



Sounds harmonious

Octaves and scales

JANICE

Well that's the sum total of my keyboard skills. But Alan when I look at this there's a clear pattern here isn't there, and that must mean something to a pianist.

ALAN

Yes there is. If you look for instance just at the black notes there are two, and then three, and two, and then three. And it might help just to concentrate on...on this block of notes.

You can see there are eight white and five black notes, and that chunk of notes is repeated over and over as you move up the keyboard. Erm so that makes actually thirteen notes in all. Let me play the first twelve of them. [PLAYS 12 NOTES ON KEYBOARD]

JANICE

And you're waiting for the final one aren't you.

ALAN

I'm waiting for the final one. [PLAYS 13th NOTE ON KEYBOARD] The thirteenth note, [PLAYS 1st NOTE ON KEYBOARD] is the same as the first note but higher up. It's actually an octave above. [PLAYS 1st & 13th NOTES]

JANICE

What, eight notes apart is that.

ALAN

That's eight notes apart. These are the eight notes that represent an octave. [PLAYS 13th NOTE] And the scale I played is the chromatic scale. The chromatic scale simply takes in all the notes.

JANICE

But that...now that didn't sound like a scale as I know it, which just goes Do Re Mi. It seems to have very different intervals.

ALAN

It...it is different. The chromatic scale simply covers every note, whereas the Do Re Mi scale is actually the major scale. If I start with this note, which is C, and play ...[PLAYS DO RE MI SCALE] that's the Do Re Mi scale, and that's the scale of C major. I only used white notes. If I started on . [PLAYS NOTE]. that note D, I'd have to throw in a couple of the black notes just to keep the same pattern of a major scale. ...[PLAYS D MAJOR SCALE]

JANICE

So there are just those two main kinds of scales.

ALAN

No, there...there are others. A minor scale you may have heard of is...is quite common. Unfortunately it's rather complicated. There are...there are two...at least two forms of minor scale. But just to keep it very simple - if you concentrate on [PLAYS 3 NOTES] the first three notes of C major, and then flatten the third note, that is [PLAYS NOTE] go down to the black note immediately below it - that's the flat - and play that scale, you get a simplified version of the minor scale. [PLAYS MINOR SCALE]

JANICE

Yeah, it gives it a very different feel, doesn't it.

ALAN

Yeah, a minor scale has a different feel. It's a sort of rather sad, wistful sound.

JANICE

So using those three main kinds of scales then, can you play all the music there is in the world.

ALAN

Er not quite. If you go to other countries for example, they don't use these thirteen notes at all. Er for example in India an instrument like the sitar is tuned to many more than these thirteen notes. Er but many of the folk tunes around the world are tuned to something called the pentatonic scale.

JANICE

Five notes?

ALAN

Five notes. And that's a very well known scale, you know a lot of tunes. Let's...let's take for instance just these black notes... [PLAYS 5 NOTES]... and the sixth note to complete, but those five notes are the pentatonic scale. And there are tunes that you'd...you'd be familiar with, like Amazing Grace for instance... [PLAYS FIRST FEW BARS OF AMAZING GRACE] or Auld Lang Syne ... [PLAYS FIRST FEW BARS OF AULD LANG SYNE]

JANICE

So can you only play those two on...on the black notes?

ALAN

If you play in this key. But you can play in any key. I mean I could have played that same tune using different notes. [PLAYS FIRST FEW BARS OF AULD LANG SYNE: 7"]
I'm only using white notes, but it's still a pentatonic scale, but in a different key.

JANICE

So it's the pattern isn't it, than the intervals between the notes, that's important.

ALAN

Exactly. The...whether it's a minor scale, chromatic, major or pentatonic, it's the pattern between, or the intervals between the notes that says what sort of scale it is.