II.—THE FESTAL ORIGIN OF HUMAN SPEECH.

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"WORDS are something," says Lamb, in his Chapter on Ears, "but to be exposed to an endless battery of mere sounds; to fill up sound with feelings, and strain ideas to keep pace with it . . . to invent extempore tragedies to answer to the vague gestures of an inexplicable rambling mime—these are the faint shadows of what I have undergone from a series of the ablest-executed pieces of this empty instrumental music."

Here is a reflexion of the gap which now exists between the sounds of music and the sounds of speech. But it could never have met the eyes of a modern ethnologist without awaking the thought that it was not always thus; for, on the contrary, the habits of music-making are found to have a closer connexion with speech, the lower down we go in the scale of human development. With the majority of modern scholars, no less than with Lamb, the connexion between measured sounds and speech is lost sight of after the "perpetual cycle of declensions, conjugations, syntaxes and prosodies" has ceased to revolve in their memories. And if it were kept in view, the measured sounds would not be thought of as belonging to music in any way. Certainly it might be remembered that (*est etiam in dicendo cantus obscurior*) "there is an obscure kind of singing in speech," and that *prosody* means "a singing accompanying the words," but for all that, words are one thing, and an endless battery of mere sounds is another. But see how the American Indian filled up sound with feeling and made ideas keep pace with it. "Long before it comes to his turn to utter his stave or part of the chant, his mind has been worked up to the most intense point of excitement. His imagination has pictured the enemy, the ambush and the onset, the victory and the bleeding victim writhing under his prowess. In thought he has already stamped him under foot, and torn off his reeking scalp. It would require strong and graphic language to give utterance, in the shape of a song, to all he has fancied, and sees and feels on the subject. Physical excitement has absorbed his energies. . . . The inspiring drum and mystic rattle communicate new energy

to every step, while they serve by the observation of the most exact time to concentrate his energy."¹

In this, and in nearly every other report of aboriginal music-making, one meets with the opposite pole of Lamb's experience. Here there is an approach to madness from the very overflowing of thoughts and feelings. Here it is the battery of sounds that is something; and the words almost nothing. Aborigines are found uttering measured sounds with no meaning at all for hours;² sometimes, the sounds possess the meaning of a single word;³ or, again, the meaning of a phrase.⁴ But in every case the sounds appear able to fire the imagination with the deepest meanings.

Can this phenomenon be interpreted? Can it be made out why feeling and imagination gather around musical sounds and measured movements, the more freely, the lower is the stage of human development? This paper is written in the belief, and with the intention of showing, that it can.

It is well known that the conditions of feeling and activity out of which we find music growing, everywhere partake of a festal character. In their most exciting and animating forms these conditions belong to tribal glorification over the achievements of heroic ancestors or mythical gods; but there are scores of smaller inducements to festal excitement. Birth, age of puberty, marriage, death, the success of a hunting or marauding enterprise, in short, every event of life and nature which has awakened the reflexion that distinguishes man from brutes, is dwelt on through the means of festal excitement, and is thereby connected with the measured sounds and movements of aboriginal music.

Now what good were measured sounds amid the wild excitement of these festal players? They could bring no distinct messages to the mind, and certainly they brought no alcoholic fumes to the brain; although the behaviour of the festal-players under their influence often bears the stamp of intoxication. What was there in measured sounds which could so well appeal to the savage nature that they are found to be deeply engrained in the habits of festal utterance and movement of every known tribe? Let us return to the Chapter on Ears.

¹ *Schoolcraft*, Ind. Trib. of N. America, pt. ii. p. 80.

² *Journ. Anthr. Inst.*, vol. xii. 892, xiii. 441, xiv. 806.

³ *Ibid.*, vol. xii. 458; *Schoolcraft*, pt. i. 898.

⁴ *Mém. de la Soc. Eth.*, vol. ii. pt. ii. 92; *Schoolcraft*, pt. iv. 71; *Kepel's Ind. Archipel.*, vol. ii. 164.

"To music it (the ear) cannot be passive. It will strive—mine at least will—spite of its inaptitude, to thrird the maze; like an unskilled eye painfully poring upon hieroglyphics. I have sat through an Italian Opera, till, for sheer pain and inexplicable anguish, I have rushed out into the noisiest places of the crowded streets, to solace myself with sounds, which I was not *obliged to follow*, and get rid of the distracting torment of endless, fruitless, barren attention!"

This passage tells the truth pitilessly; if one hates and curses them for doing so, musical sounds will, before and above all else, attract attention. And if one searched through a world of possibilities as to what could be the first impulse of making measured sounds, he would find no answer at once so simple and so satisfactory as that it was an impulse to attract and absorb the attention.

But what good was it to our festally excited ancestors to have their attention absorbed? We might refer to the Hindu Yogis who have found ecstatic delights in absorption; but they had reached a comparatively high stage of human development. We have to consider a horde of savages in the unknown time when they first began to form the habits of festal excitement. Now one of the mental characters that has given the savage the name "wild" in common with untamed animals, is the fearful, startful, and untrusting way in which he directs his attention to his surroundings. And whatever helped to absorb his attention would help to free the feelings, at the bottom of the festal excitement, from the small promptings of animal fears and appetites, and thereby increase, or at least sustain, the wild pleasures of the excitement. Therefore, if a horde once acquired the habit of festal excitement, they would have an inducement to bring regularity into the movements and sounds produced through the physical energy of the excitement. Without implying anything of the nature of conscious intention or choice, without implying that they possessed the power of speech, we may fairly assume they would be driven, at each revival of festal excitement, to feel out a way of making the sounds more and more absorbing.

Supposing that articulate speech is still only a possibility of the future, let us ask, what were the means in reach of the players for promoting the absorbing efficacy of the impressions coming from the play movements?

They could bring the movements of body, beats of sticks, stones, &c., and cries, into a more or less regular succession. But as we are at an exceedingly low stage of mental development, we must not imply either the will or the way

to make good sounding bodies, *i.e.*, musical instruments. We must fall upon the means which lie nearest to each player for making absorbing sounds, namely, their vocal organs. What a scope of variety and contrast lay in these! There were the various changes of stress consequent upon the most trifling jerk of body or of abdominal muscles; the changes of pitch and timbre consequent upon the modification of position in the vocal organs; and lastly, but most important of all, the varieties and contrasts of articulation which lay in the power of fauces, tongue, palate, teeth and lips.

If the unconsciously working impulse to find as much absorption as possible through successive auditory impressions is not a fiction, the conclusion is inevitable that articulation must result from it. And however poor were the first vague attempts to articulate the uttered cries, the progress of muscular skill in producing similar checks in succession would have the same impulse behind it as induced the articulation to begin. The muscles of the vocal apparatus would gradually habituate themselves to the easiest manner of checking the vocal sounds;¹ and the movement of lips toward each other, or of the tongue towards palate and teeth, would get educated to the production of the same checks, because their similarity for the ear would at first satisfy the dim, unconscious impulse to obtain absorbing elements of sensation in conjunction with the play excitement.

In asking what was the next step of development which an impulse like this could effect, we must not imply that it had already created any distinct consonantal articulation before it began to develop other modifications; for instance, those of pitch and stress. The principle which embodies this blind impulse gives us no permission to lay down a chronological order of development. On that account, in the above question, "next" only means "another" step. Again our ethnological facts will guide us. The facts about the rudest stages of festal play leave no room for guessing another important direction of development which sounds took to increase their attention-absorbing power. However poor, from a musical point of view, be the results of the beating of the rudest music-makers, they are found modifying some sound in the continuous succession; and they bring in this modification at more or less regular intervals

¹ Without regarding the fact as important evidence, it may be mentioned that savages are found checking the vocal sounds with their hands—"and his yells uttered quick, sharp, and cut off by the application of the hand to the mouth" (*Schoolcraft*, Ind. Trib., pt. ii. 60).

in the series—I mean the modification caused by an increase of stress in the blow struck. The dimmest expectation of this modified sound in the series would mean an advance in absorbing effectiveness; and this would ensure an effort to maintain the modification and make its recurrence regular. Beyond a succession of mere units of sound, there would now be a succession of groups; the regularly recurring modification marking each group of, say, two, three, or four sounds.

To produce a similar modification in the vocal utterance required only a jerk of the breath, and this means is found to be employed universally for the function of marking for the ear the accentual groups of speech-sounds.

It is not to be expected that phonetic decay, the clustering of consonants, the shifting of accents, and other inevitable results of the growth of the significant power of syllables, would leave extant many vestiges of this process of the origin of the articulations and stress accents of speech. But it is important to observe that ear-absorbing alliteration and reduplication¹ are most prevalent in the rudest stages of the development of speech; and with regard to the accent of stress, its ear-attracting function clings to it still. A moment's reflexion on our everyday speech will show that the accent of stress calls our attention most pointedly² to the most significant parts of words and sentences.

The notion that the rhythmical and poetical forms in traditional remnants of savage speech are witnesses of a higher stage of human development than that which exists among the savages now, is deeply rooted in popular habits of thinking, but not more deeply than in the views of special scholars. But if it is proved that the rhythmic mould of song is a direct outcome of unconscious attempts, on the part of a horde that had formed habits of festal play, to feel out a means of preserving or increasing the exciting pleasure of festal elation, then rhythmic forms may appear as witnesses of a lower stage of progress than any yet known to anthropological records, namely, the stage of the passage between brute and man.

Let us test the account which has already been given of

¹ Sir J. Lubbock calculates that in four European languages there are only two reduplicated words in a thousand, whilst in primitive languages, there are from 37 to 170 in a thousand.

² Heyse says: "It is a natural law that the more significant elements of our speech should be distinguished from the less significant by a stronger accentuation" (*System der Spr.*, 329; cf. Benloew, *Précis d'une Théorie des Rhythmes*, p. 13; Humboldt, *Verschied. der Mensch. Spr.*, 1880, ii. 170; *Journ. Anthr. Inst.*, vi. 459).

the origin of rhythmic and articulate sounds, by asking, What course of development must the sounds have taken if they were originated and moulded by festal excitement? What was there to make them significant?

They would be most generally associated with the confused elements of sensation belonging to festal play. But to point towards the general emotional states associated with the vocal utterances gives no satisfaction while the question before us relates to the particular meanings which would be fixed upon the utterances. The question to be answered is: What particular sensations or perceptions would, by the strength of their interest to the excited festal players, force themselves first into prominence out of the confused excitement?

The more trouble we take in examining the ethnological facts bearing upon the habits belonging to festal excitement, the more likely we shall be to conclude that among all the events of life which find a sort of play-reflexion in festal habits, the actions of war preponderate immensely. The war-dance is the most prevalent of all imitated actions,¹ and the feelings manifested surpass those accompanying any other actions in their realistic wildness. Besides the guidance furnished by ethnological facts, natural history has always taught that no actions of any animals equal those of war in the wildness of the feelings they excite. As there can be little doubt that the actions of war were at the root of the earliest festal excitement; the perceptions of (1) captured enemies, living or dead; (2) their possessions, females, food, &c.; (3) slain comrades of the victors, must be considered first when we look for perceptions which would, by the strength of their interest to the excited players, force themselves into prominence out of the confused excitement. The hold of such objects upon the interest of all warlike animals, whether they are co-operative or not, makes it quite safe to suppose that any of them might come into prominent notice amid the festal excitement; and every moment during which such objects, connected as they are with the natural appetites of the

¹ Even the African Pigmies (the Akka) performed the war-dance most enthusiastically (Sweinfurth, *Heart of Africa*, p. 129). The predominance of the war song and dance long ago made Langsdorff (Washington Islands) and other travellers think that although many occasions besides war awoke the excitement of song and dance at the time of their observations, yet originally the aborigines only danced and sang on their return from war. And where war-dances are not customary it is generally known that they have been in the past. (See Crawford, *Hist. Ind. Archip.*, vol. i. p. 122.)

animal, could be dominated by the emotional strength of festal play, and kept, however dimly, in consciousness, without firing the train of passions natural to them, would mean the melting away of a link in the chain which held the animals below the possibility of human development. Before the festal habits obtained the sway which they hold in savage communities now, how often must the passions of the lower animal have flooded the yet narrow field of (destined) human consciousness, and turned the activities of festal habit into the old activities of animal life! Unquestionable vestiges of this struggle remain in the festal habits of savages, and in the early history of the festal habits of now civilised races. The realistic frenzy with which imitations of the movements of attack upon enemies, imitations of the passionate movements of wild animals, *i.e.*, sexual, &c., are performed, is certainly a result of the discharge of passions awakened amid the festal habits, through the nerve centres which rule the actual, appetite-appeasing movements. But as long as festal excitement could last, it remained the conquering element of feeling, and was able to draw all the energy of actual passion to promote its own inherent tendencies. Some terrible examples of the moulding of animal-appetites and passions to the tendencies of festal excitement exist in accounts of the sacrificial cruelties of early festal celebrations, and revolting examples of it in accounts of "phallic rites". At whatever stage the traditional racial habits of festal celebration began to acquire symbolic meanings in the minds of celebrants, there can be no doubt, I think, that (1) bloody, human sacrifices, (2) sacrifices of animals for food, and sacrificial feasts generally, (3) phallic rites, were in their origin the results of (1) the passion for slaying enemies, (2) the appetite for food, (3) sexual passion, being drawn into the fire of festal emotion.

While considering this colouring of festal excitement by particular animal passions, we must not lose sight of the absorbing elements of sensation, the regular movements of body, the rhythmic sounds of sticks and stones, the rhythmic and articulated cries. It is perhaps impossible to estimate too highly the value of this absorption for enabling the festal excitement to mould the natural passions according to its own tendencies, instead of being destroyed by them.

Besides the perceptions from captured objects of desire, it was inevitable that the great changes of nature which intimately affect all animal life, should at one time or other obtain prominence in festal excitement. How many

circumstances helpful in gaining a victory over enemies or wild animals, or conducive to the welfare of the horde in other ways apart from fighting or hunting, would be noticed occurring in connexion with the changes of light and darkness, summer heat and winter cold, the storms, the rising and falling of rivers, and fire?

The answer to the question from which we set out, namely, What would be the history of the articulated sounds as they developed in their full rhythmic mould? may run as follows. They came into existence through the help they offered in preserving the elements of feeling belonging to festal play, and it is impossible that they should not go on with their function when the elements grew more distinct, and when the festal excitement was coloured by particular perceptions—now a slain leader, again captured booty; now the thunderstorm, again the bright moon. In the early history of articulate sounds they could make no meaning themselves, but they preserved and got intimately associated with the peculiar feelings and perceptions that came most prominently into the minds of the festal players during their excitement. Articulate sounds could impose no particular order upon the confused feelings and perceptions of festal play; they could only wait while they entered into the order imposed upon them by the player's wild imitation of actions, and then preserve them in that order. Articulated utterances, in short, merely took up the acted stories of deeds of glory which began in wild confusion when festal play first began, but gradually found order through the festal impulse to bring all the sensations and perceptions that asserted themselves repeatedly into the order peculiar to fighting, destroying, rapacious warriors.

These are the considerations which oblige us to run counter to the notion that song, or rhythmical and poetical forms, must be supervening embellishments of speech which imply a certain height of civilisation. We have tested the account given of the festal origin of rhythmic forms and articulations, by leaving sounds aside and following the inevitable course of cohesive order which would take place among the sensations and perceptions dominant during festal excitement; and we come to the very cohesive principle which holds together whatever ideas there are in aboriginal songs and myths, namely, the principle of action—generally the impulsive action of beings in whom the lowest animalistic impulses are mixed up with impulses of a human character. But it remains to be asked whether there was anything in the festal impulses that will account

for the power which rhythmical and articulate utterances acquired in marking the details or relations of the actions, for example, their relation to individuals.

In the accounts we possess of festal excitement in the lower stages of human development, it is marked by no impulse so universally as by the impulse to glorify the strength and prowess of the community through its prominent members, ancestral or living. How could it be otherwise with excitement which was made to gather up in itself all the wild communal feeling of a horde in actual war? If a horde that had begun to acquire the habits of festal excitement had in other respects only the intelligence of wolves or jackals, the excitement must in time give birth to and nourish a desire to assert at least one grammatical relation of an action of war, that is, its personal relation.

Whenever a powerful and bold fighter asserted himself in actual war, the seeds would be sown which must grow into a desire to assert this fighter and his prowess amid the excitement of future, festal imitations of the actions of war. Many circumstances, which must occur at some time or other, would favour the growth of this desire.

First may be mentioned the self-assertion of the strong individual. (It is a distinguishing characteristic of the savage hero to boast of his deeds during festal excitement. Nothing brings the character of Homeric heroes nearer to that of the leaders among contemporary savages than this personal assertion.)

(2) The absence of the brave fighter at the time of the festal excitement which followed his brave deeds.

(3) The presence of his dead body. (It is hardly necessary to point to the universal prevalence of funeral dances and sung praises of the dead hero.)

(4) The imitation of a particularly great feat of a strong individual by one or more of the players who saw it performed in the battle. Any of these occurrences would tend to force the image of a particular fighter into the consciousness of the excited players while it was occupied with the general conception of victorious battle, and thus make their emotion and its expression in imitated actions and vocal utterances, an acted song of individual praise.

When a dog rushes savagely upon another and passes other dogs on his way, he acts upon the principle, "that, not these," quite as efficiently as if he could utter an articulate sound expressing the grammatical relation. A ruffian in a passion might rush upon another man, and though he possesses the articulate material and the mind for marking

the personal relation of his intended action, it avails him not to do so ; he may only growl like the dog. The animal instincts guide to their object as well without the material for marking personal relations as with it.

This is very obvious, but one who bears it in mind will better perceive the superiority of the festal impulse over any life-caring impulses in regard to creating the desire of marking the personal relations of an action—to say nothing about supplying the vocal material. Without the vestige of a conscious intention behind it, this impulse induced the players to dwell on some sort of an image of an individual in relation to the actions imitated, whilst rhythmical and articulate utterances were absorbing ear and mind, and, at the same time, getting fixed upon the perceptions which they were associated with repeatedly.

The fixing of the vocal utterances depended a great deal, perhaps, upon those who surrendered themselves most completely to the festal impulses. The impulses to realise the actions of the mighty members of their horde with all the detail possible, and to preserve the regularly recurring movements and utterances in their habitual order, would be followed with most zest by the specially clever actors and celebrants, the prototypes of medicine men, dancing dervises, shamans and yogis. The ecstatic results of the aural reverie or absorption would be felt most by these, and lead them to make the greatest efforts to furnish the sounds to sustain it. These would most keenly feel the disturbance caused when a group of syllables which had been associated repeatedly with one action was produced with another. The disturbance would consist of an interruption of the smooth absorption, and those who felt it most would try to avoid what caused it ; that is to say, they would keep particular groups of syllables in regular connexion with particular actions, and thus, without any object besides the blind following of the pleasure of festal elation, they would be gradually endowing the syllables with meaning. I will try to illustrate by such syllables as are met with in savage choruses. But it must be remembered that in the earliest stages of the development of articulation, the syllables repeated were not like the syllables of a savage chorus as they are now known. If the syllables of a savage chorus were meaningless a century ago, the traveller might confidently expect to find them meaningless now. In fact it would be as great a wonder to find that they had acquired meaning, as it would be to find that the syllables *Fal-la-la*, or *Tira-lira* ! &c., were now settled verbs or substantives, because they were used for

refrains in the middle ages. These syllables were not wanted for significance, for language was developed already.

The syllables whose history we have to follow were not sung by developed men in possession of other articulate syllables with conceptual meanings clinging to them and rendering them fit to mark any object they cared to mark. Suppose then, that, with no concept-bearing syllables in existence to compete with them—

(1) *Kín-wi-ki-kín-wi-ki-wá-ya-ya* are repeated during the wild festal imitation of the setting out of the hero and his horde, their passage over mountains and rivers, &c.

(2) *Gá-wan-ga-gá-wan-ga-wá-ya-ya* are repeated during the imitation of their coming in sight of enemies, attacking and destroying them.

(3) *Ví-ni-ka-ví-ni-ka-wá-ya-ya* are repeated during the imitation of the seizure of the enemies' possessions, eating, and otherwise satisfying appetites.

With each revival of the excitement of this festal play, the elements of feeling and imagined action must become more and more cohesive; they must become like a new instinct or habit, ready to flash into active sympathy in response to any impressions of nature akin to them. Thus, the vague groups of sensations held together by festal absorption in the actions of the strong fighter, as he fell upon enemies and destroyed them, must sometime be awakened into activity by the sight of a ravaging fire or the destructive overflowing of a river; and as sure as the group of dramatically cohesive sensations were awakened into activity, the articulate utterances, which were a part of them in the festal excitement, would accompany them. In this way, from being connected, as a sort of aural connecting bond, with the confused concept of *destroying*, *gáwanya* would become its vocal mark, and be uttered when any objects of nature gave impressions which could, however faintly, touch the spring of the latent mass of sensations belonging to the festal imagining of the destroying warrior. The same may be said of the syllables of the other two phrases in the illustration. A mass of sensations rendered slightly cohesive as a concept of *wandering forth* would be ready for sympathetic response to impressions conveyed by, say, a wandering herd of the quieter sort of animals, moving clouds, the sun or moon; and the syllables *kínwíki* would become their vocal sounding mark. A vague concept, which we would describe as *eating* or *enjoying*, would be ready for sympathetic response to impressions conveyed by, say, animals that were oftenest seen satisfying their appetites; and *vínika* would become their vocal mark.

It will be observed that there was plenty of time for any little affinities of impression to assert themselves in the consciousness of these festal players. For example, if the affinities between impressions of moving clouds and the cohesive group of sensations belonging to the festal imitation of the setting forth of warriors, did not assert themselves at once, or were vaguely felt and then lost again, the cohesive group would be still held together, ready for any favourable circumstances of the future. The festal impulses which drew the groups of sensations into cohesion did not depend in any way upon the progress in naming objects of nature which was made by the syllables connected with the different cohesive groups. The pleasures which created the festal habits sustained them by their first blind impulses, quite independently of this further turn of development; although in time the results of naming would enter into the heart of the festal excitement, and give it an impetus which it could never receive from the bare rhythmic sounds and movements. Then, the mere ear-absorbing sequences of sound would have to yield to the interests of significance.

It could never have given much satisfaction to a philologist with modern habits of mind to be told that he may begin his interpretations at the rudest possible stages of the development of speech, but he need not think of the problem of its origin, as that is the rubicon between brute and man. Ordinary scientific instincts must whisper to the philologist that the secret of origin would save enormous labours of plausible guessing about those early stages of development which he is allowed to grapple with. For instance, if he is invited to consider a root-period of development, a period of the acquisition of grammatical forms, and then a myth-making period, he might well feel that the problem of origin, like a tough weed that ought to have been cut down at the outset, has sent forth three branches each as vigorous and obstructive as itself.

Yet the masters of philology who have uttered cautions against the forming of opinions about origin had good grounds for doing so. As there was no evolutionistic view of origin which did not look to some kind of life-caring impulses, what use would such views be in face, say, of grammatical forms? What miracles would it require to bring the broken and separate cares of appetite and passion to establish these forms, even if the vocal material and the desire for marking grammatical relations were at hand, and nobody asked how appetite and passion could create them?

If festal habits had not been brought forward to account for the vocal signs of concepts of actions, the problem of the origin of grammatical forms would point directly to them, or rather to the euphonic aspects of them. One who merely glances over the grammatical forms of any primitive language, and observes the great euphonic variety of sounds elaborated out of a few simple elements, must be struck with the fact that a similar phenomenon is displayed by the art of music. In respect of rhythmic grouping, the similarity is complete; and the contrast and likeness between individual sounds and groups in speech display a strong musical impulse in "vocalic harmony," as well as in the contrasts and varieties of consonants. But the guidance offered by these exterior suggestions is of small value in comparison with that offered by a simple pursuance of the principle upon which the articulate sounds acquired meaning.

When particular syllables got fixed upon particular actions they would be brought up with them, and here two chief interests of the festal excitement would begin to clash, the interest of significance, and that belonging to the impulse to make the vocal apparatus produce the easiest possible enticements for the ear. As soon as a rudimentary significance was felt, that is to say, as soon as it was felt as wrong or disturbing to use any but a particular few syllables in connexion with the imitation of a particular action, these few syllables would be brought up with the action, whether or not their production at this moment disturbed the absorption of the ear. The impulse to utter sounds which would attract the ear most easily would be driven to make the best of it by the easy repetition of the syllables used to fill up the rhythmic phrase, after the occurrence of the significant syllables. This filling up of the rhythmic phrase is suggested by the syllables *wā-ya-ya* in the above illustration, if such an illustration is necessary for pointing out facts which are apparent in every stage of the progress of language. In the familiar observation of travellers about the "unmeaning interjections scattered here and there to assist the metre" of savage songs, as well as in the most polished alliterations, assonances, rhymes, refrains and burthens, there can be no doubt that we behold the demands for aural absorption trying to make their way among syllables which have been fixed by significance. Of course, in these later stages of development, we see the simply ear-attracting syllables driven out of the significant phrases altogether, and left to refrains. There could be neither room nor inclination for them among syllables which had

the full power of language. But in the earliest stages of development, when no significance clung to any syllables besides vague concepts of actions, the still meaningless syllables would fall thick about them and become a ready material for signifying the personal and temporal relations of the actions.

With regard to explaining the progress of significance, it would be an obvious mistake to look exclusively toward the working of the blind impulses of festal excitement. When we approach the use of grammatical tools we are certainly at the confines of what could be effected under these blind impulses. Indeed it is a question whether the rudest articulate fixing of concepts of actions would not assert the communicative utility of the syllables. If the sight of a lion touched the spring of the latent mass of perceptions made cohesive by the festal imitation of the destroying warrior, and caused even a fragmentary imitation of the action, and the utterance of a little group of the associated syllables (*i.e.*, *gawanga*), the utility of the fragmentary act or gesture and the utterance must begin to loom in consciousness, however dimly, and make their further use an affair of intention. I shall make no attempt to show how impulses of festal excitement came to blend with conscious endeavours to make distinctions of meaning, or what the results of the blending would be. But it might be shown that the syllables used blindly to fill up the rhythmic phrase after the occurrence of the few syllables which had acquired a fixed meaning were very apt for the marking of grammatical relations.

First, the nature of the problem of the origin of grammatical meanings should be made clear. The elements of the conceptual meanings of actions were held together by the bodily imitation of the actions; but there were no imitated actions to create and combine the vague notion of a personal or temporal relation of many different actions, and fix it on a particular few syllables. What was there instead? The inevitable growth of a conscious effort to distinguish has been pointed out already. But how admirably the blind festal impulses were adapted to meet the conscious efforts half-way! Let us take the fixing of a personal relation as an example.

It is hardly necessary to insist further on the reality of the festal impulse to dwell on the image of a prominent member of the horde during the excitement of the play imitation of the actions of war. The impulse that created headstones and other rudiments of sculpture is not a thing

of speculation. The same may be said of refrain-syllables in aboriginal songs, the syllables, namely, which are brought up unchanged for the mere attraction of the ear, for the filling up of rhythmic phrases after the occurrence of syllables of fixed meaning. At the stage of development which we are considering we have the meaning of different concepts of actions fixed upon different little groups of syllables; and it is obvious that so far as these syllables predicated the actions at all, they predicated them of the member or members of the horde whose image dominated the festal excitement. Now what could prevent some of the continually repeated refrain-syllables from fixing themselves gradually upon whatever vague desire existed to assert a demonstrative or pronominal notion? At any rate (and this is all that is claimed), the refrain-syllables would be a well-prepared grammatical material when a conscious effort to mark a personal relation came to be made. Because, just as the notion of the personal relation floated around successive and different actions, the auditory impression of these refrain-syllables floated around the successive, and different, action-predicating syllables.

The permanent use of one grammatical tool would mean the swift creation of the need of others; and the vocal material for them would be supplied in plenty always by the impulse to supply the articulate food for aural absorption.

One who holds this view of the origin of grammatical forms will, I think, see no impenetrable mystery in the wondrous regularity and euphonic adaptiveness of the grammatical forms of primitive languages; and with regard to cultured languages, it may be remarked that Prof. Sayce quotes late studies by Bergaigne and Meyer in support of his own conviction that a "thoroughgoing examination of the Aryan declension would show that its origin was similar to that of the Semitic noun, the cases being differentiated, as the need of them arose, out of various more or less unmeaning terminations".¹ And again, he says, "when the conception of a locative case, for example, first arose in the mind of the Aryan, he selected some formerly existing but hitherto meaningless suffixes to express the new relation, and so turned a mere phonetic complement, a mere formal sound, into a grammatical inflexion".

¹ *Princ. Comp. Phil.*, 8rd edit., p. 896.