III.—THE FESTAL ORIGIN OF HUMAN SPEECH.

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IT would not be a difficult task to induce any student of the speech-branch of anthropological science to take a serious interest in aboriginal music, even if he were offered nothing but the disjointed exclamations of surprise made by travellers among contemporary savages and by ancient writers at the intimate connexion which music has formed with the very roots of mental and moral culture. To observe that at the first glimpse which history obtains of men who had raised themselves above their fellows to the dignity of religious, moral, and scientific teachers, they are found to be called singers is sufficient to create an intellectual reverence for things belonging to aboriginal music, if we went no deeper than the bare notice of the fact. An interest has long been growing in matters connected with aboriginal music through the sheer force of the reputation of the art as an accompaniment and supporter of mental culture, and not by reason of any confident insight into its psychological roots. results of philological and archæological research, and the queries and guesses made about the power of music by philosophers from Aristotle downwards, have been paralleled in such a remarkable way by travellers among contemporary savages that the bare weight of ancient tradition and modern ethnological fact could not help tending to raise music into a high place as a factor in the evolution of mind, though psychology furnished no interpreting guide. But for an indirect evidence of the intimacy of the connexion between early speech and music, nothing could be referred to more striking than the fact that the intimacy of this connexion has encouraged Mr. Herbert Spencer to turn to speech and load the unsolved problem of its origin with the further problem of the origin of music. Now, although a close scrutiny of even the historical aspects of musical pleasure may be calculated to make one feel that making a beginning in music must have required less advanced and complicated psychological machinery than making a beginning in speech, it is undeniable that an easy glance at these historical aspects suggests the contrary. But I believe that neither a close nor an easy scrutiny of the psychological aspect of musical pleasure will lead one to any conviction except that

its origin required simpler psychological machinery than the origin of speech. Indeed I think it will be found that the origin of speech was only possible through the aid of the psychological machinery which belonged to musical

pleasure.

If we begin by comparing the ear with the eye in respect of their relative contribution toward making up our mental life and activity, the eye must suffer by the comparison, although it is usual to regard it as the most intellectual of The superiority of the claims of the ear in our senses. generating the peculiarly human characters of mind rests upon its functional passivity. The extreme ease of the animal's control over the eye and the absence of any control over the ear made a difference in the degree in which the common animal appetites dominated the manner of the reception of the two kinds of sense-impression. The passivity of the ear allowed auditory impressions to force themselves into consciousness in season and out of season, when they were interesting to the dominant desires of the animal, and when they were not. These impressions got further into consciousness, so to speak, before desire could examine their right of entrance than was possible for impressions which could be annihilated by a wink or a turn of the head. the more attention any impressions could command without there being anything beyond them of interest to the animal's life-caring instincts, the more likely were those impressions to lead to the origination of one of the chief human powers of mind, that of grasping more than one impression and becoming aware of a relation of difference between them. The subjection of the eye to life-caring interests must place it below the ear in any speculation about how a beginning was induced in the apprehension of relations of difference between sensations, however superior the eye became when the beginning had been fairly made. But, granted that the ear was a possible channel for educating the consciousness of some animals up to this power, where could the stimulating influence come from? The natural stimulants of the organ could not have changed radically, at any time, from what they were in all ages of animal life: why, therefore, should they begin at any particular time to educate the consciousness of the ancestors of man? or why do they not educate that of other animals which possess highly developed organs of hearing? These are the sort of questions which are in fairness put in the way of an attempt to show how any of the specially human characters of mind could originate without assuming that other characters existed

And, whether comparative psychologists justified or not in supposing that their constructive schemes of the origin of the human mind meet and answer such questions, I think that there lies still untouched a mass of important historical and ethnological facts which are better able to answer them than any which have been yet brought But it is necessary to bring these facts into the light of certain psychological suggestions which are offered by a new analysis of the art of music. The solution which is possible along the lines of this analysis avoids all the old difficulties which stood in the way of a beginning in mental training when the animal's impulse to educate itself was thought of only in the blind seeking for the satisfaction of natural appetites. If the impulse was an old, naturallyworking one, which is common to many animals, it could not face the questions, why it did not begin its work sooner, or why it does not effect it in other animals. The impulse behind the effort in mental training to which attention is invited here was free from every kind of self-caring stress. It was intensely pleasurable, yet not an old animalistic pleasure. It was the incipient pleasure of music.

The facts of history and ethnology which may be given a new aspect when regarded in the light of the analysis of music cover a very wide field of the early manifestations of human thought and emotion, beginning with the first and rudest vestiges of communal sympathy and tribal glorification, and extending up to the national song or epic. In order to work down to the root of these facts quickly, it must be observed that, while communal interest itself is not peculiar to man, it is peculiar to man to give expression to this interest in a way which has nothing to do with life-caring instincts. Now what is the rudest and most primitive manner in which man is found giving expression to a communal interest apart from practical co-operation for the care of life, hunting and fighting, &c.? The most ancient traditions of the races now civilised and the ethnology of still uncivilised races give the same answer. The communal spirit of man finds its first and rudest expression in the bodily playexcitement which is found in all grades of development from that of the lowest Australian or American aborigines up to the choral dance out of which the first glorifying songs of the race and its heroes are found growing. Certainly we cannot catch sight of this play-excitement in its first spontaneous outlet; at the lowest grade in which the manners of its outlet are found, they had already become manners of racial tradition, and had become involved in the peculiar racial habit of

But (1) bodily play-movements in imitafestal celebration. tion of actions, (2) rhythmic beating, (3) some approach to song, and (4) some degree of communal interest, display themselves as the most constant elements of all festal celebrations. The degree in which the play-excitement is infused with a spirit of communal interest seems to vary considerably in different tribes, but if we start from the generally-accepted explanation of play-movements in animals, and grasp the ultimate reason why play-excitement became infused with the communal spirit, there will be no difficulty in tracing evidences of this spirit even where they are most hidden by accompanying habits. When the strain of action resulted in the satisfaction of the chief animal desires and the play-movements of the pleasant nervous reaction drifted into the manner of the actions that brought about the satisfaction, it was impossible that some of the communal interest which lived amid the actions should not be resuscitated in Few will deny that this is how play-excitement drew communal interest up from its lower animal grounds of life-caring instincts to the distinguishing human habit of expressing this interest apart from actual life-caring co-operation, even if they deny that the event was important in its consequences. And, if it is kept in view while the most familiar phenomena of aboriginal festal celebrations are recalled, it will be perceived that fact verifies this simple interpretation of the connexion between play-excitement and communal interest. In the chief ethnological works, festal celebrations are often placed under the heading of "amusements" even when they display not only a communal interest, but also a pronounced religious spirit. classifying these habits the ethnologists are obviously influenced by the large element of seemingly aimless play which enters into them, by the rhythmic beating, hilarious cries and songs, &c. They would not attempt to deny that, whether the dance was to celebrate a victory in war, the capture of an animal in the chase, the stranding of a whale, the coming of the salmon, or the finishing of harvest or vintage, the play-excitement would be fused with a more or less solemn spirit of communal interest. Although bodily play-excitement and communal interest are constant elements of festal celebrations, neither of them may be the moving spirit of the celebrations that travellers observe in any particular instance. Having become traditional habits of the tribe, the celebrations had clinging to them interests which were superior to their originating impulse, interests of patriotic and religious memories, which could only have

developed along with the mental development which resulted in the origin of the human characters of mind. When the ethnologist regards the celebrations, such interests as these are their vivifying spirit. But if we are to interpret the previous course of their development at all, we must follow the psychological consequences of the fusion of the two primitive elements, and see in how far they agree with the state of things familiar to the ethnologist and philologist.

The foundation we have to work on is the animal consciousness as occupied with the diffused pleasure of bodily play-excitement, and the communal elation following success in a common enterprise. This state of consciousness must be preserved in order to do its work. Its natural modes of expression tend to preserve it, i.e., the bodily play-movements in imitation of the successful actions and the rhythmic beating. These movements give to consciousness preservative elements of sensation. But they have to compete with destructive elements connected with life-caring These latter, for instance, sights or sounds of a terrific character, must often have completely destroyed the play-excitement. But our speculation has no concern at all with the violently destructive elements of perception. They take away our fundamental fact till the conditions occur again for bringing it into existence. It is upon slightly destructive elements of perception that we should direct our It is in face of slightly destructive elements (ordinarily occurring sensations connected with natural passions, life-caring instincts, &c.) that we must ask if there was anything about the production of the preservative elements of sensation which rendered it likely that they would improve in their competing effectiveness. The question being brought to this point, it is hard to say that it would not occur to many psychologists to look to the rhythmic beating for the direction from which the improvement might come, even if they saw nothing in the art of music to guide their speculation. But we are distinctly guided in this direction by the psychological grounds of the development of the art of music. For it is possible to work down from the greatest symphony of Beethoven to the rudest rhythmic beating of savages, and show that every step of tonal development between them was made in order to improve the effectiveness of the elements of sensation which could preserve the content of consciousness springing out of play-excitement and communal elation. Passing over all plausibilities from geology about the period when objects capable of emitting a musical tone began to be struck for

the rhythmic beating of the play-excitement, I have but to point out that, when a musical tone was produced in the persistent succession of rhythmic beating, the elements of sensation which had but an ordinary destructive power would have less opportunity for completing the psychic movements on which their destructive power depended than when the sounds produced in the beating were only By its own natural right the impression of a musical tone has a startling vividness. The attentiondrawing power it possessed by natural right was enhanced by the conditions of its production, which ensured repetition in a persistent temporal succession. The persistent succession of such impressions inevitably induced an attitude of sustained expectation in the animal consciousness. And it was the absorption of attention implied in this expectant attitude which shielded the feeling of play-excitement and communal elation from all destructive elements of perception, except those which were linked instinctively with peril or the strongest animal passions. It is needless to say anything about the way in which musical tones must have developed in their attention-absorbing power. compound nature of the musical tone, and the resulting intimacy of its relation with other tones at the intervals of octave, fifth, &c., speak for themselves. To insist that tonal constructions have always been increasing their absorbing power would be to insist that the art of music has developed. I hasten to call attention to something that was happening both before and after the stimulating rhythmic beating produced tones, I mean the animals' excited cries. of the exceedingly stunted supply of vocal tones furnished by the animals which are the nearest physiological allies of man, it may be asked if comparative psychologists who construct a bridge between the lower animals and man do not see a difficulty in the general aspect of "phonetic decay" in the history of speech. How became the original supply of vocal tone so copious as to bear the decay of ages in the sign-bearing growth of consonantal checks? who assumed or admitted that naturally occurring emotional excitement effected a beginning in the production of such vocal tone would be, apart from the insurmountable speculative difficulty of the event, ignoring the fact that the animal's cry of natural excitement offers about the most melancholy outlook for future development or variety that is offered by any natural phenomenon. The natural passion is always the prison-house of the cry it impels forth, shutting it off from the possibility of furnishing a germ of future

development of any kind. But the fact of the copious supply of vocal tone in the beginning would render it necessary to assume that cries of excitement did not merely break through the walls of their prison-house, but became infused with a mighty spirit of development from somewhere. Taking up the chain of psychological events arising from the conditions of nascent musical pleasure at the point where we reached the animal's cries, let the reader observe that the same excitement which impelled to these cries also impelled to rhythmic beating, and thus produced a persistent auditory model for the cries. The inducement to break the cries from their purely natural character to follow the model of the sounds produced by beating could not help working its way in time without any conscious effort on the part of the But here we reach a point on which the facts bearing upon our problem will hardly ever justify a fixed opinion, namely, whether or not the rhythmic sounds were of musical quality before they induced such vocal imitation as could become effective towards establishing the elements of speech. It will easily be perceived, however, that the point is not of fundamental importance. There was certainly more musical possibility in the vocal apparatus of any likely progenitor of man than in the first rude objects of percussion. If this apparatus were drawn to adapt itself at all to a rhythmic succession of sounds it would produce better musical sounds than its model. All that is necessary here is to indicate how the walls which penned vocal utterance within mere animal habits or passions were broken through. Of course we know as a fact that tones of musical quality and in musical relations were produced in time from objects of percussion, and that the vocal apparatus succeeded in adapting itself to the production of these; and it is obvious that the activity implied (destined to become the activity of song) would more and more effectually narrow the opening into consciousness for elements of sensation which would be destructive of the pleasurable feeling which is the foundation of our study.

I will now venture to bring our result—namely, the excited cries' being drawn into the mould held forth by tones produced from rhythmic beating, at a time when the animal-consciousness was steeped in the emotions belonging to the actions out of which the play-excitement sprang—into relation with the belief fostered by philological research, that the ultimate roots of language, the "vocal signs," are the signs of concepts of actions, and into relation with the mysterious union existing between music and speech at the earliest

glimpse which ethnology or history obtains of them. was there favourable for the origin of concepts in the circumstances of this vocal production of tones? If we regard only the superficial aspect of the musical inducement to a persistent repetition of the vocal tones, it is evident that the conditions are laid for the tones' becoming mnemonics of the actions they were associated with in all the members of the community that let the elation of success fuse with, and find an outlet in, bodily play-excitement. If we follow the deeper psychological results of the production of tones, we shall see at work a portion of psychic machinery which avoids all the worst of the difficulties that have hitherto blocked the way to an understanding of the purely natural evolution of concepts with their fixed vocal signs. How a vocal sounding mark should ever become fixed in the consciousness of animals (not yet possessing the specially human characters of mind) to the vague, manifold, presentative elements of a concept, is a problem which may be solved in the light of the psychological conditions of this vocal production of tones. If we sum up the results of the nervous outlets of the excitement (bodily movements, cries, rhythmic beatings), it will be clear that—(1) the movements in imitation of actions, besides tending to keep up the general and diffused sense of the elation of success of the actions, tended also to specify particular actions in consciousness. The sensational and perceptional details of the actions as they were imitated would inevitably bring their peculiar emotional background into consciousness, and so far particularise the play-excite-The war-dances and phallic-dances of savages demonstrate the truth of this, for they often so fully particularise the actions imitated in play, that the play-excitement dies away in a natural passion. (2) The excited cries' having become rhythmic and tonal along with the rhythmic tones produced from external sounding bodies, besides fixing themselves upon the presentative elements in consciousness, tends also to preserve the stability and integrity of the pleasure clinging to them against any destructive sensations or percep-My space is too near its limit to permit me to do more than invite the reader to think a little of the subtlety of this economy: how the sounds which held the animals' attention with their sustained temporal succession and their pitch-relations had by psychological necessity to become, every moment that they did their shielding work, more and more successful reproductive agents for bringing the vague, pleasurable, presentative elements of past actions back to consciousness again, when the animals' life-cares or

brutal instincts had driven them away; how the sounds became able to keep these elements together in the fire of an intensely pleasurable feeling until they had time to fuse

into the wonderful phenomenon of a concept.

My conclusion, plainly, can be nothing else but that the psychologist will advance upon the philologist's negative definition of the ultimate roots of human speech. The philologist says that roots are elements of words which analysis can reduce no further. The psychologist may say that the root is not ultimate for him. He can trace it back to the musical tones which became reproductive agents of the vague presentative elements of actions as they had been repeatedly held together in consciousness by the psychological machinery of nascent musical pleasure. He can trace the root back to the rhythmic sounds that savages produce when they beat sonorous bodies amid the play-excitement which was originated through communal elation of the success of communal action, and which had become, at the earliest glimpse we obtain of it, involved, like the oldest and most sacred of the words it gave birth to, in the race's traditional custom of festal celebration.