# primaries

**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 difference in the development of a major and a minor harmony
—The twelve developing keys mingled
—D? shown to be an imperfect minor harmony
—E? taking B? as C? to be the same as D#
—The intermediate tones of the seven white notes are coloured, showing gradual modulation
—As in the diagram of the majors, the secondaries are written in musical clef below the **primaries**, each minor primary sounding the secondaries of the third harmony below, but in a different order, and one tone rising higher, . . . . . 34 [Harmonies of Tones and Colours, Table of Contents3 - Harmonies]

The tones between the seven white notes of keyed instruments, and the tints and shades between the seven colours, cause the multequivalency of colours and of tones; consequently every colour, as every musical harmony, has the capability of ascending or descending, to and fro in circles, or advancing and retiring in musical clef. It is a curious coincidence that Wünsch, nearly one hundred years ago, believed in his discovery of the **primary colours** to be red, green, and violet; and in this scheme, red, answering to the note C, must necessarily be the first visible colour, followed by green and violet, but these not as **primary colours**, all colours in turn becoming **primaries** and secondaries in the development of the various harmonies. To gain facts by experiment, the colours must be exactly according to natural proportions—certain proportions producing white, and others black. In this scheme, green and red are shown to be a complementary pair, and therefore (as Clerk Maxwell has proved) red and green in right proportions would produce yellow. The same fact has been proved in Lord Rayleigh's experiments with the spectroscope. Yellow and ultra-violet, [Harmonies of Tones and Colours, On Colours as Developed by the same Laws as Musical Harmonies3, page 20]

The first trinity of sounds (hereafter called the **Primaries**) rise veering from left to right; the second trinity (hereafter called the Secondaries) follow, veering from right to left. The life of sound always causes a variety of movement to and fro. [Harmonies of Tones and Colours, Diagram II - The Twelve Keynotes1, page 23]

The three lowest of the six tones are complementary pairs with the key-note and its two highest tones. Observe the curious order in which the tones sound, avoiding consecutive fifths. First, we have the key-note and its root, or fellow; next A; then D and its root; and then E, whose root, A, has already sounded between the first and the second pair. B, the fourth and central tone in depth, sounds seventh, and, finding no fellow within the compass of the harmony developing it, is isolated. Observe also how closely a key-note and its kindred tones are linked into each other. The **Primaries** spring from the key-notes, the Secondaries from the **Primaries**; the first pair comprises a key-note and a tone of the **Primaries**, the other two pairs have each a tone of the **Primaries** and a tone of the Secondaries. The key-note, after giving out its tones in trinities, or [Harmonies of Tones and Colours, Diagram II - The Twelve Keynotes1, page 23]

In the same way are written the two last **primaries** of a series of twelve, which began with C. A higher series of twelve follows, and the first two **primaries** of a still higher series of twelve. The secondaries are written below the **primaries**. [Harmonies of Tones and Colours, Combinations of dissonance, rests, page 24]

We find that on a keyed instrument each primary sounds the same tones as the secondaries of each third harmony below, but in a different order, and the double tones are altered sharp or flat as the harmony requires. For example, the secondaries of B are sharps; when **primaries** of D?, they are flats. In order to trace this quickly, the sharps and flats are written to each note. [Harmonies of Tones and Colours, Combinations of dissonance, rests, page 24]

In any series of twelve, the **primaries** of the two first key-notes repeat the secondaries of the two last of a lower series of twelve; and the two last secondaries of the twelve in development are sounded as the two first **primaries** of a higher series of twelve. The three series are thus linked into each other. [Harmonies of Tones and Colours, Combinations of dissonance, rests, page 24]

This diagram represents the two last major **primaries** of a series of 12; 12 of a higher series follow, and the two first of a still higher series: the secondaries are written below the **primaries**, the sharps or flats belonging to the different harmonies are written to each note. Each primary sounds the same tones as the secondaries of each third harmony below, but in a different order; and the double tones are altered sharp or flat as the harmonies require.
By reference to previous coloured notes it will be seen that all these agree. [Harmonies of Tones and Colours, The Two Last Major Primaries, page 24e]

AS an example of the twenty-four, compare A major, developing, in Diagram II., with A minor, Diagram IX., taking the notes in the order which they sound in trinities. The three notes of the **primaries** sounded by A minor are, first, the same root as the major; the two next are the fourth and seventh higher notes (in the major, the fifth and sixth); the secondaries only vary by the sixth and seventh notes being a tone lower than in their relative major. Observe the order in which the pairs unite; the fourth in depth, sounded seventh, isolated. A and its root do not rise from the chasms. The fundamental key-note C was seen not to be interfered with, neither is the fundamental minor key-note A; G# on the one side, and B? on the other, being the key-notes. The seven of each minor harmony embrace only seventeen tones. C major and A minor are the only two keys which sound the seven white notes of keyed instruments. The minor scale and chords of A are not included in this remark. [Harmonies of Tones and Colours, Diagram IX - The Minor Keynote A and Its Six Notes, page 34a]

The **primaries**, with their secondaries written below each in musical clef, show that the notes of each **primary** are the same as the third secondary below, with the exception that one of the **primaries** rises a tone higher. The order of rising varies as in the majors. [Harmonies of Tones and Colours, Diagram IX - The Minor Keynote A and Its Six Notes, page 34a]

This diagram shews the two last **minor primaries** of a series of 12, with the 12 of a higher series, and the two first of a series higher still. As in the diagram of the Major, the secondaries are written below the **primaries**, and the sharps or flats of each harmony are written to their respective notes. With the exception that one of the **primaries** rises a tone higher, it will be observed that in the same way the notes of each **minor primary** are identical with the secondaries of each third harmony below, but in a different order; and the double tones are altered sharp or flat, as before. [Harmonies of Tones and Colours, Diagram Shews the Two Last Primaries, page 34e]

As regards the tones from each note, the **primaries** rise from the left to the right, the secondaries from the right to the left. This, I believe, as true knowledge is discovered, will be found to be the "to and fro" throughout Nature. [Harmonies of Tones and Colours, On Keyed Instruments as considered Circular, page 56]

See Also

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**Primary**

**three primaries**
**trinity of sounds**