

## ON THE ORIGIN OF MUSIC.

By HERBERT SPENCER.

A few words from me in comment upon the criticisms of Dr. Wallaschek and Prof. Cattell, in *MIND* No. 63, seem needful to prevent the spread of misapprehensions.

Possibly without intending it, Dr. Wallaschek leaves his readers to suppose that I do not recognise, or do not adequately recognise, rhythm as an essential component of music. But the following passage will show, not only that I fully recognise it, but that I trace it back to the sources he indicates :—

“Even the *rhythm*, which forms a remaining distinction between song and speech, may not improbably have a kindred cause. Why the actions excited by strong feeling should tend to become rhythmical is not obvious, but that they do so there are divers evidences. There is the swaying of the body to and fro under pain or grief, of the leg under impatience or agitation. Dancing, too, is a rhythmical action natural to elevated emotion. That under excitement, speech acquires a certain rhythm, we may occasionally perceive in the highest efforts of an orator. In poetry, which is a form of speech used for the better expression of emotional ideas, we have this rhythmical tendency developed. And when we bear in mind that dancing, poetry, and music are connate—*are originally constituent parts of the same thing*—it becomes clear that the measured movement common to them all implies a rhythmical action of the whole system, the vocal apparatus included; and that so the rhythm of music is a more subtle and complex result of this relation between mental and muscular excitement.” (*Essays, &c.*, lib. edit., vol. ii. p. 418).

But Dr. Wallaschek differs from me by concluding that “the origin of music must be sought in a rhythmical impulse in man”; and that “men do not come to music by way of tones, but they come to tones and tunes by way of the rhythmical impulse”. In this view I cannot coincide, for the reason that it regards music as acquiring its essential character by a trait which it has in common with other things, instead of by a trait which it has apart from other things. While music must be classed as one of sundry rhythmical products, it becomes music only by that which distinguishes it from the other rhythmical products. This is clearly shown in the contrast between spoken verse and song. Both are rhythmical, but spoken verse does not become song by any development of rhythm. It becomes song by the inclusion of an element additional to rhythm. It may be admitted that the combinations of tones are moulded into a rhythmical form, at the same time that it is contended that in the absence of combinations of tones there is no music.

Is it that Dr. Wallaschek has read only my recent article in *MIND* No. 60, and has not read, or has not recently read, the original essay on “The Origin and Function of Music”? It would almost seem so from one of the objections he raises, which runs thus :—  
“Music is an expression of emotion, speech the expression of

thought. If we assume that music originates in, and is developed from, speech, we must also assume that emotion is developed from thought." The misleading influence of a wrong name is well illustrated in the objection thus raised. The name "speech-theory" was used by Mr. Gurney in his argument against me: whether previously used I do not know; but it is a name which has received no countenance from me. Though it is not true that speech is "the expression of thought" exclusively, since the cadences which ordinarily constitute part of it habitually express feeling, yet the intellectual element is so dominant that the emotional accompaniment is scarcely suggested by the word. As used by Mr. Gurney, "speech-theory" seemed to me very much a nickname; and it has now proved to be a mischievous nickname, as will be seen by the following extracts from my original essay:—

"All speech is compounded of two elements, the words and the tones in which they are uttered—the signs of ideas and the signs of feelings. While certain articulations express the thought, certain modulations express the more or less of pain or pleasure which the thought gives. Using the word *cadence* in an unusually extended sense, as comprehending all variations of voice, we may say that *cadence is the commentary of the emotions upon the propositions of the intellect.*" (*Essays, &c.*, lib. edit., vol. ii. pp. 421-2).

And the whole argument of the essay is to show that it is from this emotional element of speech that music is evolved—not from its intellectual element. For instance:—

"Thus, in respect alike of *loudness, timbre, pitch, intervals, and rate of variation*, song employs and exaggerates the natural language of the emotions." (*Ib.* 411.)

"Vocal music, and by consequence all music, is an idealisation of the natural language of passion." (*Ib.* 418-4.)

On reading these passages Dr. Wallaschek will, I think, see that the view I really hold is not touched by the objection he raises.

Turning to Prof. Cattell's criticism, I may in the first place remark that the nature of overtones (or harmonics as they were called in my early days) and their relations to the fundamental tone are not unfamiliar to me, as he may find in sundry places; among others on p. 197 of vol. iii. of my *Essays*. Prof. Cattell says:—"Mr Spencer seems to hold that nothing in a single tone corresponds to a combination of tones, and that the intervals used in music are not found in nature". That I do not hold this I have just pointed out, and I do not see any ground for the statement that I *seem* to hold it. The sentence on which Prof. Cattell bases his assumption as to my meaning is this:—

"Dependent as harmony is on relations among rates of aerial pulses, its primary basis is purely mechanical; and its secondary basis lies in the compound vibrations which certain combinations of mechanical rhythms cause in the auditory apparatus".

This sentence expresses no opinion respecting the simplicity or complexity of musical tones. It refers to tones as commonly conceived, taking no note of the overtones which give their *timbre*; and implicitly refers to the harmony produced by a combination of two or more such tones. Harmony as ordinarily spoken of, and as alone recognised in music, with which I was dealing, presupposes tones that are separately distinguishable by the ear and have something approaching to likeness of volume: a requirement which becomes obvious on perceiving how little harmony can be obtained between the note of a violin and that of a powerful organ-pipe. Though the overtones which, joined with the fundamental tone, give its *timbre*, bear to it relations like those which the notes of a chord do to one another, yet they are not recognised as producing harmony. It is true that in the dying sound of a deep-toned church bell, the overtones may be distinguished, and their harmony with the fundamental tone perceived; but in any ordinary musical tone no such discrimination is possible. To perception the tone seems simple, and in dealing with musical effects we are dealing with perceptions. Harmony, as ordinarily understood in music, and as spoken of by me, is concerned with the fundamental tones, and ignores the overtones; as is clearly shown by the fact that two notes of widely unlike instruments are said to be in unison, or in harmony, if their fundamental tones have the requisite congruity: no attention being paid to the overtones.

Of course I should willingly, could I do so, accept Prof. Cattell's view that "harmony has been developed from melody"; but I cannot see my way to do this. To establish the evolution of the one from the other, there must be found some identifiable transitions between the combinations of tones constituting *timbre*, which do not constitute harmony to our perception, and those combinations of tones which do constitute harmony to our perception; and I know of no such transitions. So far as I know (and I speak from memory, for I write far away from books), harmony commenced with the fugal repetition of a melody in ecclesiastical chants. Though the melody was the same, and the effect was produced by one choir commencing a bar or two after the other, yet the new kind of effect suddenly achieved cannot be considered as *evolved*, without stretching somewhat unduly the meaning of the word.