

Musical Ability

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It is generally supposed that musicians are born, not made. A modern student of heredity, for example, writes of musical ability:

This quality is one that develops so early in the most marked cases that its innateness cannot be questioned. A Bach, matured at 22; a Beethoven, publishing his compositions at 13 and a Mendelssohn at 15; a Mozart, composing at 5 years, are the product of a peculiar protoplasm of whose tenacious qualities we get some notion when we learn that the Bach family comprised twenty *eminent* musicians and two-score others less eminent..

Following out this line of attack, let us look a little further for evidence that musical ability is innate. Of the Bach family I shall not speak, for its history is well-known: it presents an amount of musical genius unrivaled in history. But if we examine the ancestry of other great musicians, including some of those mentioned by the writer just quoted, we find little to indicate that their preeminent musical ability was due to any extraordinary combination of heredity.

Among such cases is Haydn. His father was a wheelwright, his mother had been a cook and, although both were fond of music, neither could be reckoned a musician as we diagnose the term. Schubert is another example; and the immortal Robert Schumann had no ancestors who were even slightly addicted to music. Even the musicians who can point to a musical parent or grandparent have, in many striking instances, seemingly failed to transmit to their offspring even a trace of their stupendous

ability. Another interesting point which strikes even the casual observer of the musicians of the past is that musical heredity seems to be anti-suffrage. When heredity might seem to have caused musical ability in the sons, the daughters seem usually not to have been extraordinarily benefited; and in this connection it is also of interest to note that, while many women have excelled as vocal or instrumental performers, the originality necessary to musical composition has been conspicuously lacking and there are no women who come even within hailing distance of Beethoven, Mozart, Handel and a dozen other men we might name.

A Common Inheritance

Now, I do not propose to argue from these facts that musical ability is not a matter of heredity. I think it is a matter of heredity, but that *almost everyone possesses the heredity*. Twenty years of teaching give me reason to believe that, although great genius will doubtless continue to be sporadic and unaccountable, real musical ability is much more common than has been supposed. Genius, like murder, will out. It cannot be suppressed by environmental obstacles, but talent, often overlooked, may be discovered and brought to great perfection. It seems, indeed, that music, like poetry, may be a primal talent; that, as all children are born poets, they may also be born musicians and also, very similarly, that as 99% of humanity lose all poetic faculty during the years of early childhood because of the artificial conditions of modern child life, so the very large majority of children lose their native musical ability through lack of training of the ear

Acquiring a Supposedly Inborn Gift



Positive Pitch—the ability to name a musical note when it is sounded—has often been considered a rare, inborn trait which marked its possessor as particularly fortunate in the inheritance of musical ability. Recent evidence, however, indicates that it is by no means a sharply inherited character, but a function of the mind which can be acquired by almost anyone, with proper training. The children here photographed are acquiring Positive Pitch in an interesting way: one of them sounds notes on the piano, the two blindfolded ones name the notes, and the boy at the table then locates them on the staff, by means of wooden symbols. (Fig. 4.)

and mind during their most susceptible period. Education should come to the help of heredity to reclaim and develop man's natural gift.

We are all born with ears and they are formed for hearing as the eye is for seeing; they are, moreover, capable of hearing far more and better than they are accustomed to doing. We carry them around with us everywhere, but we really pay very little attention to them. We let our children speak in a slipshod, indistinct way and we

listen carelessly. We leave good talking and singing to the professional musicians and orators, which is just as unreasonable as to leave good seeing to the professional artist and poet. We are only

just beginning to learn what the normal ear is capable of, for instance in the matter of Positive [absolute] Pitch, that is, ability to recognize and name musical tones. The lay public has been accustomed to consider Positive Pitch as a gift wrapped in the exclusive tissue of genius and doled out to the ultra musical only. One who can enter a room where a musician is singing or playing and say, "He is singing high C, or baritone B," has hitherto been looked upon as a prodigy. This is by no means necessarily true. By proper training this power may be acquired, speaking very conservatively, by 80% of normal children. Children who have been thought to be entirely lacking in musical ability, some of them apparently tone deaf, after a few months of training are able to sing "Center C" on demand and to recognize it when it is played or sung and they soon become equally familiar with the other musical tones.

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Hundreds of Cases Studied

I base this statement on the experience of having taught some hundreds of children; the corroborative experience of the teachers I have trained would add hundreds more cases. Certainly I do not say that every one can acquire, by training, this once mysterious gift of Positive Pitch, but I know that most people can do so, if they begin at an early age.

This surely indicates that musical talent is much more widespread than has been thought and that the

cases we have quoted of the appearance of wonderful ability in the children of seemingly non-musical parents, may be merely instances of the inheritance of latent characters.

Some children will, of course, not acquire Positive Pitch as quickly as others. There are children who do not so easily learn to write English from dictation as others; but do we therefore allow them to give up and say that they cannot be taught? By the time he is ten or twelve any normal child can learn to write correctly from dictation five hundred words or more. Now, taking every white and black key on the piano there are only eighty-eight. Given a fair chance and a mind unmesmerized by the idea that reading music and Positive Pitch are difficult and require special gift, a child may as easily see mentally the sign for any sound as he sees the words that he hears you dictate to him in English.

That the results of music study have hitherto been so meager is due to parental indifference and the faultiness of the methods of teaching music. Teachers have insisted that the child should not be allowed to play the piano by ear, claiming that this will ruin his musical ear and make reading by sight impossible! Fancy a mother fearing that if her child speaks English first by ear, he will never learn to read it! As music is primarily an art making its first and greatest appeal through the ear, it is unreasonable to suppress the interest and initiative which naturally appear first through the ear and then, later on, by laborious ear training lessons to try to get back the interest and power which we have ignored during the most formative period of the child's life.

Music Easily Acquired

The acquirement of musical education is or should be comparatively easy, not only because of the smallness of the musical vocabulary (consisting as we have said of only eighty-eight tones), but also because of the universality of its notation. The present system of musical notation, though perhaps not perfect, has this great advantage, that it is the same all over the civilized world, so that when one learns it in America, the musical thoughts of France, Spain, Germany, Italy or Russia are equally accessible. A child learns to read English easily and well during the first six years of his school life (that is from the age of six to twelve); he

Learning the Time-Divisions of Music

A sense of rhythm has long been considered innate, but recently psychologists have brought forward some evidence to indicate that it may be merely the result of early training. Whether this be true or not, it is certain that many persons have a defective feeling for and knowledge of the time-divisions of modern music. Children are now being taught the value of half-notes, quarter-notes, rests, etc. by means of blocks of various lengths, and the mental conception of these things becomes so clear and simple that they are allowed to give physical expression to what they have easily understood, by marching, clapping and acting the musical passage. (Fig. 5.)



might just as easily learn during the same time to read fearlessly and well the universal language of Music.

If you were to visit a public school and express surprise that the wash-woman's daughter reads as well as the child of your own cultured neighbor, you would be told that "thanks to the System," the advantages of birth are being wonderfully counterbalanced; that, though the effects of a few generations of culture may tell in other ways, no one is dependent upon his forefathers for ability to read, spell or write. Scientific teaching makes these things possible to all mankind.

Exactly as normal is the ability to learn to read and think music.

The first conclusion, then, which I venture to lay before students of heredity, is that they have, with the material at present available, no proper ground for drawing conclusions as to the distribution of musical talent in the population; because there is a great deal which is merely latent, having been denied the possibility of expression. The inheritance of a trait and the expression of a trait are two different things. No student of heredity would consciously ignore the distinction, but in the study of the inheritance of musical ability they have unconsciously ignored it, and therefore their results do not correspond with the reality.

Time and again, as I have said, I have taken children from families where there was apparently no musical ability, and where the child himself was supposed to be utterly deficient in music. The student

of heredity, I fear, would unhesitatingly have set down such a child as non-musical because of failure to inherit the prerequisites. Yet this child, after being educated in a natural manner, has acquired Positive Pitch, has learned to compose, to express his own feelings musically, and to analyze compositions which would baffle many teachers.

Thus, although a child may come from a supposedly unmusical family, it by no means follows that the child cannot develop musical ability of a high order. On the other hand, what of the cases where the child of two musical parents fails to show talent?

I have in mind one striking case of this sort which I met years ago. The father was a pianist of international renown, the mother a gifted musician. They hoped, of course, that their child, with its double inheritance, would surpass either one of them: they confidently expected such a result. The child was set to studying music at an early age, but made no progress whatever; he was declared to be dull, uninterested, hopeless.

I was naturally curious to find the reason for this state of affairs: and they were not hard to find. Almost the first inquiry I made disclosed the fact that the child showed a dislike for tedious hours of practicing, and was therefore frequently shut up in a dark closet for an hour or two at a time, to instill in him a greater love for his lessons, and a spirit more obedient to the wishes of his parents. Small wonder that he lost interest in music; and without interest, without an eagerness to learn,

A Lesson in Modulation



As against the view of extreme eugenicists, that musical ability is an inherited trait, which you either do or do not get from your parents, many psychologists claim that music is a universal, natural method of self-expression, and that every normal individual possesses the ability to develop it just as he possesses the ability to develop the power of expressing himself in English, or whatever his mother tongue may be. The numerous individuals who are considered or consider themselves "absolutely unmusical" are held to be the results of lack of education, or wrong methods of education, in this form of expression. Mrs. Fletcher-Copp has found that children, if allowed to develop their ability in a natural way, can soon reach achievements that many adults of long training cannot surpass. This photograph shows one of her means of teaching children modulation. By this simple piece of apparatus, on which different chords can be represented by movable pegs, no less than fifteen different simple ways of modulating can be easily taught to any child. With such a stock of experience, he will know more than the average teacher. Of 700 music teachers, Mrs. Fletcher-Copp says she found only three who could modulate easily and happily, and they did not pretend to understand what they were doing. (Fig. 6.)

little can be done. But where the interest and will exist, it is an unusually defective child that cannot acquire a considerable amount of musical ability; and the same to a less extent holds good of adults. Perhaps it may be of interest; I'll explain in a little detail the views on this point to which twenty years of teaching have brought me.

If the motive for studying music be made clear and the method of teaching the sound, we may count confidently on the results. Browning says, "It is better Youth should strive, through acts uncouth, towards making, than repose on aught found made." We have made the mistake in music teaching in the past of putting the finished product of another's mind before our children and forcing them to copy it. Behind this mistake is the wrong motive. The main idea was to force the child to copy, parrot-like, at the earliest possible moment, the thoughts of some one else. Music was looked upon merely as a means of adornment, as something to be plastered on the outside to add to the attractiveness of the child. The motive is altogether wrong. Not slavery to someone else's ideas but freedom to express one's own ideas should be the aim. Watch a tiny child seated on his mother's knee. She has been playing and he has been told to keep his little paddies on her wrists, but presently he pushes her hands aside and substitutes for the beautiful composition his own incoherent pappings and poundings of the keys, striving "through sounds uncouth" to express himself; but, alas! he is stopped. It is as though a two-year-old should toddle to his mother and stammer with his crooked little tongue, "See, mama, ye sun is playing hide and go seek wif me," and the mother should say, "You must not talk that way, my child. You should say, as Homer writes, 'Lo! Dawn the rosyfingered, opes wide the gates of Day.'" What would be the effect of this classical method of teaching English upon one's joy and proficiency in acquiring the mother tongue?

Methods of Education

The motive, then, for learning musical notation must be for the purpose of freeing the child by giving him the means of expressing his own ideas on paper as well as giving him pleasure in reading easily and joyfully the thoughts of others. The means used for the attainment of these ends are most important. They must cultivate as many of the child's senses as possible. If he can feel the symbols as well as see them; if he may see them in a big, tangible form; then through this touch contact and through this ready sight, it occurs to him to place the

symbols thus and so and then to find out on the piano what the symbols so placed by himself will express when sounded.

We, therefore, give the child notes of heroic size to play with and a loose-noted key board to take to pieces and become familiar with by putting together again. We have further invented games which call into play qualities of mind the lack of which has wrecked many a musician in the past; games which cultivate the ability to think calmly, coherently and quickly before others, games which require rapidity of thought and action and which develop unselfishness, generosity and balance, mental, emotional and technical. It was not music which made for the lack of these qualities as has often been insinuated; it was a lack of the most valuable traits of a true musician, missed by acquiring a certain musical veneer without real, scientific, educational growth.

In the past to be a musician was almost a synonym for being characterized by nervousness, lack of balance, general peculiarity and uselessness in practical life; but, to repeat, these deficiencies were not because of music but rather proved a lack of musical development in its entirety.

If we will consider music as a language, not so much of the intellect, as of that finer, higher, more spiritual part of us, a language which this soul of ours

needs; and if we will then consider all the sensible things we do to acquire other languages and try these same things for the attainment of the musical language, we may make some interesting discoveries. When a 5-year-old child speaks English it is because he has thought it and has his own thoughts to express. First in music, then, a child should be led to think his own music, to speak his own music before he is taught to copy. He cannot become an independent thinker by first being wholly and solely a copyist. Improvising and modulation in music are equivalent in English to power to express the sense contained in a prose paragraph or in a verse. It is like taking six adjectives, three nouns, two verbs, and three prepositions and making a sentence out of them. These rudimentary exercises in English lead to more or less freedom in the art of expression of ideas if we have any to express later on. We do not say at the outset that there is no earthly use in having the child participate in such and such exercises because he will never be an author; the being an author is submerged in the practical usefulness of self-expression. Precisely the same attitude should be taken in regard to music if it is to be allowed to do the good and be the good to us that it may be. When we take an idea from a poem or an essay and express it in our own words, we are improvising in English. Are we never to do this in music? Can we get nothing except the literal thought word for word as we read it?

Composition of a 13-year-old Boy

Acting on the principle that music is as natural a form of self-expression as are words, Mrs. Fletcher-Copp tries to get children to express their feelings in this way. This composition represents the thought of a 13-year old boy after studying a picture called "The Last Outpost," in which an Indian who has been driven from the ancestral hunting-ground of his tribe contemplates the waters of the Pacific with the thought that if he is again forced by the white man to move, it can only be into the ocean. (Fig. 7.)



The Value of Music

The value of learning music is not in the number of pieces one may play, but in the musical thoughts one can think. Real music is self-expression and, far from making the child self-centered, it should make him most sympathetic of the efforts of others. A child who has made his own Reverie or dream has the keenest appreciation of a "real composer." We know that to trim a hat does not cause one to be unappreciative, but the reverse, of a well-trimmed hat. So it is with cake-making, dress-making, story-making, poem- and music-making. We do not complain because so few of the boys and girls, who during their school days wrote essays on "The Dog," "Our Country's Flag" or "A Visit to Grandmother," fail to become authors or authoresses. We are satisfied if they are able to express themselves well in spoken or written language as required by the demands of every-day life. But there are times when every human being feels the need of a language beyond the power of words. Plato said, "Music is to the mind what air is to the body." Now air is a necessity but we moderns have not believed music to be a necessity. We have considered it merely an accomplishment. How much more it might be! Just the other day a boy of 13 brought to me the little composition which is reproduced in Fig. 7. He had seen the picture weeks before of a lonely Indian standing against the sunset sky, gazing in calm desperation into the ocean at his feet. This would be the next move if he were ordered further west. The picture was called "The Last Outpost" and it stirred up feelings in the boy's heart which presently got out on paper (much the safest, healthiest place for them) in the form of this little composition. This is only one example of oh, so many natural outbursts of feeling in music.

Every human being feels at some time or other the need of music, but this music which he needs is not the artificial substitute which has usurped the place of the real thing. Music can be to each only what he is capable of hearing, feeling and understanding. Therefore when

one sits at the piano and plays a Beethoven Sonata which one cannot think, cannot analyze, cannot mentally hear--plays exactly in the manner of the Herr Professor--one is exemplifying the parrot in music and this is an unsatisfactory accepting of the unreal for the real, which gets us nowhere. Man is not the sum total of his words but of his thoughts and it behooves us to stop copying words, words, words in music and to begin to think and to express ourselves.

When we really believe what we say, that "nothing is too good for the American child," we shall give him eight years' training in the public school in self-expression in music and the results will prove beyond cavil the source and cause and meaning of music. They will also, I am sure, leave no ground for the belief now entertained by some geneticists, that musical ability is a rare "unit character" due, as has been alleged, to some "defect in the protoplasm" which only a few families possess; they will show on a large scale what my own experience has already made clear to me, that musical ability is part of the universal inheritance of man, just as the ability to talk is, and that the differences between individuals in respect to it are due much more to training than to differences in the heredity.

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