
THE
M E L O D Y A N D M E A S U R E
O F
S P E E C H.

I HAD long entertained opinions concerning the melody and rhythmus of modern languages, and particularly of the English, which made me think our theatrical recitals were capable of being accompanied with a bass, as those of the antient Greeks and Romans were, provided a method of notation were contrived to mark the varying sounds in common speech, which I perceived to run through a large extent between *acute* and *grave*; though they seldom or never coincided, in their periods, with any of the tones or semitones of our ordinary music, which is an imperfect mixture of those two genera, called by the Greeks *diatonic* and *chromatic*.

I was of opinion that, in pronunciation, the voice moved up and down by such small gradations as that, whether the
B degrees

degrees were by quarters of a diatonic tone, or by smaller divisions, they seemed, in comparison with those of our *chromatico-diatonic*, to be by imperceptible slides.

But though I had often communicated these notions to many gentlemen of genius and learning, as well as capital artists, hoping some of them would turn their minds to the revival of the antient *chromatic* and *enharmonic* genera of music, and of a proper bass accompaniment for the declamation of the stage, so long lost; yet I never digested my own thoughts on paper, till my learned and honoured friend Sir John Pringle, President of the Royal Society, desired me to give him, in writing, my opinion on the *musical part* of a very curious and ingenious work lately published at Edinburgh, on *The Origin and Progress of Language*, which I should find principally in part II. book ii. chap. 4. and 5. wherein several propositions, denying that our language has either the *melody of modulation*, or the *rhythmus of quantity*, gave occasion to the following systematic attempt to prove the contrary. And as the substance of it was originally communicated to that gentleman in two letters, so I have continued the same form of division here, by giving it in two parts.

THE PROPOSITIONS CONTROVERTED.

See Origin and Progress, vol. II. p. 276, &c. “ That there is
 “ no accent, such as the Greek and Latin accents, in any modern
 “ language.—And lastly, the impossibility for us, that are not
 “ accustomed to it, to found those antient accents, has persuaded
 “ many people that it was as impossible for the antients to do it.”

P. 298.

P. 298. " Mr. Foster would fain persuade us, that in English
 " there are accents, such as in Greek or Latin; but to me, it is
 " evident that there are none such: by which I mean, that
 " we have *no accents upon syllables*, which are musical tones,
 " *differing in acuteness and gravity*. — For though there are
 " changes of voice in our speaking, from *acute to grave*, and
 " *vice versa*, these changes are *not upon syllables*, but *upon words*
 " or *sentences*." P. 299. " Our accents—neither are nor can by
 " their nature be subjected to any rule; whereas the antient,—
 " are governed by rules, &c.—We have accents in English,
 " and syllabic accents too; but there is *no change of the tone in*
 " *them*; the voice is only raised more, so as to be *louder* upon
 " one syllable than another. — That there is no other difference
 " is a matter of fact, that must be determined by musicians.
 " Now I appeal to them, whether they can perceive any dif-
 " ference of tone betwixt the *accented* and *unaccented* syllable
 " of any word? And if there be none, then is the *music of our*
 " *language*, in this respect, *nothing better* than the *music of a*
 " *drum*, in which we perceive no difference except that of
 " *louder or softer*."

P A R T I.

WE suppose the reader to have some knowledge of the modern scale and notation of music, namely the *chromatico-diatonic*; which may be defined practically, as,

A series of sounds *moving distinctly* from grave to acute, or *vice versa* (either gradually or *saltem*) by intervals, of which the semitone (commonly so called) may be the common measure or divisor, without a fraction*, and always dwelling, for a perceptible space of time, on one certain tone.

Whereas the *melody of speech moves* rapidly up or down by *slides*, wherein no graduated distinction of tones or semitones can be measured by the ear; nor does the voice (in our language) ever dwell distinctly, for any perceptible space of time, on any certain level or uniform tone, except the last tone on which the speaker ends or makes a pause. For proof of which definition we refer to experiment, as hereafter directed.

Whilst almost every one perceives and admits singing to be performed by the ascent and descent of the voice through a variety of notes, as palpably and formally different from each other as the steps of a ladder; it seems, at first sight, somewhat extraordinary, that even men of science should not perceive the

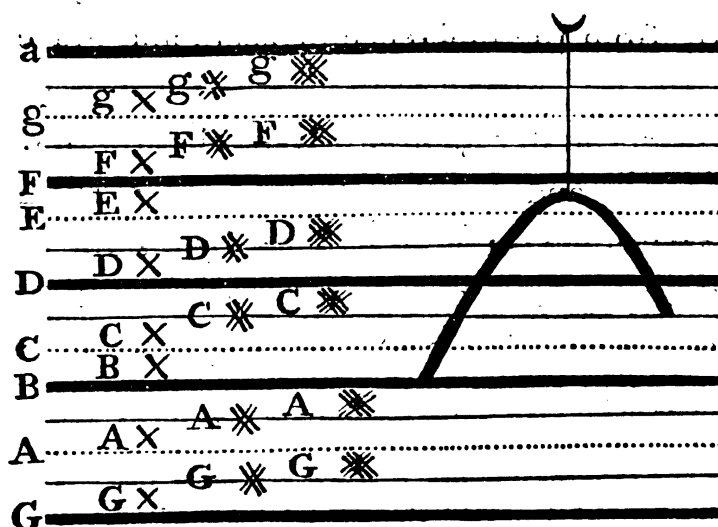
* I omit the critical distinction of major and minor tones and the diesis, because the modern chromatico-diatonic octave is practically divided into 12 semitones, supposed equal to the ear.

rapid

rapid slides of the voice, upwards and downwards, in common speech. But the knowledge of the various distinct notes of ordinary music is not only laid open to those multitudes who learn that art; but also, being rendered visible and palpable to the unlearned, by the keys of organs and such like instruments, it happens that almost every one knows, the variety of music to arise, in part, from the difference of acute and grave tones.

In traveling through a country, apparently level, how few people perceive the ascents and descents that would astonish them, if the man of art were to demonstrate them by his instrument, and to bring the sluggish stream to form a cascade! In like manner, when the modulation of the melody of speech shall be ripened into method by art, even the vulgar may be taught to know what the learned can now scarce comprehend.

A METHOD OF DELINEATING NOTES OR CHARACTERS TO REPRESENT THE MELODY AND QUANTITY OF THE SLIDES MADE BY THE VOICE IN COMMON SPEECH.



oh!

Let the 5 black lines, such as are made use of in noting music, according to the ordinary modern method, be drawn, as in the margin, strong; and let them be interlined with red or faint black; *videlicet*,

with two continued lines and one dotted line between them, except in the interval between B and C, and in the interval between E and F, as hereafter explained. So that, supposing the strong black line at bottom to be that whereon the note G is to be marked, then the space between that and the red or faint line next above it, will be the space for $G + \frac{1}{4}$ tone, or $G \times$ (with a single cross); and the said red or faint line itself, being the first red or faint line from the bottom, will be the line for $G + \frac{1}{2}$ a tone, or $G *$ (with a double cross); and the space between this red or faint line, and the dotted line next above it, will be for $G + \frac{3}{4}$ tones, or $G ※$ (with a triple cross); the dotted line will be

for A, the same tone that would have been marked on the whole space, if there had been no red or faint lines at all. The additional quarter tones of $A \times$, $A \ast$, and $A \text{※}$, will proceed in like manner; and the second strong black line will be for the note B, the next space for $B + \frac{1}{4}$ tone or $B \times$; and here, omitting the continued red or faint line, we come immediately to the dotted one, which is for C; because the interval between B and C contains only two quarters, or a semitone; the interval also between E and F, being of the same dimension, is provided for in a similar manner: and these lines, so drawn, I call the *Scale*.

Then, instead of using round or square heads for the notes to be marked on this scale (as in the ordinary music) let us substitute *sloping or curving lines*, such as the expression may require; as , or , or , or ; which lines, when drawn on the foregoing scale, will easily shew through how many quarter tones the voice is to slide; and these I call the *accents* or *notes of melody*.

In the next place, the quantity or proportion of time allowed to each note, may be distinguished by adding tails of different forms, always drawn upwards, to prevent confusion, by mistaking the head for the tail, or *vice versa*; because our heads have some resemblance to the tails and eyes of quavers in the ordinary music, and our tails have some resemblance to their heads of minims and briefs; as thus,

Various forms of tails to express the difference
of quantity,



The heads which mark the *accent* or difference
of melody,



Tails

Tails and heads joined together, the heads being }
 at the bottom and the tails drawn upwards, } 
 which, being thus joined, form, as it were, one note, expressing
 both *accent* and *quantity*.

Though we differ somewhat in form, let us however (since the measures of time in music and in speech are both the same) adopt the names by which the different quantities or proportions of time, are distinguished in common music.

Such as a semi-brief = 2 minims = 4 crotchets = 8 quavers.

For which let our marks be, 

And let the rests or pauses be represented thus,

a semi-brief rest = 2 minim rests = 4 crotchet rests = 8 quaver rests.


We also adopt the method used in common music, of lengthening a note, by the addition of a point, as,



Then the note, on the foregoing scale, over the interjection *Ob!* whose duration in time is only that of a crotchet, represents the melody of the voice to have made a slide from B to E $\times$, and thence down again to C $\ast$; a flight, up and down, through nineteen quarter tones; and this I apprehend may very properly be called a *circumflex*.

In devising a scheme for expressing on paper the musical slides of the voice, in the melody of speech, I chose one which might come as near as possible to the modern notation of music, in order to make it the easier to be comprehended by those whose ideas of sounds and measure of time are already formed on that plan.

plan. I had no intention of imitating the figures of the *Greek accents*; and yet, by meer accident, in pursuing my own scheme, I found my new invented notes were exactly in the Greek form. From this fortuitous coincidence, may we not suspect, that we have hit on the true meaning of the Greeks (who wrote, as we do, from the left to the right) by their marks, of *acute* for the slide upwards, and of *grave* for the sliding return downwards: for (omitting the tails, which are only for the purpose of measuring the time,) to mark a slide progressively upwards by our system, it must go thus , and progressively downwards, thus, . Why did the Greeks mark their accents
oh!

wards, thus, . Why did the Greeks mark their accents
ho!
by exactly such sloping lines, if they did not mean them as we do, for the expression of a slide upwards , or of a slide downwards ?

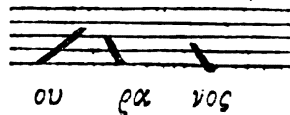
I must allow, however, that this coincidence between the marks which I have adopted and those used by the Greeks is somewhat extraordinary, considering that they called their most acute sound, low; and their most grave sound, high; and also that their distinctions of notes in writing, were not made by position as ours are (that is, the higher notes occupying the higher parts of the scale, and *vice versa*); but their notation ran in one strait line, each different note being distinguished by a particular character, like a line of common writing. But to solve this difficulty to myself, I have supposed their calling the gravest note, high; and the most acute, low; was in relation to the position of their notes on their instruments: for I think their expressions of

ἐπίτασις and ἀνάτασις * as applied to the *acute*, and of ἀνέσις to the *grave*, seem to imply that they considered the voice as ascending to the first, and descending to the last; for unless they had been led by this sentiment, they should have made their marks for the acute and grave quite contrary to what they really did, and to what I have done, by making them conformable to our modern notation of music.

If the learned author of the *Origin and Progress of Language*, had conceived that the melody of our speech was formed by slides, he would have found his quotation (page 278.) from Dion. Thrax. (φώνης ἀπήχησις ἐναρμονία, ἢ κατ' ἀνάτασιν ἐν τῇ ὀξεύᾳ ἢ κατ' ὀμαλισμὸν ἐν τῇ βαρεύᾳ, ἢ κατὰ περίπλασιν ἐν τῇ περισπωμένῃ) to have been perfectly agreeable to our system; and his difficulty to comprehend why the grave, marked on a last syllable, should (by some commentators be said to) denote the acute would vanish, if he had considered that a grave accent must begin comparatively acute, in order to end grave, by sliding downwards.

The true sense of these words of Dionysius is probably this: "That accent is the change of the enharmonic voice, by an
" extent or stretch up to the acute, or by levelling it to the grave,
" or by making a circuit in the circumflex." In other words, sliding up to the acute, sliding down to the grave, and sliding up and down, without change of articulation in the circumflex.

Suppose the word *ουρανός* to be noted in our manner: *ού*, with the acute, rose or slid up about a fifth; *ρα*, with a grave, fell or slid



* Aristid. Quint. says expressly (in Meibom. vol. II. p. 8. and 9.) γίνεσθαι δὲ, ἢ μὲν βαρύτης, κατὰθεν ἀναφερομένη τῷ πνεύματι· ἢ δ' ὀξύτης, ἐπὶ πολλῇ προεϊμένη; that is, a grave sound is produced from the bottom or lowest part of the breath; and an acute sound, from the top or upper part.

down to the common level; consequently, to let *ὦδ* slide to the *grave*, in like manner, the voice must be allowed to get to the top, or acute part of the *grave*, in order to slide down again; otherwise, if the identical tone that *πα* ended on should be continued uniformly to the whole of the syllable *ὦδ*, it would fall under the description or definition of common song, by dwelling for a perceptible space of time on one tone. Wherefore I think it must be understood, that *acute* and *grave* were not single fixed tones, like the notes of diatonic music, but were the marks of vocal slides; *viz.* that the *acute* began *grave* and ended *acute*; and on the contrary, the *grave* began *acute* and ended *grave*.

As all speech, prose as well as poetry, falls naturally under emphatical divisions, which I will call cadences: Let the *thesis* or pulsation, which points out those divisions, be marked by *bars*, as in ordinary music. Modern musicians, very improperly, use the words *accented* and *unaccented* in the place of *thesis* and *arsis*; but the proper sense of *accent* refers only to the melody of *acute* and *grave*, or diversity of tone; whereas the *thesis* and *arsis* should relate solely to *pulsation* and *remission*. By which diversity of expression, *emphatic* and *remiss*, the modes of time are pointed out, and the measure governed.

Of modes of time there are only two genera; the one, where the whole time of a *bar*, or *cadence*, is divided by 2, and its sub-duples or sub-triples; the other, where the whole time of a *bar* or *cadence* is divided by three, and its sub-duples or sub-triples. More shall be said of this and of emphasis hereafter, under the head of Measure or Rhythmus.

Almost every syllable in our language (monosyllables excepted) is affected positively either to the *arsis* or *thesis*, though some are of a common nature, and may be used with either.

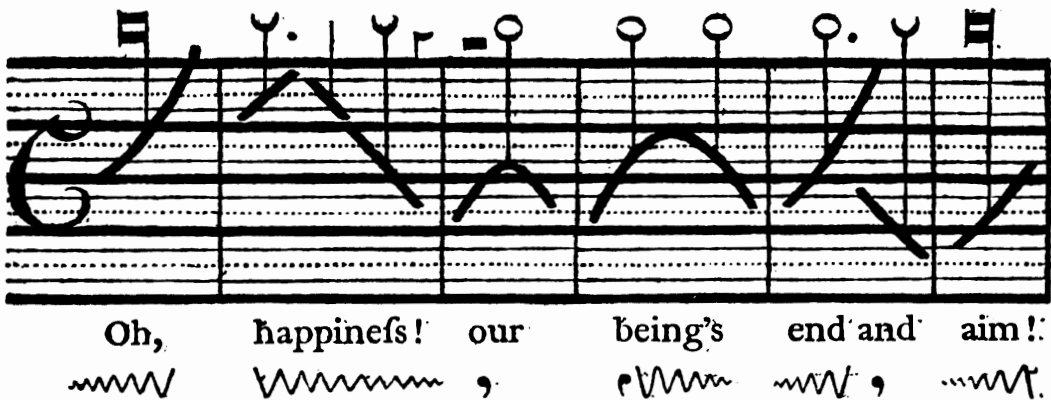
Our heroic, or ten syllable lines, most commonly begin with a syllable under arsis: and supposing the line to consist of 5 feet, or rather according to our system, of 5 *bars* or *cadences* of musical time (exclusive of rests or pauses), there will be half a bar at the beginning, and half a bar at the end; that is, it will begin with *arsis* and end with *thesis*: but sometimes the affection of the first syllable is so positive to *thesis*, as to oblige the measure of the line to begin with a whole bar (for the beat, or *thesis*, constantly falls on the first note or syllable of the bar); but always some *rests* or *pauses* are necessary, as being more agreeable both to the sense and to the measure; so that, including the *rests*, a line of nominal 5 feet, or ten syllables in words, occupies at least the time of 6 *bars* or *cadences*, as in the example following; in which the syllable, *ob!* is positively *emphatical* and under *thesis*, and the syllable *our* (agreeable to the sense in this expression) is, as positively, *remiss*, and under *arsis*.

But here let it be observed, that this *emphasis of cadence* and the *expression of loudness*, are not to be considered as equivalent terms or affections of the same kind; for the *arsis*, or *remiss*, may be *loud*, or *forte*; and the *thesis*, or *emphatic*, *piano* or *soft*, occasionally. The *thesis* and *arsis* being periodically alternate, whether expressed or supposed; whereas the applications of the *forte* and *piano* are *ad libitum*, or *apropos*.

Therefore, beside the characters which distinguish the variety of sounds and of measure of time, there are others required to
mark

mark where the *forte* and *piano* should be expressed. The modern musicians have no other characters for these than the words themselves. However, they will be better supplied in our scheme by the asper *ʼ*, and lenis *˘*, of the Greeks*; the *crescendo*, *rinforzando*, or *swell*, by ; and the *smorzando*, or *dying away*, by ; all which will be more conveniently written under than over the words, to prevent their interfering with apostrophes or tittles of the letter *i*.

THE FOREGOING CHARACTERS APPLIED IN THE FOLLOWING
EXAMPLE.



In an attempt so new in our age, as the reducing common speech to regular notes, it will not be expected that this first

* I mean, by adopting these marks, to insinuate a conjecture; and, if I am right, will not the necessity of *two spirits*, as well as two *accents*, be apparent?—Though very learned men have thought otherwise. In the ancient guttural languages, the forte was probably aspirated; that is, the sound of the letter H was frequently thrown in: for a frequent energetic aspiration is a principal cause of the Irish vicious tone in pronouncing English; and that aspirated tone is derived from the original Irish language, which, like all the other antient languages, is extremely guttural.

essay should be extremely accurate; for there is a great latitude in the slides not only of different speakers, but also of the same speaker at different times.

People who play by ear on instruments of music, as well as those who play by notes, can seldom play their voluntaries a second time without great variation. Now all people, orators of pulpit, bar, and stage, in respect of the melody and rhythmus of language, are but as players of voluntaries exhibiting by ear, having no notes as a test or standard to prove their correctness, and to measure the degrees of their excellence.

We have heard of Betterton, Booth, and Wilks, and some of us have seen Quin; the portraits of their persons are probably preserved, but no models of their elocution remain; nor any proofs, except vague assertions and arbitrary opinions, to decide on the comparative merits in the way of their profession, between them and the moderns. Had some of the celebrated speeches from Shakespeare been noted and accented as they spoke them, we should be able now to judge, whether the oratory of our stage is improved or debased. If the method, here essayed, can be brought into familiar use, the types of modern elocution may be transmitted to posterity as accurately as we have received the musical compositions of Corelli.

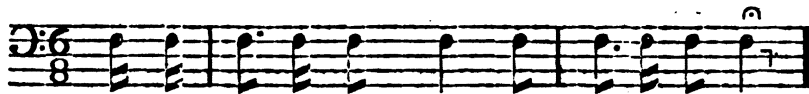
But perfection and accuracy in this art can only be attained by experience and a close attention, in estimating the pitch and extent of vocal slides by the ear, with the assistance of a proper instrument.

I hope, however, this example will shew, that the *melody of speech* is formed by *slides*; and that by these, or some other apt characters,

characters, the musical expression of speech may be described and communicated in writing.

But if this essay be not sufficient to prove what the *melody of speech* is, let us, in the next place, endeavour to shew *what it is not*.

It is not like the proclamation of a parish-clerk announcing the psalm,



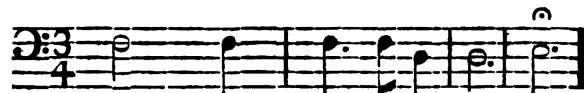
Let us sing to the praise and glory of God!

where the whole sentence is in one tone, without any change of acute or grave.

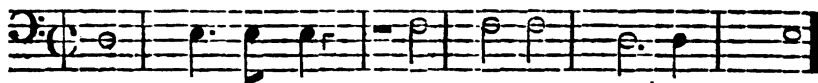


Oh, happiness!—our being's end and aim!

Neither is it like the intonation of the chorostates, or precentor in our cathedrals, where the change of tone is made between one sentence and another, or between one word and another; that is, where the change is made, *not upon syllables, but upon words or sentences.*



Lord! have mercy upon us!

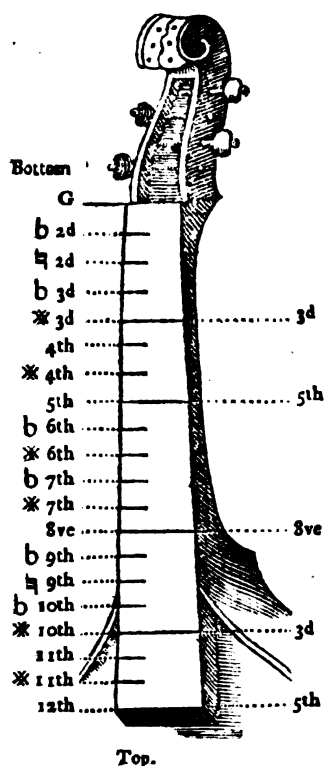


Oh, happiness!—our being's end and aim!

Now to submit these several examples to the judgement of common ears, let a bass viol have a paper pasted on the whole length of the finger-board near the 4th string, marking all the chromatico-

chromatico-diatonic stops or frets, suitable to that bass, from the bottom to the top, as in the figure represented below.

For the experiment of the slides, let the 4th string (though actually tuned to ) be called  for the sake of keeping our slides within the compass of the five black lines, or nearly so; and also to keep the hand, making the slides, so high on the shift, as never to fall down to the open string.



Then while the player draws the bow over the 4th string, let him try, by sliding his left hand on the same string up or down the finger-board, to imitate the rapid turns or flexions of the voice in common speech, and he will soon find, that they will have either their beginnings or endings, for the most part, in the intervals between the frets; which intermediate stops, we may call quarter tones: for it will be accurate enough for our purpose, to call every degree of tone a quarter, that does not coincide with any tone or semitone of the chromatico-diatonic. And then, if he can pronounce, being thus assisted by the in-

strument, all the foregoing examples, as they are written or noted, the auditors will most probably agree in the following conclusions.

1st, That

1st, That the sound or *melody of speech* is *not monotonous*, or confined like the *sound of a drum*, to exhibit no other changes than those of *loud* or *soft*.

2dly, That the changes of voice from *acute* to *grave*, and *vice versa*, do not proceed by pointed degrees coinciding with the divisions of the chromatico-diatonic scale; but by gradations that seem infinitely smaller (which we call *slides*); and though altogether of a great extent, are yet too rapid (for inexperienced ears) to be distinctly sub-divided; consequently they must be submitted to some other *genus of music* than either the diatonic or chromatic.

3dly, That these changes are made, not only upon words and upon sentences, but upon syllables and monosyllables. Also,

4thly, and lastly, That in our changes on syllables or monosyllables, the voice slides, at least, through as great an extent as the Greeks allowed to their accents; that is, through a fifth, more or less.