David Bowie’s ‘Life on Mars’ is arguably the ultimate pop incarnation of classical romanticism. The lyricism is quite abstract; on a surface level the song is about a girl who goes to the movies again and again to escape her home life; but the film is a ‘maddening bore’ because she’s seen it ‘ten times before’. The much deeper subtext references the futility of man’s existence, an area Bowie explores in other songs. Later in the song Bowie uses the same idea, referencing American society in particular. Says Bowie, talking to the Mail on Sunday in 2008: “I started working it out on the piano and had the whole lyric and melody finished by late afternoon. Rick Wakeman came over a couple of weeks later and embellished the piano part and Mick Ronson created one of his first and best string parts.” When it came to the recording session Wakeman used the same piano Paul McCartney used in ‘Hey Jude’.

Below is the chord sequence from ‘Life on Mars’ with the vocal line.
As with most songs the chord chart works if all you want to do is follow the track and play the chords, but it doesn’t really tell you much while it remains in a sequential context. We can tell by looking at the chart that it is certainly quite involved and complex, but the chord chart alone doesn’t really explain how or why.

Overleaf we come to the Chord Grid version of the song, which lays the chords out not in sequential form as used in the song but in a proper, relative harmonic context. Only the chords used are featured.

The ones in red are the ones used that lie outside what we would normally find. We see where the chords used are in relation to each other, and in relation to the bigger picture.
It is important to note that things will look naturally busier in this song in view of the fact that the verse is in F and the chorus is in Bb. Naturally there is a greater degree of movement and variation by virtue of these facts. But even within this context the amount of variation and deviation involved in this song is truly one of the things that define it, particularly the bridge between verse and chorus. With specific reference to the chords used and how they relate, straight away we can see patterns emerging: in terms of the use of ‘normal’ chords in the central circle (in bold black) Bowie uses only the F, Bb and Gm. The only Am is inverted and the only C chords are 7th chords and inversions. Clearly we can see a pattern of less reliance on ‘normal’ chords and much greater disproportionate reliance on colourful extension and inversion.

The use of inversions and slash chords are clearly pivotal to the overt, theatrical style of the song, bringing a heightened sense of drama. There are five separate occurrences of the augmented chord (F+, D+, C+, Db+ and Gb+) and most of these are themselves inverted. The combination of an inverted chord and an augmented chord is quite crucial here because the D+/F#, C+/E and F+/A) are only one note away from being an entirely different chord.
In the figure below I have listed three groups of chords.

The third chord in each group is from a totally different key centre but manages to contain nearly all the notes from the first two chords. In other words, with reference to the first group of three chords; when you play a C chord and an E chord, they sound completely different because they are from different key centres. But when (in bar two of each group) you add the embellishments, they take on some of the character of the third chord. Therefore the middle chord (the ones Bowie used) manages to function as a hybrid between two chords from totally different key centres. This is why and how it creates such a feeling of abstraction. The inverted nature of the final chord is how and why it has such an exhilarating feel. These chords are such great passing chords. The listener can feel an inexorable sense of inevitability.

The Db+/B chord (the chord just before the chorus) is also very colourful and dramatic. Even a ‘normal’ major chord voiced over the 7th creates a great feeling of expectation, but add to this the augmented 5th and we have a chord bursting with tension and colour. One of the reasons this chord creates such great emotion is because it is unexpected. As I have mentioned elsewhere we listen with expectation, presumption and prejudice. The degree to which the occasional chord confounds our expectation can often be linked to how successful a piece is. If we confound people’s expectation too much or too severely we lose them, whereas if we don’t surprise or confound them at all we risk boring them.
One reason the chord confounds us is, once again, because it can technically be rationalised two different ways. Below I have voiced the same chord but spelt the chords differently.

But this argument is a little too simplistic in its presumptions; chords symbols are more than simply a means of identification and classification. Although the non-musician wouldn’t know the names of chords, they would develop and ‘ear’ which would respond to certain vertical groups of notes and a memory of the context of how they are used. The fact that there are two ways of identifying the chords above means there are two different contexts of how they could be used, depending on surrounding harmonic terrain. When we hear either of the two chords above (which are the same sound with different names) we are fleetingly exposed to two possible harmonic realities and contexts. This is part of why the chords have such drama.

Plenty of +5s

This piece has many of harmonic embellishments, perhaps chiefly the fact that it spans outward to so many different key centres. It also has plenty of inversions, which I will discuss later. If we examine just the +5s we see that they span the extremities of the major chord spectrum, from D+ right through to Gb+. To give extra colour and drama to the augmentations each are inverted, which disguises the chord even more (as I alluded to earlier – fig.3 and fig.4)

The manipulation of structure

People sometimes imagine that the ‘art of composition’ is somehow separated from the much more mundane possession of knowledge of structure that enables ‘creation’ to happen in the first place. One of the reasons people revere the art of composition is because they wrongly think it’s all about ‘content’ – i.e. the stuff the composer thinks up.
They think structure and form are convenient ready-made shells into which the composer pours his or her uniqueness. They imagine that form is kind of a receptacle. The belief then is that form and structure is less important than whatever it contains. This is misleading; form and structure has no inside and outside. Form is just as much a part of what makes music sound unique or ‘great’ as the ‘content’ it accompanies. Structure guides form and form guides content. And yet structure and form are not something composers’ necessarily invent or create. Form is a template, a pattern, an approach or methodology. When listeners react to the ‘exciting bits’ in music or the sections that really engage them they could just as easily be responding to something which is more form than content. If, as a listener, you react to the way an inversion really gives the piece a sense of lift, a sense of purpose and an element of drama, you’re responding to something the composer decided to make use of, not something the composer can be said to have created. Even the ‘stuff composers think up’ is itself heavily guided by the need and desire and propensity to follow existing structures and forms. It’s highly unlikely and very rare that a composer can be said to have thought up an entirely new chord sequence. And even if they had, they didn’t invent the chords so they can’t be responsible for the fact that it works; they are responsible for realising it works, not for making it work. In music there is nearly always order, structure, method; or, conversely there is an absence or manipulation of structure which affects the piece in a way people always imagine is down to the ‘art’. I say this because one of the most intriguing aspects of ‘Life on Mars’ it’s sense of drama, urgency and immediacy. One of the reasons for this is right at the beginning of the song; it has no intro. There is no preparation and no preamble. The concept of an introduction is an important aspect of a song; it helps distil the music and the message in a controlled environment; with ‘Life on Mars’ we’re straight in. There are a relatively small number of songs with no intro; ‘Goodbye to Love’ by the Carpenters is one such example; although it is nowhere near as dramatic or abstract as ‘Life on Mars’, there is still an excitement and poignancy to the beginning of the track, not least because the listener has no preparation.

**Jolts, surprises and climactic points**

When discussing television broadcasting and programming, the Centre for Media Literacy refers to the principal of ‘jolts per minute’. A ‘jolt’ refers to the moment of excitement generated by a quick film cut. These are often disorientating. In song we can apply this to situations where we are confronted with something we didn’t expect and weren’t adequately prepared for. In many ways one of the factors that define successful music is the degree that it surprises us. Sometimes these are mild and sometimes, as with ‘Life on Mars’, they are severe and dramatic. On the left (fig.6) I have placed grey arrows against the mild jolts; bar one qualified not because of what is in it, but because it arrives with no introduction. The other grey ones are F to Fm and Cm to Ebm, which are unexpected harmonically. The yellow ones are where the context in which chords are used is a complete surprise; the move from C7 to Cm/Eb is one such example, as is the move from Db to F+/A. This move is made all the more exciting because if we treat the bass note of the Db chord as a C#, which then moves to the A (bass note of the F+/A chord) the two form a major 3rd in the key of A.
This is one of the way complex harmony communicates; by encompassing an array of information where notes function harmonically in many different ways. The chords in ‘Life on Mars’ don’t necessarily sound ‘weird’ until you analyse the sequence or attempt to replicate the success. Then you realise how forensically detailed the piece is. Once again, as with many songs, it borrows from the lush harmonies and great peaks and highs of classical romanticism in the style of chords: inversions, augmented chords and specifically the orchestration mirrors and compliments the romanticism.

Below if we look at the chord chart / vocal line for the verse and display the ‘normal’ chords in black and the chords which lay outside the key centre, and/or embellished chords in red. We can see that the ‘normal’ chords are the strong chords and therefore come at the start of each four bar sequence, whereas the out-of-key-centre chords (the red ones) come in groups subsequent to a strong chord. We listen to the ‘red chords’ in context of the chord which begins the four-bar phrases; in songs, if we are to deviate from the norm we need to do it in a way which is colourful but where the deviation seems like a natural progression. Therefore the three red chord between the first F chord and the Gm in bar three, represent simply a more interesting way of navigating from F to Gm.

Looking at the image below we can see that even within context of the key centres of F Bb, the chords used, particularly in context of their extensions and inversions, lay outside both. We have to treat the bridge almost as a separate piece of music and look at the dynamic within to discover how it communicates. The vocal line is rhythmically the same phrase repeated, so once again we look to the chords for the colour. When composers use inversion they normally provide one of two explicit functions. They either function to allow a smooth ascending or descending bass line, so the bass contour has its own separate narrative; or they use it to being drama. An inversion is simply a reoriented version of an existing major or minor chord. But this small realignment of the intervals (with 3 or 5 going at the bottom rather than 1) can produce subtly dramatic affects. In Bowie’s case the inversions fulfil both functions; they provide colour and drama, part of which is the exquisite and palpable sense of inevitability when we hear the bass rising.
In terms of the chorus (fig.9) obviously the Eb and Cm now become chords within the Bb key centre (circled in black).

Also of interest is that the chorus starts with two chords which belong emphatically within the key centre of Bb; in other words the although there are abstractions within the harmony, the chorus starts with a definite and strong, resolute harmonic statement.
As many will know there are striking similarities between ‘Life on Mars’ and ‘My Way’. Bowie wrote lyrics to a French tune called ‘Comme d’habitude’, composed in 1967 by Claude François and Jacques Revaux. Lyricist Paul Anka also wrote lyrics to the same tune, which became My Way, which was popularized by Frank Sinatra. Bowie was frustrated that My Way had dominated the landscape and crowded out his own piece, so he essentially re-wrote ‘My Way’ as ‘Life on Mars’. The melody and words are totally different to My Way but there is a great likeness between the chords. Below (fig.10) I have transcribed the chords Bowie used in ‘Life on Mars’ and underneath the chords from ‘My Way’, which, for convenience and comparison, I have written in the same key (F).

Fig.10

Although the specifics of the chords may look slightly different, these are essentially tiny differences in chord construction and voicing. Both songs succeed at least partly because of the sense of inevitability created by the descending bass.

**Piano arrangement and the use of strings**

“They are music’s unsung heroes, yet their work can turn a great song into a classic, intensify the emotional impact of a heartrending lyric or make a stirring vocal performance even more memorable.” So said George Cole in his excellent Guardian article entitled ‘Elton John, the Beach Boys and the fine art of pop alchemy’. In the article legendary arranger Paul Buckmaster says arranging is about “being able to enhance the emotive quality and bring out the intent of the lyric and the artist’s performance” before saying “adding orchestral passages and textures should give added depth and dimensionality, physically, psychologically and aurally.”

He wasn’t specifically talking about the arrangement of ‘Life on Mars’ but he might as well have been because the arrangement is completely pivotal in the success of the song. On top of having an excellent knowledge of harmony and orchestration, a good arranger needs the ability to sense what is right and proportional in the context of the song.
Below I have transcribed the voice, Rick Wakeman’s piano accompaniment and Mick Ronson’s string arrangement.

Wakeman’s playing is dramatic, colourful and romantic. The part is littered with exposed major or minor thirds, which exude a warm, inviting romantic air.

All good arranging is functional; elements of the instrumentation usually fulfil some kind of role. Whilst many arrangements use instruments simply for the sake of it, good arrangements happen when the instruments have meaning and provide some kind of extra context. In ‘Life on Mars’ the piano performance is crucial to the success of the song. Essentially it functions almost as an augmented version of the vocal; this is not a piano part that simply sits in the background. The relentless and precise right-hand movement gives the piece an element of nervous energy and a sense of urgency.

With the absence of drums the quavers and demisemiquavers give the piece a sense of momentum.

When the voice lands back on the maj3rd on bar five there is an incredible richness created by the low LH octave piano.
The anticipated octave Gs are particularly exposed with no vocal to occupy the same space; they work to accentuate and expose the rhythmic nature of the piano accompaniment.

The move from C to Cm/Eb is a severe and dramatic change, harmonically. This is bolstered and italicised by the octave left-hand piano and the octave low strings, both of which accentuate the upward motion.

The blue contour displays the different types of chord positions as the bass notes evolve through this crucial two-bar sequence. While the musical contour (red arrow) is upwards, the intervallic contour of the bass notes are different. Whilst we might image these are purely theoretical academic observations, these different variable dynamics are part and parcel of what makes music sound the way it does.

The variation from 1st inversion back to root up to 3rd inversion is the journey the interval takes, which creates drama when it is coupled with the actual physical movement, which is one dimensional (in red).
The move from Bbm to Db7/B to the chorus (Bb) is a stroke of brilliance, particularly the way the piece resolves to Bb. The feeling of resolution from Db7/B to Bb seems as if the piece is finally able to exhale.

As I said earlier, the move from Db to F+/A is made all the more exciting because if we treat the bass note of the Db chord as a C#, which then moves to the A (bass note of the F+/A chord) the two form a major 3rd in the key of A.

The strings move from octaves to rich chord voicings with the vertical expanse between the low Db and the F and Ab in mid-range.

The beginning of the chorus is more defined (with the Bb and Eb chords) but benefits again from the abstractions of both the Gb+ and the move from F to Fm, all of which surprise us.

The move from F to Fm is bolstered and italicised by the right-hand semiquavers.

The strings play the demisemiquaver runs, which lend a theatrical context to the piece.
The song navigates from the Cm back to the Bb via the dramatic harmonic distraction of the Ebm
The guitar line which breaks up the song between the chorus and 2nd verse, is itself quite abstract and very interesting in that it introduces dissonance into the equation by virtue of the F-A notes playing over an F diminished chord on piano*. The downward arpeggiated E7 chord is interesting and sounds physically mildly clumsy. Also the E7 arpeggio clashes mildly with the D diminished chord, which adds extra colour.

The addition of Mellotron is very helpful to the piece, adding a layer of texture but also benefitting from the emotional characteristics of the sound, which emulates a mixture of flute, penny whistle and Ocarina.
The mild dissonance between the top F and the low bass and strings (E) provides some nice tension in the chord.
The importance of economy in the voicing of strings is shown here; the top note of each string chord in bars 35-36 is Ab, which forms a consistency and uniformity in terms of how the chord sounds. This goes to the heart of good chord voicing. The intervallic value of the Ab notes evolves, but the note stays static.
The interplay between voice and piano becomes more complex and passionate as the final verse heads toward the chorus. But there is still a sense of space in the arrangement, insofar as the busy piano comes before the busy vocal line.
The final string line at the end of the song highlights one of the great tactics of arranging; if something appears, it rarely appears just once. The context delivered by the demisemiquavers which appear at various points in the song, is distilled into the final few bars, which ‘ties up’ the use of strings well.