

MIDDLE EASTERN SCALE

I was very disillusioned not to hear this scale at all on my 3 visits to Saudi Arabia. It's the scale everyone in the West uses to create an oriental sound, so it's not a complete fraud. Maybe I named it after Pittsburg or Lowestoft. I don't know. Read on anyway.

THE MIDDLE-EASTERN/ARABIC/GYPSY/TURKISH SCALE

Everyone knows this scale, although it is given a variety of names, such as one of the above. My apologies to the people concerned. I know that your music is much more complex than this, but anyone interested in really getting to know about the genuine music should consult a world music source.

The scale which is described here is the common one that people use when they want to conjure up an exotic sound for whatever reason. The notes are as follows:

I bII III IV V bVI VII (I)

which translates into the key of C as this:

C Db E F G Ab B (C)
 |-----| |-----|
 minor 3rd minor 3rd

Triads consist of these chords:

C C⁺ D^b D^bm E Em Fm G⁷⁽⁻⁵⁾ A^bΔ(+5) D^b7 (B bass)

Note that the Ab is shown as a G# in the C⁺ and E major triad. Strictly speaking, the last chord should not be included as it is an inversion of a Db7 chord, minus the 5th.

Here are the four note chords built on this scale:

C^Δ C^{Δ(+5)} D^bΔ D^bmΔ D^b7 D^bm7

E⁶ Em⁶ Fm^Δ Fm^{Δ(+5)} G⁷⁽⁻⁵⁾ A^bΔ(+5) A^bm^{Δ(+5)}

You could also add the inversions to the above.

Larger chords can be made, but the number is limited. For example, by adding an E to the Db7 chord you can get a Db7(#9). and by adding a G to the Fm chords you turn them into (major) 9ths.

Runs with occasional leaps characterise solos on this scale, although there is no reason why arpeggios cannot be introduced, like this:



The symbol I use for this scale is **A** as in **CA** (short for Arabic), but you can use any symbol you fancy. I would advise spelling out the notes to clarify what you mean though.

The **minor** middle-eastern scale (**mA**) consists of these notes:

I II vIII #IV V bVI VII I

Starting on C, this works out as this:

C D Eb F# G Ab B C

If you start the scale on F instead of C, you end up with this:

F G Ab B C Db E F

In other words, the minor scale is exactly the same scale as the C major version, starting on the fourth note - a perfect fourth away from the tonic. Or you could say that the major one is exactly the same as the minor one starting on the fifth note - a perfect fifth away from the tonic. (Ignore the tonic an octave up.)

Therefore you don't have to learn a whole new set of scales. You just have to find out what note to start on. For example, to get the notes of E minor Middle Eastern scale, start on the A (a perfect fourth from E) and play the A major Middle Eastern scale.

Moreover, the chords are the same for the minor as for its equivalent major scale.

The picture on the next page was painted by the Lewes artist Tom Walker. A few years ago I organised a jazz and painting concert. As my band played each tune, Tom painted what it suggested to him. This painting, which took just over 5 minutes to complete, came about as a result of us playing the tune Arabian Days (found on the Small Band section). Tom's website, which is well worth a visit, is www.tommwalker.co.uk



SUPPLEMENT

Genuine Middle Eastern music makes use of very many different modes and quarter-tones. There are lots of other websites which will enlighten you more about them. A basic introduction can be found at the Arabian Maqam page on Wikipedia. From what I can understand an Arabic scale or maqam consists of between 1 and 3 (possibly more?) sections. each is called a jins, similar to the way that a western scale can be broken down into 2 tetrachords, except that the ajnas (plural of jins) can overlap. The Middle Eastern scale I have described in this tutorial is called the Maqam Hijaz Kar if it starts on C, and has other names if it starts on other notes, for instance, G (Maqam Shadd Araban), D (Maqam Shahnaz) or A (Mazam Suzidil) - these keys suit the instruments used in the countries concerned. The scale is a combination of 2 Hijaz ajnas, C Db E F and G Ab B C (starting on the important dominant note G). More about these fascinating scales can be found at www.maqamworld.com.

For the purposes of jazz, this scale - which can be heard in the Balkans, the Middle East and the Indian subcontinent - usually serves the purpose of suggesting somewhere exotic.

There are other scales which can also sound exotic. The Dorian, Phrygian and Aeolian modes, for instance. I have heard what sounded to me like the Dorian in the call to prayers ("athaan") from a local mosque in Saudi Arabia.

The harmonic minor can also be used effectively for this purpose. In fact the upper tetrachord (the highest 4 notes of the scale starting on the dominant) corresponds to the Hijaz jins found in Middle Eastern music (see the scale described in the first paragraph on this page. The harmonic major scale (the same as the harmonic minor but with a major third) can also be very effective.

Pentatonic scales (shortened versions of segments of these scales) can work well too.

To create a really exotic sound, the diminished scale takes some beating to my mind.

You could also use a composite scale, such as a mixture between the harmonic and melodic minor scales.

To be effective, the key will lie with the background. Be-bop style changes with lots of II V I's, II V's and I VI II V's will take away the atmosphere you are trying to create. Chord changes should be very sparse. Extended periods over a simple tonic or tonic and dominant pedal or just a drum backing can often be best.

The crux of the matter is that when you wish to create a Middle Eastern or Indian atmosphere in a jazz piece you have to be careful not to overdo it so that the music you produce unwittingly becomes world music rather than jazz. In other words, you have to maintain some of the jazz idioms. This is important if you are not going to lose your jazz-loving audience.

Regarding Middle Eastern rhythms, here is an excellent website which explain them fully.

<http://www.khafif.com/rhy/rhythm.html>

MY EXPERIENCE

I have now written a number of "exotic" pieces and would like to share my thoughts about them. There are links to all these pieces - be sure to listen to the end of the videos or you might miss out on something important. You may have to cut and paste them in to your browser.

1. **Pavilion** (from the Brighton Jazz Suite) Link: <http://youtu.be/3YTGnCGZlkk>

The pavilion in Brighton is a strange Indo-Islamic styled building. In the first part of the tune, I wanted to create an Indian atmosphere. The flute is very evocative of a lot of Indian music, so it is used to play the tune at the beginning. The backing is just low root and fifths with additional drums.

On the repeat of the tune I add a couple of soprano saxes to the flute. The soprano can conjure up a Middle Eastern/Magreb sound. The tune goes to the very highest register of the soprano but intonation is not a problem - in fact a bit of poor intonation gives a more authentic sound. When the tune comes to an end I then go into a fast three. The problem of having a tune based on one chord is that there is no variety, no relief from the same bass note. So I therefore devised a chord sequence drawing mainly on chords found within the scale. This is where the jazz bit comes in. To finish the piece there is a rit down to the original tempo and a small bit of the melody is played.

2. Namzadi (from the One World Jazz Suite) Link: <http://youtu.be/5tBpzmZiFhs>

This piece had to have an Iranian flavour so I stuck to the Middle Eastern scale. The tempo is a fast two.

The tune is played by guitar and synth and then by saxes and guitar (guitar-like instruments, eg the oudh, are common there. After a repeated 8 bars, I add a bridge using a minor part of the scale but harmonised it with a chord not found in that scale but which seemed natural fitting for the notes of the tune. (This was the first time I'd thought of doing that.) The initial bit of the tune is repeated and then there are some solos on trombone - not loud enough I'm afraid on this recording. What do I do next, I thought? What I did was to move into the minor on the subdominant (using the same scale - C Db E F G Ab B C)

After a few bars by the rhythm section to set the scene I then made use of this for an ensemble chorus.

Big chords are impossible so I limited it to 3-note chords, eg G Ab C used for an F minor chord - the G giving more bite than the F. Each note is doubled up many times by different instruments to make it sound full. Using this device I found that a lot of rhythmic twists and turns were necessary to keep it interesting.

This continues till it comes to a bit of a climax accompanied by a sudden change of key to the dominant.

This is the point at which my star soloist could solo backed just by the drums. To add a bit of additional sparkle I thought that occasional chords might be nice. So I wrote down and numbered various rhythms

for the horns letting them choose any note from the scale they liked. I think it worked well.

When the soloist had had enough he played a bit of the tune (cued in on all parts so everyone knew where they were. And so on to the end.

3. Nemocracy (from the One World Jazz Suite) Link: <http://youtu.be/RSAMPoXMZWA>

This one had to have an Indian sound. Again I used flutes (several of them plus a flutey sound on the synth - I like to use the keyboards to add to the sound texture of the horns). After the tune had been played for the first time. I modulated up a minor third using the equivalent scale starting on that note.

Some of the horns now played a counterpental line against the tune. Then up again a major third with fuller backing chords until the tune came to a halt at which time I count in at a much faster tempo.

This is the opportunity for the guitar to solo (I was expecting a Ravi Sankar sound but Jimmy Hendrix would be a more apt description. Still I liked it. Against the solo the bass and piano played an Indian funk line which was repeated several times. Adding the horns (trombones, then full brass, then saxes with them) I gave them chords using just the notes in the scale. So at times, a C major chord would be

C Db E G. Then at the climax I changed the key to Eb for the sax to solo, first with just the rhythm section with root and fifth on the piano and bass. After a few repeats, the horns come in on riffs and the key modulates up by semitones to arrive at G when everyone cuts out leaving just the soloist. The tempo goes back to the original and there is a token bit of the tune to round things off.

4. Qana (from part 2 of the One World Jazz Suite) Link: <https://youtu.be/0tGsB3pAXNI>

This tune is based upon the harmonic major scale - a scale I discovered just beforehand and wanted to write a piece of music to make use of it. Here it is: C D E F G Ab B C. I suppose you could divide it up into 2 maquam or 2 tetrachords, consisting of the first and last 4 notes. It has a bitter-sweet sound which appeals to me. Various chords can be derived from the scale in the usual way.