

## Student guide: Area of study 2 (Popular music)

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This resource supports GCSE Music (8271) Area of Study 2.

*Sgt. Pepper's Lonely Hearts Club Band* by The Beatles

*With a Little Help from my Friends* by Lennon and McCartney



## *Sgt. Pepper's Lonely Hearts Club Band – Background*

By the end of 1966, after constantly touring for more than four years, the fab four had become completely disillusioned with live performance. They had just returned from the Philippines where they had barely escaped with their lives after refusing to visit the first lady Imelda Marcos. John Lennon had recently made his famous, probably true, but ill-advised comment about the Beatles being 'more popular than Jesus' and in spite of a swift apology, this went down extremely badly in America, the result being that they played to half-filled audiences giving poor quality concerts. These issues were bad enough but their primary concern was that concerts had turned into a farce, the volume of the largely female teenage audience far out-stripping the volume of the band. On their previous album, *Revolver*, they had started to experiment with a wider instrumentation and it seemed obvious that their new material could no longer be performed by the limited, two guitars, bass and drums format that they had initially started out with. After a particularly miserable gig when the band were ushered out through a side door into a waiting van with no seats, McCartney exclaimed "Right, that's it" and in August 1966 The Beatles permanently retired from touring and took a three month holiday.

On a return flight to London, McCartney had the idea for a song that involved an Edwardian era Military style band and this eventually formed the concept that was to become the album. As McCartney explained in 1992, "The record could go on tour, that was the theory." On the 24th November 1966 they went into Abbey Road studio no. 2 and started recording tracks that were originally going to form an album of songs representing their childhood. The first two of these were *Strawberry Fields Forever* and *Penny Lane*, both familiar haunts from their childhood days in Liverpool, but neither of these songs were included on the album. Brian Epstein, their manager, wanted a great song for a single release so both were released as a double A side. In those days it was considered bad practice to put singles on the album as well because it was seen as conning the public.

By February 1967 they had finished recording the title track for the album and decided that the whole album should represent the fictitious Sgt. Pepper band, a kind of recorded concert as McCartney had originally envisaged. The fact that they were never going to have to tour the album meant that they could embark on a completely new form of studio composition where they were free to experiment. With songs such as *With a Little Help from my Friends*, *Lucy in the Sky with Diamonds* and *A Day in the Life*, along with producer George Martin's creativity and musical training, they were able to craft songs of stunning originality using signal processing, a forty piece orchestra, wonderful string and brass arrangements and all achieved with the constraints of EMI's 4 track studio equipment. The record became recognised as the first real concept album and paved the way for 'art rock' and 'progressive rock' that dominated the popular music scene during the late 60s and the first half of the 70s. It was also the first multi-genre album covering a wide range of styles; Rock, Pop, Classical, Indian classical, Vaudeville, Music Hall, Ragtime and Avante Garde.

## *With a Little Help from my Friends* – Lennon and McCartney

Lennon and McCartney would always try to write a song for Ringo to sing on most of the Beatles' albums and this was the song that they created for him on *Sgt. Pepper*. Ringo was insecure with his vocals and to a certain extent the composition often reflected this in relation to the vocal writing, with Lennon and McCartney writing specifically for his limited baritone voice. This is certainly true in this case, as we shall discover. The other three members of the band provide the chorus support in the song.

Despite appearing second on the album the song was actually the last to be recorded and is generally regarded as a 50/50 effort between John and Paul. The song originally had a working title of *Bad Finger Boogie*, supposedly because John had damaged his forefinger and had to work out the melody on the piano with his (bad) middle finger. If true, this could also be another reason for the simplicity of the melody. The rock band The Iveys, a Beatles discovery who had already released a single for Apple Records, changed their name to *Badfinger* after hearing the song's original title. In 1970 they had their biggest UK hit with a McCartney song, *Come and Get it*, which reached number 4 in the charts.

The album starts with the title track, a solid 8 beat rocker in the key of G with McCartney screaming the lead vocal in the verses and the band complimenting this with close harmonies in the choruses. This Overture (opening) presents us with the sound of a pit orchestra tuning up and audience mumbling (recorded by George Martin at a *Beyond the Fringe* comedy gig in Newcastle), all giving the impression of a live performance. The wonderful five-bar, four part horn quartet bridge is a George Martin arrangement directly taken from what McCartney had sung to him. Just before the conclusion of the song McCartney sings "Let me introduce to you, the one and only Billy Shears" (Ringo's alter ego in the fictitious band)) before the song cleverly segues into *With a Little Help from my Friends*. This is achieved with a moment of crowd cheering that George Martin recorded at a Beatles concert at the Hollywood Bowl, during which, the music pauses for two bars on the subdominant chord (C). A sudden tempo increase from the steady 90 BPM to 112, is accompanied by three rising major chords (C, D, E) spread over four bars, to which, John and Paul sing in multi-tracked close harmony Billy Shears, thus, we have our modulation from G major to E major, the key of *With a Little Help from My Friends*.

The overall structure is not untypical of a Beatles song or indeed any pop song of the period:

**Intro:** chorus (rising major chords, C – D – E)

**Verse 1:** solo – Ringo

**Chorus:** solo n- Ringo – chorus joining on the third repeat

**Verse 2:** solo – Ringo alternating questions with chorus

**Chorus 2:** In vocal harmony throughout, six bars instead of 8

**Bridge:** chorus asking questions with solo (Ringo) answering

**Verse 3:** chorus-asking question with solo (Ringo) answering

**Chorus 3:** In vocal harmony throughout, six bars instead of 8

**Bridge:** chorus asking questions with solo (Ringo) answering

**Chorus:** In vocal harmony throughout, this time 8 bars leading to:

**Outro:** harmonically a repeat of the intro.

Whilst the accompanying chords plod along in a square, crotchet movement, the overall rhythmic style of the backing and the melody is that of a steady shuffle, a beat commonly found in rock 'n' roll. A shuffle beat essentially breaks up each crotchet into a triplet, the first two being tied to each other. If notated in this manner, it would look something like this:

This can become rather confusing to read so most music in shuffle beat tends to be notated in quavers with an indication at the top of the music to play or sing in a shuffle beat. If you look at what Ringo sang for the opening melody below, you will note the simplistic stepwise movement throughout the entire melody. What is interesting about the melody is that after the first note, the shuffle beat places each of the important words in the text, do, sang, tune, stand, walk and me just slightly before the beat making them prominent and having greater emphasis. The tied quavers on each of these notes create a sense of syncopation in the rhythm of the melody. The sequential movement between the first four notes of bar 1, and the first four notes of bar 2, help to give it a sense of shape and balance, and all of this within the narrow range of a perfect fifth, E to B, simple, but extremely effective.

Chord symbols above the first staff: I (E), Vb (B 1st inv), IIc (F sharp M 2nd inv), II (F sharp M).

Chord symbols above the second staff: II (F sharp M), V (B), I (E).

Lyrics: What would you do if I sang out of tune would you stand up and walk out on me

The harmonic structure of the verse is also very simple using only three chords, I (E), II, F sharp minor and V (B). What makes this simple harmonic structure more interesting is McCartney's remarkable ability as a bass guitarist. In his youth he learned to play, largely by ear, piano, guitar, bass guitar and drums. When he was fourteen his father gave him a trumpet but he traded it for a £15.00 Framus Zenith Model 17 acoustic guitar arguing that it would be difficult to sing whilst playing the trumpet! His natural aptitude for melody meant that his bass playing has always been very melodic and it was particularly so on Sgt. Pepper. The use of passing notes in the melodic construction of the bass line in the opening results in inverted chords. Inverted chords (inversions) simply mean that other notes from the chord rather than the root appear as the lowest note. This means that the bass line can be melodic in construction rather than always moving in larger intervals. This is particularly noticeable in bars 4 and 6:

Staff: Bass Guitar

Measures 1-6: Melodic line with passing notes, dynamics *mf*.

Measures 7-8: Sustained notes.

Notice also the balance in the construction of the phrasing, the opening four bars essentially descending in pitch being perfectly by the next four bars rising.

Similarly, the vocal line in the chorus is also restricted to a very narrow and limited range:

Chord symbols above the staff: flattened VII (D), IV (A), I (E).

Lyrics: with a lit - tle help from my friends Mmm I get high

Notice the repeated notes followed by the leap of a fifth. Once again, the vocal melody is restricted to a range of five notes. What is interesting about the

chorus is the harmony with the opening chord (D) being the flattened 7<sup>th</sup> in relation to the home key (E major).

This very simple eight bar chorus is based on the repetition of this two bar idea three times, (notice the addition of the rest of the band singing in harmony the third time), followed by a two bar pause on the chord of B (V) creating an imperfect cadence, with syncopated drum fills on the tom toms. This then sets up a perfect cadence in the return to the verse.

The second verse demonstrates some development of the opening verse vocally. Texturally, the antiphonal call and response brings in a dialogue between Ringo and the rest of the band posing a series of questions with no answers:

**Ringo:** What do I do when my love is away?

**Band:** Does it worry you to be alone?

**Ringo:** How do I feel by the end of the day?

**Band:** Are you sad because you're on your own?

The second chorus is significant in demonstrating just how far Lennon and McCartney had come in the four years since their first album. If you listen to, for example, *Please, Please Me* from the first album, *Hard Day's Night*, or even *Taxman* from *Revolver*, (the album immediately preceding *Sgt. Pepper*), you'll notice how the arrangement of the chorus tends to be the same each time. To a large extent this is still true of a lot of pop/rock music today. However, in *With a Little Help from my Friends*, the second and third choruses differ in three distinct ways:

1. The vocal harmonies are present throughout.
2. The final two bar instrumental passage is omitted.
3. The second part of the sixth bar is used as a transition to the bridge.

After all of this quite restrictive vocal writing in the verse and chorus, the bridge provides a complete contrast, with the rest of the band now asking the opening questions, in harmony, within an expanded vocal range and Ringo providing the answers at his baritone pitch. Note once again the syncopation in the melody driving against the shuffle beat.

The structure of the harmony in the bridge is also very interesting. The opening two chords (C sharp and F sharp) sound like a preparation for a modulation to B major, F sharp being the dominant of B. However, instead of the expected perfect cadence into B, the harmony suddenly shifts back to E, the use of the flattened 7<sup>th</sup> (D) chord once again resembling the chorus. As a result, the modulation isn't quite complete.

The image shows a musical score for the song "Let It Be" by The Beatles. It features two systems of music. The first system, labeled "Lennon/Mccartney/Harrison" and "Ringo", covers measures 34 to 36. The second system covers measures 37 to 40. The third system covers measures 41 to 42. The lyrics are: "Do you need a ny bo dy? Could it be a ny bo dy? need some bo dy to love want some - bo dy to love". Chord symbols are provided above the vocal lines: B major, C sharp, F sharp, I, I, flattened VII, D, V, A, I.

After this, the verse, chorus and bridge repeat followed by a final chorus, this time extended to eight bars, leading into a two bar outro based on the intro link from 'Sgt. Pepper's Lonely Hearts Club Band' that we heard at the beginning, thus bringing the song to a neat conclusion.

Other points to note:

- In the intro, George Martin plays Hammond Organ.



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- The backing track was created first with Paul on piano, John on cowbell, Ringo on Drums and George on guitar.
- The vocals, tambourine and bass were added in the latter stages.
- The crowd noise in the opening helps to emphasise the segued link from the opening track.

### *Lucy in the Sky with Diamonds – Lennon and McCartney*

Much has been said about the relationship between this song and LSD, an illegal hallucinogenic drug that was prevalent in the 1960s and 70s. The Beatles always denied that the song was influenced by the drug, claiming instead that it was influenced by Lewis Carroll's *Alice in Wonderland* books and named after a picture that John's son Julian had painted, the subject Lucy (O'Donnell) being one of his classmates at nursery school. Whatever the truth regarding the stimulus for the song, there is no doubting its hypnotic, mesmerising quality and

it is this that we should focus on in discovering how such effects were achieved with the studio technology available at the time. In many ways, the manner in which it was recorded has its roots in two earlier psychedelic influenced works, *Tomorrow never Knows* and *Strawberry Fields Forever*, but it is this song where the techniques really come together, and much of that was down to experimentation and the creativity of the studio engineers.

The overall structure of the song looks like this:

**Intro and verse 1:**  $\frac{3}{4}$  metre

**Bridge 1:**  $\frac{3}{4}$  metre

**Chorus 1:** 4/4 metre – bass line in running quavers

**Verse 2:** back to  $\frac{3}{4}$  metre

**Bridge 2:**  $\frac{3}{4}$  metre, bass line very arpeggio driven

**Chorus 2:** 4/4 metre – bass line in running quavers again

**Verse 3:** slightly modified bass line

**Chorus:** repeated three times with modified bass and fading out

The opening  $\frac{3}{4}$  metre keyboard introduction is remarkable in its simplicity but immediately evokes the dreamy atmosphere:

The image shows a musical score for a keyboard introduction in 3/4 time. The key signature is D major (two sharps). The melody is written on a treble clef staff. The first four bars are marked with asterisks (\*) above the notes, indicating sustained notes. The notes are E, G, F sharp, and F. Above the staff, the chords are labeled: A, G<sup>7</sup> 3rd inversion, D<sup>9</sup> 1st inversion, and D<sup>m</sup>. The first bar is marked with a '1' and the fifth bar with a '5'. The word 'Keyboard' is written to the left of the staff. The dynamic marking 'p' (piano) is placed below the first note.

The keyboard in question is a Lowrey DSO Heritage Deluxe electronic organ played by Paul McCartney. The organ is set up to sound a little like a *celeste* through a combination harpsichord, vibraharp, guitar and music box stops on the instrument, although to be fair, it sounds more like a harpsichord. It is this, together with the chromatic shape of the lowest, sustained notes of the melody (indicated by the asterisks) that are responsible for the effect.

After these first four bars, the keyboard theme continues into the verse where John's voice enters singing the opening melodic phrase, initially on a hypnotic single note:

Lead vocal

1 5

Pic - ture your - self in a boat on a ri - ver with

9 13

tan - ger - ine trees and mar - ma - lade skies Some - bo - dy

17

calls you you ans - wer quite slow - ly the girl with ka - lei - da - scope eyes

21

Apart from the final four notes in the notes, the melody is centered entirely round the first three notes of the A major scale (A – C sharp). This contributes greatly to the dreamy mood, but it is not the only contributor. John Lennon really didn't rate his own vocal abilities and he was always asking the sound engineers at Abbey Road studios to find ways of electronically enhancing the rather thin timbre of his voice. He had been doing this for several years by using double tracking, a technique whereby an artist sings the same thing twice and then both recordings are played back simultaneously. It is virtually impossible for a singer to sing the same thing twice absolutely the same. There will always be very minor variations in pitch and rhythm that will mean that when played back together, there will be a type of chorus effect that produces a richer, fuller timbre because the two parts will be slightly out of sync. This technique is still widely used today, but Lennon grew tired with the tedium of having to do this. In 1966, a studio engineer at Abbey Road called Ken Townsend invented a method of Automatic Double Tracking (ADT), and this technique is used on many of the songs on Sgt. Pepper, including this one. Townsend realised that if you could in some way engineer the same voice to appear 'out of sync', then you could create a double tracking effect without having to record several times. He came up with a method using tape delay. Remember that during this period all recordings were made on tape. He just added a second tape recorder to the main tape machine. When mixing a song, the vocal track was routed from the recording head of the multi-track tape, which was before the playback head, and transferred to the recording head of the second tape machine. This meant that the recording on the second machine had a delay on it, and when combined with the normal vocal track, it created a double tracked effect. This effect could be controlled by adding more or less delay.

The Beatles loved this invention and used it on virtually all the songs on 'Revolver' and all their subsequent albums. In fact, in the next song in our study, *Within You, Without You* it is alleged that ADT was used on virtually every vocal

and instrumental track. But before that, let's consider its contribution to the opening vocal on *Lucy in the Sky with Diamonds*. In the opening nine bar phrase, itself rather unusual in construction, there is barely any ADT and Lennon's voice is as exposed as you're ever likely to hear it. However, during the next eight bars from bar 14, the ADT and echo on Lennon's voice is applied with increasing intensity, so that by the time we reach *The Girl with Kaleidoscope Eyes*, we have the full psychedelic effect, a kind of 1960s electronic word painting.

These vocal effects continue with even more echo and ADT into the bridge, which shares many similarities with the verse. The melody continues to be narrowly centered round the major third, now in the key of B flat, with even more repeated notes dominating the melodic construction:

The image shows a musical score for the bridge of "Lucy in the Sky with Diamonds". It consists of two staves. The top staff is labeled "Voice" and the bottom staff is labeled "Bass Guitar". The key signature is B-flat major (two flats). The time signature is 3/4. The score is divided into two systems. The first system contains bars 1 through 13. The second system contains bars 14 through 17. Chord symbols are placed above the voice staff: B-flat (1), C<sup>9</sup> (3), F<sup>5</sup> (5), B-flat (14), C<sup>9</sup> (15), G (16), and D (17). The lyrics are: "Cell - o - phane flo - wers of yel - low and green tow - e - ring o - ver your he - ad Look for the girl with the sun in her eyes and she's gone".

Despite this simplicity, the repeated notes do help to colour the harmony by, for example, adding the 9<sup>th</sup> (D) to the chord of C in the third and ninth bars. Notice also how the phrasing of this section is made up of an eight bar phrase, followed by a five bar phrase, continuing the uneven phrases seen in the verse.

In the final bar of the bridge, the chord of D (chord V in G major) provides the basis for a modulation to G major in the chorus, along with a change of metre to 4/4. Interestingly, the tempo in the verse and bridge has a BPM (beats per minute) of around 125. As the verse shifts to 4/4 time, the tempo reduces to a BPM of 98, but the tempo appears to be quicker due to the bass part moving in running quavers, another great example of one of McCartney's superb melodic bass lines:

The image shows a musical score for the bass guitar part of the bridge. It consists of three staves. The first staff is labeled "Bass Guitar" and the time signature is 4/4. The score is divided into three systems. The first system contains bars 1 through 4. The second system contains bars 5 through 8. The third system contains bars 9 through 11. The first staff has a dynamic marking of *f* (forte) and a first ending bracket over bars 1-4. The second staff has a first ending bracket over bars 5-8. The third staff has a first ending bracket over bars 9-11 and a *rit* (ritardando) marking. The score ends with a double bar line and a 3/4 time signature.

The chorus is in complete contrast to the verse and bridge and once again, the construction is irregular, featuring a two bar phrase played three times followed by an additional seventh bar before returning to the  $\frac{3}{4}$  metre in readiness for the next verse. There are also some unusual instrumental effects:

1. George Harrison plays his lead guitar part based on a simple and typical rock I, IV, V chord pattern, through a Hammond Organ Leslie speaker. The Leslie Rotating speaker was essentially just that, a speaker and amplifier with a rotating drum that amplified and modified the sound. On most units there were two speeds that could be selected, slow and fast. Normally they were (and still are) used with a Hammond Organ but on *Sgt. Pepper*, George Harrison experimented by feeding his guitar through the unit and you can hear the effect quite distinctly in the chorus on *Lucy in the Sky with Diamonds*.



In this picture of a Leslie speaker with the back removed, you can see the rotating drum below the bass speaker unit.

2. McCartney plays simple offbeat chords (2<sup>nd</sup> and 4<sup>th</sup> beat of the bar) on a Lowrey Organ. Lowrey Organs were generally considered to be somewhat inferior to Hammonds and were usually inexpensive and therefore popular in the home for those who couldn't afford a Hammond.

3. At the end of the chorus, leading into the second verse, George Harrison plays a tambura. This is a string instrument with a long neck that resembles a lute, but rather than playing melodic lines, it produces a drone as an accompaniment to melody.

At the end of the first chorus we hear the complete verse, bridge, chorus structure again, followed by a third verse leading straight to the chorus without the bridge. This chorus is now played as a complete eight bar structure and repeated three times with a fade-out during the final repetition.

### **More technological developments**

The Beatles spent months in Abbey Road recording this album. They'd finished with touring and didn't need to rush. Most bands like to record their work as quickly as possible because studio time is expensive, but money wasn't really an issue for them anymore. As a result, they and the engineers had time to reflect on the creative process and develop new methods of recording that were instrumental in making this album so unique and so influential on future generations of bands and artists. In addition to ADT, here are some of the other techniques used on *Sgt. Pepper*, and in particular, *Lucy in the Sky with Diamonds*:

**Varispeeding:** where the music is recorded with the tape machine slowed down or sped up. When the track is mixed it is played back at the standard speed of 50 cycles it alters the timbre of the voice/instrument.

Used in *Lucy in the Sky* to achieve a 'light-headed' effect.

**Direct Input Transformer (DIT):** The Abbey road sound engineers invented a 'Transformer' so that electric instruments could be recorded directly into the equipment rather than through a microphone. This is now known simply as *DI*.

Used to record most of Paul McCartney's bass lines on *Sgt. Pepper*. This is what gives them that crispness and clarity.

**Close-micing:** a microphone is placed close to an instrument or sound source, within three to twelve inches, producing a dry sound often with more bass. Also separates the individual sounds.

Used extensively on Ringo's drums throughout and notably on the title track.

**Reduction Mixing (Ping-Ponging/Bouncing):** dubbing multiple parts to just one or two tracks, allowing more room for additional overdubbing. Nearly always used with older 4 track machines due to limited recording space.

Used extensively on the tracks which had many instruments or vocal parts - *Sgt. Pepper/A Day in the Life/Within You Without You/For the Benefit of Mr. Kite*.

With the benefits of modern digital technology, bands can record an almost limitless number of tracks. This was not so with the old 4 track machines so the process would work something like this:

Record three parts onto track 1, usually the rhythm section, for example, drums, bass and rhythm guitar. Ping-Pong or bounce these onto track 4, perhaps together with a live vocal track. You now have four parts on track 4 and track 1 is now free again to record new parts. You just carry on repeating the process until you've run out of tracks. Of course, record producers had to be really careful to ensure that everything was recorded at the right level because once the recordings had been finished there were limits as to how those parts could be mixed.

### *Within You, Without You* – George Harrison.

As the 60s progressed, George Harrison was becoming increasingly interested in Indian music; Indian culture and the spiritualistic aspects of the music that he felt. *Within You, Without You* was not his first venture into this form of writing. The song *Love to You* on *Revolver* shares many of the same techniques, but *Within You, Without You* is a real fusion of Indian Classical tradition and Western Pop music. When the Beatles toured Hamburg in the early 60s they met Klaus Voorman, an artist and musician. Harrison composed the song using a Harmonium round at Voorman's London home after a dinner party. It is the only Harrison song on Sgt. Pepper. Here he explains his thinking:

*Within You, Without You came about after I had spent a bit of time in India and fallen under the spell of the country and its music. I had brought back a lot of instruments. It was written at Klaus Voorman's house in Hampstead after dinner one night. The song came to me when I was playing a pedal harmonium.*

*I'd also spent a lot of time with Ravi Shankar, trying to figure out how to sit and hold the sitar, and how to play it. Within You, Without You was a song that I wrote based upon a piece of music of Ravi's that he'd recorded for All-India Radio. It was a very long piece - maybe 30 or 40 minutes - and was written in different parts, with a progression in each. I wrote a mini version of it, using sounds similar to those I'd discovered in his piece. I recorded in three segments and spliced them together later.” – George Harrison.*

Harrison was the only Beatle to perform on the song, the instruments were:

Harrison: vocals, sitar, acoustic guitar, tambura

Unknown musicians: dilruba, swardmandal, tabla, tambura

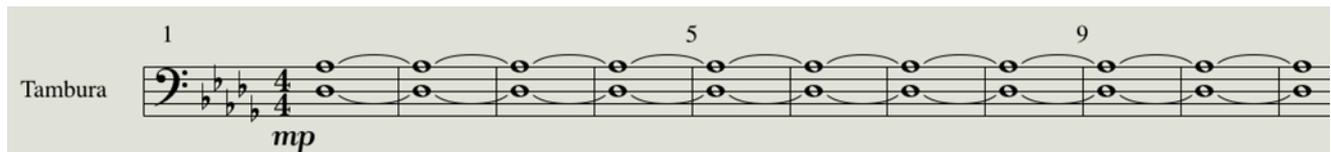
Strings: session musicians

Neil Aspinall: tambura

The Indian musicians were hired from Asian Music Circle in Finchley, north London and George Martin arranged string parts according to Harrison's instructions and conducted the English string players during the recording.

Structurally, the song appears to be fashioned in three sections, a kind of overblown extended ABA ternary shape with a long improvised-sounding instrumental section sandwiched between the vocal sections.

The introduction starts with a long, sustained, pulsating drone that fades in on the tambura:

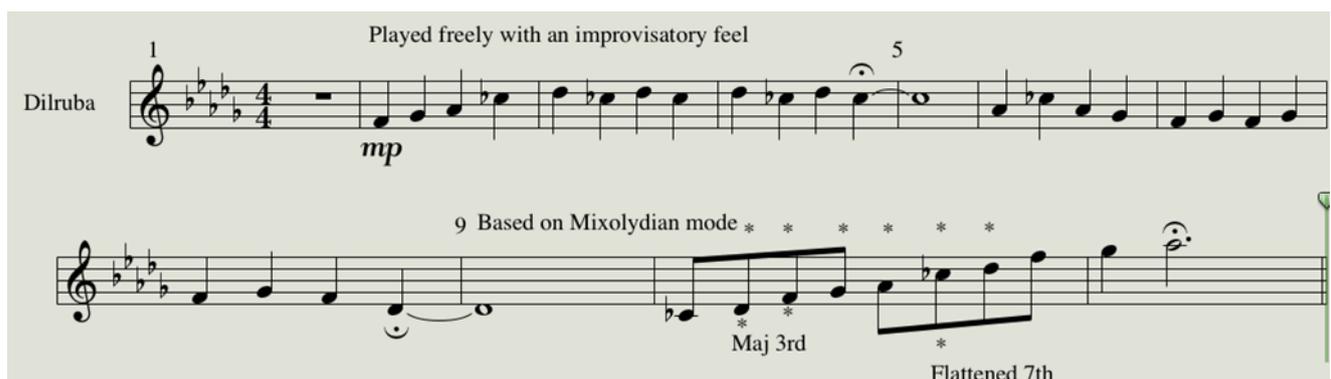


Musical notation for Tambura drone. The notation is in bass clef, 4/4 time, and features a sustained drone of two notes, D flat and A flat, with a dynamic marking of *mp*. The notation is divided into measures 1, 5, and 9.

A drone usually consists of two notes, most often the tonic and dominant of the chord, arranged as either a perfect fourth or perfect fifth depending on which note appears at the bottom. In this case, the two notes are D flat and A flat (see above), but if you listen really carefully, you'll notice that the drone also includes these notes at multiple pitches thereby accentuating the somewhat hypnotic effect.

After a few seconds, the dilruba enters playing a leisurely extended and decorated melody. There are two significant points to notice here:

1. In this opening section there is no real sense of pulse and this adds to the dreamy quality of the music.
2. The tonality is modal and closely linked to the mixolydian mode based on a major 3<sup>rd</sup> interval between the lowest two notes and the flattened 7<sup>th</sup> at the top.



Musical notation for Dilruba melody. The notation is in treble clef, 4/4 time, and features a leisurely extended and decorated melody. The notation is divided into measures 1, 5, and 9. The melody is based on the Mixolydian mode, with annotations for the Major 3rd and Flattened 7th intervals. The dynamic marking is *mp*.

At the end of the introduction you can hear a rising glissando recorded with heavy echo on the swarmandal, a type of Indian zither with a harp-like quality to the timbre:



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This is followed by a two-bar rhythmic pick-up on the tablas leading into the verse. A seamless link is achieved by the continuation of the drone in the Tumbura.

At the start of the verse the constant beat is provided by the tablas through the tala-like rhythm. In Indian music a tala is a repeated rhythmic idea used as an accompaniment for the performers of other instrumental/vocal parts to improvise and weave around freely. The tala can often regularly change metre and/or have an irregular number of bars, and this helps to create variety in the overall structure. In *Within You, Without You*, the tala does indeed appear to change frequently against the rhythmically much more strict vocal melody from Harrison that enters after 4 bars:

voice

$\text{♩} = 115$

1 5 9

13 We were talk - ing a - bout the space<sup>17</sup> be - tween

us all and the peo - ple who hide them<sup>21</sup> selves be - hind a wall of i - llu -

sion, ne - ver glimpse the truth, then it's far too<sup>25</sup> late, when

they pass a - way.....

There are some really interesting things to note in the construction of this long and intricate melody:

1. The dilruba doubles the vocal line with some minor decoration added.
2. The construction is certainly unusual, two six bar phrases followed by an extended nine bar phrase.
3. The essence of the melody is derived from the free dilruba melody introduced at the start of the song.
4. There is effective word painting at the end of the melody to the words 'They pass away'. Notice the descending melodic shape followed by the extension to the word 'away' as it wavers and hesitates before finally dying away.

At the end of the verse the Western strings enter in preparation for the second verse.

The second verse is melodically virtually the same as the first. The Western strings develop the idea through a counter-melody playing in the violins creating a contrapuntal texture, whilst the 'cellos join with the dilruba and Harrison, sharing the original melody. Note the slight extension to the verse at the very end as a lead into the chorus.

The chorus seems to have a greater sense of urgency created largely by the use of almost continuous crotchet movement in the vocal melody. This again is based on the repetition of a six bar phrase, but notice how the repeat picks up on the last beat of the bar rather than the third, putting a completely different emphasis on the shape and phrasing. This, together with the continuous crotchet movement and the ever-changing rhythms in the tablas means that it is really difficult to sense the downbeat of the 4/4 metre:

1  
Voice

Try to re-a-lise it's all with-in your-self no-one else

5 9

can make you change And to see you're rea-lly on-ly ve-

13

ry small and life flows on with-in you and with-out you

In this section the violins provide an antiphonal response to Harrison's vocal, particularly at the end of the first phrase whilst the 'cellos support and reinforce the tambura drone.

The central instrumental section is in complete contrast to both the verse and the chorus. The drone is maintained, along with the Mixolydian tonality, but the tempo moves up a gear, accompanied by a change of metre to 5/8, virtually unheard of in Western pop/rock music at the time:

1  $\text{♩} = 230$

Dilruba

5

9

13

17 21

25

In this, the dilruba carries the above melody with antiphonal responses from the Sitar. Note once again the irregular phrase lengths. In the second part the strings enter playing their own octave, *pizzicato ostinato* figure:

17

All of this then repeats but with some differences in the instrumental arrangement:

1. The Western strings play the theme in octaves.
2. The dilruba provides the antiphonal answers.
3. The sitar picks up on the pizzicato figure.

At the end of this section, the rhythmic drive is reigned in and the swarmandal glissando heard in the introduction heralds the return to the final verse and chorus.

### Recommended further study to support your learning

- You will gain a much greater understanding of the music if you have the opportunity to perform it, so ask your teacher if you can have a look at the classroom performance editions that are on the AQA website.
- Many artists have covered many of the Beatles' songs. Try to listen to their cover versions, in particular:
  - *With a Little Help from my Friends* – Joe Cocker (essential) change of metre to  $\frac{3}{4}$ , Wet, Wet, Wet and Mumford and Sons (based on the Joe Cocker version).
  - *Lucy in the Sky with Diamonds* – Elton John, The Flaming Lips and Katie Melua.
- TV and film: There were two really good documentaries about the album. The first was in 1992 and called *25 years of Sgt. Pepper*. The second was called *Sgt. Pepper – it was 40 years ago today*, a BBC special – note – contains strong language. You may be able to see clips from both of these on the Internet.

## Glossary of terms

### Antiphonal

Refers to a musical texture where the musical material is sung or played by alternate groups.

### Automatic Double Tracking (ADT)

Creating a double tracking effect through the use of tape delay. Can also now be done digitally.

### BPM

The number of beats in a minute in a musical pulse.

## Bridge

In song-writing, a bridge is usually a contrasting section performed before returning to a verse or chorus. Can also be called a 'Middle 8'.

## Celeste

A keyboard instrument where hammers strike metal plates of different pitch.

## Concept Album

A studio recording with a thematic unity, purpose or artistic cohesiveness.

## Contrapuntal

Two or more independent melodic lines performed at the same time.

## Call and Response

Refers to a musical texture whereby one musician or group of musicians makes a musical statement and this is immediately answered by another musician or group of musicians.

## Dilruba

A bowed string instrument found throughout the Indian sub-continent.

## Double tracking

Recording the same instrumental or vocal part twice to achieve a chorus type effect.

## Drone

A harmonic effect where a single note or chord is sustained throughout a musical phrase. Often appears as a perfect 4th or 5th interval.

## Harpsichord

A keyboard instrument where the strings are plucked rather than struck.

## Imperfect cadence

In an imperfect cadence the last chord is chord V (the dominant) creating an unfinished effect.

## Inversions

An inverted chord is one where any note from the chord appears as the lowest in pitch other than the root.

## Leslie Speaker

A loudspeaker and amplifier with a rotating drum producing a fluttering effect.

## Mixolydian

Can refer to the Greek, medieval or modern mode.

## Modulation

Process of changing from one key to another.

## Ostinato

A constantly repeated musical phrase.

## Overture

Opening section to a piece of music, usually an instrumental introduction.

## Passing notes

Melodic notes that do not form part of the essential harmonic structure but 'pass' between one chord and another.

## Perfect cadence

A perfect cadence is a progression from V to I in both major and minor keys. It gives the musical phrase a sense of finish.

## Pizzicato

Plucking rather than bowing a stringed instrument such as the Violin or 'Cello.

## Root

The note from which the chord grows, ie the 1st note.

## Segue

A smooth uninterrupted transition from the end of one piece of music to the beginning of another.

## Sequence

Repetition of a music motif or melodic phrase at a higher or lower pitch.

## Shuffle beat

Commonly found in rock, jazz and blues with an 8 beat rhythm sub-divided into triplets.

## Sitar

A plucked string instrument found mainly in Indian music.

## Stepwise

Refers to melody in cases where the movement is largely by step, ie from one note to the next adjacent note.

## Swardmandal

An Indian harp or zither.

## Syncopation

Refers to stresses in the rhythmic flow that appear to be off the main beats in the pulse.

## Tabla

An Indian drum where the pitch can be altered by pressing on the skin.

## Tala

A repeated rhythmic pattern found in Indian music.

## Tambura

A lute-like stringed instrument producing a drone.

## Tie

Two or more notes tied together.

## Transition

A transition is a section of music that links one main idea to another, for example, between a verse and a chorus.

## Word painting

A compositional technique whereby the sound of the music reflects the lyrical content thereby literally 'painting' the words.