twelve notes

Ramsay

The inner stave contains the chromatic scale of **twelve notes** as played on keyed instruments. The flat and sharp phase of the intermediate notes are both given to indicate their relation to each other; the sharpened note being always the higher one, although seemingly on the stave the lower one. The two notes are the apotome minor apart overlapping each other by so much; ?D is the apotome lower than C#; ?E the apotome lower than D#; F# the apotome higher than ?G; G# the apotome higher than ?A; and A# the apotome higher than ?B. The figures for the chromatic scale are only given for the notes and their sharps; but in the mathematical series of notes the numbers are all given. [Scientific Basis and Build of Music, page 120]

Hughes

The key-note C sounding from within itself its six tones to and fro in trinities, the tones written as notes in musical clef

- -The trinities hereafter termed primaries and secondaries
- -The seven of each of the twelve key notes developing their tones
- -The order in which the tones meet, avoiding consecutive fifths
- -Dissonance is not opposition or separation
- -The use of the chasms and double tones is seen
- -The isolated fourths sound the **twelve notes**

-Each double tone developes only one perfect major harmony, with the exception of F#-G?; F# as the key-tone sounds F? as E#, and G? as the key-tone sounds B? as C?

-The primaries of the **twelve key-notes** are shown to sound the same tones as the secondaries of each third harmony below, but in a different order

—All harmonies are linked into each other, . 23 [Harmonies of Tones and Colours, Table of Contents2 - Harmonies]

the artificial system must not be mixed up. The wonders of Nature's laws in the developments of harmonies, consist in the beautiful adaption of keyed and all other musical instruments to a range commensurate with human powers. The chromatic scale of **twelve notes** (the thirteenth being the octave) is not the scale of Nature. To construct a musical instrument upon real divisions of musical tones, each of them being in correct ratio with the others, it would be necessary to have a larger number of tones to the octave. In the development of harmonies on the natural system, we trace the perfect adaptation of means to ends, meeting the intricacies of every musical instrument, including that most perfect of all— the human voice. [Harmonies of Tones and Colours, The Method of Development or Creation of Harmonies3, page 17]

The inequality of the equinoctial points is a well-known fact. It will be seen how apparent this is in the developments of harmonies. From the moment that trinities depart from unity, the balance is unequal, and the repeated endeavours after closer union cause a perpetual restlessness. May not this want of equilibrium be the life or motive power of the entire universe, with its continuous struggle after concord, even to oneness? "Closer and closer union is the soul of perfect harmony." In tracing harmonies of tones and colours, the double tones of keyed instruments will be seen to correspond with the intermediate tints and shades of colours. The **twelve notes**, scales, and chords in the major and minor series, the meetings by fifths, &c., all agree so exactly in their mode of development, that if a piece of music is written correctly in colours with the intermediate tints and shades, the experienced musician can, as a rule, detect errors more quickly and surely with the eye than the ear, and the correct eye, even of a non-musical person, may detect technical errors. Although the arithmetical relation has been most useful in gaining the laws, it is not here entered upon; but numbers equally meet all the intricacies both of tones and colours. The bass notes have been omitted, in order to simplify the scheme. [Harmonies of Tones and Colours, The Arabian System of Music, page 21]

THE five circles represent a musical clef on which the **twelve notes** of a keyed instrument are written. Six of the notes are shown to be double, *i.e.*, sounding two tones, eighteen in all, including E#, which is only employed in the harmony of F#, all others being only higher or lower repetitions. [Harmonies of Tones and Colours, Diagram I - The Eighteen Tones of Keyed Instruments, page 22a]

We here trace the twelve harmonies developing in succession. Notice how exactly they all agree in their mode of development; also the use of the chasms between E and F, B and C. Remark also the beautiful results from the working of the double tones, especially C#-D?, and E#-F?, causing the seven tones of each harmony, when ascending, to rise one tone, and, descending, to reverse this movement. F#-G? is the only double tone which acts as F# when a key-tone, and G? when the root of D?. The root of each harmony is the sixth and highest tone in each succeeding harmony, rising one octave; when it is a double tone, it sounds according to the necessity of the harmony. The intermediate tones are here coloured, showing gradual modulation. The isolated fourths (sounding sevenths) were the previously developed key-tones; these also alter when they are double tones, according to the necessity of the harmony. Beginning with B, the isolated fourth in the harmony of C, the tones sound the **twelve notes** of a keyed instrument, E# being F?, and the double tones, some flats, some sharps. [Harmonies of Tones and Colours, Combinations of dissonance, rests, page 24]

ALTHOUGH only **twelve notes** of a keyed instrument develope perfect minor harmonics, there are fifteen different chords, the double tones D#-E?, E#-F?, A#-B? all sounding as roots. The fifteen roots are written in musical clef. A major and a minor fifth embrace the same number of key-notes, but the division into threefold chords is different. In counting the twelve, a major fifth has four below the third note of its harmony, and three above it; a minor fifth has three below the third note of its harmony, and four above it. A major seventh includes **twelve key-notes**, a minor seventh only eleven. As an example of the minor chords in the different keys, we may first examine those in the key of A, written in musical clef. The seven of its harmony have two threefold chords, and two of its ascending scale. If we include the octave note, the highest chord of the descending scale is a repetition of the first chord of its ascending scale. These two repetition chords are only written to the key of A: the chords of the other eleven keys will all be found exactly to agree with those of A in their mode of development. We may again remark on the beautiful effect which would result if the colours of the minor chords of the Twelve Minor Keys, page 37a]

I had also hoped to write a very brief outline of a few of the innumerable Scriptural types which have guided me in the development of Tones and Colours; but my sight suddenly failed for reading and writing; and I only allude to the seven spirits of God (Rev. iii. I) as regards tones and colours, and to the twelve fruits of the Tree of Life (Rev. xxii. 2) as regards the **twelve notes** of keyed instruments. [Harmonies of Tones and Colours, Supplementary Remarks and Diagrams, page 53]

See Also

chromatic twelve note series of twelve seven white notes