recordings from 1961, with the British-born German artist Tony Sheridan, display not only a natural aptitude to the instrument that McCartney had been learning for only a matter of months, but also shows these influences were evident from a very early stage.

Much of McCartney’s playing around these early years was based around arpeggio-led rock ‘n’ roll patterns, which can be heard on Tony Sheridan’s ‘My Bonnie’, along with scalar passing runs.

‘My Bonnie’ - verse section



If one listens to McCartney's performance of the 1963 Beatles' hit 'I Saw Her Standing There', it is evident that he has played this bass line as a direct replica of Chuck Berry's 'I'm Talking About You'. When interviewed by Tom Mulhern in 1990, McCartney admits to this and justifies it's inspiration: "Here's one example of a bit I pinched from someone: I used the bass riff from 'I'm Talkin' About You' by Chuck Berry in 'I Saw Her Standing There'. I played exactly the same notes as he did and it fitted our number perfectly. Even now, when I tell people, I find few of them believe me; therefore, I maintain that a bass riff hasn't got to be original" (Mulhern 1990).

Chuck Berry's 'I'm Talkin' About You' - verse bass line



'I Saw Her Standing There' - verse bass line



It is evident, early in McCartney's bass playing, that he perceived the bass to be more of a lead instrument than was conventionally viewed. Whereas Chuck Berry's 'I'm Talkin' About You' features a bass line low in the audio mix, the bass on 'I Saw Her Standing There' is considered to be the focal point of the piece (Alstrand p.47). Whenever I've performed the song live, the audience recognise the piece instantly from the bass line; I would suggest this wouldn't be the case from the Chuck Berry example.

Flatwound Strings

The flatwound strings that McCartney has used throughout his career have contributed greatly to his overall sound. When arriving at the first rehearsal for *The Sessions*, with my vintage Fender Jazz bass complete with roundwound strings, it was evident how much the flatwound strings added to McCartney's tone during his work with The Beatles. The roundwound string add far too much presence to the sound of the bass, with an unwanted 'zing' to the tone, not in keeping with the music. From my research, I discovered that McCartney was playing with flatwound strings, merely because that was all that was available; roundwound strings didn't have the popularity or the availability they have now (rotosound.com).

Plectrum Playing

As the electric bass was not mass-produced until 1951 with the introduction of Leo Fender's 'Precision' bass, many bass players of the 1960's were already proficient on other instruments before making the switch to bass. Unlike modern day bass players who can learn from tried and tested techniques specific to the bass, these players simply transferred techniques used from their previous instruments. Former double bass players such as Jack Bruce and James Jamerson often used their fingers to play the strings of the electric bass. Sting, previously playing Spanish Guitar, used the thumb of his right hand. The common trend with guitar players such as American session bass player Carol Kaye, Noel Redding and Paul McCartney, was to continue using a plectrum. In McCartney's case, this is a technique that became the mainstay of his playing and remains so to the present day.

Virtually all the live footage of The Beatles feature McCartney using a plectrum, with the exception of certain 'miming' performances around the mid-1960s. From the *Anthology* recordings, outtakes prove McCartney was in the habit of forgetting plectrums (heard in the spoken conversations included) and attempting to perform the songs, with difficulty, using just his fingers. An example of this is the *Anthology* recording of 'One after 909' (Beatles *Anthology* 1996). When questioned about his preference of technique (plectrum or fingers) by Tony Bacon, McCartney stated: "I did a bit of both. Mainly, if it was a sort of important gig, I'd nearly always resort to a pick because I feel safer that way" (Bacon p.27). This would help explain the lack of plectrum on some of the live mimed performances by the group, 'You've Got to Hide Your Love Away', 'We Can Work It Out' and 'Day Tripper'. If McCartney felt the performances were of little importance, he is unlikely to have been concerned with taking a plectrum.

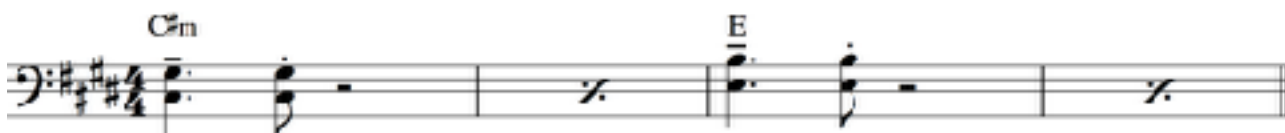
My involvement in *The Sessions* called for me to play almost exclusively, for the first time, with a plectrum. It was immediately noticeable how much more attack to the note was achieved using this technique. Bearing in mind the lack of bass amplification technology available during the early years of The Beatles' career, McCartney's use of the plectrum gave the instrument presence above the guitarists in the band and, as Tony Bacon states, it allowed McCartney and many other early bass players to be heard (Bacon p.28).

When trying to replicate McCartney's plectrum technique, during *The Sessions*, I had to make numerous alterations to the way I instinctively used a plectrum. For this, the most productive research I conducted was to simply watch videos of McCartney playing live. This video evidence shows McCartney playing with the plectrum angled at almost 45 degrees, resulting in the plectrum pushing down on the string as much as across. This produces much more attack to the note and brings out more of the bass frequencies than if the plectrum is played straight across the string. A suitable example of me using this technique would be on 'With Little Help From My Friends' (CD2, Track2)

Use of Open Fifths

Throughout The Beatles' early recordings, McCartney regularly made use of playing open fifth intervals on the bass, resulting in what has become known to guitarists as 'power chords'. During my research and transcribing, I noticed that McCartney began using this technique around the time of The Beatles' second album 'With The Beatles', on the song 'All I've Got To Do' (a piece supposedly inspired by Smokey Robinson's 'You Can Depend On Me', although there are no bass similarities present). This ceased, or at least diminished, once The Beatles stopped touring and suggests that McCartney was using this technique as a means of bolstering the sound of his bass; filling the lower frequencies of the band and making up for the lack of amplification provided for their live shows.

'All I've Got To Do' - verse bass line



In the studio McCartney continued to use this approach for the bass on many of his compositions, surprisingly including some of the softer ballads. This provided a strong, full sound without the effect of over-playing or producing excessive volume. McCartney's performance on 'And I Love Her', from 1964, provides a strong bass foundation to support the thin sounding nylon string acoustic guitar, with its lack of sustain. The bass line in this instance moves in parallel, down a tone to accommodate the F#m, E6 chord progression. ('And I Love Her' - CD1, Track9)

'And I Love Her' - intro section



As the song progresses into the verse section, McCartney's playing moves away from the vertical fifths previously played, inverting the open fifth on the C#m chord in bar 2, allowing the bass to stay in the same frequency range, creating a more understated effect.

'And I Love Her' - verse section



During the rehearsals for *The Sessions*, McCartney's playing of open fifths on the bass went undetected by my colleagues and I, causing us to speculate why we weren't achieving the overall tone for the pieces. When listening to Take 2, from 25th of February 1964 on The Beatles' *Anthology 1*, it is evident how much McCartney's open fifths add to the sound of the song as a whole. McCartney's earlier performance of the piece, playing only single notes, although providing a focused root movement, sounds weak in comparison to the final recorded version.

It is curious then – given the sonic impact this techniques has on these pieces – that Walter Everett's book fails to mention them in his detailed analysis of the songs (Everett 2001).

During the *Sgt. Pepper* period, the use of these open fifths began to reappear in McCartney's playing, albeit for brief passages, sometimes for just one note. This results in the note gaining in weight, without being overpowering in volume.

Rubber Soul 1965-66

After completing a ten-date American tour in August 1965, The Beatles arrived back in the UK on 2nd September and took a break from work for almost six weeks (Lewisohn, *Chronicles* p. 202). As was often the case, whenever The Beatles took time off from working, they emerged with a new sound and fresh ideas, and on Tuesday 12th October they returned to Abbey Road, Studio 2, to work on the songs 'Run For Your Life' and 'Norwegian Wood' (working title 'This Bird Has Flown') (Lewisohn p.63).

The Switch To Rickenbacker and The Iconic Imagery of The Höfner Bass

Some significant changes in Paul McCartney's bass playing occurred around this period, drawing from many various stylistic, technological and cultural influences. During the American tour, in August 1965, McCartney received his specially built, left-handed, Rickenbacker 4001s bass guitar from Rickenbacker's Franciscan Hall (Babiuk p.168). Everett suggests that this new addition to McCartney's instrument collection was to provide a "remarkable change to the group's sound" (Everett 2001 p.308). Everett also states "The most important new aspect to Rubber Soul's rainbow of colours is not the celebrated use in 'Norwegian Wood' of the sitar, but McCartney's August 1965 adoption of the Rickenbacker bass" (Everett p.80).

Having a solid maple body, the Rickenbacker bass produced a more 'present' sound than the 1963 Höfner McCartney moved from, achieving more attack and clarity when recorded. Also, with its longer scale length neck (the distance between octaves), the Rickenbacker bass held its intonation far more successfully than the Höfner. During my work on *The Sessions* project it was evident that these inherent problems with the instrument still exist. As frustrating as these problems are, they also add to the character of the instrument, giving a quasi-acoustic tone similar to an upright bass and allow for the reproduction of McCartney's sound during those early Beatle years.

Paul McCartney was first offered the Rickenbacker bass in February 1964, at the Savoy Hotel in London, but refused it (MacDonald p.154). Why McCartney first refused the bass isn't widely known or documented, however, from an early stage in The Beatles' career, the Höfner, 'Beatles Violin Bass' began to identify the group's image. To this day the bass is used in promotional material far more than any other instrument used by the band as a whole. McCartney himself has suggested a similar notion when speaking to Tony Bacon, stating "I was known for the violin shape. It's a bit like Charlie Chaplin, you know? The little walking cane, little moustache and a bowler hat, and he's Charlie. If he comes on with a bandana and he's shaved and he's on a bike it's like: Who's that?".

There are numerous live performances of songs where Paul originally recorded with his Rickenbacker bass, but when filming, the more iconic imagery of the Höfner is seen. Examples of

these are 'We Can Work It Out', 'Penny Lane' and 'Revolution', amongst many others, all recorded on the Rickenbacker, but filmed on the Höfner bass. Exceptions to this are the filming of both 'I Am The Walrus' and 'All You Need Is Love', possibly a result of McCartney wanting to reveal his new psychedelically-painted Rickenbacker, to be in keeping with the theme of the compositions. When the idea of a return to live performance was mooted (around the time of the *Let It Be* album), McCartney's instinct was to return to using the Höfner bass; either nervous to lose the iconic appearance of the Höfner, or uncomfortable to play a 'new' bass in a live situation. This theory is also reinforced by the fact that McCartney now plays the Höfner bass exclusively when performing live, even though he admits himself that the bass has many inherent problems. (McCartney, 'In The World Tonight' DVD)

McCartney's bass playing changed in many ways from this point, as a direct result of his new instrument, in a way that a painter would paint more efficiently with better quality brushes. The bass certainly increased in level in the mix, and this wasn't by accident. John Lennon stated that he was always wanting the bass on his compositions to equal the volume of Motown recordings (Lewisohn 1998, p.69). The Beatles' engineer, Geoff Emerick also stated "I was getting frustrated listening to American records like the Motown stuff, because the bass was a lot stronger than we were putting on our records" (Babiuk p.165).

As intonation was significantly increased by the switch to this instrument, McCartney's playing style differed in several ways that I will discuss in later chapters. One particular variation is McCartney's choice of fretting position, mainly due to the better intonation achieved on the Rickenbacker. Poor intonation is an accumulative problem, with the instrument getting more and more out of tune the further up the neck it is played. As a result of the Höfner's poor intonation, McCartney generally played the instrument below the twelfth fret, relying on the first (G) string to produce the required pitch. With the transition to the Rickenbacker, McCartney often chose to fret the notes on a lower string and play it higher up the neck (five or ten frets dependent on which string is chosen). The thicker bass strings help create a warmer, rounded tone with much more attack, as opposed to the more brittle, transparent note produced on the first string. This is a technique also used often by Cuban Salsa bass players, producing a rounded, conga drum-like tone to the note (which the bass line was originally intended to be played on). In McCartney's case, the tone produced from this technique was often tuba-like, this would be a method he adopted more frequently during the *Sgt. Pepper* era, which will be discussed in later chapters.

Photographic evidence from around this time also shows McCartney with a new bass amplifier in the studio, a Fender 'Bassman'. These photographs show the amp set up 'piggyback' style (with separate amplifier and speaker, as opposed to previous 'combo' amps) and positioned behind a speaker baffle. It was around this time that The Beatles started to use smaller, more controllable amplifiers in the studio (Babiuk p.171). Alongside the new pieces of equipment, *Rubber Soul* also sees McCartney experimenting much more with the instrument. Photographs show Paul using a capo on the bass during the sessions of 'If I Needed Someone' (Bacon p.56), and the bass is put through a 'Tone Bender' fuzz pedal for the first time on 'Think For Yourself'. (Babiuk p.173). Both of these pieces will both be discussed further in this chapter.

McCartney's Playing on the 'Help' Album

Tony Bacon, in his book *Bassmaster*, suggests that *Help* was a pivotal album for Paul McCartney's bass development. However, through my listening and transcribing many of the songs on this album, I can only describe the bass playing on each track as conventional in its approach. McCartney tends to play on this album with a similar approach to most of The Beatles' earlier releases. This mainly focuses on a pop/country style, playing in 'two' (that is to play two notes per bar on beats one and three). Harmonically these bass notes emphasise the root and fifth of the chord, a much used bass device in the playing of country music. An example of this style can be heard on the title track 'Help'.

'Help' - verse bass line



Of the eleven tracks that included bass on the *Help* album, eight feature this two in a bar-root/fifth style bass line. The three tracks that differ from this style feature either a static root note or a more conventional rock 'n' roll arpeggiated approach, as can be heard on 'Dizzy Miss Lizzy'. With these factors considered, and with little in the way of recording technique advancement, I would disagree that this was a pivotal time for McCartney.

Of the fourteen tracks on the *Rubber Soul* album, only three feature the above 'root-fifth' approach (and often in a less pronounced way than previously). On songs such as 'What Goes On' and 'I'm Looking Through You,' with their distinct country flavour, a bass style similar to the previous album would have been the obvious approach. However, either McCartney was looking for new influences, or deliberately de-emphasising these bass clichés.

Motown and Stax Records Influences

During the writing and recording of *Rubber Soul*, the influence of soul music is evident in McCartney's bass playing. Paul can be heard playing in a more linear fashion, using a scalar approach increasingly and incorporating more syncopation in his playing, similar to that of Motown resident bass player, James Jamerson. As Walter Everett states, around 1964-66 bass

was sonically coming to the fore on recordings by the likes of Wilson Pickett on Stax Records, featuring Donald 'Duck' Dunn on bass (Everett p.309).

George Harrison, the main scout for soul music for The Beatles, being considered as having comprehensive knowledge of the genre (MacDonald p.148), had picked up on these American influences and quoted Otis Redding's recordings as a direct influence on 'Drive my Car' (MacDonald p.166). This is the first example of McCartney taking Stax and Motown influences and weaving these musical devices into Beatles' music. As Rodriguez states, the playing on 'Drive My Car' was "an overt R&B workout" (Rodriguez 2012 p.74-75).

John Lennon, when asked about the title of the album, stated that *Rubber Soul* was an intended pun suggesting imitation 'English soul' (Everett 2001 p.309). On Take 1 of 'I'm Down' (recorded in June 1965 and featured on *Anthology 2*), one can hear McCartney repeatedly saying "Plastic soul man, plastic soul," possibly referring to the musical direction the group was taking, although Lewisohn (one of the only people given full access to the Abbey Road vaults) claims McCartney can be heard explaining to the other Beatles that 'Plastic Soul' was a phrase coined by black musicians to describe Mick Jagger (Lewisohn Recording Sessions p.69).

In keeping with the new soul music influences, the *Anthology 2* album includes one of only four instrumentals in The Beatles' catalogue. Recorded on 4th November 1965, but unheard until the release of *Anthology 2* in March 1996, the recording of '12-Bar Original', although lacking the technical facility or stylistic authenticity, displays distinct similarities to the style of Booker T and the MGs, a group also featuring Donald 'Duck' Dunn on bass guitar.

McCartney's Bass Playing Throughout the *Rubber Soul* Period

Throughout my research, I found no definitive record of which bass (Höfner or Rickenbacker) was played on which song around this period. With the bass still fairly low in The Beatles' audio mixes (in comparison to *Sgt. Pepper* and subsequent recordings), it is difficult to distinguish the identifying tone of the bass at times. During my work on *The Sessions*, the decision of which bass to use on the various songs of this period was made literally by trial and error; trying both basses until I felt the correct overall tone for the band was produced.

12th October 1965

Although in his book, Tony Bacon references that McCartney used his new Rickenbacker for the first day of the *Rubber Soul* sessions, I disagree. From listening to the recorded versions and the stems provided by Geoff Emerick, and playing the songs live, I have come to the conclusion that the songs recorded on this day ('Run For Your Life' and 'Norwegian Wood') were recorded on McCartney's 1963 Höfner bass. This is mainly due to the hollowed out sound of the bass, with much less attack than a Rickenbacker bass produces, this may explain why the bass is

much lower in the mix than it is on 'Drive my Car', recorded the day after (Lewishohn p.63), which is undoubtedly played on the Rickenbacker 4001s.

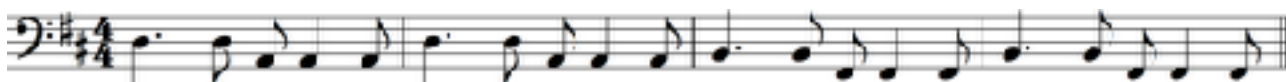
'Norwegian Wood' / 'Run For Your Life'

These two new tracks, intended for the album *Rubber Soul* featured a bass playing style similar to that of previous albums. Both 'Run For Your life' and 'Norwegian Wood' use the root/fifth bass movement heard on the majority of early Beatle songs (see transcription). Compared to later recordings for the album, the bass is quite 'under-played'. In keeping with his earlier bass playing, the bass is functional and provides just a supportive role to the vocals and arrangement. This could suggest McCartney was settling back into the recording studio, after such a long break (in Beatle terms) of six weeks, and used the Höfner possibly due to being nervous of returning to the studio with a new instrument. ('Norwegian Wood' - CD1, Track 21)

'Norwegian Wood' - verse



'Run For Your Life' - verse



'Drive My Car'

The next day's recording session (13th October) resulted in a far different style of playing from McCartney, on the song 'Drive my Car'. This would be the first Beatles' recording session to extend past midnight (Lewisohn 1998 p.63), and one that displays recording and mixing techniques not yet heard from the group.

On 15th September 1965, less than one month before 'Drive My Car' was recorded, Otis Redding's album *Otis Blue/Otis Redding Sings Soul* was released on Stax Records (Turner 2005 p.88). The album included the song 'Respect', which featuring Stax resident bass player, Donald 'Duck' Dunn, and a unison bass/guitar line very similar – both rhythmically and harmonically – to that featured on The Beatles session. When this bassline/guitar part was then used by Jimi Hendrix in 1968 on the song 'Crosstown Traffic', one would imagine it was in homage to the

McCartney bass line, as opposed to the Dunn recording, bearing in mind the automobile-themed lyrics. ('Drive My Car' - CD1, Track 19)

'Drive My Car' verse bass line



Donald Dunn's bass line on 'Respect'



'Crosstown Traffic' bass line



'If I Needed Someone' / 'Day Tripper'

The 16th of October 1965 saw The Beatles back in EMI Abbey Road Studios, recording both the album track 'If I Needed Someone' and the single 'Day Tripper', with the afternoon spent rehearsing and recording the rhythm track for the latter.

With the foundation for 'Day Tripper' based on a riff John Lennon claimed ownership of (Playboy interview 1980), Paul McCartney and George Harrison used an approach similar to that of the recording of 'Drive My Car' (three days earlier), the bass and guitar doubling the riff/bass line. This technique of guitar and bass doubling was used, albeit briefly, by The Beach Boys on 'California Girls' released on 12th July 1965. Multiple sources detail The Beatles' appreciation of The Beach Boys, this shouldn't be dismissed as a possible, additional influence for this musical device.

The UK and US Charts of Autumn 1965, show it was an era when bass-led songs were very much in vogue: 'Ain't That Peculiar' by Marvin Gaye, 'I Hear A Symphony' by The Supremes, 'Rescue Me' by Fontella Bass, and 'Let's Hang On' by The Four Seasons. 1965 also saw the release of one of pop's only bass solos in The Who's 'My Generation'. Unsurprisingly, The Beatles were quick to take up this trend for bass prominence themselves.

Whoever can claim to have written the riff for 'Day Tripper', its origins undoubtedly come from Roy Orbison's 'Pretty Woman' (Bacon p.49). The Beatles toured with Orbison in 1963 and he remained an influence for the rest of their careers. The Beatles' song 'Please Please Me' was, to quote Lennon, "My attempt at writing a Roy Orbison song" (Sheff p.168). George Harrison also kept his association with Roy Orbison and formed the band The Travelling Wilburys with him.

Below is a short transcription of both The Beatles' and Roy Orbison's riffs on these two pieces. In addition to the rhythmic similarities evident, both riffs also focus heavily on the minor 7th and major 9th scale tones of the E major chord they are based on. This ostinato figure continues throughout the piece which, as Everett states, is a surprisingly underused device for a band whose roots are steeped so heavily in rock 'n' roll (Everett p.146). As Alan W. Pollack explained in his *Notes On* series "This kind of branding-by-riff may not be something The Beatles necessarily 'invented,' but there's no denying that it is one of several techniques by which they would be known" (Pollack, *Notes on*).

Roy Orbison's 'Pretty Woman'



The Beatles' 'Day Tripper'



From listening to the isolated bass line from this recording, it is clear that the piece was recorded on McCartney's new Rickenbacker bass, given the tone and attack present. This clashes with Bacon's belief that it was played on McCartney's 1963 Höfner (Bacon p.150). I also find no reason why McCartney would decide to go back to his inferior Höfner bass for the day's recording session, especially considering how enamoured he was with his new instrument.

In keeping with the day's session, McCartney plays another ostinato-pedalled bass line over the A and G/A chords on George Harrison's 'If I Needed Someone', marking what Tony Bacon refers to as the start of the group's psychedelic approach to their music (Bacon p.46). The recording and its approach also signifies McCartney's spirit of experimentation. Photographs from the session show McCartney with a capo positioned on the 5th fret (George Harrison wrongly recalls it being on the 7th fret) (Everett p.318). The effect produced captured the style of The Byrds, featuring David Crosby, who both Harrison and McCartney had been socialising with whilst recently in the US. When asked about the unconventional use of the capo, McCartney simply stated "I'd try anything once!"

'If I Needed Someone' - Ostinato Bass Line



This ostinato introduction section shows stark similarities in both musical content and tone to The Byrds' 'The Bells Of Rhymney'. Both these tracks feature the 'jangling', 12-string guitar and drone-effect pedalled bass note (much like The Beatles had done on 'Ticket To Ride' earlier that year), and only a slight difference of beats-per-minute in tempo (Byrds: 122bpm, Beatles: 129 bpm).

'We Can Work It Out'

Recording commenced with the Paul McCartney original 'We Can Work It Out' on 20th October 1965, during what was The Beatles' longest session to date (MacDonald p.152). The song consisted of McCartney's optimistic verse, interspersed with Lennon's more pessimistic 'middle 8' section. This was a trend that would emerge often, both lyrically and musically, later in the band's career.

Here we see a pattern evolving in McCartney's playing. During the latter part of the band's recording output, McCartney's bass playing has a tendency to be far more 'conventional' on his own compositions, particularly on songs that feature himself on lead vocals. In keeping with my theory of McCartney's bass simplicity on his own compositions, a difference can be heard between Lennon and McCartney's individual sections of this song.

'We Can Work It Out' - McCartney's verse/chorus section

Verse D C D

4 D C D

7 Chorus

The image shows three staves of musical notation in bass clef, 4/4 time, with a key signature of one sharp (F#). The first staff is labeled 'Verse' and 'D' and contains measures 1-3. The second staff is labeled '4 D C D' and contains measures 4-6. The third staff is labeled '7 Chorus' and contains measures 7-9. The notation shows a mix of eighth and quarter notes, with some measures containing rests.

'We Can Work It Out' - Lennon's Middle-8 Section (coincidentally in 6-bar sections, like McCartney's verse)



When performing this song during *The Sessions* project, we felt the need to 'time-map' this track. Time-mapping is a means of accurately producing a click-track that fluctuates in tempo at the same rate as the original recording. The Beatles, especially later in their career, increased and decreased in tempo, sometimes imperceptibly. The two-bar 'We Can Work It Out' chorus increases quite dramatically from 104 to 108bpm, then returns back to exactly 104bpm for the verse again. The way The Beatles did this throughout their recordings, long before click-tracks were used, shows an instinctive aptitude for the 'ebb and flow' of a song. ('We Can Work it Out' - CD1, Track 22)

'Nowhere Man'

Surprisingly little has been written analytically about Paul McCartney's bass playing on John Lennon's composition 'Nowhere Man', considering its complexity and development in contrast to his earlier bass work. Dennis Alstrand's book, devoted to The Beatles' bass work, talks more about George Harrison's guitar playing on this track than Paul's bass playing. That is, however, not to take away from the praise McCartney has received from the playing on this track. In Everett's words it is "McCartney's most melodic part yet, rich with passing tones, bouncy neighbours and optimistic anticipations" (Everett p.322). When transcribing what MacDonald refers to as "an ornate foundation" (MacDonald p.154), I realised how McCartney's part, working almost as a 'session player' to Lennon, is sympathetic to both the tonality and rhythm of the three-part vocal melody.

When performing this piece for *The Sessions*, we included a section of a-cappella vocals, towards the end of the song. Both this section, and the four-bar vocal introduction before the bass enters, makes the listener realise how much McCartney's bass part adds to the overall sound and movement of the piece. Lennon's vocal line, although rich in harmonic complexity, is almost nursery rhyme-like in its rhythmic make up.

‘Nowhere Man’ - vocal melody



McCartney counteracts this rather rigid ‘on-the-beat’ melody line with syncopations throughout. Every bar is anticipated from the last quaver of the previous bar. The line has more chromaticism than much of his previous work, leading up to chord tones, much like a jazz player would in a walking bass line. The legato nature of the piece is also contrasting to his playing around this time, with walking notes given their full length, much the same as his playing on ‘Penny Lane’ just over a year later. (‘Nowhere Man’ - CD1, Track 20)

‘Nowhere Man’ - verse section (bass)



After recording a take of Paul’s new song ‘I’m Looking Through You’ on 24th October (Lewisohn p.203), The Beatles ceased recording to carry out an engagement for Granada TV, where the band can be seen miming to rough mono mixes of both ‘We Can Work It Out’ and ‘Day Tripper’. It should be noted that (filmed on 1st November) this programme shows McCartney, despite recording almost exclusively on his new Rickenbacker bass (and certainly on these two tracks), played his 1963 Höfner on both songs. This only reinforces the notion that McCartney was using his older instrument for visual, iconic effect.

‘Michelle’

The following week included what McCartney described as “a great moment in my life” when referring to his bass development. From my research, it appears McCartney was in the studio alone this particular day and recorded all the parts featured in the piece himself.

Unusually for McCartney, this ‘landmark’ bass work was on one of his own compositions and his ‘revelation’ on this occasion was a harmonic one. The song ‘Michelle’ – a slow ballad McCartney wrote some years earlier whilst at art college (Beatles, 1994) – is based on a familiar chord progression to many jazz ballads (‘My Funny Valentine’, ‘For Once In My Life’, ‘My Way’, ‘Gentle On My Mind’), as well as The Beatles’ songs ‘Cry Baby Cry’, ‘Something’ and ‘Strawberry Fields Forever’.

The song’s introduction, based in the key of F minor, features what is known as a ‘minor descending progression’, meaning that, through the sequence, the root of the chord falls in semitones, giving a min-m(maj)7-m7-m6 progression. In this case the F root falls chromatically to the sixth (a D). McCartney, perhaps feeling the progression was too clichéd or predictable, worked towards altering the bass notes, with the result cleverly and subtly disguising the often used progression.

Many examples of bass playing over this kind of progression would feature the bass also falling in semitones, in effect giving Fm- Fm/E -Fm7/Eb- Fm6/D.

I include an example of this style below:



McCartney’s subtle alterations, in what he refers to as “a Bizet thing” (MacDonald), result in a progression that effectively masked what would have been an often heard, familiar sequence. Paul has spoken numerous times about this recording session, obviously proud and excited to discover his newfound power of harmonic manipulation, by merely playing a different chord tone in the bass. What is a rudimentary bass approach by today’s standards, had a profound impact on how McCartney saw the bass player’s role.

McCartney’s intro ‘reharmonisation’ on ‘Michelle’



McCartney used this technique several times in later Beatles’ work, especially on George Harrison’s ‘Something’, with its chorus featuring a very similar chord progression to ‘Michelle’. The approach was also used effectively on John Lennon’s ‘Lucy In The Sky With Diamonds’, ‘With A Little Help From My Friends’ and McCartney’s own ‘Fixing A Hole’, again disguising a rather predictable and repetitive chord progression.

Paul McCartney told Mark Lewisohn that this style of reharmonising was influenced by The Beach Boys' album *Pet Sounds* (Lewisohn 1988 p.13), however this album was released almost a year after *Rubber Soul* was recorded, so the influence must have arrived from another source. I suspect McCartney was referring to the The Beach Boys' 'God Only Knows', with its bass-note/chord relationship (often sustaining the fifth of the chord in the bass), very similar to some later Beatles' recordings.

'Think For Yourself'

Paul McCartney's bass work on the George Harrison composition 'Think For Yourself' shows a further embellishment on the skills acquired earlier in the album's recording sessions. The concept of doubling the bass and guitar (taken from the Stax Records' house band and adopted by The Beatles for 'Drive My Car' and 'Day Tripper') was employed once more. However on this occasion, for the first time, McCartney recorded two separate bass tracks: one played 'clean' with no effect, the other put through a fuzz pedal, usually intended for use with an electric guitar.

During my interview with Geoff Emerick, he informed me that EMI Studios used to make their own fuzz and distortion pedals, however, in this instance, the bass was put through a 'Tone Bender' pedal made by Gary Hurst (Babiuk p.173). The Beatles felt this development was significant enough to mention "fuzz bass" on the liner notes to the *Rubber Soul* album (Lewisohn p.209). Both the recording of two separate, independent bass lines and the use of distortion pedals on the bass would be evident in the remainder of The Beatles' recording career.

Conclusion

In conclusion, the recording of the *Rubber Soul* album and the accompanying singles represent what I perceive as the first period of major development in McCartney's bass playing. The early country-rock 'root-fifth/two in a bar' style, gives way to Motown influences and what I conclude to be a conscious avoidance of these playing styles by McCartney.

The introduction of the Rickenbacker bass to McCartney's available instruments gave him the opportunity for his bass to be heard prominently in the audio mix, with presence and accuracy regarding intonation and tuning. The bass became a significant element of The Beatles' sound, with importance put on its position in the mix. The instrument began to be played as a featured instrument, rather than delegated to the accompanying role it served on previous albums.

Revolver 1966

Overview Of The Revolver Album

The Beatles performed their last concert in the UK on 12th December 1965, at Cardiff's Capitol Cinema (Lewisohn p.209). This was followed by three months of inactivity, allowing The Beatles to stop work and re-evaluate their career path once more. Just as they had done between the *Help* and *Rubber Soul* albums, The Beatles re-emerged with fresh ideas and new musical directions. On 6th April 1966, the band entered Abbey Road Studios again to begin recording what Mark Lewisohn describes as "The vital plateau between their touring years and studio years" (Lewisohn p.210): the *Revolver* album.

The Beatles' interest in touring was beginning to subside, with the band becoming frustrated that the latest Vox amplification systems supplied for the concerts, were still being overshadowed by the volume of screaming fans. With the notion that they weren't progressing as performers anymore, one by one, the four members of The Beatles rallied for a halt to the band's touring (*Anthology*, 1996).

Along with the eventual cessation of live performances, the previous year (1965), was to be the last year The Beatles released two separate albums of wholly new material (Lewisohn *Chronicles* p.206), signalling The Beatles' desire to spend more time and consideration on each album, plus a suggestion that EMI Records were letting the group work more to their own time schedule. This would be more evident with their next album, 1967's *Sgt. Pepper's Lonely Hearts Club Band*.

1966 was also the first year since The Beatles' rise to fame that they had no film commitments to honour. Again this meant that even more time could be spent focusing on the recording of their compositions.

Musically, The Beatles continued using various devices, instruments and influences they featured on *Rubber Soul*, to create the second part of what George Harrison described as "Volume 1 and Volume 2" (*Anthology* 1996). In the same interview, Harrison also states that he "...doesn't really see much difference between *Rubber Soul* and *Revolver*". However, in their compositional style and lyrical content, The Beatles were maturing. Stylistically, the album includes a broader palette of genres than any previous album: from the pseudo-classical 'Eleanor Rigby', the psychedelic imagery of 'Tomorrow Never Knows' and Indian Raga of 'Love You To', to the children's nursery rhyme-like 'Yellow Submarine'.

Surprisingly for a pop group, *Revolver's* track listing includes five songs containing references to death, or the afterlife, a sign that The Beatles were wanting to move away from the "I love you" pop themes of previous years. As Bob Dylan said, when first hearing 'Tomorrow Never Knows': "Oh I get it, you don't want to be cute anymore!" (Turner p.269).

It has been stated that leadership of The Beatles was passed to Paul McCartney for the *Revolver* album (Rodriguez interview). Whilst the statement could be said to have some merit, both albums (*Rubber Soul* and *Revolver*) saw substantial developments, in both Lennon and McCartney, as composers and instrumentalists.

The Arrival of Geoff Emerick as Engineer

1966 saw the departure of The Beatles' first engineer, Norman Smith, and the arrival of Geoff Emerick as his replacement. Emerick had been working at the EMI Studios as assistant engineer, dating back to The Beatles' first session at Abbey Road, which could only have given him insight into The Beatles' methodology in the studio. Also, in interview, Emerick told me that he knew from the first session how he wanted to approach the new job position, bringing new recording and microphone techniques to EMI (Emerick interview, London, April 2016). As Bacon states, these newly developed techniques brought clarity and depth to the group's sound (Bacon p.49). This was also to be the start of a recording partnership between Emerick and Paul McCartney, that continues to the present day. This partnership was to conceive recording techniques, focusing heavily, but not exclusively on the bass. Emerick was only 20-years old when he acquired his new position at Abbey Road Studios and displayed an eager, creative work ethic, similar to that of The Beatles. As Jerry Boys stated "Geoff walked in green, but because he knew no rules, he tried different techniques, and because The Beatles were very creative and adventurous, they would say yes to everything".(Lewisohn *Recording Sessions* p.70).

During this chapter, I will detail some of Geoff Emerick's developments and methods for recording the bass around this time and the way McCartney's bass playing altered to embrace these techniques.

In Emerick's book, he states that in the months leading up to the recording of *Revolver*, all four Beatles had invested in home studios (Emerick p.111). These Brennell-made machines (Lewisohn p.216) would allow The Beatles to conduct their own personal experimentation in tape manipulation, suggesting an interest in recording techniques that could be brought to the studio for further improvement.

Paul McCartney's Bass Playing Throughout the *Revolver* Period

'Got To Get You Into My Life'

As witnessed at the start of the *Rubber Soul* sessions, a reliance on earlier playing styles could be an indication of McCartney's conservative approach when returning to the studio, after such a long break. His performance on 'Got To Get You Into My Life' is no exception, as this is some of the last, direct Motown-influenced playing McCartney would record on The Beatles' albums.

On listening to and transcribing 'Got To Get You Into My Life', it is clear that the bass line's influence is from Motown. John Lennon confirmed this notion in Barry Miles' book (Miles 1978 p. 88).

Walter Everett states that McCartney's bass performance on the track is most likely influenced by the 15-year old Motown star Stevie Wonder's 'Uptight', released in November 1965. McCartney saw Wonder perform in February 1966 at London's Scotch of St. James club, then spent the remainder of the evening socialising with him (Turner p.128), leading to a collaborative friendship spanning more than 40 years. However, Wonder's recording of 'Uptight' bears little resemblance to McCartney's performance on 'Got To Get You Into My Life' (with the exception of a slight similarity in tone).

Listening to some of the Motown chart releases around that time shows more similarities with 'Don't Mess With Bill' by The Marvelettes (November 1965); an example of James Jamerson's bass playing with its fundamental groove based on a 'crotch-shuffle' feel. This is evident in The Beatles' recording of 'Got To Get You Into My Life', but absent from the straight-quaver feel of 'Uptight'. Both McCartney's and Jamerson's bass lines feature the heavily accented first three pulses of the bar, with strong, heavily swung-quaver ghost notes on the fifth of the chord. See examples below of the two pieces:

'Got To Get You Into My Life' - chorus section



'Don't Mess With Bill' - chorus section



Recording of 'Paperback Writer' and 'Rain' (13th, 14th and 16th April 1966)

On the afternoon of 13th April, McCartney walked into Abbey Road Studios, demanding the rest of the band “gather round and have a listen to our next single” (Emerick p.114). With all The Beatles in agreement that the song was worthy of the statement, Paul immediately gave instructions to the newly appointed Geoff Emerick to try new techniques to replicate the “deep Motown bass sound” The Beatles had been searching for during the *Rubber Soul* album. Emerick states in his book that he and McCartney often had sessions in Abbey Road Studios’ mastering room, listening intently to the bass sound on McCartney’s US imports (Emerick p.115).

This desire for a more prominent bass sound could also be attributed to a desire to match The Beach Boys’ latest single ‘Sloop John B’, released in the U.S. just three weeks previously. McCartney, with his access to U.S. imports, is likely to have scrutinised this single and the bass playing it contained, although it is plausible that he was unaware that, in this instance, the bass playing is provided by female session musician, Carol Kaye. The Beach Boys’ album, *Beach Boys Party*, contains no less than three covers from The Beatles’ back catalogue (from a selection of twelve tracks in total), an indication that The Beach Boys were just as influenced by The Beatles around this period. The fact that McCartney had access to these imports and a desire to study their bass playing approach, displays a desire to better his already praised bass sound. McCartney was the featured ‘player of the month’ in the March 1964 edition of *Beat Instrumental Magazine* (Bacon p.33), proving that his bass playing skills weren’t being ignored, stating that “Technically, Paul is highly rated in the beat business”.

In my interview with Emerick during *The Sessions*, he informed me of the recording techniques used for McCartney’s bass in several instances. A significant obstacle in the production of *The Sessions* was the reproduction of the bass sound exactly like the original recordings. During the earlier Beatles’ material I found it much easier to replicate the sound, being that it was fairly low in the audio mix, without the presence or clarity heard on *Revolver* and later recordings. As Emerick stated in our interview, the bass on these later Beatle albums was recorded by placing a microphone directly in front of the bass amplifier, as opposed to putting the bass signal through a Direct Injection (DI) box, used for most recordings.

Due to the nature of our live performances on *The Sessions*, the use of microphones or amplifiers was not practical, as the 22-piece orchestra’s ambient microphones would have picked up my onstage sound and visa-versa. As we were attempting to recreate music intended for a recording studio, in a live arena setting, we were forced to make compromises. One particular concession was for me to use an ‘Avalon’ preamp unit, tonally effecting the bass sound, before I sent the signal to the sound system. (See enclosed CD).

On the 13th April 1966, Whilst the rest of The Beatles worked with McCartney on the arrangement for ‘Paperback Writer’, Emerick formulated the approach to recording that resulted in

a much heavier sounding bass line. Knowing that microphones are, in effect, loudspeakers wired in reverse (both are transducers that convert sound waves to electrical signals and vice versa), Emerick devised the idea to use a loudspeaker as a microphone, with the notion that a large loudspeaker could respond to the lower bass frequencies better than a small microphone. (Emerick p.116). After seeking the permission of EMI colleagues, Emerick set about creating the recording environment. With the help of second engineer Richard Lush (on his first day in the role), this resulted in what Emerick describes as “the first time the bass sound had been heard in all its excitement” (Lewisohn recording sessions p.74).

‘Paperback Writer’ has drawn attention for its bass playing from numerous sources. Dennis Alstrand stated in his book that “people still talk in amazement about what he did on ‘Paperback Writer’ and ‘Rain’”. Tony Bacon states that during this April 1966 period, McCartney played “some of the best bass guitar in his life” (Bacon p.14). I conclude that a large proportion of the reverence for this bass work is derived from the recording techniques and that more detail in McCartney’s playing is audible in comparison with previous recordings. These recordings bring the bass to the front of the mix, with a ‘dB level’ equalling the lead vocal. Much like several of his later bass performances, the major development on this track is the tone and presence of the instrument, as opposed to what McCartney is actually playing. As Rodriguez suggests, McCartney played more prominent bass lines and fills, purely with the knowledge that his listening audience could now hear the passages he was playing (Rodriguez p.159-160). McCartney made use of Emerick’s recording development by featuring some of the ‘high note/lower string’ playing he started to explore upon acquiring his Rickenbacker 4001s bass, with its improved intonation. The bass playing on ‘Paperback Writer’ features occasional fills using the higher section of the bass fingerboard, whereas the later recorded ‘Rain’ utilises the technique in its entirety.

A Shift in Influences

Around this time, my listening and transcribing research shows evidence of a change in influence on Paul McCartney’s bass playing, on both the *Revolver* album and the single releases from the period. Little evidence is apparent of the Motown style of playing so heavily featured on the *Rubber Soul* album. The legato major pentatonic foundations so distinct in James Jamerson’s bass playing had now given way to a tighter, more minor pentatonic approach; more in keeping with the bass player Bernard Odum and his performances with the American soul singer, James Brown. Tony Bacon states that the playing on ‘Taxman’ from the *Revolver* album shows signs of influence by Brown’s song ‘I Got You (I Feel Good)’ (Bacon p.52), released in January 1966. I would also suggest a similarity to ‘Papa’s Got A Brand New Bag’, a June 1965 single release, also by James Brown. Both of Brown’s pieces rely on a staccato bass line, heavily accentuating beat two of each bar, and a significant emphasis on the b7th of the chord, also detectable in McCartney’s playing around this time.

When transcribing ‘Paperback Writer’, ‘Rain’ and ‘Taxman’ (all recorded in April 1966), distinct similarities between the three pieces were evident. Thursday 14th April’s recording

session at EMI, resulting in the song 'Paperback Writer', reveals, for the first time, a style that McCartney would retain and expand over the next six days. The recording displays the distinctive features of Bernard Odum's bass style previously mentioned, the root played strongly on beats 1 and 2 and the use of the b7th scale degree. In interview, Paul told Mulhern that he played 'Paperback Writer' on his Höfner, however the attack of the bass sound suggests his Rickenbacker was used for this recording, rather than the hollowed out sounding Höfner (Mulhern 1990).

'Paperback Writer' - verse section



Included in Mark Lewisohn's *Complete Beatles Recording Sessions* book is a scribbled note from the day of the 14th April 1966, clearly stating "Tr 2 Bass - Limiter 2 compressed + bass cut filter". In my interview with Geoff Emerick, he informed me that this was most probably referring to the 'Fairchild Limiter', used frequently around this period. The use of a limiter allowed McCartney to play with intensity high up the neck on the lower string, to give more attack and roundness to the notes, without 'overloading' the recording and creating distortion. As a result 'Paperback Writer' included some high register bass fills, heard with more clarity than previous recordings.

'Paperback Writer' - high register fills



'Taxman'

The recordings of 'Rain' and 'Taxman' (16th and 20th April respectively) (Lewisohn, *Recordings* p.75), show Paul McCartney developing this approach further, whilst maintaining the fundamentals of the bass, both rhythmically and harmonically. Minimal variation is apparent to distinguish the two pieces with regard to the bass playing. The verse sections of each piece feature an octave-root leap on beats 1 and 2, only differing in note length ('Rain' is legato, 'Taxman' is staccato). Beat three consists of a three-semi-quaver movement of the 4th, 5th and b7th scale degrees of the two respective keys. ('Taxman' - Cd1, Track 24).

'Rain' - verse section



'Taxman' - verse section



When researching the Bernard Odum/James Brown style of the mid to late 1960s, I found the piece closest to McCartney's bass playing on 'Rain' and 'Taxman' was Brown's 'Cold Sweat'. Further research revealed the track to be recorded in May 1967, some 13 months after The Beatles' recordings. This suggests that McCartney and Odum's styles were evolving side by side, simultaneously drawing on each other's approach.

'Cold Sweat' - bridge section

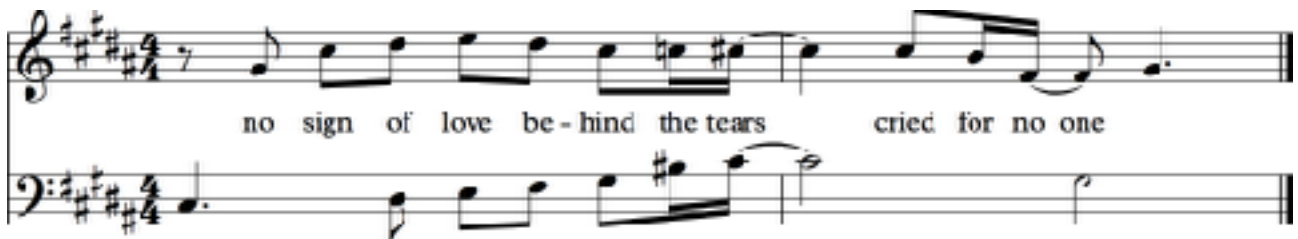


During my transcribing of the 'Rain' bass line, two issues perplexed me. One was that McCartney appears to play a 'low D' on occasion – one tone lower than the lowest available note on the bass – which I assumed he'd simply achieved by tuning the low E string down a tone (although, as it only provides a quaver 'push' into beat one, it would seem unnecessarily laborious). I also noticed that on several occasions in the piece, McCartney appears to go from a low G (3rd fret, E string) to a G two octaves higher (12th fret, G String), in the space of just a quaver. To achieve this movement would require a very fast right hand articulation for McCartney to produce a smooth transition. Upon further research, Lewisohn's *Recording Sessions* book details that the piece was actually recorded at 42 cycles per second, as opposed to the usual 50 (Lewisohn p.74), meaning that, on playback, the piece sounded a tone lower than when recorded. This explains my two concerns, as it reveals that the piece was actually played in the key of A as opposed to G, accounting for the low D note produced, and enabling McCartney to play an open A string for the two octave jump mentioned. This method of tape manipulation would be the start of a technique that The Beatles would continue to use and develop on many instruments over the course of the band's recording career and evident on their next album, *Sgt. Pepper's Lonely Hearts Club Band*.

‘For No One’

Paul McCartney’s bass playing for his own composition, ‘For No One’, provides the listener with his first recorded example of counterpoint on the bass. The composition being described by Matthew Parsons as ‘Baroque Pop’ (CBC Music) and the piece’s use of harmonic counterpoint echoes the style of that era.

‘For No One’ - vocal and bass counterpoint



Of The Beatles, only Paul McCartney and Ringo Starr attended the ‘For No One’ recording session (Lewisohn 1988 p.78), along with session flugelhorn player, Alan Civil (MacDonald p.205). This led me to surmise that McCartney was using the bass, for the first time, to harmonise directly with his voice. Much in the way that John Lennon or George Harrison would have done, if they were in attendance. The flugelhorn plays a more typical counterpoint line in the last verse (also aurally written by McCartney), suggesting he was noticeably familiar with this Baroque style of composition. This method of bass-counterpoint would resurface and develop further during the *Sgt. Pepper* era and beyond. (‘For No One’ - Cd1, Track 27)

‘And Your Bird Can Sing’

Paul McCartney’s bass playing on the John Lennon composition ‘And Your Bird Can Sing’ constitutes what I consider to be more significant bass playing on this album. The verse bass line’s harmonic movement, on the final two bars, can be heard replicated exactly in James Brown’s ‘You Got To Have A Mother For Me,’ released in August 1969, suggesting again that Bernard Odum was still watchful of McCartney’s bass playing developments.

‘And Your Bird Can Sing’ - verse section



'You Got To Have A Mother For Me' - main groove



Conclusion

In conclusion, Paul McCartney's bass playing throughout the period of the *Revolver* sessions (and the accompanying singles), displays further developments, taking influence from black American sources. Overall, the bass work became more structured and disciplined compared to the *Rubber Soul* album. The legato, loose feel of James Jamerson gave way to a more staccato 'punchy' feel, evident with greatest effect on 'Taxman'. McCartney's classical interests, evident in compositions such as the bass-less 'Eleanor Rigby', began to emerge on the bass guitar on McCartney's 'For No One'. This showed the beginnings of counterpoint being used, a technique McCartney would be known for over the coming years.

Sgt. Pepper's Lonely Hearts Club Band 1967

1967 saw The Beatles entering what Lewisohn describes as the band's "creative apex" (Lewisohn p.236), spending the winter of 1966 and spring of 1967 creating the album that would ironically epitomise the 'Summer of Love' (1967).

During the late summer of 1966, The Beatles engaged in what would become their final tour, finishing in America. Paul McCartney, being the most eager of the band to perform live (with the attitude that The Beatles needed to "keep music live"), was the final member of the group to agree on leaving the touring years behind (*Anthology* p.227). On Monday 29th August 1966, The Beatles played what would be their final performance at San Francisco's Candlestick Park, to an audience of approximately 25,000 people. This decision to cease touring heralded a change in focus and direction for the group. Whereas the band's previous schedule would comprise of various live appearances, for both TV and concerts, the group would now focus their attentions solely on composition and the realisation of the sounds they heard in the studio; an environment described by Howard Goodall as a "sonic laboratory" (Goodall/BBC).

Following the Candlestick Park concert, The Beatles embarked on a break of almost three months, Lewisohn stating that the band scarcely spent a day together from September to November 1966. This amount of time apart was unprecedented since the start of the group's career (Lewisohn p.232), and (as could be witnessed during the years of 1965-66, when they emerged from their sabbatical period), a transformation in both their sound and appearance was discernible. Comparing pictures from the Candlestick Park concert of October to the ITN News footage of their arrival at EMI in December, the metamorphosis of the band members is startling. The previous image of The Beatles being what Mick Jagger referred to as a "four headed monster", makes way for the band members' individual image and character, possibly a result of their longest spell apart.

While the other members of The Beatles were pursuing either family life or acting and musical enrichment, Paul McCartney spent the period of September-December 1966 relocating to his first bachelor home in St. Johns Wood, London. He could be seen attending art galleries such as Indica gallery, even setting up the Indica bookshop with friend Barry Miles (Miles). He became an acquaintance of writers William Burroughs and Alan Ginsberg; was a regular audience member at avant-garde concerts by Karlheinz Stockhausen, John Cage and Luciano Berio; participated in experimental 'happenings' and installed a studio in Ringo Starr's unoccupied London basement apartment (Miles p.239).

These avant-garde sensibilities started to appear in McCartney's own musicality, stating at the time "You don't have to like something to be inspired by it". Earlier in the year, Berio's use of tape loops (small pieces of audio tape cut randomly and joined back together) was adopted by McCartney and suggested to The Beatles as part of the sonic landscape provided for *Revolver's* 'Tomorrow Never Knows'. As The Beatles' tour manager, Tony Barrow, states "He was rapidly becoming the most inventive and creative Beatle" (Barrow p.308).

Paul McCartney's Bass Playing During The *Sgt. Pepper* Period

The *Sgt Pepper* period and the subsequent months of 1967, signal that Paul McCartney was coming into his own as a bass player with a unique style and direction. As he said to Tony Bacon "I think there was a prize period when I was playing my best bass" (Bacon p.61). Whereas *Rubber Soul* and *Revolver* drew influences from Motown, Stax and James Brown and the bass playing their songs contained, McCartney's playing around the *Sgt. Pepper* album appears to consolidate these influences, mixing with McCartney's lyrical style which was developing as a unique voice.

Paul McCartney, around this time, wasn't playing the semiquaver driven groove that James Jamerson was exhibiting or the soloing style that John Entwistle was using with The Who, instead he played purely for the purpose of the song. Most of McCartney's development around this period was harmonic and rhythmic in nature, rather than perfecting technique or playing at speed as an incentive. This is perhaps why McCartney's bass playing is rarely mentioned by my bass playing peers or students. Much of his playing is so intrinsic to the song that it is easily overlooked or disregarded.

McCartney has stated on numerous occasions that his main influence for the bass playing on *Sgt. Pepper* came from The Beach Boys' *Pet Sounds* album. However, when listening to the two albums, little commonality is detectable between McCartney's performance style and Carol Kaye's playing on *Pet Sounds*, with the exception of the harmonic similarities noticeable between 'Lucy In The Sky With Diamonds' and 'God Only Knows'.

A significant contributing factor to the bass playing on *Sgt. Pepper* was its recording methods and the importance given to its presence in the mix. Sometimes, to the dismay of the other band members, McCartney would now often want to record the new songs leaving the bass until last (Bacon p.55). As a result, when listening to the isolated bass stems from *Sgt. Pepper*, one can hear the bass for the first time on its own track, rather than sharing tracks with other instruments. As Geoff Emerick explained to me, on the four-track machines used, one track would always be left free to accommodate McCartney's bass part. This also allowed McCartney time to 'compose' a bass line without the pressures and time restraints of the studio. These factors are a sure indication of the importance the band put on the bass playing around this time.

I agree with Tony Bacon's notion: "On many of the *Sgt. Pepper* songs recorded from late 1966 into early 1967, it's the bass that is the dominant instrument. That's down to the way it's played, precisely what McCartney plays, the sound of his bass, and the instruments prominence in the mix. Here's a bass player saying with confidence: this is my style now. He's aware he's in control, that he can turn on his creativity whenever he needs it or feels like it, and very often the results are startling" (Bacon p.54).

Within the Lennon-McCartney songwriting partnership, it has been identified that McCartney wrote the more angular vocal melodies and Lennon the more static (sometimes one note) melodies, relying on the frequently shifting chord progression to provide the harmonic interest. Two examples of this style of writing follow with McCartney's 'I'll Follow The Sun' and Lennon's 'Julia'.

'I'll Follow The Sun' - vocal melody (McCartney)

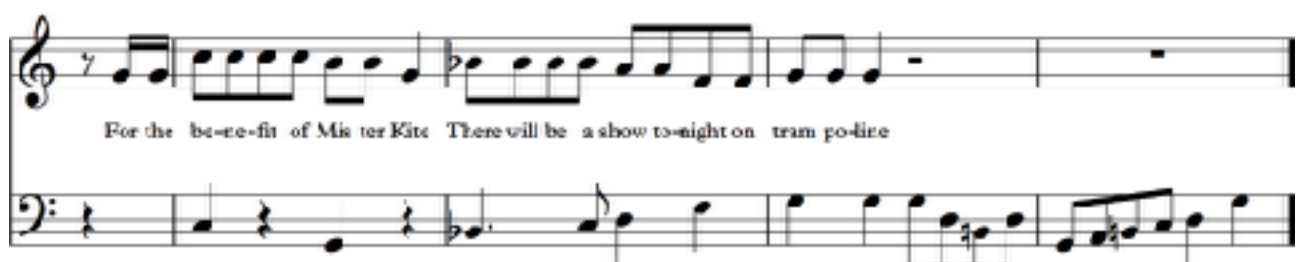


'Julia' - vocal melody (Lennon)



It is evident that McCartney's talent for melody writing started to manifest in his bass playing. During the year of 1967, his bass playing featured melodic and harmonic devices used to write vocal melodies in previous years. Counterpoint (independent melodies used in conjunction), started to be used more noticeably on pieces such as 'A Day In The Life' and 'Being For The Benefit Of Mister Kite', playing a similar role to a jazz saxophonist, filling musical gaps around the vocal.

'Being For The Benefit Of Mister Kite' - vocal and bass



'A Day In The Life' - bass and vocal interplay

The image shows a musical score for the song 'A Day In The Life' by The Beatles. It features a vocal line in the treble clef and a bass line in the bass clef, both in 4/4 time. The key signature has two sharps (F# and C#). The vocal line includes lyrics: 'I read the news to-day, oh boy' and 'A-bout a luck-y man who made the grade'. The bass line consists of a steady, rhythmic pattern of eighth and sixteenth notes. Above the staff, a series of chords are indicated: G, D/F#, Em, Em/D, C, G/B, and Am.

The two examples shown above demonstrate McCartney's sensitivity towards Lennon's lead vocal, playing a straight bass line using uniform crotchets and quavers, whilst Lennon sings a rhythmically syncopated lead line. During the gaps in the vocals, McCartney takes over the syncopations and embellishes his lines to create a 'question and answer' effect.

Several of McCartney's early bass playing approaches and techniques started to reappear in his playing during this period. The use of the open fifths in McCartney's playing – used to great extent on earlier albums – returned, albeit for brief passages, on 'Strawberry Fields Forever', 'Penny Lane', 'A Day in The Life', 'Being For The Benefit Of Mr Kite' and 'Lucy In The Sky With Diamonds' (visible in my transcriptions included). McCartney's heavily arpeggiated playing style is also evident on many songs. One can conclude that McCartney was compiling all his previous bass playing devices and mixing them with the new American influences gained over the previous two years.

As the band's original intention for the album was to create music that reflected their childhoods in Liverpool (although this concept soon subsided), McCartney also starts to draw on some very early influences from his father's chosen style of music, vaudeville. This genre is evident throughout the album, both musically and in the choice of instrumentation. The bass, for the duration of the album, has the tuba-like quality hinted upon during *Revolver*. To achieve this tone and tuba-like note quality, McCartney employed the use of the Rickenbacker built-in mutes. These 'screw down' mutes push small pieces of rubber against the strings near the bridge, forcing the note to decay quicker than normal whilst allowing the note to be played with much more attack. This results in a very focused sound and can be heard to it's greatest effect on 'Lucy In The Sky With Diamonds' (CD2, Track 3). The sound produced has the same quality as a tuba, with a very sudden attack, followed by a quick delay, also giving space to the music without losing any bass frequencies. Whether McCartney was deliberately trying to replicate a tuba is purely conjecture, as nowhere in my research have I seen this stated. Other Rickenbacker players, whilst using this feature for muting, rarely do so to the extent that McCartney did during this period.

When discussing the Rickenbacker mutes with Geoff Emerick, he informed me that McCartney would also ask Emerick to place extra foam under the strings to increase their effect. During my performance on *The Sessions*, creating this effect took much effort; carefully adjusting

the mutes to allow for some string sustain, but also creating the sudden decay needed. A balance was also needed to allow the force needed from the plectrum, sometimes with the tightness of the mutes pushing the strings out of tune. The various pieces we played from *Sgt Pepper* required differing levels of muting, as a result I would have to change the mute resistance and speedily retune the instrument to compensate. This is most evident on my live recordings of 'Lucy In the Sky With Diamonds' and 'With A Little Help From My Friends' (CD2, Tracks 2 & 3).

'Strawberry Fields Forever' / 'Penny Lane'

As previously mentioned, The Beatles' intention for the *Sgt Pepper* album was to create music that evoked their childhoods in Liverpool (Martin p.14). The first offering for this concept was from John Lennon, arriving at Abbey Road Studios on 1966 with the skeleton idea for 'Strawberry Fields Forever', a song written about one of his childhood playgrounds. McCartney's bass playing on this track is simplistic, echoing his return to the studio for the previous two albums. The bass, although supportive for the song, plays long root notes with little in the way of development.

As a response to Lennon's new composition, McCartney embarked on writing a piece of his own, also reminiscing about his childhood. The result was 'Penny Lane', a song McCartney states was trying to recreate the 'clean' sound of The Beach Boys' albums (*Anthology*), his bass playing certainly reflects this 'clean' intention. Not only does the song feature various memories of Penny Lane (a suburb of Liverpool), but its bass playing and instrumentation also has an air of nostalgia; the bass being at times classical or vaudevillian sounding, with the song's descending walking lines more akin to classical music than the walking style of jazz. The song's bass part also features the arpeggiated style McCartney relied on so heavily in early Beatle recordings, as well as his open-fifths used as a bolstering effect in the chorus sections. One point of interest is in the verse sections: McCartney alternates the verse sections, playing the walking line legato in verse one and three, then staccato in verses 2 and 4. For the first and only time, McCartney uses an extremely wide vibrato on the sustained note at 0:59. Double bass player Frank Clark was also hired to play only one note at 2:06 (MacDonald p.221). The sustained notes in bars 4-6 reduce in length so accurately that I propose this was intentional by McCartney. All these factors make it apparent how much attention McCartney was now giving his bass lines and the 'through composed' style he was now adopting for his performances in the studio. These two songs, although originally intended for inclusion on the *Sgt Pepper* album, were released as a double A-side single, owing to their quality and cultural significance. ('Penny Lane' - CD2, Track 12. 'Strawberry Fields Forever' - CD2, Track 13. Full 'Penny Lane' transcription overleaf)

'Penny Lane' - bass transcription

This image shows a bass transcription of the song 'Penny Lane' by The Beatles. The music is written in bass clef with a key signature of three sharps (F#, C#, G#) and a 4/4 time signature. The transcription includes various musical notations such as triplets, slurs, and dynamic markings. The piece is divided into measures, with measure numbers 6, 12, 17, 21, 28, 33, 38, and 43 indicated at the start of their respective lines. Key features include a triplet of eighth notes in measure 3, a 'To Coda' instruction in measure 17, a 'D.S. al Coda' instruction in measure 33, and a repeat sign in measure 38. The transcription ends with a double bar line in measure 43.

8va

3

6

12

17 To Coda

21

28 1.

33 2. D.S. al Coda

38

43

‘When I’m 64’

Continuing the theme of reminiscence, the first song recorded that made it onto the actual album was Paul McCartney’s ‘When I’m 64’. Although not referencing Liverpool like the previous two songs, ‘When I’m 64’ was originally composed by McCartney at the age of 16 (Miles p.319) and features many traits of his father’s vaudeville influence. The tuba-like tone quality, previously mentioned, appears on this track for the first time on a Beatles’ recording, in keeping with the song’s quasi-brass band arrangement. McCartney returns to his familiar ‘root-fifth’ bass movement, but with more commonality to ‘Oompah’ music than the country style he used the technique for in the past. The piece in its entirety has the sense of McCartney trying to recreate music from the past, rather than pushing musical boundaries. The lyrical content and delivery, complete with rolled ‘Rs’ in a Scottish accent, also high-light the humour in the composition.

‘Lucy In The Sky With Diamonds’ (CD2, Track 3)

Whilst John Lennon’s ‘Lucy In The Sky With Diamonds’ is simple in its nursery rhyme like melody and rhythm, what Howard Goodall describes as its “destabilising bass line” provides enough harmonic interest to retain the listeners attention (Goodall/ BBC).

When listening to Lennon’s demo recordings, a simple chord progression underpins the piece. Although complimenting the melody, it doesn’t have the same un-resolving quality of the final recorded version. The harmony implied on the demo is as follows:

‘Lucy In The Sky With Diamonds’ - demo concept

Musical notation for the demo concept of 'Lucy In The Sky With Diamonds'. The score is in 3/4 time, key of A major (two sharps). The melody is written on a treble clef staff, and the bass line is on a bass clef staff. The lyrics are: 'Pic-ture your-self in a boat on a ri-ver With tan-ge-rine trees and mar-ma-lade skies'. The chord progression indicated above the melody is: A, F#m, A, F#m.

With McCartney’s choice of bass notes, the resulting harmonic development is as follows:

‘Lucy In The Sky With Diamonds’ - final version

Musical notation for the final version of 'Lucy In The Sky With Diamonds'. The score is in 3/4 time, key of A major (two sharps). The melody is written on a treble clef staff, and the bass line is on a bass clef staff. The lyrics are: 'Pic-ture your self in a boat on a ri-ver With tan ge-rine trees and mar- ma-lade skies'. The chord progression indicated above the melody is: A, A/G, F#m, A+/F, A/E, A/G, F#m, F.

The remainder of the piece takes a journey through five keys: A-Bb-C-D and finally the chorus in G, the bass using many devices such as arpeggios, staccato and legato passages and a tempo-pushing quaver chorus section.

When performing this song in *The Sessions* (CD2, Track 3), attention had to be given to the overall volume of the bass. By using a valve pre-amp on the bass with various presets, I was required to change the built-in settings to produce the bass level needed without distortion arising.

During this period of The Beatles recording, such consideration was given to the bass, that an entire track and frequency range was reserved for the bass to occupy. As Geoff Emerick told Cunningham: "When I was mixing, the last instrument you bring in is the bass. So through *Pepper*, everything was mixed without hearing the bass. I used to bring everything to -2 on the VU meter and then bring the bass in and make it go to 0, so it meant the bass was 2dB louder than anything on the record. It was way out front, the loudest thing on the record" (Cunningham/*Good Vibrations*).

'A Day In The Life' (CD2, Track 8)

Much has been written about this piece with regard to its newspaper inspired conception and its revolutionary use of an orchestra in pop music for the transitional climax sections. However, little has been written about the bass playing on the piece, which displays Paul McCartney introducing a new approach to the instrument.

Insight can be gained from the contrasting way McCartney plays the Lennon composed "I read the news" section, to his playing on his own compositions. During Lennon's sections, McCartney plays in a very 'loose' unstructured way, with octave variations (much the way he would play on George Harrison's 'Something' in 1969). His long legato notes, varying each time he plays over the chord structure, could be described as 'through composed', reminiscent of his playing on Lennon's 'Strawberry Fields Forever', weeks before. This is in stark contrast to his own "Woke up, got out of bed" section, which displays staccato playing as its central component. This section uses the same staccato walking style that McCartney played on 'Penny Lane', the 'musical companion' to 'Strawberry Fields Forever', with a more uniform, structured style showing little variation. Little has been written about McCartney's tenancy to play simpler on his own compositions, one can assume his focus was elsewhere, either concentrating on lyrics or arrangements.

'A Day In The Life' - McCartney-composed section



'A Day In The Life' - verse section



'With A Little Help From My Friends' (CD2, Track 2)

'With A Little Help From My Friends' provides further evidence of McCartney perceiving the bass guitar to be a lead instrument around this time. The 'question and answer' style of the vocals leaves little space for other instruments in the arrangement, with McCartney's playing approach similar to that of his performance on 'Being For The Benefit Of Mr Kite'.

Geoff Emerick gives insight to the importance McCartney put on this bass line in his recent book, stating that an amplifier was set up in the studio, with a long guitar lead stretching to the control room, so McCartney could record the line 'phrase by phrase' (Emerick p.183). This goes against Everett's notion that the bass for this piece was recorded via Direct Injection (Everett p. 102). Also, the headphone 'spill' evident in the isolated bass stems, suggests a microphone was used in the recording.

Rhythmically, the nature of the piece showcases McCartney and Ringo Starr's aptitude for playing in heavily swung-shuffle style throughout. Ringo brings back one of his earlier techniques of occasionally playing a straight quaver hi-hat pattern against the swung bass and bass drum parts. This was a technique adopted earlier by Chuck Berry on 'Johnny B. Goode' and Little Richard on 'Tutti Frutti', and can be heard on the live version of 'Dizzy Miss Lizzy' from *The Beatles At The Hollywood Bowl*. This technique of playing straight quavers over swing would also be used by McCartney on bass, throughout The Beatles' career.

The bass performance on this piece brings together many of the influences previously discussed: the arpeggiated style from early McCartney influences, the swung root/5th quavers compatible with James Jamerson and McCartney's own, recently developed melodic 'lead bass' approach.

'With A Little Help From My Fiends' - verse-chorus-verse-chorus-bridge

♩ = ♩² ♩

5

9 **A**

15 **B**

21 **C**

26

31 **D**

35

'Being For The Benefit of Mr Kite' (CD2, Track 6)

When John Lennon arrived at Abbey Road Studios with this piece, he informed George Martin and the rest of the band that he wanted the arrangement to make him “smell the sawdust,” with reference to the circus effects he envisaged sonically (Emerick p.167). McCartney’s bass part throughout this piece relies on numerous musical clichés that help evoke this setting. The root-fifth movement and the unusually placed, heavy staccato on notes add to making the sound reminiscent of a wind-up piano. Paul’s counterpoint in bars 8 and 9 of the verse echo his playing on *Revolver*’s ‘For No One’, albeit in a more developed and focused manner.

McCartney once again uses the technique of answering the vocal line with a distinct bass figure in bars 3 and 4 of the verse. This bass response to the vocal appears significant enough to McCartney for him to vary it, albeit slightly, each time he plays the figure. When watching McCartney perform the song live in recent years, he still adheres to these subtle variations, suggesting they weren't just an improvised part of the 1967 performance.

'Being For The Benefit Of Mr Kite' - verse, bars 3 & 4 variations

'Being For The Benefit Of Mr Kite' - bass, full transcription

A full transcription of the bass line for the song 'Being For The Benefit Of Mr Kite'. The music is written in bass clef with a key signature of one flat (B-flat) and a 4/4 time signature. The score consists of ten staves of music. The first staff begins with a treble clef and a 3/4 time signature, followed by a double bar line and the bass clef with 4/4. A box labeled 'A' is placed above the fourth measure of the first staff. The music features a variety of note values, including eighth, quarter, and half notes, as well as rests. There are two first and second endings marked with '1.' and '2.' above the staves. The piece concludes with a double bar line and a final chord.

4 **A**

8

13

18

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38

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Conclusion

In conclusion, the *Sgt. Pepper* period shows another transition in Paul McCartney's bass playing. It would appear McCartney's drive to replicate the American sounds he was admiring gave way to his own natural instincts for musicality. With the recorded bass matching, and arguably exceeding, the presence of the Motown and Stax records, McCartney's previous playing style begins to blend with the soul influences developed over the preceding two albums.

The arpeggiated playing of his early rock 'n' roll style intermingle with the drive of soul. The use of open-fifths reappear for brief passages, being used as a tonally bolstering tool. McCartney also embraces the vaudeville influences of his youth with the song 'When I'm 64'. The early 'root-fifth' style of playing that McCartney appeared to be actively avoiding on *Rubber Soul*, was now played with full conviction on 'Being For the Benefit Of Mr. Kite' and 'With A Little Help From My Friends'. The use of counterpoint is more evident than on any other album, with McCartney taking the bass out of its traditional, accompanying role. We also see the beginnings of McCartney using 'through composition' on the bass for many of the pieces, something that he would develop further during the *Abbey Road* album.

I feel that, during this period, McCartney was amassing all of his previous influences and approaches to the bass, resulting in a style that was unique to him.

Post *Sgt. Pepper* Bass Playing 1968-

Tony Bacon suggests in his book that a demise can be witnessed in McCartney's bass playing after the *Sgt. Pepper* album and questions whether this can be attributed to the heavy drug use The Beatles took part in during 1967. Although I have decided to not enter into this topic during this project, as I don't feel it particular necessary, or feel it has any more importance than the subject of another musician's alcohol use. However I do agree with Bacon that from 1968 onwards, McCartney's bass playing somewhat plateaued. This is not to say that it demised, just slowed in its development.

1967 was an eventful year for The Beatles: the recording and release of *Sgt Pepper*, the recording of both the *Yellow Submarine* and *Magical Mystery Tour* albums, the filming of the *Magical Mystery Tour* movie and the recording of 'All You Need Is Love' for a worldwide transmission. Significantly, the other major event was the death of their manager Brian Epstein in August 1967. This event resulted in the group's partial loss of focus (Beatles/BBC).

With the intention of escaping their drug-fuelled lifestyle in London and the constant harassment of the press, The Beatles decided to embark on a trip to Rishikesh, India in February 1968 (Lewisohn). Equipped with only acoustic guitars, The Beatles' stay of almost four months resulted in their next – predominantly acoustic – album *The Beatles* (or as it became known, *The White Album*). Demo recordings made on their return to England feature the acoustic guitar as the dominant instrument, with songs such as 'Blackbird', 'Mother Nature's Son', 'Julia', 'Cry Baby Cry', 'Dear Prudence' and many others that weren't released until The Beatles' solo recording sessions (1970 onwards).

The singer Donovan accompanied The Beatles to India and taught them techniques in guitar finger picking (Beatles 1994). Lennon and McCartney returned from India with guitar picking styles which, although practically identical in their rhythmic makeup, are vastly different in their execution. With such an emphasis on the finger picking of the acoustic guitar from this period, extending up to their final album, *Abbey Road*, it would be plausible to suggest that McCartney's focus simply shifted away from the bass to this instrument.

The bass playing on The Beatles' albums from 1968 to 1970, although worthy of merit, echoes McCartney's previous achievements in the years leading up to *Sgt. Pepper*. His rapid development from 1962 to 1967 (resulting in McCartney performing as a bass player with his own voice by 1967), didn't appear to continue at such a rate throughout The Beatles' final two years.

Conclusion

During this project, my mixed-method mode of research has revealed the development of Paul McCartney's bass playing throughout the years 1965-67. Access to the isolated 'stems' of his playing have given me a unique insight into the finer details of his performance, allowing for more focused analysis than would be possible from simply using the original master recordings.

My practice-led research methods have allowed me to detail the various sources of inspiration during this chosen period and how McCartney utilised them in his own performances. I have considered McCartney's culmination of soul and Motown influences alongside his previously prevalent performance styles that led to his own sound and method of application to the bass, becoming established from the *Sgt. Pepper* era onwards.

My practice-based research has allowed me the opportunity to recreate these bass lines, focusing on the tonal impact to the compositions; an area of study that has had little attention by scholars previously.

1965-67

I conclude that 1965-67 represents the period of McCartney's greatest development on the electric bass. During this period, one can witness McCartney's bass playing evolve from a simple country music style technique (derived from a double bass heritage), to a bass style and approach to the instrument unique to McCartney. With the electric bass still in its infancy, developments in the instrument's production and the recording techniques used to capture the sound, greatly affected the way McCartney approached the instrument. The philosophy of the role of the bass in an ensemble changed greatly, no longer did McCartney view it as having a supportive duty, but a lead instrument deserving of its own position in a recorded mix.

Influence

The ever-present 'root-fifth' style of McCartney's country and rock 'n' roll influences, with its simplistic rhythmic foundations, gave way to the soul influences of Stax and Motown in 1965. Both the 'two-in-a-bar' rhythms of country music and the crotchet-led bass lines of rock 'n' roll began to be replaced with a sense of syncopation, absent from the majority of earlier Beatle music. McCartney also strived to replicate this music tonally, using various recording methods to achieve this. These tonal improvements matched McCartney's desire for more distinct bass lines, allowing the finer nuances of his performances to be heard much clearer than before. Both the recording and performance advances resulted in particular areas of McCartney's technique to be temporarily redundant, such as his previous open-fifth playing. The bass lines of The Beach Boys (either performed by Brian Wilson or Carol Kaye) provided harmonic inspiration to McCartney, forcing him to look closer at the bass note's relationship with the chord structure. Evidence of this

can be heard in to great extent from *Revolver* onwards. By 1967, McCartney had culminated all these influential approaches, together with his previously dominant musical idiosyncrasies, to produce a melodic style of playing unique to him.

Non-Composer Performances

The differences are evident in McCartney's bass playing when performing for one of his own compositions, or for the music of others. Throughout my research, distinct contrasts arise with the approach to the bass on his own compositions (structured or conventional bass lines to support his vocal performance), and his playing on John Lennon and George Harrison songs (a freer and more creative approach). This can also be witnessed in pieces with a shared 'Lennon-McCartney' credit, the same characteristics are applied to the individual composer's sections. Clear examples of this can be heard in 'A Day In The Life' and 'We Can Work It Out'. Why McCartney maintained this trend hasn't been studied in-depth and remains a matter of conjecture. Some scholars assume it derives from McCartney's vocal responsibilities being reduced, whilst others claim it could be from malice, deliberately playing in a less structured manner on other composer's work. I am inclined to agree with the former notion, alongside McCartney's desire to have a creative input in all areas of The Beatles. McCartney's bass line on George Harrison's 'Something', displays arguably his most improvisational, through-composed playing, using counterpoint to the melody throughout. I see this as a direct result of McCartney's desire to add his own creative input to such a compositionally strong piece, which was further highlighted on The Beatles' 1969 single release 'Come Together' / 'Something'. This was, ironically, the first ever Beatles' release not to comprise a McCartney composition and yet showcases two of his most inventive and celebrated bass lines.

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