

The Simplicity of Harmony

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[THE ETUDE regards the privilege of publishing an article from the distinguished English composer and teacher, Mr. Frederick Corder, a distinct honor. Mr. Corder is one of the few who have the delightful gift of talking with the pen. No matter how far you may be away from the capital of the British Empire, Mr. Corder's style takes you right to his very desk side. In the following article the teacher of many of the best known present-day English Composers gives some sound advice which our American readers may do well to heed. Mr. Corder uses some technical terms commonly used in harmony and in order that any of our readers who have never studied Harmony may be benefited by this article, we have attempted to define these terms in the simplest possible manner and have added the definitions at the end of the article.—EDITOR OF THE ETUDE.]

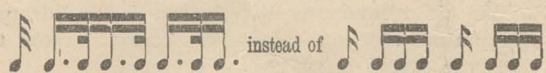
The most unpopular part of musical study is certainly Strict Counterpoint, and next to that Harmony, or Theory, as it is vaguely called. The very vagueness of the name explains the dislike and tells of non-comprehension. Students in general fail to see how writing ugly exercises in four part harmony can help them in singing or learning instrumental pieces which are written as if the worrying rules about "consecutive fifths" and "consecutive octaves" had no existence. And I fear that the text-books are somewhat to blame, in that they are written from too mechanical and arbitrary a standpoint. I do not remember to have seen the ear mentioned in any harmony-book, and even the words "concord" and "discord" are used only as technical terms and with little reference to their æsthetic significance.

WHAT THE STUDENT GAINS BY KNOWING HARMONY.

Let me try to explain to students what they lose by not knowing all about Harmony and what they would gain by possessing that knowledge.

Firstly I would ask them to realize—what is too often ignored—that "learning music" comprises three totally distinct operations: the understanding of music as a thing, the reading of music that is written down, and the reproduction of this upon voice or instrument. Students in general believe themselves to be concerned with the last only; the first they deem unnecessary and the second "a gift" which it is useless to strive for.

All these ideas are wholly erroneous. Take a simple example for proof. Nearly every pupil when first set down to try Schumann's *Arabesque*—that pretty and easy piece—begins by playing the sixteenth note twice too short and the eighth twice too long, making the rhythm



Clearer thus:



Instead of



Deceived by the breaking up of the broken chords into four parts he (it is generally she) learns the whole of the two first pages wrongly and has to learn them again. Next he fails to perceive, owing to his ignorance of harmony, that the first four bars are really a simple

progression of very familiar chords going from C major to D minor and the next four an almost similar set of chords coming back to C—that the whole melody is *sequential* and that the harmonies, had he but been trained to recognize them, are absolutely household words to him. The curious dreamy broken part in the middle, which seems so incoherent, is rendered perfectly clear by a slight knowledge of harmony. There is, in fact, in this piece, not one chord or pair of chords that one has not played a thousand times before.

WHAT LEARNING HARMONY MEANS.

To learn harmony means to learn these chords and pairs of chords once and for all, instead of stumbling over them again and again every time they are encountered. But no! the student is content to practise scales and arpeggios for years without a thought that they are anything more than ugly and tiresome exercises for the fingers. Yet these exercises contain in themselves nearly all the harmony he needs to know—the common chord, the dominant seventh chord, the diminished seventh chord and the construction of the major and minor scales. How incredibly foolish it is to drum these on the piano for hours every day and yet know nothing of what they are trying to teach you! Look at the time you might save!

Methinks I hear some virtuous student protest "But I did study harmony for two years and only left it off because I could not see that it did me any good!" No; not if you learnt it as you do your piano—as a mechanical operation. What you say only confirms what I guessed before—that you have been, like so many, trying to learn music by the eye instead of by the ear. Let me tell you how your musical education ought to have proceeded—how it may still proceed, if you care to take a little trouble; how you may become a good musician.

THE VALUE OF SIGHT SINGING.

You should first have been taught sight-singing, by either the Tonic sol-fa or other method: there are several, all equally good. You should thus have learnt to gauge intervals and sing, or hum, or whistle them. You would have learnt to refer every note to its key-note and every interval to its place in the scale. What! But you have not learnt all this, and don't want to? But you do, and you can easily teach yourself. Come now: Every time you are on the point of beginning to play, just make a rule of asking yourself how these two notes or chords that your hands are poised over are going to sound. It will hardly delay you an instant and will force you to listen, which is half the way to good playing. If you persevere in doing this you will presently be able to hear each note a fraction before you sound it, and to *hear* notes is some way towards understanding music, without which your performance is like reciting a poem in a language which neither speaker nor hearer understands.

HEARING WITH THE EYE.

Now to hear notes in succession and appreciate their relationship—in other words to *understand melody and rhythm*—is easy to all; but to hear notes in combination—*i. e.* to take in harmony—is not so simple. I find that once the ability to hear *two* notes together is acquired the hearing of three or four is not so hard, and few chords consist of more than four different sounds. This is where the practice of two- and three-part Counterpoint is of valuable assistance, but if you are afraid to dabble in that art for fear of becoming clever—I have had this excuse offered me by more than one pupil—you can teach yourself what a major or minor third sounds like by humming the two component notes first separately and then in quick and quicker succession. Three simultaneous notes can then be learnt in the

same manner and the sound of a common chord thus distinguished from its inversions. I assure you I have known hundreds of quite unclever people get thus far, but I admit that it generally requires a good deal of coaxing and the incentive of seeing others doing it.

When this stage has been reached and not till then, we are fit to understand what Harmony has to tell us and to absorb it. Harmony, like English Grammar, would like to tidy up all the confusion and litter in your mind. But there must be litter there for it to act upon. It seeks to put all the different sound-effects into separate pigeon-holes of your brain and label them so that you will know them again. (It is true that the names on the labels are somewhat uncouth—but so are the names on botanical and chemical specimens, and a trifling knowledge of Latin would soon make that all right.) But where is the use of telling you what a Dominant Seventh is an how it behaves if you don't know one when you hear it? Seeing it is of no avail. I often see girls puzzling out their figured bass exercises and counting up the intervals on their fingers. The thing becomes a mere sum and they cannot tell, when you play it to them which particular exercise out of several it is.

THE COMMON CHORDS.

You must have, then, before your mind can be tidied up, a lot of sound-effects half digested and a vague sense that one chord sounds different from another. Even among the most ignorant I seldom find a student who can fail to distinguish the ugly diminished triad from the pure common chord, *except when they see them on paper*. Our terrible musical notation is here, as always, a greater stumbling-block to learners than they know; the beginnings of harmony are therefore best taught orally. Harmony, after giving a number of definitions and names to things (which *now* you will dimly perceive the use of) proceeds to describe how a common chord, major or minor, is the only complete kind of sound-combination; all the others being incomplete and unstable. It is obliged to enter into details and show you how when our chord is placed with its third in the bass it sounds weaker (that is, somewhat as if it needed the assistance of another chord to follow) and when with its fifth in the bass it seems top-heavy and almost, yet not quite, like a discord.

You will find no difficulty in comprehending such details when once you have brought your ear to the pitch of conjuring up the sound of a common chord, but whether all this will be digested and become part of yourself depends partly upon how it is presented to you and partly upon whether after all you really care at all about music. You know there are plenty of people who profess to adore music but they really approach it as they would a looking-glass—to behold themselves shining therein. But my point is to show how simple Harmony really is.

Having learnt all about common chords the student can hardly fail to notice the prevalence of such in all ordinary music, nor their increasing paucity as we approach what is foolishly called "modern music." I say "foolishly called" because extravagant writing is no invention of to-day nor yesterday.

THE DOMINANT SEVENTH.

Well, the next chord we are introduced to, the chord of the Dominant Seventh, has a strangely familiar sound about it. And well it may have, for it is Nature's own particular chord that she utters everywhere. Not only in our pianoforte exercises have we heard it long, but with every note we strike or sing the fairy sounds of this chord, three octaves higher, peal out, whether we can actually hear them with our ears or not. It may seem strange that this ever-present chord should be a discord, requiring something else to complete its effect, but so it is. When we can hear anything at all we feel that the harsh seventh must fall to the note below, while the third—the leading, or sensitive note of the scale—yearns to resolve the ugly diminished fifth that separates it from its fellows by going up to meet it. And behold! the notes of these two chords comprising six out of the seven notes of their scale, whenever we hear them *both* we know what key we are in. Thus, to discover at any moment what key the music is in one has only to listen for a dominant seventh and its resolution.

THE DIMINISHED SEVENTH.

The only other chord of any importance that we need to learn is the Diminished Seventh. This is familiar enough to the fingers of the pianist from the pleasant fact of its always lying comfortably under the fingers and feeling the same in any position. It should also be familiar to his ears for a similar reason; it sounds the same in any inversion and can appear on any degree of the *chromatic* scale. Also it can travel up

and down that scale and be converted—either by any one of its notes falling a semitone or any three rising a semitone—into a Dominant Seventh in any key whatever. It is the very Proteus of chords, and if the Dominant Seventh tells us what key we are in it is the function of the Diminished Seventh to puzzle us agreeably by concealing and changing the key. A pity it causes so much trouble to the reader!

These are all the chords that matter in music. Passing notes hardly need explanation. Suspensions—the moving from one chord to another leaving one note or more lagging behind—are only troublesome when written down; play them and all the difficulty vanishes.

"This is all very well," says the student, "but with all their inversions and the different way they are placed, whose ear can distinguish one from another of these multitudinous chords?"

ONLY A FEW CHORDS NEEDED.

Now that is where you go wrong again. They are not multitudinous by any means. Just listen! You are told in the books that there is a common chord on every degree of the scale except the leading note. But you rarely want to use more than three: those on the 1st, 4th and 5th degrees. Get some simple tunes—any ordinary songs—and you will find that you can harmonize them on just these chords and (with occasional addition of the 7th to the dominant chord) you will find them quite sufficient for general purposes. As to distinguishing them there are only three kinds of sound—four, if you reckon the major and minor varieties of the common chord. These two, as I have said, sound comfortable and "done with" in any key and position. You cannot confuse their sound with that of the familiar dominant seventh—which has four notes, too—nor this with the sinister and indefinite diminished seventh. And you, who can tell the difference between your back door bell and your front door bell!

O yes, there are other chords, of course; but once you have broken the ice and trained your ear to the pitch of *wishing* to distinguish between one chord and another it would not matter if there were a thousand. You would soon learn them all. *Ce n'est que le premier pas qui coûte*—(It is only the first step that counts); persuade yourself that music is for the ear and not for the eye and you have taken the first real step in a musical education.

And when you become a musician you will probably wonder at a curious omission from the harmony books. Why do they never point out how much prettier or uglier some chords are than others? They never tell you that the chromatic chords are nearly all beautiful and they give you suspensions or major ninths in the bass without any apology, hideous as they are. I confess I think this a sad mistake on the part of the theorists, who would doubtless plead that they are only concerned with grammar and not with graces of style; but I think the plea insufficient. We want to learn the beauties of sound properly at first and to leave all abnormalities for afterwards. It is easy to be ugly (or at least, I used to think so).

WHY BECOME INFERIOR HUMAN PIANO-PLAYERS?

But I still hear the recalcitrant student mutter: "I don't want to know what key I am in. I can play very well without knowing." Well, I defy you to read music without knowing, unless some one invents a new notation easier than ours. No note tells the reader its name unless he knows what key he is in, and the once useful device of a key-signature is now not of much use after the first eight bars or so. As to playing well, perhaps your hearers may not be so satisfied as you are. I think one can generally tell whether a man understands what he is saying or not and anyway, where is the fun of studying to make oneself into merely an inferior species of pianola when one might be getting rational enjoyment out of the matter? The construction of a piece of good music is such a simple thing to the musician and such an impenetrable mystery to the ignorant! And its comprehension is so easily within the reach of all!

REAL EFFORT DEMANDED.

"Sixthly and lastly, my brethren, do try to bear in mind that learning anything means real effort and initiative on the part of the learner and not just passively receiving what a teacher pumps into him. Lessons are not like pills, which you swallow in faith (and a little cold water), hoping to derive some indefinite good from them. I say this because the teacher of Harmony suffers so much from this torpid attitude on the part of his students. Also in their instrumental "practice" how often do they sit for hours, self-hypnotized and drum-

ming away at things that have long lost all sense to them, instead of using their brains for thirty minutes or so and then turning to something else! It is not as if music were a difficult art either. The difficulty arises because you *will* try to mix up three things together—the comprehension of music, the deciphering of the hieroglyphics in which it is written down and the reproduction of it on an instrument. If one could only tackle these studies one at a time how simple it would be!

HOPE FOR GROWN UPS.

Finally and in conclusion when you (whether pianist or singer) find yourself a grown up person with a miserably poor ear, don't take the lazy course of saying: "Oh, all these things are gifts; either you can do them or you can't. I'm sure I should never be able to hear any note, let alone two or three," because it is simply not true. You have learnt far more difficult things before you were five years old—for example, to stand on your feet without falling. We all come into the world babies with blank minds and learn just what we care to learn. How can it be difficult to train your ear to recognize intervals when you are listening to them all day long? How can it be hard to recognize chords when even the motor-cars in the streets are shouting them at you perpetually? The huntsman can distinguish between the sounds of all birds and beasts *because he wants to*; the—what d'ye call him?—colored person in a hotel can distinguish any one of a dozen bells because it will save him a useless journey to the wrong door and you can, at least I suppose so, put your finger on any one of 84 pianoforte keys that you wish, merely by wanting to. Let me give you a still better example. I once had a native of Southern India sent over to me to study Western music, under penalty of death if he failed. Our very tuning—our notes and scales—all were to him as so much senseless noise. Well, in three years he went back a very fair musician and with a bandmaster's diploma, simply because he *had to*. Only say to yourself "This is my job; I've got to master it, or I shall be of no account!" and very soon you will be able to turn round and agree with me that Harmony is as simple as simple.

DEFINITIONS.

The following definitions refer to terms employed in the foregoing article by Mr. Frederick Corder, and have been prepared for the assistance of those who may never have studied Harmony. A fuller explanation may be obtained from Dr. Hugh A. Clarke's *Harmony*.

Figured Bass. (Often called Thorough Bass, Continued Bass and in German, General Bass.) This refers to a bass part provided with figures above the notes (a kind of numerical short-hand) to indicate what chords are to be employed with the bass notes. At one time it was customary for the musician to be so proficient in reading and deciphering these figures that he could take any figured bass and play the chords indicated at sight. The accompaniments to such works as the Handel oratorios were once written in this way. Later figured bass became the basis of all harmony instruction. In more recent years it has been discarded in some harmony methods.

The Common Chord is formed by combining any note with its major or minor third and its perfect fifth. The major third of any note is the third degree of or step of the major scale beginning with the given note. The minor third above any note is the third degree or step of the minor scale beginning with the given note. The perfect fifth above any note is the fifth degree of the scale beginning with the given note. Thus the common chord or Major Triad on C is C, E, G. The minor form of the common chord on C (minor triad) is C, E flat, G.

Consecutive Fifths or Octaves. Consecutive intervals are simply two intervals, one fifth or one octave apart, following each other scale-wise (diatonically) either up or down the scale. Illustration: Play D and the A above it on the piano in the form of a chord. Follow this by the adjacent E and B above (or the C and G immediately below). This movement of the intervals is known as consecutive (sometimes parallel) fifths. In most works on Harmony, consecutive fifths, consecutive octaves, consecutive seconds and consecutive sevenths are forbidden, at least in strict part writing. Consecutive thirds, fourths and sixths are allowed to an extent. Modern investigations, however, have revealed that consecutive fifths are not objectionable to the uneducated ear. These intervals are all used in modern compositions of masters skilled in "how to violate the rules."

The Diminished Triad is composed of two minor

thirds super-imposed. It may be found on the seventh degree of any major scale, or on the second and seventh degrees of any minor scale. *Illustration:* The notes B, D, F, reading from bottom upward, form the diminished triad. B is the seventh degree of both C major and C minor. B is also the second degree of the scale of A minor.

The Dominant Seventh Chord is the natural seventh chord formed on the fifth degree of any scale. It is composed of a major third, a perfect fifth and a minor seventh. In the key of C this chord would read from the lowest note up G, B, D, F. A dominant seventh can be formed on any note. It takes its name from the name of its lowest note as the fifth degree of any scale is called the dominant.

The Diminished Seventh Chord is composed of three minor thirds superimposed. It may be made by taking the seventh, second, fourth and flat sixth degrees of any minor scale. For instance, in the scale of C minor the chord B, D, F, A flat forms a diminished seventh. This chord is extremely useful in modulating from one key to another. The full significance of the chord is ably explained in Dr. Clarke's *Harmony*.

A Chromatic Chord is a chord in which one or more of the notes of the chords is altered by an accidental sign (sharp flat or natural). The accidental in a chromatic chord is a note foreign to the key. *Illustration:* The chord C, E, G sharp in the key of C is a chromatic chord because the note G sharp is foreign to the key of C.

Progression is the movement of one chord to another or the movement of one note (sometimes called a voice or part) in a chord to another note. *Illustration:* Imagine the following chord in the Key C, reading from the lower or first-mentioned note upward. C on the bass staff; B, D, F on the treble staff. This chord is the dominant seventh chord of the key of C. The most natural movement of this chord is as follows: The G in the bass is followed by either the C above or the C below. The B in the treble is followed by the C immediately above. The D may be followed by the E above or the C below. The F is almost invariably followed by the E below it. Such movement of the voices on chords is called *Progression*, and with the chords mentioned above is termed the *Resolution* of the dominant seventh. That is, the dissonating chord is followed by a chord giving the feeling of content.

Sequence refers to any orderly succession of notes or chords. The repetition at least three times of any fragment of a melody regularly ascending or descending by intervals.

HOW MUSICAL SOUNDS COME TO US.

We are all familiar with the fact that sounds travel towards or away from us in "waves," yet few of us know exactly what takes place. If a man stands on the platform of a large auditorium and plays loudly on a trombone or a cornet, the sound is audible all over the hall. We are told that the sound comes to us through the air by a series of wave motions, yet there is no noticeable disturbance of the air around us. We do not feel a "draught" every time any one plays the cornet. How then does the sound reach us?

Wave motion in the air is very like wave motion in the sea. If you stand on the deck of a liner and watch the waves it looks as though an immense mass of water was rolling along. Yet as a matter of fact the water does not change its position. If you threw a cork on the water it would bob up and down in one place almost as if it were anchored, thus showing that the myriad drops of water which go to make up the sea do not change places, but are turning round in a circle, so to speak, and as they bump up against the drops in front of them, the wave motion is carried along until it looks as if the whole sea were moving bodily in one direction.

Similarly if you watch the wind blow across a field of wheat you will notice that as the wind sweeps across the field it looks as though the wheat were rolling along in a kind of tide like the sea, yet obviously the wheat remains in the same place. In sound waves, the particles of air move almost exactly like the drops of water in the sea, except that the commotion is much greater, owing to the confinements of the hall-space. Nevertheless, the air in the room is not displaced, it is only set into wave motion, and the movement is so slight that it is not perceptible to our sense of touch.