## Eduqas GCSE Music (2021–)

# Full Analysis of Africa



In connection with the Full Score

Analysis by Patrick Johns

#### TOTO

The band **Toto** was formed in 1977 from some of the finest session musicians on the scene. As a band, Toto has sold over 40 million albums, and members of Toto have played individually on over 5000 albums, surpassing half a billion sales, worldwide.

Toto has had many changes of personnel over the years, but has retained its distinctive sound, blending elements of Rock, Pop, Jazz, R'n'B, Funk and Blues. *Africa* is taken from the band's best-selling album, Toto IV, which was released in April 1982, and has now sold over 12 million copies. The album was written when the band was under pressure from their record company to make a hit record. It also features one of Toto's other huge hits, *Rosanna*.

#### DID YOU KNOW...?

Members of Toto played on Michael Jackson's hit album Thriller.

#### DID YOU KNOW...?

A set of six speakers in the Namibian desert is playing *Africa* on a permanent loop. The different instrumental and vocal parts of *Africa* were record separately, often even without other band members there. If you are interested in finding out more about how *Africa* was recorded, there are many articles and videos online. To find out more about Toto, visit their website: <a href="https://totoofficial.com">https://totoofficial.com</a>

Basic info	Personnel	
Composers: David Paich, Jeff Porcaro	David Paich: lead vocals (Verse), backing	
Key: Various	vocals (BVs), and synthesizer	
Intro/links: ambiguous	Bobby Kimball: lead vocals (Chorus), BVs	
Recorded: 18th October 1981	Steve Lukather: lead (electric) guitar, 12-	
Album: Toto IV	string acoustic guitar, BVs	
Tempo: = 92	Steve Porcaro: synthesizers	
Metre: 2/2 (although Toto themselves –	David Hungate: bass guitar	
and almost all arrangements – use 4/4)	Jeff Porcaro: drums, cowbell, gong, other	
This analysis and corresponding score use	percussion	
<ul> <li>2/2 for ease of use alongside Eduqas's own resources.</li> <li>Eduqas refers to this as cut common time, which will be valid as an answer in the exam.</li> </ul>	Toto were joined by some extra musicians: Lenny Castro: congas, shakers, percussion Jim Horn: recorders Joe Porcaro: marimba, percussion Timothy B Schmidt: BVs	
Rhythm	Texture	
As in all Rock and Pop music, there is a	Homophonic / melody and accompaniment	
mix of syncopation and on-beat rhythms		
Harmony and Tonality	Dynamics	
Mostly major	Limited dynamic range, from $mf$ to $f$	
Almost entirely diatonic		
Uses a mixture of root position chords,		
inversions, and extended harmony		

All timings refer to the version of Africa on the album Toto IV (not the shorter version, released as a single): https://www.youtube.com/watch?v=PNQh12i3C8E

#### **OVERALL STRUCTURE**

Africa follows a standard Verse-Chorus structure, well-used by Pop and Rock musicians from the 1960s onwards. When written out like this, the changing keys are clearer.

	7	_	
C# minor	B major	A major	
Intro 1-24	Verse I	Chorus I 60-77	
Link I	Verse 2 86–111	Chorus 2	
Link 2	Solo (Instrumental) 138-154	Chorus 3 155-171	Chorus 4 172–188
Outro 189-228			

NB Eduqas has amalgamated Chorus 3 and 4 together, calling them both Chorus 3.

# INTRO Bars 1-24 (0'00"-0'31")

#### HARMONY AND TONALITY

Before looking at the Introduction, we must address the issue of its key, and harmony. The harmony of the Intro (and corresponding sections later in the song: the Links and the Outro) is **tonally ambiguous**, and has been the subject of much debate, with no conclusions being reached.

The Intro uses three chords, all in Root Position: A major – G# minor – C# minor 7.



#### SO, WHAT KEY IS IT IN?

- Some argue that it is in **B major**.
  - o This seems rather unlikely, seeing as the chord of B major doesn't appear at all, and bVII-vi-ii7 would be an extremely unusual chord progression.
- Some argue that it is in A major, because that is the opening chord.
  - The problem here is that the second chord, G#m, includes the note D#, which doesn't belong in the key of A major.
  - Therefore, some (including the author of a well-watched YouTube video) have chosen to think of this as being in **A Lydian** (a mode that uses a raised 4th: in this case A B C = D = -E F = C = A), but this seems a little far-fetched, not least because no one in Toto has ever alluded to writing modally.
- Some argue that it is in **C# minor**, with chord sequence therefore being bVI-v-i?. (Remember that lower case numerals mean a minor chord.)
  - This is the most compelling argument of the three, as it accounts for the presence of the D# (in the G#m chord).
- Another interpretation would be to say it alternates between **A major and C# minor**, as the keys are closely related, but this begins to get unnecessarily complex.

Overall, the most likely keys are A major and C# minor. This analysis, and the corresponding score, favours C# minor, and therefore uses the corresponding key signature (four sharps).

#### REMEMBER...

The simplest way of explaining it is to say that, ultimately, we don't know, and that it probably doesn't matter, so long as we understand that the chords are  $A - G \# m - C \# m^7$ .

Eduqas will accept any of the explanations above – A major, B major, C# minor (and, E major) – but remember that Toto themselves are unlikely to have wasted a single calorie of energy in worrying about it, so we shouldn't, either.

#### Bars I-8 (0'00"-0'10")

The song begins with the iconic drum and percussion **loop**, made out of **overdubbed** percussion: congas, cow bells, shakers, and miscellaneous percussion, likely to include caxixi, and jingle sticks.

At the opening, there is a very strong sense of pulse, as the cow bell and caxixi play on every beat, the shakers play regular quavers, and the drum loop itself is in regular time, notably with the bass drum playing on every beat.

Rhythmic interest comes from the congas, playing a pattern including some **syncopation**:



NB The x note-head denotes a 'slap' on the higher conga, resulting in a higher pitch

And, from bar 5; and a high cowbell joins in, playing a pattern made of off-beats and a little syncopation, seen here on the upper line. (The lower line is the low cowbell, which plays throughout the song.)



#### REMEMBER...

David Paich had never been to Africa when he co-wrote this song, so the polyrhythmic texture is a reference rather than direct imitation. Overall, this a layered texture, with several simultaneously sounding rhythmic patterns. These are known as polyrhythms and are a reference to the polyrhythmic percussion found in much traditional music from West African countries.

With the exception of the high cowbell, that drops out at the start of Verse I, this two-bar percussion loop is played throughout the song, almost without variation. The high cowbell re-appears in the **Outro**.

#### DID YOU KNOW...?

Drummer Jeff Porcaro and percussionist Lenny Castro recorded various rhythms and patterns into a 24-track recorder for half an hour, then they listened back, selected the bar they liked best (notated here as two bars), and looped it.

Nowadays, technology makes that process easy, but in 1981, they literally had a huge loop of tape running round and round the room!

#### Bars 9-24 (0'10"-0'30")

#### Riff A

The remainder of the Intro is made up of one four-bar phrase, repeated three times. The phrase's main feature is the iconic **riff**, that permeates every section of the song, except the Choruses. Eduqas refers to this as **Riff A** (Ex.I).



**Ex. I**: here written an octave higher than it sounds, for ease of reading

It's played on what was then a relatively new instrument, the CS-80 synthesizer, on a brass voice-setting. The riff itself is a mixture of syncopated (bar 9) and on-beat (bar 10) rhythms, using root position chords that move in parallel motion.

Riff A is **doubled** by the **bass guitar**, and, lower in the mix, by a **marimba** (Ex.2), played by Joe Porcaro, father of drummer Jeff and keyboardist Steve (and bassist Mike, who joined Toto shortly after *Africa* had been recorded). Joe Porcaro was a well-known Jazz drummer, who'd worked with David Paich's father, the Jazz pianist and arranger, Marty Paich.



Ex.2: The Marimba part of Riff A

#### WHAT IS A MARIMBA?

A marimba is a large, tuned percussion instrument, with a set of wooden bars.

It has metal resonators beneath the bars, to amplify the sound.

It is closely related to the **balofon**, an instrument common in many West African countries.

Have a look on YouTube to see the similarity in sound between these instruments.

NB Marimbas are **not** common in Rock music!

#### Riff B

The second feature of the introduction is a fascinating line played on another synthesizer, the GS-I, that Eduqas is calling **Riff B**. It is often notated like this:



#### WHEN IS A RIFF NOT A RIFF...?

Riff B is not – strictly speaking – a riff, as it is not repeated back-to-back, it doesn't drive the song along, nor is it low in pitch as almost all riffs (in Rock music) are.

But, in the interests of alignment with the Eduqas analysis, we'll refer to it as Riff B.

As soon as you listen to the song, you will notice that this line is not what you hear! This is because the part was created by **overdubbing** many shorter musical ideas, all using a **kalimba** voice on the GS-I synthesizer.

#### WHAT IS A KALIMBA?

Sometimes called a thumb-piano, a kalimba is part of the Mbira family.

It is a hand-held tuned percussion instrument, with a set of small metal bars, attached to a wooden resonating chamber, that has a similar role to that of the body of an acoustic guitar: amplifying the sound. Mbira instruments have been used in many parts of Africa for millennia.

Have a look on YouTube to see the variety of music these wonderful instruments can play.

Tip: there's even a kalimba cover of Africa on there!

The nearest approximation of what you will hear as Riff B is below (Ex.4), but this is not very user-friendly (to put it mildly!), even if it is more accurate.



**Ex.4**: Riff B – as close as we can get without hearing the original tapes

What is certain, is that the Riff B uses a **pentatonic scale**. The minor pentatonic, in particular, is common to both traditional music from various parts of Africa, and to Rock music – no coincidence, when you consider Rock music's ancestry.

#### C# MINOR OR E MAJOR PENTATONIC?

Eduqas describes this as the E major pentatonic scale (E - F $\sharp$  - G $\sharp$  - B - C $\sharp$ ), and whilst this scale obviously contains the same notes as the C $\sharp$  minor pentatonic scale (C $\sharp$  - E - F $\sharp$  - G $\sharp$  - B), it makes more sense to think of it as a **C** $\sharp$  minor pentatonic scale, not least because it's played over a chord of C $\sharp$ m<sup>7</sup>!

However, either answer will be accepted in the exam.

A notable feature of Riff B, is the apparent repeated 5-quaver pattern, in descending parallel 4ths, which is easier to see in the simplified version (Ex. 5), but this is hard to hear, bearing in mind the numerous overdubbed synth parts.

Here is Riff B, again in a simplified form, to help you see the 5-quaver pattern:



Super-imposing a repeating 5-quaver figure over a 2/2 time signature, with its regular groupings of four quavers, creates **cross-rhythms** – another feature of much traditional music from West Africa.

Rhythmic Displacement

#### The Guitars

Lower in the mix, but supporting every instance of this repeated line (with the exception of the final few at the very end of the song) is a figure, played on a 12-string acoustic guitar.

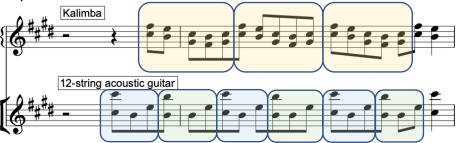


Ex.6: 12-string guitar part, played behind Riff B

At first, this seems like a very complicated figure (again, not a riff). But closer inspection reveals that — in a similar manner to Riff B's being built of a repeating 5-quaver pattern — this guitar line is merely three repetitions of a 6-note pattern, itself clearly in two almost-identical 3-note melodic cells:

I		2	ı	3	
C#_B_E	B-B-E	C#_B_E	B-B-E	C#_B_E	В-В-Е

This creates further **cross-rhythms**, when superimposed with the 5-quaver Riff B, and the percussion loops.



**Ex.7**: Cross-rhythms created by super-imposed 5- and 3-quaver patterns

#### Why is the first note in each group doubled?

The first note in every 3-note cell is doubled at the octave, because it is played on the G-string of a 12-string guitar, whereas the pitches B and E are played on open strings.

On a 12-string guitar, the G-string is paired with a string one-octave higher, but the B- and E-strings aren't, so only the first note of this 3-note pattern is doubled at the octave.

Note that in the 2nd, 4th and 6th patterns, the pitch B is played firstly on the G-string, and then on the open B-string.

Finally, under the third and fourth times that Riff B is played within the group of four, the **lead guitar** reinforces the start of every 3-quaver group by playing the same pitch, quietly, with a **clean** sound (ie without **distortion**) (Ex.8).

## HOW DO 12-STRING GUITARS WORK?

12-string guitars are, basically, normal 6-string guitars, but with each of the regular strings having a second string very close to it, so that both sound when you pluck them.

The low E string, the A, D and Gstrings all have their second string tuned an octave higher than the main string, thereby creating much fuller, richer chords.

But the second string of the Bstring and the high E-string are tuned identically to the regular string – exactly the same pitch.

The tuning is: E - E - A - A - D - D - G - G - B - B - E - E.



Ex.8: Lead guitar reinforcing the 12-string guitar's musical figure

# **VERSE I**Bars 25–59 (0'30"–1'16")

Verse I of Africa comprises four phrases, the first three of which are almost identical.

These first three phrases each are nine bars long, with the chords changing once per bar (except the ninth bar of each phrase), and can be divided into three, shorter, unequal phrases, of four, three and two bars:

#### Bars 25-33 (0'31"-0'43")

Part I	В	D#m <sup>7</sup>	G#m <sup>7</sup>	B/F#
[4 bars]	I hear the drums	echoing tonight	But	she hears only
Part 2	A/E	F#''	E <sup>maj9</sup> /G# *	
[3 bars]	whispers of some	quiet conver-	sa-	
Part 3 [Riff A]	Α	A-G#m-C#m <sup>7</sup>		•
[2 bars]	-tion		*What on eart	h is THAT chord?

Ex.9: Verse 1, Phrase 1

\*What on earth is THAT chord?
Don't worry - we'll look at that below!

Eduqas states that each phrase is divided into three bars and six bars, but this focuses more on the placement of the second vocal entry, and not the actual sound of the chord sequence (Ex.9), with the strong harmonic shift to the  $\flat$ VII chord (A/E) happening on the fifth bar of the whole phrase.

To hear this in action, play the chords without any singing, and hear how the second phrase starts on the chord A/E. Part I is clearly a strong, 4-bar phrase, and Part 2 feels like it should be an answering 4-bar phrase, but is interrupted by the return of Riff A.

When you add the vocal line, you'll notice that the second line of lyrics (beginning, "But she hears only...") begins before Part 2 starts. That's true – but it acts as an anacrusis, or pick-up, albeit a long one!

Remember that Toto consider Africa to be in 4/4, not 2/2, and therefore this anacrusis is only half a bar – perfectly normal.

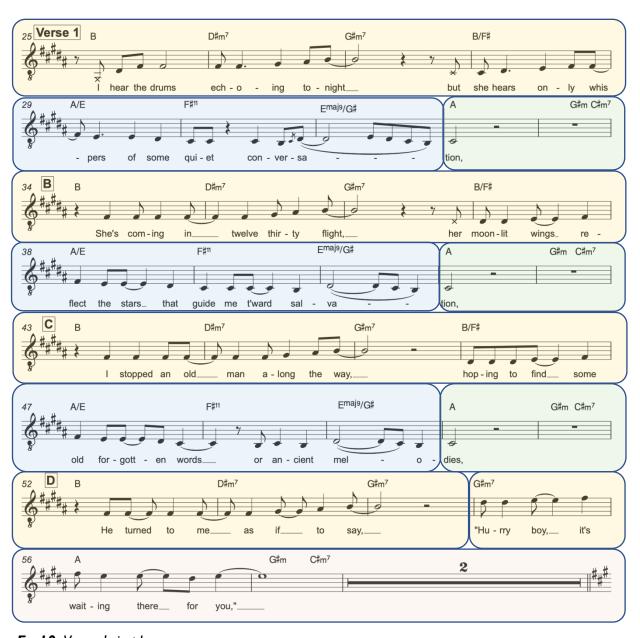
#### PROVE IT!

OK... listen to the Solo section (2'57"-3'19", beginning at bar 138, and described in detail in a later section), which uses the same chord sequence as the Verses.

Here, the solo line, played by the synth, clearly and unambiguously, plays a 4-bar phrase, followed by a 3-bar phrase, with the 2-bar riff completing the pattern above (Ex.9).

That seems like pretty conclusive evidence that Toto themselves thought of this as being split into four bars, three bars, and two bars.

To reinforce the point, here is the vocal line of Verse I, with the coloured boxes showing the different phrase lengths.



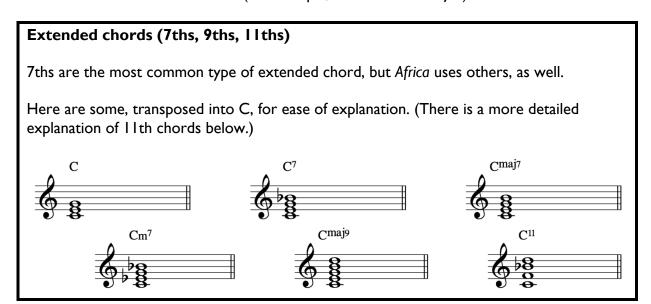
**Ex. 10**: Verse 1, in phrases

#### **HARMONY**

Before we go any further, we need to take a closer look at a few of those chords.

#### **Extended harmony**

Several of the chords use **extended harmony**, that is, chords extended upwards, beyond the usual I–3–5 of familiar triads (for example, C–E–G for C major).



Let's look at that phrase from the Verse, again. Some chords are regular 7th chords, covered above, so we can tick them off:



Others look a bit more complicated, initially, but are actually pretty straightforward.

#### INVERSIONS

In classical music, we'd call these chords inversions.

What type of inversion is A/E?

What about B/F#?

And E/G#?

#### Slash chords

Slash chords are shown with chord symbols like this: A/E, or B/F# (pronounced, "A slash E" or "B over F sharp").

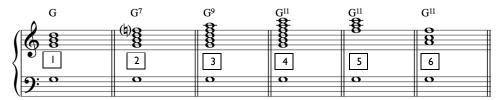
The first letter tells you what the chord is, and the second letter tells you the bass note. So, A/E is A major with E in the bass.

#### **Dominant 11ths**

A Dominant 11th is a slightly odd, but seriously useful chord, used all the time in pop, gospel, soul, and funk music. If you're writing a song for your composition, seriously consider using a **Dominant 11th** instead of a normal Dominant (Chord V), and see if you like it. (Spoiler alert: you will.)

To create a Dominant IIth, you take a Dominant chord (in this example, G major, chord V of C major) [fig. I, below]; add on the 7th to create  $G^7$  [2], add on the 9th to create  $G^9$  [3], then add on the IIth to create  $G^{11}$  [4].

In order to prevent a cluttered sound, I Ith chords are usually voiced (played) without the 3rd and 5th of the original chord (in this example, B and D) [5]. Then, just re-voice the chord, and you have a Dominant I Ith [6]. Simple and effective!



Note that the top three notes in the Dominant 11th chord are the same as those of the Subdominant chord (chord IV), so it's sometimes written as a slash chord, eg F/G.

#### "That" Chord

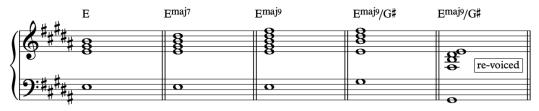
OK – there is a great chord in the Verse of Africa, first heard in bar 31 in the synth. Debate has raged about how to refer to it, which just shows how subjective things like this can be.

The notes in the chord are (from the bottom up): G#\_F#\_B\_D#\_E

Eduques refers to this chord as  $G^{\sharp m^7}$  ( $G^{\sharp -}B-D^{\sharp -}F^{\sharp}$ ), but this ignores the presence of the **E**, at the top, which is prominent in the synth and the 12-string guitar.



A more logical way of thinking of this chord is as:  $E^{maj9}/G^{\sharp}$ .



→ E major: E–G#–B

 $\rightarrow E^{\text{maj7}}$ : E-G#-B-D#

 $\rightarrow$  E<sup>maj9</sup>: E–G‡–B–D‡–F‡

And then move the  $G^{\sharp}$  into the bass, creating a 1st inversion, and re-voice, to give  $E^{maj9}/G^{\sharp}$ .

This makes more harmonic sense, too, as it acts as a dominant chord (Chord V) leading to the next chord, of A major.

#### JUST ONE MORE THING...

One other way of spelling this chord is as  $\mathbb{E}^{\text{maj}7(+2)}/G^{\sharp}$ .

This treats the  $F^{\sharp}$  as an added 2nd of the chord of  $E^{maj7}$ .

It is an acceptable way of thinking of this chord, and will be accepted as an answer by Eduqas, as will  $G^{\sharp}m^{7}$ .

#### **MELODY**

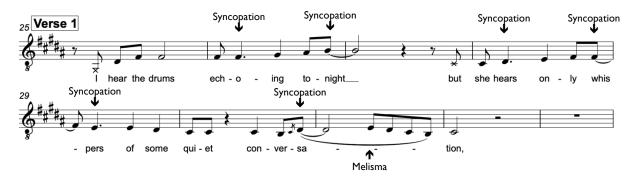
David Paich sang lead vocal in the Verses, and his vocals are **tripled**: ie he recorded an identical vocal line twice more on top of his original line, a common technique.

The melody of the Verses of Africa is in a relatively low **tessitura** (part of the voice's range), with a range of just an **octave**, from B to B.

It is almost entirely **conjunct**, meaning that the notes in the phrase are next to each other in pitch. You can also call this **step-wise** or **scalic** (from the scale).

The word-setting of the Verse is **syllabic**, apart from the **melismas** found on the last word of all but the last phrase (eg "conversation" in bar 31 – see Ex.11).

Harmonically, the melody is **diatonic** (meaning that it only uses notes from the scale of the key, in this case, B major), and includes a huge amount of **syncopation** (see Ex.II), meaning that many notes are placed off the beat.



**Ex. 11**: opening phrase of Verse 1, showing the syncopation, and the melisma

#### **SYNCOPATION**

Syncopation is extremely common in Pop and Rock music – almost every single Pop and Rock song is loaded with it!

So, whilst it's worth noting, the syncopation in the vocal line should not be regarded as having any special significance to music from the African continent, or to reflect any deeper allusions.

This 9-bar phrase is repeated three times, with an extension on the fourth time (bars 55–59). See Ex.10.

### Let's take a quick look at what else is happening in the Verse.

Instrument	Role						
Lead vocal	Described above						
Backing	Overdubbed BVs feature a great deal in Africa. In Verse 1, they appear						
vocals	twice: in the third phrase (bars 48–50), singing an octave higher than the						
(BVs)	lead vocal, as well as filling in some harmonies:						
	<b>8</b> 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
	48 48						
	Lead Vox						
	or an - cient mel o - dies,						
	BV1						
	or an - cient mel o - dies,						
	Additional 2 ###						
	Additional BVs 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4						
	or an - cient mel o - dies,						
	And in bars 55–57, which is the end of the last phrase, just before Chorus						
	I. Here, a backing vocal sings a <b>third</b> below the lead vocal.						
	1. I let e, a Dacking vocal sings a chirc below the lead vocal.						
	55						
	Lead Vox "Hu-rry boy, it's wait-ing there for you,"						
	Q # #						
	BV1						
	"Hu-rry boy, it's wait-ing there for you,"						
	, se,,						
Guitars	There are two guitars in the Verses, and they take it in turns to play						
Lead	behind the other instruments.						
(electric) and							
12-String	The <b>lead guitar</b> plays a short, repeated figure, with a <b>clean</b> sound (ie no						
Acoustic	distortion), whilst <b>palm-muting</b> . This is where the guitarist uses the side						
	of whichever hand they're picking with to softly touch the strings whilst						
	playing.						
	This stops the strings from vibrating for long, and gives the notes a much						
	shorter attack and a softer sound. On the score, it's indicated by "P.M."						
	and a bracket over the relevant 4-bar phrases:						
	25 P.M. Clean						
	(						

After the first 4-bar phrase, the electric guitar stops, and the 12-string acoustic guitar takes over, playing the following syncopated pattern:



This happens for all four phrases in the Verses (and in the Solo), but when it changes in the last four bars before the Chorus, the 12-string guitar strums a different syncopated pattern underneath Riff A, also playing the same rhythm as Riff A (bars 56–59).

## Synth and Piano

Synth I (using the brass voice) plays sustained chords with the right hand, and doubles the bass guitar in the left hand, also playing Riff A each time it comes around. Note that the voicing of chords isn't always the same each time.



Far lower in the mix, but audible, is a piano, playing Riff A each time.



#### **Bass Guitar**

The bass guitar plays a mixture of roots and different partials of each chord (thereby creating inversions as described above), using the same rhythm in each bar. It also joins in with Riff A every time.



# Drums and Percussion

The drums and percussion continue to play (OK, not "play", as it's looped) the 2-bar pattern heard in bars I-2, but with a few slight differences:

 As it's a 9-bar phrase, the 2-bar conga pattern doesn't fit, so the congas repeat the first bar of their 2-bar pattern, before resuming (eg bars 31–33).



- The high cowbell drops out at the start of Verse I, not reappearing until bar 207, in the Outro
- The marimba, whilst not part of the percussion loop, joins in for every appearance of Riff A
- A bell tree sounds in bar 57, just before Chorus I
- To anticipate the sound of live drums in the Chorus (as opposed to the repeated loop used in the Verses and Solo), there is the iconic drum **fill-in**, in bars 58 and 59.



# CHORUS I Bars 60-77 (1'16"-1'39")

The Chorus of Africa is one of the best-known Choruses in Pop and Rock music – definitely a huge sing-along!

#### **HARMONY**

It's built of four 4-bar phrases, the last of which is extended. This chord progression is a tried-and-tested one, that can be found in dozens of hit songs.

It is a variation of the classic Four Chord Song, used by hundreds of song-writers, past and present.

#### THE FOUR CHORD SONG

The Four Chord Song is: I - V - vi - IV The Chorus of *Africa* begins halfway through that pattern, on chord vi:

• **vi - IV - I - V**, if we consider the Chorus to be in A major.

Phrase I	F#m	D	Α	E			
Phrase 2	F#m <sup>7</sup>	D	Α	Е			
Phrase 3	F#m <sup>7</sup>	D	Α	Е			
Phrase 4	F#m <sup>7</sup>	D <sup>(add 2)</sup> *	Α	C#m <sup>7</sup>	Е	F#m	E/G

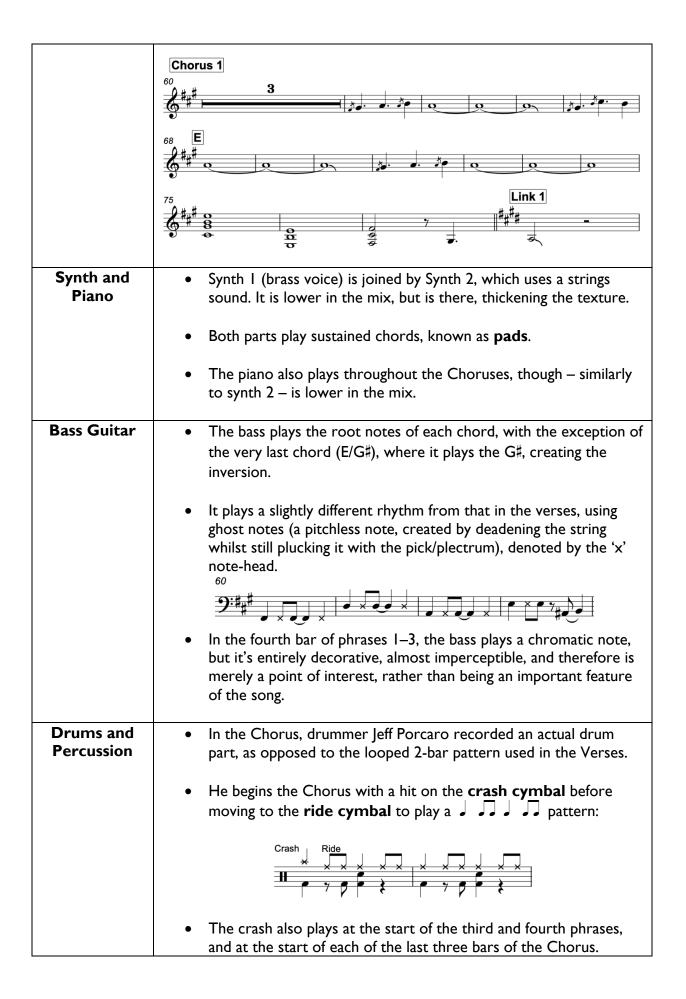
\*D(add 2): This is a normal D major chord, with a prominent added 2nd (E) in the BVs

Note how the final chord of the Chorus is a Slash Chord: E/G#, which is Chord V (1st inversion) of A major, the first chord of the Link, that follows the Chorus.

#### TEXTURE

- There's not a huge amount to say about the texture of *Africa*: it's basically melody-and-accompaniment (often called melody-dominated homophony), throughout
- Though within that, remember there are the continuous polyrhythms in the looped percussion
- The texture of the Choruses is thicker than those in the Verses, due to greater forces: the extra synth, the piano, both guitar parts, live drums, and the layered BVs

•	B.I				
Instrument	Role		. = -		
Lead vocal	<ul> <li>The lead vocal, now sung by Bobby Kimball, not David Paich, sings an incredibly catchy melody, always beginning on the second crotchet of each phrase, with an extremely narrow range: just a minor 2nd, or semitone, from A to G#.</li> <li>This is only extended right at the end (bars 75–77), and even then, the range only extends to a 4th (A–E).</li> <li>The lead vocal uses lots of syncopation, and is completely syllabic until the long melisma on the word 'had' in bars 75–77.</li> </ul>				
Backing vocals	The multiple B	vs enter gradu	ally throughout	the Chorus:	
(BVs)		Phrase I	Phrase 2	Phrase 3	Phrase 4
(= : =)	Lead Vocals	✓ ✓	✓ ×	✓ · · · · · · · · · · · · · · · · · · ·	✓ ·
	BV I	*	<b>√</b>	<b>√</b>	✓
	BVs 2 & 3	×	×	✓	✓
Guitars	<ul> <li>There are generally two BVs, but in bar 69, it briefly splits into three BVs.</li> <li>The final two notes of the Chorus (on the word, "Ooh") has one BV.</li> </ul>				
Lead (electric) and 12-String Acoustic	<ul> <li>There are two guitar parts in the Chorus</li> <li>The 12-string plays ascending and descending arpeggios in quavers.</li> <li>The lead guitar (using distortion) plays a simple idea on the fourth bar of every phrase, leading into a long, sustained note. Thi idea is varied, the second time. It is quite low in the mix, but is there.</li> <li>In the last three bars of the Chorus (bars 75–77), the lead guitar is much louder. It follows the chords of the song, playing C#m<sup>7</sup> in ba 75, followed by two power chords on E and F#.</li> <li>It finishes the Chorus by doubling the bass guitar, playing the note G# and A, ending by sliding off the A.</li> </ul>				dea on the ined note. This mix, but is ne lead guitar is ing C#m <sup>7</sup> in bar



The last bar of the Chorus has a more complicated pattern, involving an open hi-hat, and a china cymbal, but don't worry – you won't be asked about this in the exam: it's just here in the interests of completeness.

## LINK | Bars 78–85 (1'39"-1'49")

This 8-bar Link passage is identical to bars 9–16 of the Intro (or, 17–24, if you prefer – it's the same music).

The only difference is that a **gong** sounds on the second beat of the second bar (bar 79), and – of course – the section is only eight bars long.

It's worth noting that the **live drums** stop here, with the final hit on the china cymbal on the first beat of the phrase (bar 78). Verse 2 uses the pre-recorded loop once more.

# **VERSE 2**Bars 86-111 (1'49"-2'23")

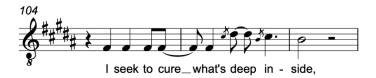
Verse 2 is almost identical to Verse 1, with just a few differences, excluding the words:

#### It's shorter

• Verse 2 only repeats the 9-bar phrase twice, not three times.

#### Lead vocal

- The rhythms are slightly different, as you'd expect with different words.
- The start of the final phrase (bars 104–106) is different from the starts of previous phrases, as it rises a major sixth (F#–D#) (**disjunct** motion) before descending back to the tonic. There are characteristic grace notes on the syllables "deep" and "in-"



#### Recorder

- In Verse 2, a treble recorder plays a backing line: four bars of conjunct, descending notes from the B major scale, followed by overdubbed lines (see Ex.12).
- Note that in bar 92, the upper recorder part doubles one of the BVs, itself copying the rhythm of the lead vocal:



Ex. 12: recorder countermelody in Verse 2

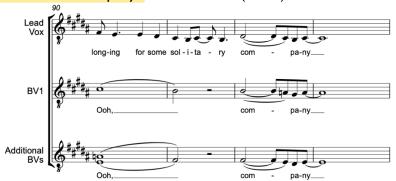
At the end of Verse 2, the recorder briefly splits into three parts (ex.13).



Ex. 13: recorder part splitting briefly into three parts

#### **Backing vocals**

- The BVs play a much more prominent role in Verse 2, compared to that of Verse 1
- In the first phrase, they sing a 3-part chord on the word, "Ooh" (bars 90–91), before harmonising the word, "company" in bars 92–93 (Ex.14)



Ex. 14: Backing vocals in Verse 2, phrase I

- In the second phrase, a single backing vocal harmonises the words, "I know that I must do what's right" (bars 95–96), in a line beginning a fourth higher than the lead vocal, before moving to a third higher; before once again singing, "Ooh" and then the final word of the phrase ("Serengeti"), but this time creating a four-part texture (including the lead vocal)
- In the third phrase, a single backing vocal harmonises a third below the lead vocal, just as it did in Verse I

# CHORUS 2 Bars 112–129 (2'23"–2'46")

Chorus 2 is identical to Chorus 1.

# LINK 2 Bars 130–137 (2'46"–2'56")

Link 2 is identical to Link 1.

## **SOLO (INSTRUMENTAL)**

Bars 138-154 (2'56"-3'18")

There is quite a lot to say about this section.

#### HARMONY AND STRUCTURE

- The harmony of the Solo section is based on that of the Verses, with its phrases of four, three and two bars, incorporating Riff A (refer back to the analysis of Verse I, above)
- It is shorter than both Verses, incorporating just one repeat of the nine-bar phrase.



**Ex. 15**: Phrase structure of the Solo, compared to the Verses

#### **TIMBRE**

- The solo itself is taken by one of the synthesizers, set to a **flute**-like voice.
- A **xylophone**-like voice is added for the second phrase onwards (bars 142–149).

#### **MELODY AND RHYTHM**

• The melody is split into three phrases:

#### o Phrase I: bars 138-141

- 2-part texture, based on parallel 4ths (with occasional 3rds)
- Regular quavers, with a triplet at the end
- All notes taken from the B major pentatonic scale  $(B C^{\sharp} D^{\sharp} F^{\sharp} G^{\sharp})$
- The melody is split into repeating groups of three quavers, thereby creating cross-rhythms and syncopation. There is an argument for referring to this as a sequence



Ex. 16: Solo, phrase 1, broken into seven 3-quaver cells

#### Phrase 2: bars 142–146

- A more rhythmically complex line, mainly in parallel 3rds, featuring both quaver and crotchet triplets
- Eduqas have said that this uses the E major scale, and whilst it's clear why this decidion has been arrived at, this interpretation overlooks that the song is (albeit briefly) in A major:  $A/E F^{\#11} E^{maj9}/G^{\#} A$
- However, to avoid opening a can of worms about Lydian scales, let's agree that it's an E major scale



Ex. 17: Solo, phrase 2

#### > Phrase 3: bars 147-149

- A return to the regular quavers, moving mainly in parallel fourths, played in groups of three, creating cross-rhythms
- All notes once again taken from the B major pentatonic scale
- In contrast to Phrase I, this phrase ascends, apart from the final two chords
- Use of grace notes in bar 149



Ex. 18: Solo, phrase 3, broken into four 3-quaver cells

#### **OTHER**

#### **Vocals**

- The lead vocals and one backing vocal return in bar 150, singing a slightly modified version of the end of Verse I (55–57). The lyrics are slightly different.
- There are also three backing vocals, which weren't heard in Verse I, singing a three-part chord on the word, "Ooh".
- This begins in bar 151, on the chord of A major, so the top B in the BVs turns the chord into A<sup>(add2)</sup>.
- On the second beat of bar 152, the chord changes to  $C^{\sharp}m^7$ , and the middle note of the BVs' chord resolves downwards, leaving them singing  $E G^{\sharp} B$ , the top three notes of a  $C^{\sharp}m^7$  chord.



Ex. 19: Backing vocals in Verse 2

#### Piano

• The piano is far higher in the mix during the Solo section.

# CHORUS 3 Bars 155–171 (3'18"–3'39")

Chorus 3 is largely the same as Chorus 1 and Chorus 2, but there are a few differences:

#### **Bass Guitar**

• The bass guitar part is considerably more decorated in the last two Choruses, with lots of passing notes, and improvised variations on the original bass line.

#### **Lead Guitar**

- The lead guitar part first heard quietly in Choruses I and 2, is now far more prominent (higher in the mix). In the second half of Chorus 3, it abandons the previous pattern to play an ascending figure based on the F#m pentatonic scale (bars 166–168) (Ex.20).
- Eduqas incorrectly calls this a riff, and says that this is its first appearance. Should a question about this come up in the exam, it will be acceptable to refer to it as a riff.



Ex.20: Lead guitar part in Chorus 3

However, the main difference is that the fourth phrase of Chorus 3 repeats the third phrase, rather than extending it to lead back to a Link, as it did in Chorus I and 2.

To put it another way, the chords of Phrase 4 are the same as those for Phrases I-3, and the vocals (including backing vocals) are the same in Phrases 3 and 4 (Ex.21)



Ex.21: Vocal parts in Chorus 3

In the final bar of Chorus 3, an additional lead vocal enters, singing a (presumably) improvised vocal in a very high register, acting as an anacrusis into Chorus 4.

# CHORUS 4 Bars 172–188 (3'39"–4'03")

Chorus 4 follows the 4-chord pattern of previous choruses, and – unlike Chorus 3, it uses the extended fourth phrase to lead into the Outro.

Also unlike previous Choruses, the backing vocals do not build up gradually, but continue the full 3-/4-part texture from the end of Chorus 3.

The improvised lead vocal soars over the top of the texture: in bar 180, hitting the highest vocal note of the whole song, a top E.

The piano is more prominent in this Chorus than in previous ones, but all other parts remain the same as in previous Choruses.

# **OUTRO**Bars 189–228 (4'03"–4'55")

The Outro is based on the Intro, with two synths alternating between Riff A and Riff B, as before, using the chords of the Intro, with no vocals.

The bass guitar, having taken something of a backseat throughout, suddenly plays some decorative (perhaps improvised) lines. These are played high in the instrument's register, in answer to the Riff As: therefore, under various Riff Bs (bars 195–196, 203–204, and 211–212) (Ex.22).



Ex.22: Bass guitar fills in the Outro

The percussion loop continues, and in fact, is strengthened by some additional instruments:

Instrument	Description	Notation
Xylophone	Plays a short, repeated figure in bars 195–196, 203–204, and 211–212	195
Pangi shell shakers	These play on the beat from the beginning of the Outro till the end	Outro

Wood block	Plays an ostinato from the beginning of the Outro till the end	Outro  II
More Cowbells	The high cowbell (last heard in the Intro) returns, and a new ostinato is heard	189 Outro
Extra conga	From bar 215 onwards, an improvised conga line is added	

Throughout the Outro, the various instruments drop out to leave just the percussion loop with the marimba playing the bass line from Riff A, and the synth playing Riff B.

The music fades out.

#### **Notes**

- This analysis has been produced alongside the <u>Ten Sample Listening Tests</u>, available on TES.com, and the <u>Full Score</u>.
- Generally, this matches that offered by Eduqas, but there are a few differences (eg I have identified the final two Choruses as being Chorus 3 and Chorus 4, whereas Eduqas has amalgamated them, calling this amalgamation Chorus 3).
- I hope this analysis is of use.
- It is for sale on TES.com. It is nearly 6500 words long, and has taken considerable time to research and write. **Please don't share it with others for free.**
- Please look out for the <u>Ten Listening Tests</u> on TES.com, and my transcription of the score, available on www.sheetmusicplus.com (search for "Africa – Toto – Full Transcription – Eduqas GCSE") or click here: <u>Africa – Toto Full Transcription</u>.
- If you find any errors, or have any queries, please get in touch: <a href="mailto:nptjohns@gmail.com">nptjohns@gmail.com</a>.

#### About the author

Patrick Johns is a classroom music teacher, radio producer (BBC Radio 2 and Radio 3, and Scala Radio), presenter of the Music Education podcast Teaching Notes, and freelance trombonist.

He is a former Eduqas A Level Examiner, and is the author of various popular resources for GCSE and A Level Music.

Find out more at www.patrickjohns.co.uk.

**Toto: Africa** 



#### **Toto: Africa**

#### **Musical Analysis**

Intro

Bars 1 - 4

4 bars

B major

The introduction contains only three chords – \( \forall VII, \text{ vi and ii } (A, G#m and C#m) – and consists of two riffs, both of which last for two bars each.

The first (Riff a – bars 1 & 2) is a distinctive syncopated rhythm pattern mostly repeating chord 4 VII and concluding with chords vi and ii:



Riff A is the hook that creates both the intro and the extension of the verse phrases - a clever structural device.

Root position chords, because of the bass notes. But the chords have a good **voicing** - with the 3rds at the top. This really emphasises the differences in tonality between the chords.

The second (Riff b – bars 3 & 4 with an anacrusis) uses an ostinato pattern of five notes – based on the E major pentatonic scale – over a sustained chord ii: It makes more sense to say Minor Pentatonic of C# minor - which are the same notes!! As the chord is C# minor, and the



With the exception of the Chorus, the first riff makes an appearance in every other section of the song whilst the second is developed in the instrumental section.

Both riffs have their origins in traditional African music with their use of syncopation, pentatonic scale and irregular ostinato groupings that cut across the 2/2 time signature. The instrumental sonorities used on the recording – including xylophones and marimbas – suggest the sounds of pitched percussion instruments which originate from the various countries of the African continent. The recording of the song also includes an additional eight-bar introduction, performed only by unpitched percussion instruments. This is heard before the vocal score begins and contains African influence in its use of layered rhythm parts and ostinatos.

African xylophones are Balafons

https://www.youtube.com/watch?v=qKaXt1PYKXk
This is the version with the layered intro.

**Toto: Africa** 



*Verse 1* Bars 5 – 39 35 bars B major

The verse falls into four phrases:

Phrase 1 Bars 5 – 13 9 bars

I hear the drums echoing tonight. She hears only whispers of some quiet conversation.

Phrase 2 Bars 14 – 22 9 bars

She's coming in twelve thirty flight. Moonlit wings reflect the stars that guide me t'ward salvation.

Phrase 3 Bars 23 – 31 9 bars

I stopped an old man along the way, hoping to find some old forgotten words or ancient melodies.

Phrase 4 Bars 32 – 39 8 bars

He turned to me as if to say, "Hurry boy, it's waiting there for you."

A nine-bar phrase is an unusual length. The reason for this is that Riff a begins as the vocal line ends in bar 8 each time.

The melody for the first three phrases is also unusual because each one falls into two vocal lines of three and five bars respectively, ending with a silent bar. It is fairly low in the voice, moves conjunctly in a syncopated rhythm and is mostly syllabic.

The harmonic rhythm of the first three phrases is slow and the chords change only once each bar with the exception of the last bar where the end of Riff a's distinctive chord pattern can be heard.

The chord pattern of each of the nine-bar phrases is:

Bar 5	Bar 6	Bar 7	Bar 8	Bar 9	Bar 10	Bar 11	Bars 12 & 13
I (B)	iii (D#m)	vi (G#m)	Ic (B/F#)	ងVIIc (A/E)	iv <sup>9</sup> d (E/F#)	vi (G#m)	Riff a

The final eight-bar phrase begins in exactly the same way as the previous three phrases; however, in the fourth bar the melody begins an octave higher than previously stated and is harmonised by a backing vocalist, moving in parallel motion at an interval of a 3<sup>rd</sup> below.

Harmonically, chord vi (G#m) is sustained for an extra bar. This allows Riff a to be stated in the fifth and sixth bars with chord ii sustaining until the end of the phrase.

The chord pattern of the final eight-bar phrase is:

Bar 32	Bar 33	Bar 34	Bar 35	Bar 36 & 37	Bar 38	Bars 39
I (B)	iii (D#m)	vi (G#m)	vi (G#m)	Riff a	ii (C#m)	ii (C#m)

**Toto: Africa** 



*Chorus 1* Bars 40 – 57 18 bars A major

The chorus also falls into four phrases:

Phrase 1 Bars 40 – 43 4 bars

It's gonna take a lot to drag me away from you.

Phrase 2 Bars 44 – 47 4 bars

There's nothing that a hundred men or more could ever do.

Phrase 3 Bars 48 – 51 4 bars

I bless the rains down in Africa.

Phrase 4 Bars 52 – 57 6 bars

Gonna take some time to do the things we never had.

The first phrase is sung as a solo, the second as a duet and the third and fourth in three parts.

The melody for the first three phrases uses only two pitches: the tonic and the leading note. This time it is high in the voice, although as before it uses a syncopated rhythm and is syllabic.

The harmony of the first three phrases has the same harmonic rhythm as the verse. This time, however, a typical pop song chord pattern is used:

Bar 40	Bar 41	Bar 42	Bar 43
vi (F#m)	IV (D)	I (A)	V (E)

The final six-bar phrase begins in exactly the same way as the previous three phrases; however, in the fourth bar both the melody and the chord pattern change in order to prepare the shift back to B major. The melody ends with a melisma and the following chords are used:

Bar 52	Bar 53	Bar 54	Bar 55	Bar 56	Bar 57
vi (F#m)	IV (D)	I (A)	iii (C#m)	V (E)	vi (F#m) / Vb (E/G#)

Link 1 Bars 58 – 65 8 bars B major

This section repeats the music stated during the Introduction; however, the original four-bar section is repeated only once instead of three times.

**Toto: Africa** 



*Verse 2* Bars 14 – 39 26 bars B major

This verse falls into three phrases:

Phrase 1 Bars 14 – 22 9 bars

The wild dogs cry out in the night as they grow restless, longing for some solitary company.

Phrase 2 Bars 23 – 31 9 bars

I know that I must do what's right, sure as Kilimanjaro rises like Olympus above the Serengeti.

Phrase 3 Bars 32 – 39 8 bars

I seek to cure what's deep inside, frightened of this thing that I've become.

This section repeats the music heard during Verse 1, with different lyrics. However, there are only two nine-bar phrases this time before the final eight-bar phrase brings the section to a close as before. This verse contains a slight change to the melody in bar 33 as the singer leaps up to pitches D# and C# on the words *deep in*.

This verse is accompanied by a countermelody or descant, played on a flute-like instrument, which can be heard across the top of the texture. It changes pitch conjunctly, moving at the same speed as the harmonic rhythm.

The backing vocals also become more important in this verse. In the two nine-bar phrases they enter in the fifth bar, harmonising on *Ooo* before joining the lead singer with the last word of each phrase. The beginning of the second nine-bar phrase is also harmonised by a backing vocalist, initially a 4th higher than the melody, and then continuing a 3rd higher.

*Chorus 2* Bars 40 – 57 18 bars A major

This section repeats the music stated during Chorus 1.

Link 2 Bars 58 – 65 8 bars B major

This section repeats the music stated during Link 1.

**Toto: Africa** 



*Instrumental* Bars 66 – 82 17 bars B major

This section is based on the accompaniment heard during the verse; however, the vocal melody is almost entirely replaced with an instrumental melody based on Riff b. Where Verse 2 was a shortened version of Verse 1, this section presents an even shorter statement of the verse with only one nine-bar phrase this time before the final eight bar phrase brings the section to a close as before.

Bars 66 – 69 4 bars (the first half of the nine-bar phrase)

A descending melody using a B major pentatonic scale with the notes falling into groups of three and ending with a triplet:



Bars 70 – 74 5 bars (the second half of the nine-bar phrase)

An ascending and descending melody using the E major scale which contains more rhythmic variety than the first:



Bars 75 – 77 3 bars (the first half of the eight-bar phrase)

An ascending melody, also using the B major pentatonic scale with the notes once again falling into groups of three. This time the phrase ends in a more 'pop' style with the use of grace notes and syncopation:



Bars 78 – 82 5 bars (the second half of the eight-bar phrase)

The vocal part resumes at this point with the second half of the original eight-bar phrase: "Hurry boy, she's waiting there for you."

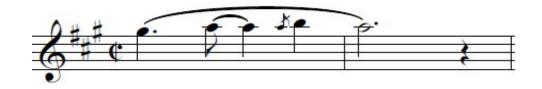
**Toto: Africa** 



*Chorus 3* Bars 40 – 92 22 bars A major

This section repeats the music stated during Chorus 1 with three notable changes:

1) A new electric guitar riff is heard on the recording in the last bar of each phrase (bars 43, 47, 51 etc):



- 2) Phrase 3 *I bless the rains down in Africa* is heard five times, making this section significantly longer than before.
- 3) Also, during phrase 3, a solo vocal improvisation is heard at the end of the first, second and fourth repeats. Each one is different, the first two using the lyrics I bless the rain, whilst the final one uses, I'm gonna take some time.

Outro Bars 93 – 96 4 bars B major

This section repeats the music stated during the Introduction. On the recording the music repeats continually and the texture is gradually reduced each time so that by the end the music is reduced to only the rhythm track heard at the beginning of the song accompanied by the bass line of Riff a.

#### **Glossary**

**Grace notes** are additional notes added as decoration. They are not essential to the melody or the harmony.

The **harmonic rhythm** is the rate at which the chords change in a piece of music.

**NME** is the New Musical Express, a British music journalism website and former magazine that has been published since 1952. During the 1970s, it became closely associated with punk rock through the writings of Julie Burchill, Paul Morley and Tony Parsons.

A **pentatonic scale** is a musical scale with five notes per octave, most commonly notes 1, 2, 3, 5 & 6 of the major scale.

A **riff** is a short-repeated phrase in popular music and jazz, typically used as an introduction or refrain in a song.

Toto: Africa



## **Appendix**

Whilst the author of this analysis has decided to place much of the content of this song in B major, the key is, in fact, ambiguous and could be interpreted as B major, E major or A lydian. The Chorus, however, is resolutely in A major.

Centres are free to deliver the analysis through any of these keys and future exam questions will ensure access for all candidates, whichever key is taught.

Riff a	А	G#m	C#m
B major	۹VII	vi	ii
E major	IV	iii	vi
A lydian	I	vii	iii

Verse	Bar 5 B	Bar 6 D#m	Bar 7 G#m	Bar 8 B/F#	Bar 9A/E	Bar 10 E/F#	Bar 11 G#m
B major	I	iii	vi	lc	≒VIIc	iv9d	vi
E major	V	vii#5	iii	Vc	IVc	ii11	iii
A lydian	II	iv#5	vii	llc	lc	vi11	vii

Verse	Bar 32 B	Bar 33 D#m	Bar 34 G#m	Bars 35 G#m	Bars 36 & 37 Riff a	Bar 38 C#m	Bar 39 C#m
B major	Ι	iii	vi	vi	타VII – vi – ii	ii	ii
E major	V	vii#5	iii	iii	IV – iii – vi	vi	Vi
A lydian	II	iv#5	vii	vii	l – vii – iii	iii	iii

# **Background Notes**

**Toto: Africa** 



#### **Toto: Africa**

#### **Background**

- Africa is a song recorded by the American rock band Toto in 1981 for their fourth studio album entitled Toto IV. It is a soft-rock love song with features of African music.
- The song was written by band members David Paich (born June 25<sup>th</sup> 1954) and Jeff Porcaro (born April 1<sup>st</sup> 1954 and died August 5<sup>th</sup> 1992).
- Africa was released as the third single from the album on September 30<sup>th</sup> 1982 through Columbia Records. It reached number one in America for a single week on February 5<sup>th</sup> 1983. It also achieved a place in the top ten in the UK, Canada, Ireland, Netherlands, New Zealand and Switzerland.
- In 2012, Africa was listed by music magazine NME in 32<sup>nd</sup> place on its list of '50 Most Explosive Choruses'.

#### The Music

Instrumentation: Rock Band: drum kit with additional percussion, lead and bass guitars, synthesizers,

male lead vocals and male backing vocals.

Tempo: Moderately fast.

Dynamics: Most of the song is mezzo-forte whilst the choruses are forte.

Form and Structure: Verse / Chorus Form:

Intro	Bars 1 – 4	4 bars
Verse 1	Bars 5 – 39	35 bars
Chorus 1	Bars 40 – 57	18 bars
Link 1	Bars 58 – 65	8 bars
Verse 2	Bars 14 – 39	26 bars
Chorus 2	Bars 40 – 57	18 bars
Link 2	Bars 58 – 65	8 bars
Instrumental	Bars 66 – 82	17 bars
Chorus 3	Bars 40 – 92	22 bars
Outro	Bars 93 – 96	4 bars

Tonality: The majority of the song is in B major whilst the choruses are all in A major.

Harmony: Diatonic throughout.

Melody and Pitch: The melody is mostly conjunct (moving in step) and includes occasional use of the

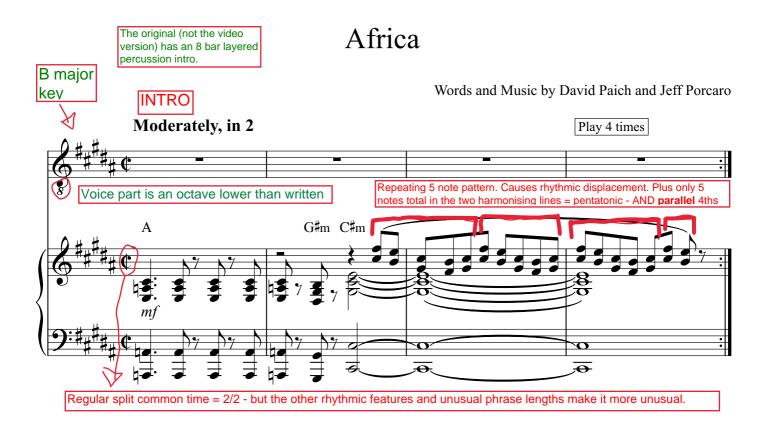
pentatonic scale. The pitch range of the vocal line is just less than two octaves on the printed score, but it is wider on the recording with the vocal improvisations towards

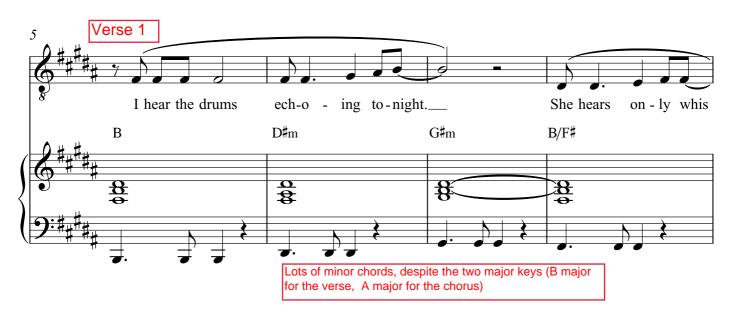
the end of the song.

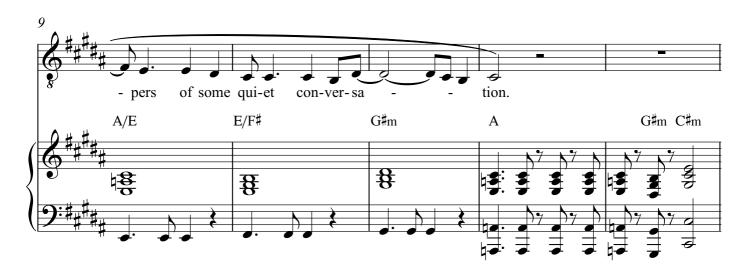
Rhythm and Metre: Ostinato rhythms, consisting almost totally of quavers, with constant use of

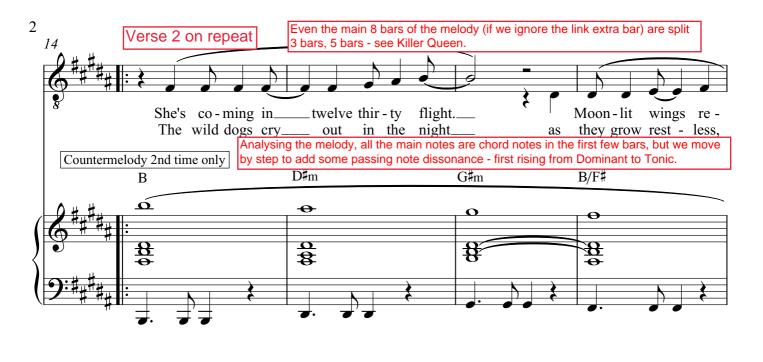
syncopation. The time signature is 2/2 (split common time) throughout.

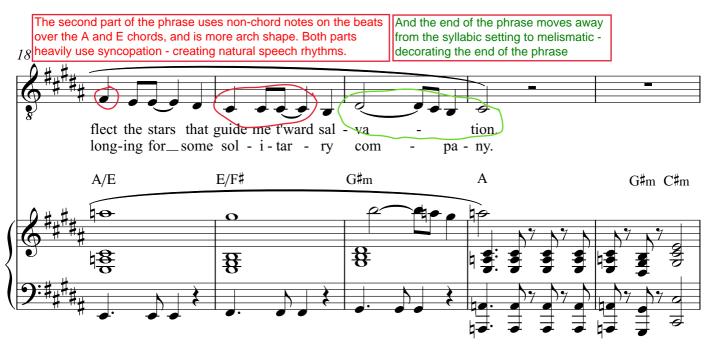
Texture: Homophonic (melody and accompaniment).

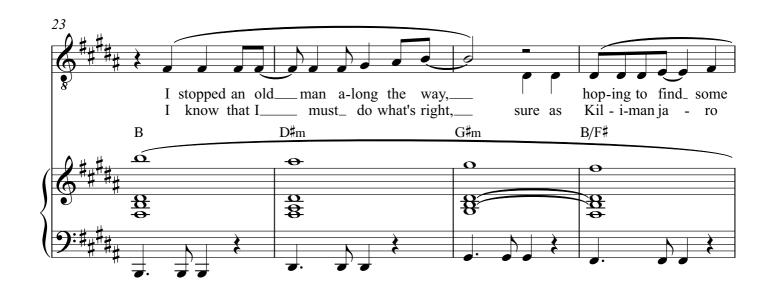


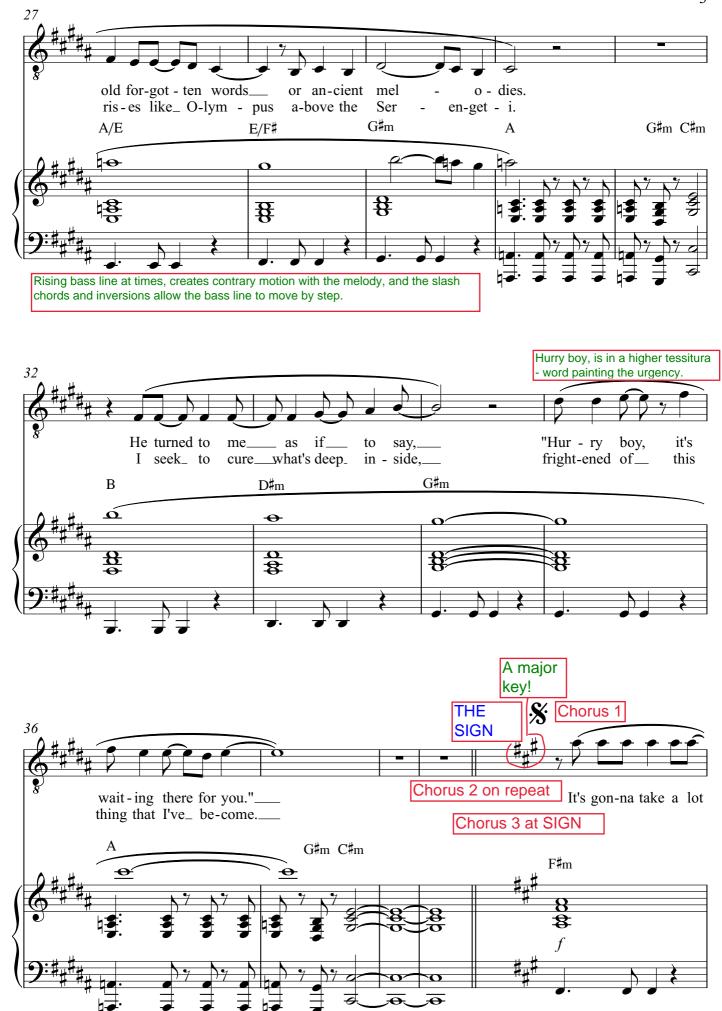






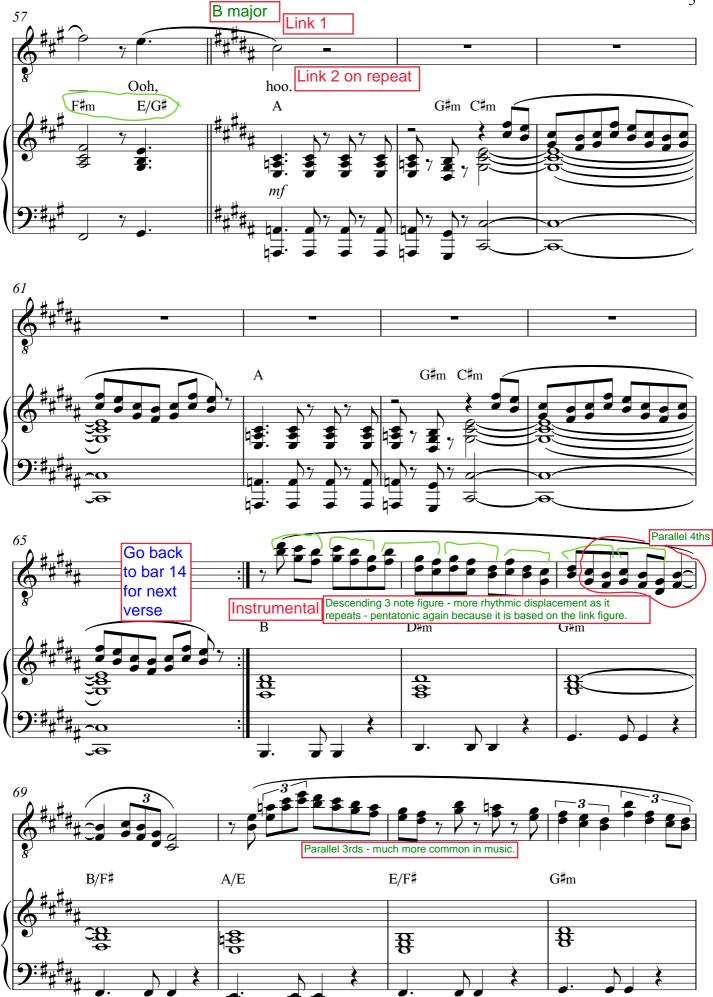


















## Verse / Chorus Form:

Intro Bars 1 – 4 4 bars
Verse 1 Bars 5 – 39 35 bars
Chorus 1 Bars 40 – 57 18 bars
Link 1 Bars 58 – 65 8 bars
Verse 2 Bars 14 – 39 26 bars
Chorus 2 Bars 40 – 57 18 bars
Link 2 Bars 58 – 65 8 bars
Instrumental Bars 66 – 82 17 bars
Chorus 3 Bars 40 – 92 22 bars
Outro Bars 93 – 96 4 bars