

THE FOLLOWING STUDY IS BY WILLIAM ORTIZ

I. SUMARIZED EXPLANATION

A. *WHY WE USE THE MAJOR SCALE*

1. It's a natural scale:

The **major scale** is obtained by the resonance of natural sonorous bodies.

The **minor scale** is obtained by changing the three chords of the major scale to minors. The **major scale** is a discovered scale, the **minor scale** is invented.

2. It's a perfect scale:

The **major scale** requires no modification or arrangement. It's perfection is appreciated even more by the fact that it's the only scale where you can apply a "chain of chords." In other words, by ringing the tetra chords (first 4 notes or last 4 notes of a scale or key), you can obtain the rest of the major scales, flats and sharps.

This isn't possible with the minor scale. Besides, an "imperfection" that the minor scales presents is that the 7th degree is one tone from the 8th degree; thus it loses its sensitivity. To avoid this, man altered the 7th degree by one half tone in minor keys.

B. *NOTES USED IN THE SONG OF THE LORD*

The notes that are used in the Song of the Lord are the following: 1st, 3rd, 5th and 6th. The reason we use these is based on the consonance or dissonance of these notes.

The most consonant notes of the diatonic scale are the 1st, 3rd and 5th. These can be played uninterruptedly producing a pleasing sound. In consonance, the 6th is the following; meaning that it should be played less than the others. These four notes are precisely the ones used in the Song of the Lord.

II. A MORE EXPANDED EXPLANATION

A. *WHY THE MAJOR SCALE IS USED.*

1. It's a natural scale:

The **major scale** is obtained by the resonance of natural sonorous bodies.

It's a physical principal. It's the only combination of notes that can be emitted parting from the perfect major chord found in the first harmonics of natural resonance of sonorous objects.

The **minor scale** was obtained by converting the 3 chords of the major scale to minors. With said conversion, besides a minor scale, we get a scale with the same sounds as a major one. For example, the scale of "C" minor contains the same sounds as the scale of "Eb" minor.

The **major scale** is a discovered scale, the **minor scale** is invented.

2. It's a perfect scale:

The **major scale** doesn't require any modification or arrangement. Its perfection is appraised by the fact that it's the only scale where you can apply the concatenation of the scales. In other words, through the concatenation of the tetra chords (first 4 notes or last 4 notes of a scale or key), you can obtain the rest of the major scales, flats and sharps.

How is this? If a **major scale** is divided in two tetra chords, being the first 4 notes of the lower tetra chord you obtain another scale by converting the upper tetra chord into a lower one of the new scale.

Each tetra chord must always have 2 consecutive tones and one half tone. Both tetra chords must be separated by one tone.

For example, let's use the key of "C":

C, D, E, F, (one tone) G, A, B, C,..... The scale of C major
(lower tetra chord) (upper tetrachord) ← we convert this to the lower tetra chord:

G, A, B, C (one tone) D, E, F#, G,..... This results in the scale of G major
(lower tetra chord) (upper tetrachord...) ← we convert this to the lower tetra chord:

D, E, F#, G (one tone) A, B, C#, D,..... This results in the scale of D major

We can continue this pattern until we finish all the notes. If we do this reversely, in other words, putting the lower tetra chord as the upper one, we get the same result. This proves the perfection of the major scale's construction. This is impossible with the minor scale. Besides, an "imperfection" of the minor scale is that the 7th note is one tone from the 8th. For this reason, the 7th note loses its sensibility. To avoid this, man saw the need to alter the 7th note one half tone in the minor scales.

B. NOTES USED IN THE SONG OF THE LORD

The notes that are used in the Song of the Lord are the following: 1st, 3rd, 5th and 6th.

The reason we use these notes is based on the consonance or dissonance of the notes. The more consonant the notes are, they may be played at the same time and the sound will be pleasant and harmonious. The more dissonant they are, the notes must be played for a shorter time so that the sound will not be unpleasant.

The most consonant notes in the diatonic scale are the 1st, 3rd and 5th. These may be played uninterruptedly without causing an unpleasant sound. The next most consonant note is the 6th, which implies that it must be played less than the first 3. These four notes are used in the Song of the Lord.