4-note chord

Ramsay

In the progression - that is, the going on from one to another - of these triplets in harmonizing the octave scale ascending, Nature goes on normally till we come to the passage from the sixth to the seventh note of the scale, whose two chords have no note in common, and a new step has to be taken to link them together. And here the true way is to follow the method of Nature in the birthplace of chords.[1] The root of the subdominant chord, to which the sixth of the octave scale belongs, which then becomes a **4-note chord**, and is called the *dominant seventh*; F, the root of the subdominant F, A, C, is added to G, B, D, the notes of the dominant, which then becomes G, B, D, F; the two chords have now a note in common, and can pass on to the end of the octave scale normally. In going down the octave scale with harmony, the passage from the seventh to the sixth, where this break exists, meets us at the very second step; but following Nature's method again, the top of the dominant goes over to the root of the subdominant, and F, A, C, which has no note in common with G, B, D, becomes D, F, A, C, and is called the *subdominant sixth*; and continuity being thus established, the harmony then passes on normally to the bottom of the scale, every successive chord being linked to the preceding note by a note in common. [Scientific Basis and Build of Music, page 49]

The dominant seventh, G, B, D, F, a **4-note chord**,[1] only requires that the root G be made sharp, which will make G#-B a minor third agreeably with the structure of the other two intervals, B-D and E-F. The chromatic chord only differs from the dominant seventh in that it is wholly of minor thirds. There are **four notes** in a chromatic chord, but only three of them move by semitonic progression to a tonic chord. When these three notes thus move to a major chord, one is upward to the root, a second downward to the top, and the third downward also to the middle. The relative minor being a minor third below [Scientific Basis and Build of Music, page 52]

the major, the root of the major chord is the middle of the relative minor, and the middle of the major chord is the top of the relative minor; and as the note which has a semitonic progression downward to the top of the major has a semitonic progression upward to the root of the relative minor, so the same three notes which move in semitonic progression to the top, root, and middle of the major chord, likewise move by the semitonic progression to the root, top, and middle of the relative minor. In both cases the progressions are upward to the roots and downward to the tops; but in the major the movement is downward to the middle, while in the minor it is upward. So each one of these three of the **four notes** of the chromatic chord has two various movements.[1] [Scientific Basis and Build of Music, page 53]

But, as the subdominant sixth and dominant seventh suggest that the chromatic chord should be a **4-note chord**, we must find out how Nature completes this diatonic chromatic triad and makes it a **4-note chord**, and that according to its own intrinsic character as of minor thirds. Nature has always a *rationale* in her operations which it is ever delightful to discover. Wedged in between the minor dominant and the major subdominant, this triad, B D F, has already B, the top of the dominant minor, for its root; and F, the root of the subdominant major, for its top; and its middle is the mysterious D which, in its two positions as root of the minor subdominant and top of the major dominant, stands at the two extremes of the whole twofold diatonic key, bounding and embracing all; and which in its two degrees as D26 2/3 and D27 claims kindred with both minor and major modes of the twofold key system. Surely this Janus-faced D, looking this way toward the minor and that way to the major, seems to say, "the complement of this chord, of which I am the heart, is not far to seek nor hard to find on either side." It has already B in common with the minor dominant; the very next step is to the middle of this chord, G. Roots and tops of chords may not be altered, but middles may with impunity be flattened or sharpened as occasion may require. No two of them in succession in the chord-scale have the same structure; the chromatic triad, in claiming this middle, claims it *sharpened*, for it must have [Scientific Basis and Build of Music, page 54]

a minor *third*. So by adding the middle of the minor dominant, G, but made G#, that the third so produced may be a minor third, according to the nature of the chromatic chords, we have on this minor side of the chord G#, B, D, F, which we may call its minor form, inasmuch as the semitone of its second minor third is the one, B-C, which genetically arises in the minor genesis; and inasmuch as it has also received its supplemental G# from the minor dominant. How shall we find its complement on the other side? We have seen that D, the Janus-faced center of

this triad, B, D, F, looks, as D27, toward the major also; it has already F in common with the major subdominant. The very next step is to the middle of this chord, A. Middles, we have just seen, are ever ready to accommodate themselves; and this minor third triad claims that A be *flattened*, for on this side also, though its major side, it must have a minor third; so by adding the middle of the major subdominant, A, but made A?, according to the nature of chromatic intervals, that this F-A? also may be a minor third; and now we have it as B, D, F, A?, which we may call its major form, inasmuch as the semitone of its minor third, E-F, is the one which genetically arises in the major genesis, and inasmuch as it has now received its supplemental A? from the major subdominant. This, then, is the chromatic chord in its native place, and in its native constitution; a **4-note chord**, wholly of the minor thirds. It will be observed that it has now, in its two forms, divided the octave into minor thirds - 4 minor thirds, so it is very much at home anywhere in the octave; indeed it is at home everywhere - G#, B, D, F, A?. And as every diatonic common chord in music is constituted of materials found in the octave of notes, it cannot be far from a chromatic chord in some one of its forms. [Scientific Basis and Build of Music, page 55]

Tetrachord - From tetra, four, and chord. It does not mean a **four-note chord**, but four notes such as our C, D, E, F. [Scientific Basis and Build of Music, page 63]

less variety of effect than we find in the diatonic chords; for although these chords may appear with their notes diversely named, there are still only the three. On account of their cosmopolitan character they need, and they have, no compounding with anything else. They are themselves at home everywhere; like a universal joint, they can turn any way, and affiliate in all directions. Being **4-note chords**, and all of minor thirds, their effect is always minor, and they fall with loving softness to the diatonic chords to which they resolve. How this chord in its germ is found in the diatonic chord-scale; how it becomes a **4-note chord** of minor thirds; how it variously resolves, each one of the three, in three manners with 24 tonic chords - all this is so fully set forth in the pre-note and treatise on the chromatic chord that it need not be more discussed in this place. See also Plates XVI., XVII., XVIII., XIX., and XX. [Scientific Basis and Build of Music, page 73]

See Also

Ramsay - How the Diatonic Germ becomes a 4-Note Chord
tetrachord