

# NOTES VERSUS TONES

By ARTHUR GEORGE<sup>1</sup>

**T**O read, or not to read—music: that is the question. I am well aware that the instrumentalist is provided for, rather well, in the note, or staff, system; for infinite repetitions of each note of the score to its invariable place in key and finger position on the instrument makes the mere pitching of tones a virtually automatic process.

But the human throat contains no places named C, D, E, F, G, A, B; with their justly celebrated flats and sharps.

And that, to the discerning and imaginative music-master—the lover of the art for its own glorious sake—should immediately clinch my argument for a tone system. Nevertheless, the probabilities are that I must go on, beating my already diminished head against a dead wall of conservatism; that has its daily and nightly struggles with a set of difficulties that appear to be accepted as inherent in the art, while actually they are artificially set up in discouragement of our artistic ambitions by an unworkable music orthography.

This mere alphabet is habitually known as “music.” Always it is a tabulation of absolute pitches, visually unrelated to one another as melody or harmony, such relations being customarily established by instrumental experiments.

It is a fact often observed by me as an amateur chorister, in highly cultured communities, that trained singers, even professional soloists, do not read the staff system directly, in any but the simplest and most obvious melodies: they resort to a translating machine, either listening to their own painfully acquired skill on the keyboard, or that of accompanist or director, and finally getting it “by ear.”

So serious is this trouble, and so universal where reliance is had on the broken reed we call the “staff,” that I feel justified in

<sup>1</sup>These who discovered a misprint in the note prefixed to the first number of *The Musical Quarterly* will have given the editor, I trust, the benefit of doubt by this time, for it was really to be “*Audiat et altera pars*” and not merely “*audiat*.” But there is a limit to every debate. Even on the merits of Sol-fa as against the “staff,” and vice versa. In other words, so far as *The Musical Quarterly* is concerned, the controversy, with the articles by Mr. George and Mr. Whitaker, will be *ajourné—à la Clemençon*. Most of the “reform” schemes mentioned at the end of the article, Mr. George would agree with me, were either stupid or crazily complicated, generally both.—Ed.

telling tales out of singing school, much as I would regret to humiliate certain fine artists of my acquaintance: and they were not all vocalists.

For, to dispose of the players first, in a Rossini "Stabat Mater" number the woodwinds went merrily along in the printed key for a couple of measures, while the strings observed the injunction to take it a semitone flat: they played notes regardless; they harkened not for tone effects. In the "Elijah" rehearsal a baritone blatted forth a "ray"; his companion called it a "me" by note. The trumpeter in "The Trumpet Shall Sound," of *The Messiah*, did his little whole-tone turns in semitones. All at the final orchestra rehearsals. My foolish little imported book of *tone* characters, printed in straight lines that formed no staff picture of the tune at all, informed me instantly what was wrong. The expert professionals had to be corrected: they had *notes* which, as regards pitch and related tone values, looked all alike. It became, therefore, for them a matter of close observation of exact places on lines and spaces, with watchful calculation also of the modifying effects of signatures and accidentals. I suspect that the majority of players pay little heed to the tone relation of their own scores to those of the other players and the singers; they do not listen, and in unfamiliar works do not even have time or opportunity to perceive what the assembled effect should be.

Now for a few instances in vocal effort, all in advanced rehearsals, observed in my extremely limited experience with staff "readers," if you will pardon the quotation marks. A prominent basso, guided with piano cue from a famous Bach specialist of Pennsylvania, struck *Doh* and sang the next tone *Soh*, instead of *Lah*, in Mendelssohn's "Antigone." I offered him my funny little book, that instantly told me what he failed to accomplish. He said, "I quit that stuff twenty years ago." Alas! Twenty years too soon. Another professional basso, from Italy, and in the wholesale liquor business as a side line, sang "Mors, mors stupebit," page 35, Verdi's "Requiem," as *Soh, Fe, Fe, Fah, Fah*. I had a staff copy, and would myself have taken his word for it. But it runs from *Soh* down to *Me*, three semitones. With tone characters, I would defy any orchestra to put me out; and so could he. I have forgotten what notes they were. In "Quando Corpus" of Rossini's "Stabat Mater," which is a *cappella*, tenor and alto made an octave unison of it in the second line, where the key changes from B flat to F, at least in my "idiot's delight," as it has been called. So the pianist, discreetly in place for such an emergency, had to act as referee, breaking the clinch, *pianissimo*; for it was

right in the recital. And my little book told on them, instantly. The tenor, a trained solfaist, was helpless with a staff copy.

Then again, a professor of mathematics in a great university, a retired organist and a retired soloist, tenors, were automatically and unanimously agreed that, in "The Elijah" number, "Behold! God the Lord," "Onward came the Lord," second to fifth, should then repeat fourth to sixth. The professor and my "short-hand" both demanded *Fah, Fah, Te, Te, Te, Sak*; or fourth to seventh major, to fifth. Of course, the other way sounded more natural, and they made a logical stab at it. The notes conspired with Mendelssohn to trip them up. It may happen to anybody, not protected by a graphic score, if you will pardon me again.

As a matter of easily proven fact, the vast majority of us never hear the notes of music; and then only when either very familiar with the score, or gifted with absolute pitch. Nor then do they come to us with any musical value as mere notes, but always as related tones in melody and harmony: that is what music is.

I regret the apologetic attitude taken by certain advocates of what is ridiculously known as "tonic sol-fa," who qualify their argument by supporting the method, patronizingly, as an introduction to the staff. Even John Curwen, who made Britain a vast singing society by the elaboration of Miss Glover's ideas for a tone system, made of his own labors but a stepping-stone to the traditional, highly respectable and unworkable form that is our daily affliction and time waster.

I have called the staff system a cryptogram, greatly to the distress of my conventional friends. I had it out personally here in California with the eminent Bach scholar mentioned. I read him the famous "Mass in B minor," forward, backward and arpeggio; having the music, specially imported; and a note at each modulation, most of them missing in staff.

Understand that I am not a musician, and there is not to be construed a case of excess-ego in these remarks. The point is that a dub, with a scientific score, written in the terms in which music is inspired, composed, rendered and heard, can beat a trained singer armed only with a list of absolute pitch notes, that do not relate themselves to one another visually. Therefore imagine what our singers and players could accomplish with music that revealed its tone values unmistakably to all members of an ensemble, each of them knowing positively to a semitone what all of the others are doing with respect to his own tones.

I know so little of the theory of music technically, that I must reduce a phase of my argument to the tempered scale computation,

and that is bad enough. For, in the usual two clef vocal score, with a range of four octaves, we have in the staff a matter of 576 tone guesses to labor with, as against the twelve tone certainties per octave, good at a moment's notice for any key desired, of a "tonic" method. To illustrate, C may be any one of twelve such tones, according to key; C sharp or D flat another twelve. And they do say there are fifteen keys!

In a necessarily limited article I cannot do more than refer to the other and minor tomfooleries of the staff system. The whole note that fits only a four-four measure; the signature that persists through infinite modulations, such as in "The Pilgrims' Chorus" and "Come, ye Daughters" of the "St. Matthew Passion," and very commonly elsewhere; flats and sharps that produce naturals in the effective key; naturals introduced to make accidentals, and the two clefs with their two-tone variance in reading. You see that I am wholly irreverent toward well established precedent.

It is distinctly unfair to the lovers of good music to discourage their studies and exertions for the art with utterly artificial and irrational barriers that facilitate the reading of scores in no respect at all, other than an approximate chart of the general aspect of the tune. I positively do not want the straight line tonic sol-fa system; though it is infinitely superior to the staff, for singing. But it is cluttered with numbered octaves, is unpictorial and does not serve the purposes of the player adequately. It has a scientific basis, however, and it works.

My plea, therefore, is that public spirited musicians and promoters get together, design a system of twelve tone characters, preferably in two faces of type to separate adjoining voices; with time punctuation characters; the quarter-note a "whole" note, or rather tone; staff lines therefore and therewith abolished; key and modulation notes only; the characters set in the score according to pitch elevation, as nearly done, but not quite, in the staff.

For this task and purpose it is important that we take rather more than a present-day view of the question. The world will have music, and more and infinitely better music, a thousand years from now, when extant compositions will be museum curios, and our greatest musicians and publishers and impresarios will be but faintly memorized names and biographic sketches. It is true that posterity has never done anything for us, but at least they have never done us any harm; and it is hardly fair to load them up with an incubus against their uses and expression of the finest of the arts.

Besides, we are also posterity, and have suffered enough, while our best music gathers dust on library shelves, understudied vitiatingly by a heavy and increasing tonnage of transient inanities and disturbances of the musical peace. Because there is no piano handy to let us find out what Bach, Haydn, Handel, Beethoven, Tchaikowsky, Grieg, Verdi and the other great builders of tonal rhymes and rhythms have been trying to give us.

I mean, of course, a well considered music system that will serve as well as possible every musical purpose in the one form, either for vocal or instrumental solo, choral or keyboard work.

Besides, there ought to be millions in it.

#### ON THE READING OF MUSIC

Choir rehearsals everywhere, where the staff is used, consist of an endless series of experiments with tonally meaningless absolute pitches, retarding the work and wearying immeasurably the director, the inevitable keyboard translator and the singers.

Once the composition is thoroughly learned, however, all that is needed for recital is a starting pitch. Notes are forgotten. If the range is too high or too low, take a lower starting note, or a higher, and proceed exactly as it is written, on a transposed grouping of notes, but the same tune.

Which is to say, substantially, that music is not inspired, composed, interpreted or heard as sets and series of notes, but as melody and harmony of tones, natural or sophisticated scale, but never audibly having reference to any notes, as melody or harmony—as a tune.

All of which is trite truism to a musician of any attainment at all. Yet the reminder seems to be very much in order, by reason of the traditional, round-about, established methods we employ in preference to the obviously direct idea of reading tones, that the British people use successfully, in an utterly unpictorial straight line score.

The difference, reduced to a tempered scale computation, is that they employ at the most seventeen tone characters, shifted in pitch uniformly by means of the keynote; we, in the staff system, are confronted with notes, each of which is, according to key and unnamed modulation, any one of twelve or twenty-four tones and semitones of the scale.

While in the despised "tonic solfa" a tuning fork and the tone-pitching intuition of the singers, reading tones as tones, get rapid and certain results, each voice part a visible and audible cue for

every other; we, classically correct and futilely fatalist, listen and listen and listen again to the interpretations of the keyboard, haltingly reading the time, and largely memorizing the tune "by ear."

And then there is the other clef, its other form of note readings and its confusing two tone skip, easily disposed of by means of a ledger line and a new space between staves.

And the "whole note," poor thing; too fat to go into a short measure, and too short to fill even a five-four; and to be inconsistently repeated in order to be sustained beyond its theoretical wholeness.

And the whole note and the half-note and the quarter-note and the eighth and so on: each time-size looking exactly the same under all of the twelve tone conditions, the most immediately important detail, the tone value to be computed or remembered from a previous occurrence, with a confusing new set of calculations should the "accidentals" cause a modulation, contradicting the signature.

If it is true that the best art is that which conceals art, then surely the staff system of concealing the art of music in a cryptogram takes "top hole."

We are in this situation at the moment: provided with a system that players can use rather well for mechanical reasons, and that singers, unequipped with note places in head or throat or lungs, cannot use at all. Britain, on the other hand, must resort to two systems, each workable separately for voice or instrument, but not mutually translatable at sight.

On both sides of the ocean we are without the one system that singers could use both for its tonal and pictorial aspects; and that players who are musicians, reading tones, should be able to refer instantly to their invariable note places on the instrument in each given key; therefore modulating to a stated passing key without any conscious idea of transposed readings.

This work, so far as I know, is yet to be done with authority and completeness. It is not a task for the amateur or the merely struggling professional, but rather for a college of cardinals in the art—for master musicians to bend their highest efforts to, under the full authority of the music world.

Therein perhaps lies our greatest difficulty; because the recognized masters have comparatively little to contend with in the staff, it appears strange to them that the common run of us find it a confounding thing to deal with. But, as the politician says, "it is a condition, not a theory, that confronts us." We cannot read music, because we get no music to read. Staves and notes

and bars and rests and ties and braces and other haberdashery in plenty, but nothing in the score that tells graphically what tone of that particular scale the note is intended to be. It becomes a job of cross-reference and calculation, without the machine and the expert operator to tell the ear what the voice is to do, while in a large minority of the lines the signature is definitely contradicted by the "accidentals;" the "natural" sometimes an "accidental;" the sharp or flat another time a natural, in the effective key. It must be admitted that the alleged keynote is often a theory, rather than a working condition. Sometimes, under test, it is discovered not to be the key, for a few lines or more.

Just a sketch of the constructive side of the argument. For all practical musical purposes we need not more than twelve tone characters, preferably new in form and reserved for musical uses. They may suggest the tone letters of the familiar scale, doh, de, ray, re, me, fah, fe, soh, se, lah, le and te. That is a chromatic scale, instantly available for any key. They may be advisedly engraved in two faces of type, to distinguish adjoining voices, which occasionally meet and exchange altitudes, and are found a staff-confusion very commonly. These, unqualified in the score, should be quarter-notes in time value, that being practically the modern whole note. They are readily extended, beat by beat, with beat divisions and sustaining beat dashes, terminated by eighth, sixteenth or thirty-second tacet characters in the last beat; the same being used as tacets in a beat initially silent, with the same quarter-tone character moved to the right, with or without a following tacet.

The point in this detail is that added beat time for a tone is better shown by succeeding time punctuations than in the form of the note, since this cannot sustain indefinitely, and must be incontinently repeated. It also confuses the score by such repetitions; and by obscuring its own beat values, in the case of a half or whole note.

Then, having our set of tone characters, the printer sets them in the elevation lines corresponding to their relative pitch, which is the one redeeming feature *approximated* by the staff. That is not essential to a tone system, but is desirable for instrumental work and visual suggestion for the vocalist; also dispensing with the figuring of the outside octaves necessary in straight line sol-fa.

Now wipe out your staff lines, and of course your spaces. You positively do not need them any more. The tone character tells the tune. The key note, by name, tells the point of beginning for each starting tone of each voice or each instrument. Really,



it won't bother you a day, hardly. That is, if you are a musician, and fairly bright. For I, a mere and very occasional amateur singer, can take Bach, Beethoven, Mendelssohn, Brahms, Dvořák, Rossini—any of those top notch fellows, in the common print shop tone system named, with no hint of a picture of the tune, and read them at first sight, just as you read a story; except that I or any solfaist can back track from the end, or jump from voice to voice at a moment's notice. We get our music precisely in the terms in which we hear it. The tone character, following a brief period of training, tells the vocal cords and the lungs, as it were, what sort of combination to put over; it is done intuitively, and it would be a conscious effort to do it wrong. With staff, it is a conscious and distinctly mathematical effort to do it right. In fact, the staff system is a disgrace to the art; for the good and ample reason that it does not work.

Lest some far-sighted, competent lover of music should get my point by the remotest chance—I am becoming a cynic from experience with the professors—there is a small and vital detail to be attended to. As hinted, the human throat is not fitted for staff purposes—an oversight of nature. It contains no key or fret; a note, as a note, means nothing in its young life. Therefore, in the case of a modulation, the voice must have an intuitional guide from the passing key to the new or transient key of the modulation, and from that again to the next. Therefore the bridge tone; to be inserted, preferably, between closely set bars, just to indicate the pitch of the next tone as if written in the passing key. Of course, being in a new key effectively, each succeeding tone has a new name for its note pitch.

Regard the tone, and you have music that a musician can read; putter with notes, and you are into higher mathematics, and the composer, not an absolute pitch genius, cannot read his own work.

This is iconoclasm, to be sure. And if to be conventional is to be right, regardless of results, then staff must rule forevermore, and the congregation will just begin to get the idea of the new tune about the last stanza, if it is a good, long Methodist hymn.

The editor informed me a few years ago that he had personally examined many different schemes at the Library of Congress designed for the circumvention of this eminently respectable and traditional accretion of technicalisms. Surely, if staff were but fairly and reasonably workable, such a number of inventors would not have wasted their time trying to show it up and get rid of it.



We have shiploads of the world's best music scattered around in private, professional and public libraries of our country, but for all the good it is to any ordinary musician, singer or player, who attempts to sit down at a table and actually read it, it might about as well be written in cuneiform or Chinese; with a certain advantage at least in the latter case, wherein each character always means the same thing, they tell me.