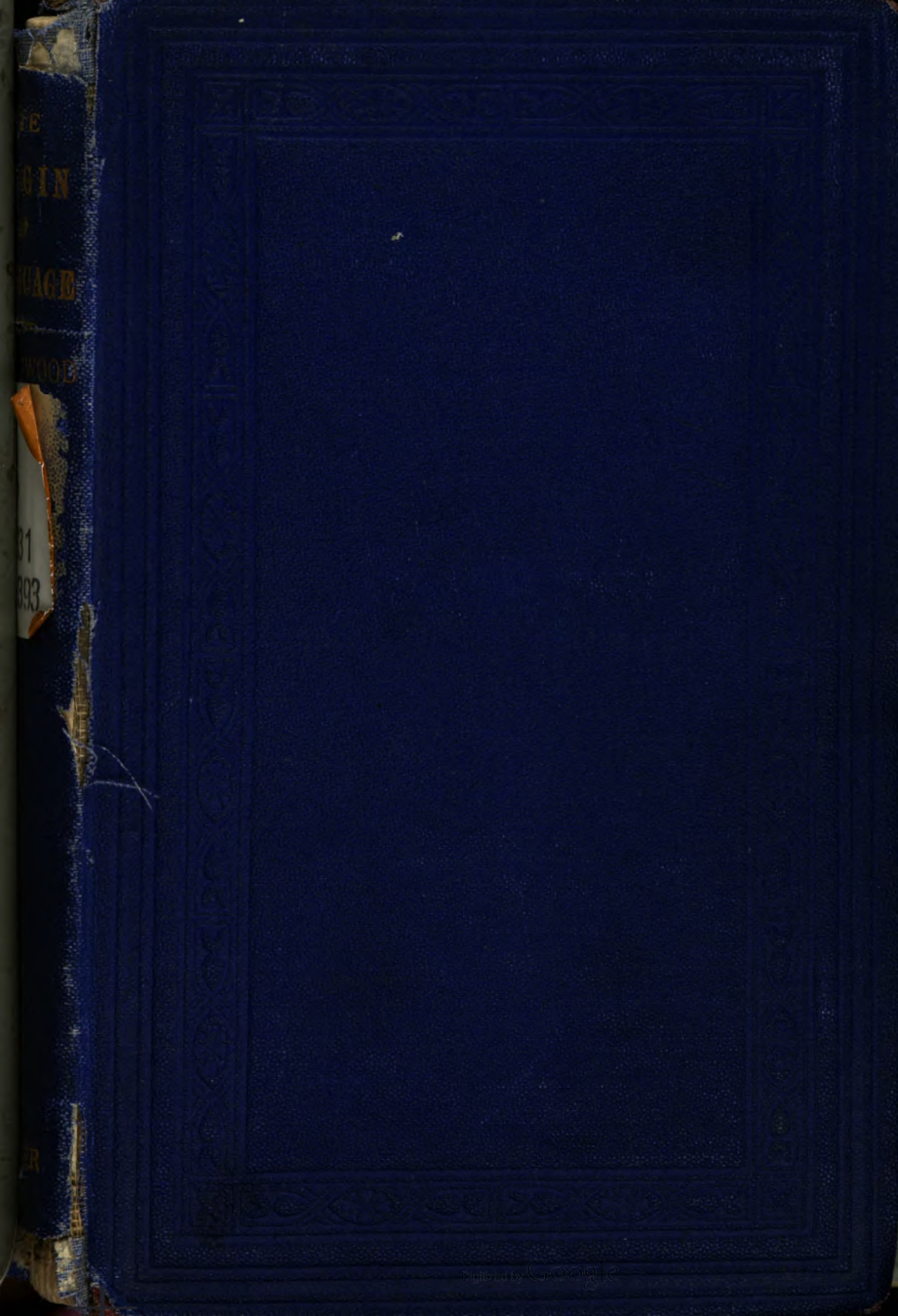

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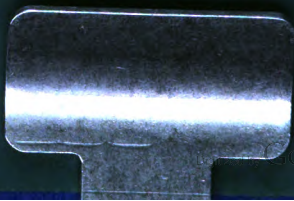
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ON THE
ORIGIN OF LANGUAGE.

ON THE
ORIGIN OF LANGUAGE.



BY

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ANALYSIS OF THE
STRUCTURE OF THE
POLYMERIZATION OF
ETHYLENE

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CONTENTS.

CHAP.				PAGE
I.	INTRODUCTORY	1
II.	ONOMATOPŒIA	16
III.	INTERJECTIONS	47
IV.	ANALOGY	101
V	CONCLUSION	126
	APPENDIX I.	156
	APPENDIX II.	164

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ON THE

ORIGIN OF LANGUAGE.

CHAPTER I.

INTRODUCTORY.

THE speech of Man in his mother-tongue is not, like the song of birds, an instinct implanted by nature in the constitution of every individual of the species, and either exercised from the moment of birth or spontaneously called into play at a certain period of growth. If that were so the same language would be spoken by all mankind, in the same way that the same species of bird utters the same notes in the most distant countries, and the song of the lark in Germany or Italy is not distinguishable from that which trills from the English skies. But Man speaks a thousand different dialects, the use of which is acquired in infancy

by the same gradual process as the practice of a mechanical art, from the speech of those in whose care the infant is placed ; and where he is cut off by natural deafness from the influence of their speech, he originates no language of his own, but grows up dumb as well as deaf.

Thus language in its actual condition is an art, like baking or weaving, handed down from generation to generation, and when we would trace upwards to its origin the pedigree of this grand distinction between man and the brute creation, we must either suppose that the line of tradition has been absolutely endless, that there never was a period at which the family of man was not to be found on earth, speaking a language bequeathed to him by his ancestors, or we must at last arrive at a generation which was not taught their language by their parents. The question then arises, how did the generation, in which language was originally developed, attain so valuable an art? Must we suppose that our first parents were supernaturally endowed with the power of speaking and understanding a definite language, which was transmitted in natural course to their descendants, and was variously modified in different lines of descent through countless ages, during

which the race of man spread over the earth in separate families of people, until languages were produced between which, as at present, no cognizable relation can be traced ?

Or is it possible, among the principles recognized as having contributed elements more or less abundant in every known language, to indicate a sufficient cause for the entire origination of language in a generation of men who had not yet acquired the command of that great instrument of thought, though in every natural capacity the same as ourselves ?

When the question is brought to this definite stage, the same step will be gained in the science of language which was made in geology, when it was recognized that the phenomena of the science must be explained by the action of powers, such as are known to be active at the present day in working changes on the structure of the earth. The investigator of speech must accept as his starting-ground the existence of man as yet without knowledge of language, but endowed with intellectual powers and command of his bodily frame, such as we ourselves are conscious of possessing, in the same way that the geologist takes his stand on the fact of a globe composed of lands

and seas subjected as at the present day to the influence of rains and tides, tempests, frosts, earthquakes, and subterranean fires.

A preliminary objection to the supposition of any natural origin of language has been raised by the modern German school of philosophers, whose theory leads them to deny the possibility of man having ever existed in a state of mutism. "Man is only man by speech," says W. v. Humboldt, "but in order to discover speech he must already be man." And Max Müller, who cites the epigram, adopts the opinion it expresses. "Philosophers," he says (*Lectures on the Science of Language*, p. 347), "who imagine that the first man though left to himself would gradually have emerged from a state of mutism and have invented words for every new conception that arose in his mind, forget that man could not by his own power have acquired the faculty of speech, which is the distinctive character of mankind, unattained and unattainable by the mute creation." The supposed difficulty is altogether a fallacy arising from a confusion between the faculty of speech and the actual knowledge of language.

The possession of the faculty of speech means only that man is rendered capable of speech by

the original constitution of his mind and physical frame, as a bird of flying by the possession of wings; but inasmuch as man does not learn to speak as a bird to fly by the instinctive exercise of the proper organ, it becomes a legitimate object of inquiry how the skilled use of the tongue was originally acquired.

It is surprising that any one should have stuck at the German paradox, in the face of the patent fact that we all are born in a state of mutism, and gradually acquire the use of language from intercourse with those around us. The case of those born deaf is still more striking, who remain in a state of mutism until they have the good fortune to meet with skilled teachers, by whom they may be taught not only to express their thoughts by means of manual signs, but also to speak intelligibly notwithstanding the disadvantage of not hearing their own voice.

Since then it is matter of fact that individuals are found by no means wanting in intelligence who only attain the use of speech in mature life, and others who never attain it at all, it is plain that there can be no metaphysical objection to the supposition that the family of man was in existence at a period when the use of language was

wholly unknown. How man in so imperfect a state could manage to support himself and maintain his ground against the wild beasts is a question which need not concern us.

The theory of the modern German school as explained by Müller (p. 387), asserts that man in his primitive and perfect state had instincts of which no traces remain at the present day, the instinct being lost when the purpose for which it was given was fulfilled, as the senses become weaker when, as in the case of scent, they become useless. By such an instinct the primitive man was irresistibly impelled to accompany every conception of his mind by an exertion of the voice, articulately modulated in correspondence with the thought which called it forth, in a manner analogous to that in which a body, struck by a hammer, answers with a different ring according as it is composed of metal, stone, or wood. It must also be supposed that the same instinct, which gave rise to the expression of thought by articulate sound, would enable those who heard such sounds to understand what was passing in the mind of the person who uttered them. Thus a stock of significant sounds would be produced from whence all the languages on earth have been

developed, and when "the creative faculty which gave to each conception as it thrilled the first time through the brain a phonetic expression" had its object fulfilled in the establishment of language, the instinct faded away, leaving the infants of subsequent generations to learn their language of their parents, and those who should be born deaf to do as well as they could without any oral means of communicating their thoughts or desires.

It is sufficient to condemn a speculation like the foregoing, that it rests on the supposition of a primitive man with a constitution of mind essentially differing from our own, whereas what we require is an indication of the process by which language might have come to a being in all respects like ourselves. Nor is there any real analogy between the effacement of a sense from want of practice and the supposed loss of an instinct when no longer wanted for its special purpose. The impressions of sense are made by physical affections of certain nerves, as of the nerve of the eye by the stimulus of light, and it appears that when the organ is left for a lengthened period without the appropriate stimulus, its sensibility is diminished, and may ultimately be wholly lost, as seen in the

case of animals inhabiting the dark caverns of America and Carniola, which are universally blind. But if there were an instinctive connection of the kind supposed between thought and language, it would give the feeling of a necessary connection between the meaning and the sound of a word, the recognition of which would be a practical exercise of the instinct, and ought, according to analogy, to keep it from extinction. It is, however, hardly worth while seriously to discuss the incidents of anything so purely gratuitous as the entire supposition.

Many attempts have been made in other quarters to explain the acquisition of language by the exercise of our natural faculties, but generally with small success, from failing to meet with sufficient distinctness the fundamental difficulty of the problem, viz. how, antecedent to any knowledge of language, man might be led to signify his conceptions by spoken sound, and to devise such modulations for the purpose as to give rise to the same conceptions in the mind of others equally ignorant of language with himself.

Yet the conditions of the problem are not so remote from all that may be found in actual experience at the present day as we are apt to

suppose. We must only not require too much to be done at once. We must not imagine some genius of the pristine world conceiving the advantages of a better means of communicating with his fellows, and elaborating a system of vocal signs.

“If in the present state of the world,” says Charma, “some philosopher were to wonder how man ever began these houses, palaces, and vessels which we see around us, we should answer that these were not the things that man began with. The savage who first tied the branches of shrubs to make himself a shelter was not an architect, and he who first floated on the trunk of a tree was not the creator of navigation.” A like allowance must be made for the rudeness of the first steps in the process when we are required to explain the origin of the complicated languages of civilized life.

If language was the work of human intelligence we may be sure that it was accomplished by exceedingly slow degrees, and when the true mode of procedure is finally pointed out, we must not be surprised if we meet with the same apparent disproportion between the grandeur of the structure and the homeliness of the mechanism by which it was reared, which was found so great a stumbling-

block in geology when the modern doctrines of that science began to prevail.

The first step is the great difficulty in the problem. If once we can imagine a man like ourselves, only altogether ignorant of language, placed in circumstances under which he will be instinctively led to make use of his voice, for the purpose of leading others to think of something beyond the reach of actual apprehension, we shall have an adequate explanation of the first act of speech.

Now if man in his pristine condition had the same instincts with ourselves he would doubtless, before he attained the command of language, have expressed his needs by means of gestures or signs addressed to the eye, as a traveller at the present day, thrown among people whose language was altogether strange to him, would signify his hunger by pointing to his mouth and making semblance of eating. Nor is there, in all probability, a tribe of savages so stupid as not to understand gestures of such a nature. "Tell me," says Socrates in the *Cratylus*, "if we had neither tongue nor voice and wished to call attention to something, should we not imitate it as well as we could with gestures? Thus if we wanted to describe

anything either lofty or light, we should indicate it by raising the hands to heaven; if we wished to describe a horse or other animal, we should represent it by as near an approach as we could make to an imitation in our own person."

But gestures are not the only means of imitation at our command, and we are as clearly taught by nature to imitate sounds by the voice, as the shape and action of material things by bodily gestures. When it happened then in the infancy of communication that some sound formed a prominent feature of the matter which it was important to make known, the same instinct which prompted the use of significant gestures when the matter admitted of being so represented, would give rise to the use of the voice in imitation of the sound by which the subject of communication was now characterized.

A person terrified by a bull would find it convenient to make known the object of his alarm by imitating at once the movements of the animal with his head and the bellowing with his voice. A cock would be represented by an attempt at the sound of crowing, while the arms were beat against the sides in imitation of the flapping of the bird's wings. It is by signs like these that Hood describes his raw Englishman as making known his wants in France.

Moo! I cried for milk—
If I wanted bread
My jaws I set agoing,
And asked for new-laid eggs
By clapping hands and crowing.”

Hood's Own.

There would be neither sense nor fun in the caricature if it had not a basis of truth in human nature, cognizable by the large and unspeculative class for whom the author wrote.

A jest must be addressed to the most superficial capacities of apprehension, and therefore may often afford better evidence of a fact of consciousness than a train of abstruse reasoning. It is on that account that so apt an illustration of the only comprehensible principle of language has been found in the old story of the Englishman at a Chinese banquet, who being curious as to the composition of a dish he was eating, turned round to his native servant with an interrogative Quack, quack? The servant answered, Bowwow! intimating as clearly as if he spoke in English that it was dog and not duck that his master was eating. The communication that passed between them was essentially language, comprehensible to every one who was acquainted with the animals in question,

language therefore which might have been used by the first family of man as well as by persons of different tongues at the present day.

The essence of language is a system of vocal signs. The mental process underlying the practice of speech is the same as when communication is carried on by means of bodily gestures, such as those in use among the deaf and dumb. The same mental principles are involved in a nod or a shake of the head as in a verbal agreement or refusal. Only in the one case the sign is addressed to the eye, in the other to the ear. The problem of the origin of language thus becomes a particular case of the general inquiry, how it may be possible to convey meaning by the intervention of signs without previous agreement as to the sense in which the signs are to be understood. To this inquiry there can be but one answer. The meaning of a sign will be self-evident only when the sign is adapted of itself to put the person addressed in mind of the thing signified; which can only be done by means of some resemblance in the sign to the thing signified, or to something associated with it in the mind of the person to whom the sign is addressed. The only principle upon which the unconventional development of a

system of signs can be rationally explained, will thus be the artificial exhibition of resemblance, or direct imitation of a character by which the thing to be signified is distinguished. If then we are to explain language as a system of vocal signs instinctively springing from the pressure of social wants, we must be prepared to exhibit classes of words taken from direct imitation, and to show how words constructed on such a principle may be employed in the signification of things unconnected with the sense of hearing, as taste, sight, and smell, the qualities and relations of things, the passions and affections of the mind and all the varied subject of cultivated thought. But in attempting the task here shadowed out it will by no means be necessary to carry our researches to the extent required by Müller, who in his Lectures on the Science of Language expresses his desire to remain neutral on the question of origin "until some progress has been made in tracing the principal roots not of Sanscrit only, but of Chinese, Bask, the Turanian and Semitic languages, back to the cries or the imitated sounds of nature."—2nd Series, p. 92. To lay down conditions like these as to the amount of evidence required to establish the imitative origin of language is to conjure up a

rampart, behind which the old prejudices may, indeed, repose in perfect security. But we cannot suppose that the Creator would provide one scheme for the origination of language among the Aryan nations, another for the Semitic or the Turanian; and if evidence of derivation from imitation on a sufficiently extended scale can be found within the limits of our own language, we shall consider our case as established, without waiting until some one has been found to execute the same task, in the Basque, Chinese, and Samoiede.

CHAPTER II.

ONOMATOPŒIA.

THE formation of words from imitation of sound has been recognized from the earliest period, and as it was the only principle on which the possibility of coining words came home to the comprehension of every one, it was called *Onomatopœia*, or word-making, while the remaining stock of language was vaguely regarded as having come by inheritance from the first establishers of speech. “*Ὀνοματοποιία* quidem,” says Quintilian, “id est, fictio nominis, Græcis inter maximas habita virtutes, nobis vix permittitur. Et sunt plurima ita posita ab iis qui sermonem primi fecerunt, aptantes adfectibus vocem. Nam *mugitus* et *sibilus* et *murmur* inde venerunt.” And Diomedes, “*Ὀνοματοποιία* est dictio configurata ad imitandam vocis confusæ significationem, ut *tinnitus* æris, *clangor*que tubarum. Item quum dicimus *valvos*

stridere, oves balare, aves tinnire.”—Lersch, Sprachphilosophie der Alten, iii. 130-1.

The principle is admitted in a grudging way by Max Müller (2nd Series, p. 298) :

“There are in many languages words, if we can call them so, consisting of mere imitations of the cries of animals or the sounds of nature, and some of them have been carried along by the stream of language into the current of nouns and verbs.” And elsewhere (p. 89) with less hesitation, “That sounds can be rendered in language by sounds, and that each language possesses a large stock of words imitating the sounds given out by certain things, who would deny?” The class of words most obviously formed on the principle of imitation is perhaps that which designates the cries of animals, the cackling or gaggling of geese, clucking of hens, gobbling of turkeys, quacking of ducks, cawing of rooks, cooing or crooing of doves, hooting of owls, bumping of bitterns, croaking of ravens or frogs, neighing or whinnying of horses, braying of asses, barking, yelping, howling, snarling of dogs, purring or mewing of cats, grunting of hogs, belling of deer, roaring of lions, bellowing of bulls, lowing of oxen, bleating of sheep and goats, chirping of sparrows

or crickets, twittering of swallows, chattering of pies or monkeys.

To the same class belong the names of various inarticulate utterances of our own, as sob, sigh, moan, groan, laugh, cough (the two last originally pronounced with a guttural, as in Dutch *kuch*, cough; *lachen*, *lachachen*, to laugh—Kiliaan), titter, giggle, hiccup, shriek, scream, snore, sneeze, wheeze.

But the chief point of interest in the cry of an animal would lie in indicating the presence of the animal itself, and the earliest purpose for which man would have occasion to represent the cry would be to bring the animal that makes it before the mind of his hearer. If I take refuge in an African village and imitate the roaring of a lion while I anxiously point to a neighbouring thicket, I shall intimate pretty clearly to the natives that a lion is lurking in that direction. Here the imitation of the roar will be practically used as the name of a lion. The gestures with which I point will signify that an object of terror is in the thicket, and the sound of my voice will specify that object as a lion.

The earliest attempts to represent the cries of animals would doubtless, like our actual imitations

at the present day, consist of mere modulations in the tone of the voice without articulate utterance. When I imitate the voice of the cock I do not cry cock-a-doodle-doo, nor coquericot, nor pah-pahahquau, nor aaoa, but I sound the vocal instrument in a way that does not admit of being spelt. And such doubtless would be the nature of the utterance which constituted the first rudiments of vocal signs with the primitive man. But in course of time, as the objects for which designations were required became more and more numerous, the necessity of a nicer distinction and an easier pronunciation of the imitative sounds, would gradually lead to the exercise of that admirable apparatus for articulate speech, which the Creator has provided in the tongue, lips, and throat. The deep sounds uttered in imitation of the lowing of an ox would first be pronounced in an inarticulate way with the lips slightly parted, but sooner or later the ear would catch the distinctness of sound given by uttering the imitation at the very moment of the opening of the lips, and thus giving it the sound of *moo* or *boo*.

The passage from direct imitation of an inarticulate sound, to the toneless pronunciation of a syllable as a conventional sign, may be observed

in our nurseries at the present day. The nurse imitates the lowing of an ox or the bleating of a sheep by the syllables *moo* or *baa* pronounced in a tone resembling the cry of the animal, while she points to the animal itself or to a picture of it, as the object she wishes to associate with the utterance in the mind of her pupil. The use of the imitative tone speedily becomes unnecessary, and the simple pronunciation of the syllables *moo* or *baa* (with or without the addition of *cow* or *lamb*, which add nothing to the significance) is sufficient to bring the animal before the mind of the infant, or to make him think of it. Thus *moo-cow* and *baalamb* become the names of the cow and the sheep in nursery language; *bowwow*, of the dog. In German nurseries *maukatt* is the cat (Danneil); *wauhund* or *wouwouhund*, the dog (Bremisch Wörterbuch); in Swabia *muh*, the cow, *máh*, the goat (Schmid). In Switzerland *báángen* is to bleat, *báággeli* (in nursery language), a lamb. So in French infantile language *coco* is an egg, in Magyar, *kukko*, in Bavarian, *gaggele* or *gagkelein*, from *gagk! gagk!* the clucking of the hen.

The universal adoption of the principle of imitation as the first means of oral communication

with infants is the best illustration of its fitness for the origination of language in the infancy of man. But it is revolting to the pride of philosophy to admit so simple a solution of the problem. "I doubt," says Müller, speaking of words formed on the bowwow principle, "whether it deserves the name of language." "If the principle of onomatopœia is applicable anywhere it would be in the formation of the names of animals. Yet we listen in vain for any similarity between *goose* and cackling, *hen* and clucking; *duck* and quacking, *sparrow* and chirping, *dove* and cooing, *hog* and grunting, *cat* and mewing, between *dog* and barking, yelping, snarling, and growling. We do not speak of a bowwow, but of a dog. We speak of a cow, not of a moo; of a lamb, not of a baa."—Lect. p. 363.

Now, in the first place, when once it is admitted that any animals are named from direct imitation of their cries, it affords a conclusive argument for the validity of the principle of imitation in the origination of language, which will in no degree be impugned although it may be shown that the names of all the domestic animals are not immediately derived from this source. It is only in the first infancy of language that names are ne-

cessarily taken from direct imitation. As soon as language is a little developed, the animal may be named from some peculiarity of form or colour, or other physical or moral character, and it is an undoubted fact that many animals are so named. The hare is in Welsh *ysgyfarnog*, the long-eared, while he was formerly known to our sportsmen under the name of *couard*, the bobtail, from Old French *coue* (Lat. *cauda*), a tail. Of the same signification is *bunny*, the familiar name of the rabbit, from Gaelic *bun*, a stump, whence *bunfeaman*, a bobtail. The parrot and robin, on account of their familiarity with man, have received names as if they were humble companions of our own species; *parrot* from *Pierrot*, the French diminutive of *Pierre*, Peter, and *Robin*, our own familiar version of Robert. *Parrakeet* is a repetition of the same principle from Spanish *perriquito*, used both as a diminutive of Pedro and as the designation of a parrot.

The designation of birds from varieties of colour is very common, as the redbreast, whitethroat, blackcap, &c. The screamer, diver, creeper, wagtail, woodpecker, explain their own meaning.

On the other hand, it is equally certain that

many names are directly taken from the cry of the animal. He would be a bold opponent of onomatopœia who denied that Sanscrit *kokila*, Lat. *cuculus*, Gr. *κοκκυξ*, Germ. *kuckkuck*, and Eng. *cuckoo*, are imitative of the well-known cry which we hail as the harbinger of Spring. Müller also admits that Sanscrit *kukkuta*, Fin. *kukko*, Esthonian *kikkas*, and English *cock*, are from direct imitations of the crowing of the bird. The Malay has *kukuk*, to crow, and the sound is represented in German by the syllables *kikeriki!* in French, *coquericot!* or *coquelicot!* in English, *cock-a-doodle-doo!* The Algonquin name of the bird, *pah-pah-ah-quau*, is manifestly a representation of the same kind. In like manner Lithuanian *gaidys*, a cock, is from *gēdoti*, to sing, to crow. The root of Latin *gallus*, Lettish *gailis*, is preserved in Old Norse *gala*, to cry, howl, sing, crow.

The plaintive cry of the peewit is with no less certainty represented in the names by which the bird is known in different European dialects, in which we recognize a fundamental resemblance in sound with a great variety in the particular consonants used in the construction of the word: English *peewit*, Scotch *peeweip*, *teewhoop*, *tuquheit*, Dutch *kievit*, German *kiebitz*, Lettish *kiekuts*,

Swedish *kowipa*, French *dishuit*, Arabic *tâtweit*. The consonants *t*, *p*, *k*, produce a nearly similar effect in the imitation of inarticulate sounds, and when an interchange of these consonants is found in parallel forms (that is, synonymous forms of similar structure), either in the same or in related dialects, it may commonly be taken as evidence that the imitative force of the word has been felt at no distant period. The note of a dove, which is represented with an initial *k* in Dutch *korren*, to coo, is sounded with an initial *t* in Lat. *turtur*, Albanian *tourra*, a dove.

The appropriation of certain verbal forms to represent the notes of particular animals is very arbitrary. The German verb *krâhen* and English *crow* are by usage confined to the voice of the cock, while the cry of the bird, which we call *crow* and the Germans *krâhe*, is expressed by the verb *to croak*, identical with Gothic *hrukjan*, to crow like a cock. The relation between the name of the bird and the designation of its cry is better preserved in Dutch *kraeyen*, to caw or croak, and *kraeye*, a crow; Lithuanian *kraukti*, to croak, *krauklys*, a crow; Polish *krukać*, to croak, *kruk* (North English *crouk*), a crow. In the same way we have Gaelic *ròc*, cry hoarsely, and *rocas*, a

rook or crow. The syllable *caw*, by which we represent the voice of the rook and daw, shows the imitative origin of the names by which birds of the crow kind are known in many languages, as Dutch *kauwe*, *kae*, Picard *cau*, AS. *ceo*, E. *chough*, a daw, Algonquin "*kahkahgee*, the raven," mentioned in Longfellow's *Hiawatha*, Malay *gagak*, Barabra *koka*, Mantchu. *kaha*, Georgian *quaki*, Arabic *ghâk*, Sanscrit *kâka*, crow.—Pictet, *Origines Indo-Européennes*, i. 474. From the same source is another Sanscrit name of the bird which Müller cites as an example of the fallacious derivations of the onomatopœists. *Kârava*, he says, is supposed to show some similarity to the cry of the raven. But as soon as we analyze the word we find that it is of a different structure from *cuckoo* or *cock*. It is derived from a root *ru* or *kru*, having a general predicative power, and means a shouter, a caller, a crier. "*Kârava*, explained in Sanscrit by *kurava*, having a bad voice, is supposed to be a mere dialectical corruption of *krava* or *karva*."—Lect. p. 349. Contrast this with the analysis of Pictet, who explains the word as *kâ-rava*, whose voice is *kâ* or *caw*, analogous to *kuhu-rava*, the cuckoo, the bird whose voice is *kuhu*.

The hooting of the owl is a note that peculiarly

invites imitation, and accordingly it has given rise to a great variety of names the imitative character of which cannot be mistaken. Thus Latin *ulula* may be compared with *ululare*, or Gr. ολολυζειν, to cry loudly. In French we have *hulotte* from *huller*, to howl or yell, as Welsh *hwan* from *hwa*, to hoot. Lat. *bubo*, Fr. *hibou*, It. *gufo*, German *buhu*, *uhu*, are all direct imitations of the hollow cry, while It. *strige* is essentially identical with *screech* in *screechowl*.

“The cry of the owl,” says Stier in Kuhn’s *Zeitschrift*, xi. p. 219, “ku-ku-ku-wa-i is in the south the frequent origin of the name, in which sometimes the first, sometimes the second part, and sometimes both together, are represented. The Turks call it *bai-kush*, i. e. bird-bai, the Greeks *κικυμυς*, *κικκαβη*, *κουκουβα*, *κοκκοβαη*, &c.”

The designation of insects from the humming, booming, buzzing, droning noises which they make in their flight is very common. We may cite Gr. *βομβυλιος*, the *humble-* or *bumble-bee*, or a gnat; Sanscr. *bambhara*, bee, *bamba*, fly, “words imitative of humming”—Pictet; German *hummel*, the drone or non-working bee; Sanscr. *druna*, a bee, Lithuanian *tranas*, German *drohne*, a drone, to be compared with Sanscr. *dhran*, to sound,

German *drönen*, 'to hum, resound; Danish *drøn*, din, peal, hollow noise; Gaelic *drannan*, humming, buzzing, growling, *drann-eun*, a humming-bird. The *drone* of a bagpipe is the open pipe which keeps up a monotonous humming while the tune is playing. The cockchafer is known by the name of the *buzzard* in the North of England.

“And I eer'd un a *bumming* away
Like a *buzzard-clock* o'er my eead.”

Tennyson, Northern Farmer.

It is in this sense that the word is to be understood in the expression “as blind as a *buzzard*,” or “as blind as a beetle,” from the headlong flight of a cockchafer or dung-beetle, knocking against whatever comes in its way. The Welsh *chwyrnu*, to buzz (corresponding to Swedish *hurra* and E. *whirr*), gives rise to *chwyrnores*, a hornet, and probably indicates that G. *horniss* and E. *hornet* are from the buzzing flight of the animal, and not from its sting considered as a horn. The name of the *gnat* may be explained from Norse *gnetta*, *knetta*, to rustle, give a faint sound, Danish *gnaddre*, to grumble. The *cricket* is named from the *creaking* sound by which he makes his unwelcome presence known in our kitchens, and he is known in the languages of Europe by different onomatopœias

varying to an infinite extent according to the fancy of the imitation.—Pictet, i. 528. Thus Lat. *gryllus* may be compared with Fr. *griller*, to creak; Breton *skril* with Norse *skryle* and Scotch *skirl*, to speak with a loud and *shrill* voice; G. *schirke* with E. *shrike*, *shriek*.

The name of the marmot affords a striking instance of the way in which etymologists will shut their eyes to the plainest evidence of onomatopœia, if they can escape by however awkward a path from such a derivation. If the marmot be watched at feeding time at the Zoological Gardens it will be observed that it makes a peculiar muttering sound which fully justifies the German designation of *murmelthier*, or muttering beast, and the French *marmotte*, from *marmotter*, to mutter. Here we have the evidence of the two languages spoken in the Alps of Savoy and Switzerland, whence the knowledge of the animal would first be obtained, that it is named from the nature of the sounds which it utters; yet Diez finds it easier to believe in the extraordinary coincidence that the names in both languages should have been corrupted from forms like Old High German *murmenti*, *muremonto*, or Grisons *murmont*, and ultimately from the Lat. *mus montanus*.

Mr Farrar in his Chapters on Language (p. 24) observes that if the vocabulary of almost any savage nation is examined, the name of an animal will generally be found to be an onomatopœia, and he cites from Threlkeld's Australian Grammar *Kong-ko-rong*, the emu; *pip-pi-ta*, a small hawk; *kong-kong*, frogs; *kunbal*, the black swan; all expressly mentioned by the author as taking their names from their cry. No one will doubt that the name of the pelican *karong-karong* is formed in the same manner. Mr Bates gives us several examples from the Amazons. "Sometimes one of these little bands [of Toucans] is seen perched for hours together among the topmost branches of high trees giving vent to their remarkably loud, shrill, and yelping cry. These cries have a vague resemblance to the syllables *Tocáno, Tocáno*, and hence the Indian name of this genus of birds."—Naturalist on the Amazons, i. 337. Speaking of a cricket he says, "The natives call it *tananá*, in allusion to its music, which is a sharp resonant stridulation resembling the syllables *ta-na-ná, ta-na-ná*, succeeding each other with little intermission."—i. 250. We may compare the Arabic *tantanat*, sound, resounding of musical instruments.—Catafogo. The Algonquin *kos-kos-koo-oo*, the

owl, may be compared with modern Greek *kok-ko-ra-ee*, Walachian *ku-ku-veike*.

There is so natural a tendency to name an animal, when first we become acquainted with it, from any marked peculiarity of cry, that it would not be surprising if occasions were found where the principle was extended to the human race. Now there is nowhere probably on the surface of the earth a more singular peculiarity than the clicks which characterize the languages of Southern Africa. In consequence of these the language of the natives would appear to the first Dutch colonists of the Cape of Good Hope to be all *hot* and *tot*, in Dutch *hot en tot*, whence the name of Hottentots seem to have been given to the people themselves. Dapper, who wrote previous to 1670, asserts that the name was given on account of the lameness of their speech. "In all discourse," he says, "they cluck like a broody hen, seeming to cackle at every other word, so that their mouths are almost like a rattle or clapper, smacking and making a great noise with their tongues."—Africa, Ogilvie's trans. p. 595.

In the case of the domestic animals it is by no means true, as Müller supposes, that names formed on the principle of onomatopœia are confined to

nursery language. Of course there is no resemblance between *hog* and *grunt*, but the snorting sounds emitted by a pig may be imitated at least as well by the syllables *hoc'h!* *hoc'h!* (giving the *c'h* a guttural and nasal sound) as by *grunt*. In evidence of the aptness of this imitation, we may cite the cry used in Suffolk in driving pigs, remembering that the cries addressed to animals are commonly taken from noises made by themselves. "In driving, or in any way persuading this obstinate race, we have no other imperative than *hooe!* *hooe!* in a deep nasal, guttural tone, appropriately compounded of a groan and a grunt."—Moor's Suffolk words, in *v. sus-sus*. Hence Breton *hoc'ha*, to grunt, and *hoc'h*, *houc'h*, W. *hwch*, a hog, leaving little doubt as to the imitative origin of the E. name. In like manner we find Lappish *snorkeset*, to grunt, undoubtedly imitative, and *snorke*, a pig; Fin. *naskia*, to smack like a pig in eating, and *naski*, a pig. Moreover, although the imitation embodied in Lat. *grunnire*, Fr. *grogner*, and E. *grunt*, does not produce a name of the animal itself, it gives rise to It. *grugno*, Fr. *groin*, Prov. E. *grunny*, the snout of a pig, and thence *groin*, the snout-shaped projections running out into the sea, by which the shingle of our

southern coast is protected. And obviously it is equally damaging to Müller's line of argument whether the onomatopœia supplies a name of the animal or only of his snout.

It requires only the most superficial examination to discover evidence of imitative origin in the names of horned cattle. The voice of cattle is represented indifferently with an initial *b* or *m*, by the syllables *boo* and *moo*, or *baa* and *maa*. From these are formed Lithuanian *bubauti*, to bellow like a bull, Norse *bura*, Illyrian *bukati*, *mukati*, Zulu *bubula*, to bellow, low like an ox. The Greek $\beta\omega\omega$, Latin *boare*, to bellow, shout, although not specifically applied to the voice of the ox, are from the same imitative syllable, and there is no reason to doubt that Greek $\beta\omicron\upsilon\varsigma$, Latin *bos*, Italian *bue*, *bu* (*boo*), ox, Norse *bu*, cattle, Welsh *bu*, Gaelic *bo*, Manx *booa*, cow, are substantival forms from the same root. In the language of the Hottentots, says Dapper, *bou* is an ox; *ba*, a sheep.

Again it must be observed that verbs signifying utterance of a certain sound are frequently formed by affixing an *l* to the imitative syllable. Thus French *miauler* is to cry *miau*, to mew; *béler*, to cry *bé*, to baa or bleat. On this principle are formed Old Norse *baula*, Swedish *bola*, Swiss

bullen, to cry *boo*, to bellow, and thence ON. *bauli*, *boli*, *buli*, Welsh *bwla*, Lithuanian *bullus*, a bull; ON. *baula*, a cow. In the same way in parts of England *to mully* is to cry *moo*, to low as a cow, whence *mull* (mooll), the name by which a Northamptonshire dairymaid calls her cows, and *mully-cow*, as *moo-cow* in nursery language

That rural call, come mulls! come mulls!

From distant pasture grounds.—Clare.

Among Swabian children, also, the name of *molle*, *molli*, *mollein*, is given to cows or calves.

Again, the sound of a loud outcry is represented with an initial *g* as well as *b*, as in Greek *yoaw*, to cry aloud, to lament; Swiss *gääggen*, as well as *bääggen*, to low like a hungry calf. German *bellen* or *gellen*, *belfern* or *gelfern*, to yelp. And so we have Norse *gaula*, to bellow, bawl, shout, to cry *gau!* *goo!* as *baula*, to cry *bau!* *boo!* Nor can we doubt that this mode of representing the sound of lowing has given rise to Sanscrit *go*, Hindu *gao*, ox, German *kuh*, and E. *cow*.

The voice of a cow is commonly distinguished from that of a sheep or goat in our attempts at imitation by sounding the former with the vowel *o* or *u*, the latter with *a* or *e*. Thus we have Lat.

mugire, Gr. *μυκαομαι*, to low, *μηκαομαι*, to bleat ; Swabian *muh*, a cow in nursery language ; *máh*, a sheep or goat. In England *boo* or *moo* is used to represent the lowing of a cow, *baa*, or in Scotland, *bae* or *mae*, the bleating of a sheep or lamb.

While ewes shall bleat and little lambkins *mae*.—Ramsay.

The addition of the verbal *l* gives Gaelic *méil*, to cry *mae*, to bleat as a sheep or lamb, showing the origin of the name Maily given in Scotland to a pet lamb or sheep, while in Greek *μηλον* (*maelon*), a sheep, the imitative form has been preserved as the common name of the species.

The abrupt sound of bleating, especially in the case of the goat, is often represented by a final *g* or *k* in the imitative syllable, as in Swiss *bággén*, *báággén*, to bleat, whence *báággeli* (in nursery language), a lamb ; and Swedish *bagge*, a ram, has doubtless a similar origin. We have then Gr. *μηκαομαι*, Gael. *meigeal*, German *mággila* (Deutschen Mundarten, 3. 486), *mekkern*, Magyar *mekegni*, *bekegni*, *begetni*, to bleat as a goat, whence must be explained It. *becco*, the animal that cries *bek*, a buck or he-goat.

The G. *hund*, dog, and E. *hound*, can hardly be distinct from Esthonian *hunt* (in the oblique cases

hund-), wolf, the origin of which is preserved in the latter language in the verb *hundama*, to howl, corresponding to Old High German *hunon*, to yelp like a fox, and Sc. *hune*, to whine. The same confusion between the two species of animals is seen in the use of the word *hurtta* in one dialect of Finnish in the sense of a wolf, in another in that of a dog.

The nursery names of a horse are commonly taken from the cries used in the management of the animal, which serve the purpose as well as the cries of the animal itself, since all that is wanted is the representation of a sound associated in a lively manner with the thought of the creature to be named.

In England the cry to make a horse go on is *gee!* and the nursery name for a horse is *geegee*. In Germany *hott* is the cry to make a horse turn to the right; *ho*, to the left, and the horse is with children called *hotte-pard* (Danneil), *huttjen ho peerd* (Holstein Idiot.). In Switzerland the nursery name is *hottihuh*, as in Yorkshire *highty* (Craven Gloss.), from the cry *hait!* to turn a horse to the right. In Finland, *humma*, the cry to stop or back a horse, is used in nursery language as the name of the animal. The cry to back a horse in Westerdale is *huf!* whence *houfe*, to go backwards.

The same cry in Devonshire takes the form of *haap! haap back!* Provincial Dan. *hoppe dig!* back! From the cry thus used in stopping a horse the animal in nursery language is called *hoppe* in Frisian (Outzen), *houpy* in Craven, while *hüpp-peerdken* in Holstein is a *hobby horse* or child's wooden horse. Thus we are led to the Fr. *hobin*, E. *hobby*, a little ambling horse, G. *hoppe*, a mare, Esthonian *hobbo*, *hobben*, a horse, and possibly also the Gr. *ἵππος*. In a similar manner the exclamation *huss!* is used in Switzerland as a cry to drive out a dog or to set it on to attack another animal, and thence *huss*, *hauss* are used to signify a dog. *Miau* in Chinese is the name for a cat.

In the face of so many examples it is in vain for Müller to speak of onomatopœia as an exceptional principle giving rise to a few insignificant names, but exercising no appreciable influence in the formation of real language. "The onomatopœic theory goes very smoothly as long as it deals with cackling hens and quacking ducks, but round that poultry-yard there is a dead wall, and we soon find that it is behind that wall that language really begins." —2nd Series, p. 91. "There are of course some names, such as *cuckoo*, which are clearly formed by an imitation of sound. But words of this kind are,

like artificial flowers, without a root. They are sterile and unfit to express anything beyond the one object which they imitate." "As the word *cuckoo* predicates nothing but the sound of a particular bird, it could never be applied for expressing any general quality in which other animals might share, and the only derivations to which it might give rise are words expressive of a metaphorical likeness with the bird.'"—1st Series, p. 365. The author has been run away with by his own metaphorical language. An onomatopœia can only be said to have no root because it is itself a living root, as well adapted to send forth a train of derivations as if it was an offshoot from some anterior stock. If a certain character is strongly marked in a particular animal, the name of the animal is equally likely to be used in the metaphorical designation of the character in question, whether the name was taken from the cry of the animal or from some other particular. The ground of the metaphor lies in the nature of the animal, and can in no degree be affected by the principle on which the name of the species is formed. Thus the comparison with artificial flowers becomes a transparent fallacy, which the author ought at once to have erased when he found himself in the same

page indicating derivatives like *cuckold*, *coquette*, *cockade*, *coquelicot*, as springing from his types of a lifeless stock. If onomatopœias can be used in giving names to things that bear a metaphorical likeness to the original object, what is there to limit their efficiency in the formation of language? And how can the indication of such derivations as the foregoing be reconciled with the assertion that there is a sharp line of demarcation between the region of onomatopœia and the "real" commencement of language? The important question is not what number of words can be traced to an imitative source, but whether there is any difference in kind between them and other words. The number of words that can be traced with certainty to the cries of animals or their names is undoubtedly small, although instances may be shown of words formed on such a principle where few suspect the metaphoric imagery they are using. To call a man a *coward* is at bottom the same figure which Achilles uses when he addresses Agamemnon as having the heart of a deer. Only instead of a deer we now take a hare as the type of timidity, to which the name of coward (signifying the bob-tailed) was given, as Reynard to the fox. In the 'Venerary of Twety' the hunter is instructed, if any of

his hounds, Rycher or Bemond, finds a hare, to cry out "Oiez a Bemond le vayllant que quide trovere *le coward ou le court cow*"—Hark to Bemond who has got scent of the bobtailed.—*Reliquiæ Antiquæ*, p. 153. Kiliaan in his Dutch dictionary has *Kuwaerd*, lepus, vulgo cuardus; ignavus, imbellis, timidus. The metaphorical nature of the word was perhaps understood by Bishop Hall when he wrote :

If some such desperate hackster shall devise
To rouse thy *hare's heart* from her *cowardice*.

The signification of the word *dupe* is founded on a metaphor which conveys no meaning to us at the present day. Fr. *dupe* is a hoopoe, a bird taken as the type of simplicity for reasons unknown. The name of the hoopoe is in Polish *dudek*, in Breton *houpérik*, both of which are used in the figurative sense of simpleton, gull, dupe: *houpériga*, to deceive, to dupe. Italian *bubbola*, a hoopoe; *bubolare*, to bubble, dupe, defraud. It is probable that *dupe*, like Lat. *upupa*, and E. *houp*, *hoopoe*, is a representation of the cry of the bird.

The principle of imitation is not less obvious in the words which express the sounds of inanimate agencies than in those applied to the cries of ani-

mals, and the operation of the principle was recognized at as early a period in the one case as in the other. Quintilian instances the words used by Homer for the twanging of the bowstring and the fizzing of the fiery stake in the eye of the Cyclops, and the occurrence of words of such a nature in all languages is recognized by every one. The question as to the imitative character of a word will, of course, be open to dispute in each particular case, and it may appear self-evident to one, while another may be wholly unable to discern any resemblance in the word to the sound which it is meant to express. Thus the writer of a critique on Wilson's Prehistoric Man thinks the author too partial to the bowwow theory when he finds the mimetic element in *laugh*, *scream*, *bleat*, *cry*, and *whimper*. He asks, "What is there in *whimper* which is mimetic? and if *simper* had been used instead, would there have been less onomatopœia? Is *rire* like *laugh*? Yet to a Frenchman, doubtless, *rire* seems the more expressive of the two." It is not to be supposed that language should be the only subject where those who have never studied the matter should at once be able to appreciate the distinctions and relations brought to light by extensive comparison,

but for those who have thus qualified themselves for judgment, none of the forms above cited will cause the slightest difficulty. Nor is it to be expected that there should be always a cognizable resemblance between words undoubtedly imitative of the same sound. There is no resemblance between *pouf!* and *bang!* Yet the Frenchman uses the one and the Englishman the other to represent the explosion of a gun.

Cases may, no doubt, be adduced where an origin in direct imitation has been claimed for words which can be historically traced to antecedent elements, while in other cases the imitative origin is supported on such fanciful grounds as to afford an easy subject of ridicule in an *ad captandum* argument against the general theory. Nevertheless it will be easy in every language to make out numerous lists of words as to the imitative character of which there will, in nine cases out of ten, be an all but universal agreement. Such are bang, bump, thump, thwack, whack, smack, crack, clack, clap, snap, rap, tap, pat, clash, crash, smash, swash, splash, slash, dash, craunch, crunch, douse, souse, whizz, fizz, buzz, whirr, hiss, hum, boom, flop, flap, pop, ring, din, whine, twang, clang, clank, clink, chink, jingle, creak, squeak, tinkle,

rattle, rustle, whistle, whisper, clatter, patter, guggle, gurgle, sputter, splutter, paddle, dabble, bubble, rumble.

We must remember that there is a constant tendency in the cultivation of a language to the loss of imitative forms. Not only does the imitative force of words become obscured by grammatical inflections, and by conventional applications to special figurative senses, but as long as it is strongly felt in speaking it gives the word a homely and familiar appearance which tends to banish it from employment in an elevated style of composition.

The imitative power of words is witnessed in the strongest manner by their use as interjections of sound, when, without assuming any special grammatical form or indicating a relation to any other conception, they are intended simply to bring the sound they represent before the mind of the hearer.

“Bang, bang, bang! went the cannon, and the smoke rolled over the trenches.”—Read, *White Lies* (1865), iii. 175. “Hoo, hoo, hoo! ping, ping, ping! came the bullets about their ears.”—*Ibid.* 139. “Haw, haw, haw! roared a soldier from the other side of the valley.” “That horrible sound a soldier knows from every other, the *thud*

of a round shot striking man or horse."—Ibid. 127. "And at it both sides went ding, dong! till the guns were too hot to be worked."—Ibid. 126. *Ding-dong*, for the sound of a bell; *rat-tat-tat*, for that of knocking at a door; *tick-tack*, for the beat of a clock; *pit-a-pat*, for the beating of the heart or the light step of a child; *rub-a-dub*, for the beating of a drum; *tantara-tantara*, for the notes of a trumpet; *thwick-thwack*, for the sound of blows, are familiar to every one. The beat of a drum is represented in French by the syllables *rataplan*, *rantanplan*; in Piedmontese by *tantan*, *tarapatapan*, *tarapatan*; in Italian *parapatapan* (Zalli, Vocab. Piedm.); in Spanish *taparapatan*, *tapatan*, leading to Italian *tappatá* (Vocab. Milanese), from the last of which we pass to Dutch *taptoe*, the immediate parent of our *tattoo*. The jangling of bells is represented in Chinese by *tsiang-tsiang*, in Manchu by *tang-tang*; the clanking of chains in the latter language by *kiling-kiling*, identical with the German interjection *kling-kling*, which Griebe, in his Germ.-Eng. Dictionary, renders by jingle! ding-ding! ting! From the same imitation is the verb *klingen*, to clink, tingle, also to sound. The *sough* of the wind to a Chinese ear sounds *siao-siao*, the lum-

bering of waggons, *lin-lin*.—Müller, 1st Series, p. 368. The sound of a drum is represented by the syllable *tom* in the Indian name of the implement, *tomtom*. The same syllable is used to represent the idea of noise in Hindustani *tumul*, uproar, tumult; in Lat. *tum-ultus*, disturbance; and in W. *tymnestl* (pronounced *tumnestl*), a tempest. In a list given by Latham of imitative words belonging to a jargon spoken by the half-breds in Oregon is *tum*, a heavy noise; *tum-wata* (falling water), a cataract.—Varieties of Man, 322. The same imitation gives rise to Fr. *tomber* and E. *tumble*. In the language of the Gallas *bilbila* represents the ringing sound of a bell, illustrating the imitative origin of ON. *biälla* and E. *bell*, as well as of the word *peal*, signifying a loud clear noise; a peal of bells, a peal of laughter. It is applied to the clear notes of a singing-bird in Albanian *bilbil*, Turkish *bülbül*, a nightingale, reminding us of Diomedes's "*tinnire aves*." The Susu (Western Africa) *nimmim*, to taste (representing the sound of smacking the lips), and Zulu *nambeta*, to smack the lips, to have a taste, to relish, may be compared with Swedish *namnam*, a tidbit, a sugar-plum. A similar agreement is shown in Galla *djamdjamgoda* (to make *djam*

djam), Magyar *csammogni*, *csamcsogni*, to champ, to chew, with the sound represented by these words. In Hindustani the same sound is represented by *chaparchapar*. The Turcoman *qalabâlac'h* (F. Newman), Turkish *karabalik*, uproar, disturbance, are nearly identical with E. *hullabaloo*; Zulu *bombolaza* with Gr. $\beta\omicron\beta\omicron\nu\zeta\omega$, to murmur, rumble. Thus the imitation of natural sounds occasionally reproduces the same or closely resembling forms in the most distant languages. So close an agreement, however, between the results of independent imitation is comparatively rare, and the formation of words on this principle is compatible with a total difference in the syllables by which the same sound is represented even in nearly-related dialects. The explosion of a gun is represented in French by the syllable, *pouf!* in English by *bang!* To neigh as a horse is expressed by Fr. *hennir*, It. *nitrire*, Spanish *rinchar*, *relinchar*, Swedish *wrena*, *wrenska*, German *wiehern*, *frenschen*, Dutch *runniken*, *ginniken*, *brieschen*, Lettish *sweegt*, words between many of which we cannot catch a glimpse of resemblance, although it cannot be doubted that they all take their rise in an attempt at direct representation of the sound of neighing.

The use of interjections of sound in German is

very common. The following are cited by Grimm (Grammar, iii. 307) as imitating the sound made by certain objects in falling, whirling, snatching, breaking: *plump*, *platsch*, *bratsch*, *patsch*, *klatsch*, *witsch*, *husch*, *klapps*, *ripsraps*, *schwapps*, *bim*, *bam*, *bum*, *zink*, *fitsche*, *fatsche* (for blows with a rod), *strip*, *strap*, *stroll* (for the sound of milking), &c. The Bremisch Wörterbuch explains *klapp* as a direct imitation of the sound of a blow. "He kreeg enen an de oren: *klapp*, segde dat:" he caught it on the ears: clap! it cried. Küttner, in his German Dict., calls *knack* "an undecidable word that imitates the sound that a hard body makes when it breaks suddenly, in which also *knucks* is usual. *Knack*, da war es enzwey: there! 'tis broken. Es thut einen *knack*: it gave a crack."

CHAPTER III.

INTERJECTIONS.

FROM the interjections of sound we naturally pass to the interjections of passion, which very unphilosophically have been supposed to exemplify an essentially different principle of language. The only difference is that in the interjections of passion the sense is carried on a stage further, and the intention of the utterance is to bring before the mind of the hearer, not so much the cry or other sound immediately represented by the interjection, as a certain condition of the mind of which the imitated sound is the physical accompaniment. The interjection *ah!* is an imitation of a cry of pain; and when I cry *ah!* my object is to represent myself to my hearers as suffering pain, that is, to lead them to think of me as suffering pain. The part performed by interjections in the development of speech has been

greatly misunderstood, as if the interjection was itself the original cry characteristic of a particular passion, instead of a voluntary imitation, uttered with the intention of representing such a cry to the imagination of another, and of thereby making known to him the internal condition of the speaker. Thus Müller says: "Two theories have been started to solve the problem [of the ultimate nature of roots], which for shortness' sake I shall call the Bowwow theory and the Poohpoo theory. According to the first, roots are imitations of sounds; according to the second, they are *involuntary* interjections."—1st Series, p. 344. And again, "There are no doubt in every language interjections, and some of them may become traditional, and enter into the composition of words. But these interjections are only the outskirts of real language. Language begins where interjections end. There is as much difference between a real word such as to laugh, and the interjection ha! ha! as there is between the involuntary act and noise of sneezing and the verb to sneeze." "As in the case of onomatopœia, it cannot be denied that with interjections too some kind of language might have been formed; but not a language like that which we find in

numerous varieties among all the races of men. One short interjection may be more powerful, more to the point, more eloquent than a long speech. In fact, interjections, together with gestures, the movements of the muscles, of the mouth, and the eye, would be quite sufficient for all purposes which language answers with the majority of mankind. Yet we must not forget that hum! ugh! tut! pooh! are as little to be called words as the expressive gestures which usually accompany these exclamations.” —p. 369—371. And to the same effect he cites from Horne Tooke. “The dominion of speech is founded on the downfall of interjections. Without the artful intervention of language mankind would have had nothing but interjections with which to communicate orally any of their feelings. The neighing of a horse, the lowing of a cow, the barking of a dog, the purring of a cat, sneezing, coughing, groaning, shrieking, and every other involuntary convulsion with oral sound, have almost as good a title to be called parts of speech as interjections have. Voluntary interjections are only employed where the suddenness and vehemence of some affection or passion return men to their natural state and make

them forget the use of speech, or when from some circumstance the shortness of time will not permit them to exercise it."—Diversions of Purley, p. 32. When the words of Tooke are cited in opposition to the claims of interjections to be considered as parts of speech, it should be remembered that to say that the cries of beasts have *almost* as good a title to the name of language as interjections is practically to recognize that some additional function is performed by interjections, and the difference thus hazily recognized by Tooke is, in truth, the fundamental distinction between instinctive utterance and rational speech.

If words are articulate sounds uttered with the intention of conveying a meaning to the mind of others, then *pooh!* and *ugh!* by which I express contempt or horror, have as good a right to the name of words as the Latinized terms used to signify the emotions in question.

The error arises from confounding the interjection with the instinctive expression of feeling which it represents in some cases. But the interjection *ah!* is as distinct from the groan of pain which it represents, as the syllables *cock-a-doodle-doo* from the cry of the cock, or the interjection *haha!* from a burst of laughter. It is not speak-

ing when a groan of agony is wrung from me, but when I imitate a groan by the interjection *ah!* for the purpose of obtaining the sympathy of my hearer, then speech begins. So when I am humming and hawing I am not speaking, but when I cry *hum!* to signify that I am at a loss what to say, it is not the less language because my meaning is expressed by a single syllable. It is purely accident that the syllables *haha*, by which we interjectionally represent the sound of laughter, have not been retained in the sense of *laugh* in the grammatical part of our language, as is actually the case in some of the North American dialects, for example, in the name of Longfellow's heroine Minnehaha, explained as signifying the laughing water. In a vocabulary from British Columbia also *hiki* is given as the word for laugh.

The principle which gives rise to the interjection is precisely the same as that which has been so largely illustrated in the naming of animals. If I wish to convey to a person of unknown language the idea of a cow, I imitate the lowing of the animal, and in the same way when I wish him to know that I am in pain, or to think of me as suffering pain, I imitate the cry which is the natural expression of suffering. And as the ut-

terance used in the designation of animals speedily passes from the imitative to the conventional stage, so it is with the interjections used to express varieties of human passion, which are frequently used in total unconsciousness of the principle to which their power of expression is due. Müller admits that some of our words sprang from imitation of the cries of animals and other natural sounds, and others from interjections, and thus, he says, some kind of language might have been formed, which would be quite sufficient for all the purposes which language serves with the majority of men, yet not a language like that actually spoken among men. But he does not explain in what fundamental character a language so formed should differ from our own, nor can he pretend to say that the words which originate in interjections are to be distinguished from others.

To admit the mechanism as adequate for the production of language, and yet to protest that it could not have given rise to such languages as our own, because comparatively few of the words of our languages have been accounted for in this principle, is to act as many of us may remember to have done when Scrope and Lyell began to explain the modern doctrines of Geology. We could

not deny the reality of the agencies which those authors pointed out as in constant operation at the present day on the frame-work of the earth, demolishing here, and there re-arranging over areas more or less limited; but we laughed at the supposition that these were the agencies by which the entire crust of the earth was actually moulded into its present form. Yet these prejudices were gradually dispelled by patiently working out the problem in detail, and in the same way we must answer such a protest as that of Müller by adducing repeated instances where interjections have unquestionably made their way into the grammatical parts of language.

The signification of interjections is of the simplest kind that can belong to words, being distinguished merely by the absence of characters, the addition of which constitutes a verb or a noun. The office of an interjection in its widest sense is simply to suggest a certain phenomenon to the thoughts of the hearer, as when I say, Bang! Bang! went the guns. When the signification includes in addition the idea of action, the word becomes a verb, as when I say, Do not bang the door, do not do something to the door that will produce the sound *bang!* When the phenomenon

is considered as the subject or the object of action, it becomes a noun, as when I say, He gave the door a bang. This analysis of the verbal signification is clearly shown in the language of the Gallas, where verbs are formed by adding *djeda*, to say, or *goda*, to make or do, to the imitative or interjectional form representing the sound by which the action is characterized. Thus the sound of a crack is represented by the syllables *cacak* (where the *c* stands for a clicking sound); the chirping of birds by the syllable *tirr* or *trrr*; the sound of beating by *dadada*; and *cacak djeda* (to say *cacak*) is to crack; *tirrdjeda* or *trrrdjeda*, to chirp; *dadada goda* (to make *dadada*!) to beat, to make a noise; *djamdjam goda*, to smack or make a noise with the mouth as swine in eating, to champ in eating. The German cry of pain *weh!* oh! ah! is used in an analogous manner in the compounds *wehthun* (to do ah!), to do something that causes pain, to ache, hurt, smart; *wehschreien*, *wehklagen*, to cry *weh!* to lament. In the Mantuan dialect *far pi pi* is to peep or cheep like a chicken.

The construction of the word is hardly less evident in such cases as the following, where the interjection is united with the ordinary affixes of verbs and nouns, with or without the cement of

certain subsidiary particle or consonantal sounds, as *ol* or *el*, *l*, *n*, *z* in Greek, *ka* in the Slavonic tongues. A groan of pain is represented by an interjection which varies little over a wide range of languages: Greek *ovai*, Latin *væ*, It. *guai*, Old Norse *vei*, Danish *vee*, German *wehe*, *weh*, Lettish and Illyrian *wai*. The E. *woe* is the same word, although it is not used by itself as a simple interjection, but has passed on to signify the condition of the person who utters the cry. In the sentence *woe is me!* however, we may recognize the same interjectional use of the word as that of *bang* in such a sentence as, *bang!* went the guns. The G. *weh* also is used as a noun with the sense of ache, bodily pain, grief, misfortune, misery; and it enters freely into the composition of other words: *kopfsch*, headache; *wehmuth*, sorrow; *wehklagen*, to lament, &c. In Italian we have *guaire*, *guaiolare* (to cry *guai!*), to wail, lament, howl; *guajo*, crying, wailing, misfortune, woe; in Norse *veia*, ON. *veina* (to cry *vei!*), to lament or cry for pain, explaining G. *weinen*, to weep, and the Devonshire *ween*, to whimper, to cry. The E. *wail* and Welsh *wylo*, to wail, to weep or cry, are analogous forms to the It. *guaiolare* above mentioned, or to Fr. *miauler*, to cry *miau*. In Lettish

waiman! Gr. *οιμοι!* we have composite forms in which the speaker expressly refers the suffering to himself, corresponding to our own analytic *woe is me!*; from whence are derived Lettish *waimanat*, Gr. *οιμωζειν*, to lament, *waimanas*, lamentation. The Illyrian *waikati*, to express sorrow, is formed on the same plan as *ishkati*, to cry *ish!* (equivalent to E. *shoo!*) for scaring birds; *jaukati*, to cry *jao!* alas, to lament; *hukati*, to cry *hu!* to sigh or moan.

A different representation of the cry of pain gives German *ach!* Welsh *och!* E. *ah!* *oh!* Gaelic *ach!* *och!* *ochan!* Irish *ochone!* Italian *ah!* *ahi!* expressive of pain and grief. Hence German *achen*, *achzen*, Welsh *ochi*, to groan; *och*, *ochan*, Gael. *acain*, a groan, a moan, explaining Fr. *ahan*, hard labour, pain, toil; *ahaner*, to toil; It. *affanno*, trouble, grief. From representing the cry which is the natural expression of pain, the signification is transferred (as we have already seen in the case of G. *wel*) to the sense of pain and grief, in Gr. *αχος*, and in E. *ache*, used indifferently as verb and noun. My head aches; I have a headache. Gael. *acaid*, a sharp pain; *acaiideach*, groaning, painful. The utterance of an interjection of pain, when standing alone, would indicate that the speaker

himself was suffering, but the interjection is occasionally used in connection with other words which attribute the suffering to a different person.

The Latin *Væ tibi!* is a threatening of woe to the person addressed, it is an indication to him that he may look out for suffering on such and such conditions. *Væ victis!* expresses the sense which the speaker entertains of the wretched condition of the conquered. On other occasions the speaker wishes emphatically to indicate himself as the suffering person, when he expressly mentions himself in connection with the interjection, as in Lat. *Hei mihi!* E. *Ah me!* Spanish *Ay di mi!* After a while the interjection coalesces with the personal pronoun in a single word having the exact signification of the first person present of a verb. The Gr. *οιμοι!* or It. *ohimé!* is uttered for the purpose of leading the person addressed to think of the speaker as suffering pain, or, in other words, the signification of the complex interjection is the same as if the speaker had said, I am in pain or grief, I suffer, I grieve. In Italian the conjugation is carried through the whole of the singular number: *Ohitu!* alas for thee! thou art to be pitied! thou art in pain. *Ohisé,* alas for him! he suffers. Moreover the form of the expression

ah me! or *ohimé!* agrees so exactly with that of the Greek verb *αχομαι*, I mourn, bewail myself, as to afford an excellent illustration of the way in which it is universally supposed that the verbs were really formed, viz. by the coalescence of a root with the remains more or less mutilated of the personal pronouns, with or without the addition of other particles significant of time or other incidents of action.

We are taught to regard the Chinese of the present day as having preserved, with little essential change, the condition in which all language must have begun, when every syllable had a separate signification, which was successively presented to the mind in discourse, with no other connection than the order of utterance. Thus the Chinese sound *ta*, without any change of form, means great, greatness, and to be great. If *ta* stands before a substantive it has the meaning of an adjective. Thus *ta fu* means a great man. If *ta* stands after it is a predicate, or as we should say, a verb. Thus *fu ta* would mean, the man is great.—Müller 1st Series, p. 255.

The sense of the locative case is expressed in Chinese by adding such words as *cung*, the middle, or *nei*, inside, as *kuo-cung*, in the empire. The in-

strumental is expressed by the preposition *y*, which is an old verb meaning to use ; as *y ting* (use stick), with a stick, where in Latin the ablative would be found, in Greek the dative. At a later stage the subsidiary element is slurred over in pronunciation, and ultimately worn down into the shape of a mere grammatical inflection, while the element signifying the principal object of discourse, with little or no alteration, takes the place of root in an inflected verb or noun.

However complicated, says Müller, the declensions may be in Greek and Latin, we may be certain that they were originally formed by this simple method of composition. Thus everything in language becomes intelligible except the roots, and the only portion of the problem that remains to be solved is this : How can we account for the roots which form the constituent elements of human speech ?

Now as far as the root *ach*, signifying pain and grief, is concerned, it is not easy to see what the derivation from the natural cry of pain leaves to be desired. It is a patent fact that violent pain is accompanied by groans and cries represented in a wide range of languages by interjections like G. *weh !* and *ach !* while it is in accordance with the

only principle of language which we do understand, that an object should be named from the most striking sound with which it is associated. If at the present day we had to originate a vocal sign of pain, or had to signify to a person of unknown language that we were in pain, it is certain that we should imitate the cry of a person in pain. Practically we see the principle acted on in the use of *weh*, the German interjection, in the sense of pain, while the plural *wehen* is typically applied to the pains of childbirth, which are in Scotch called a woman's *groaning*. Why then should we doubt that the use of the other form of the interjection *ach!* in a similar manner has been the origin of the root into which we are inquiring?

To shut our eyes to the relation between the use of the root *ach* in the sense of pain, and the aptness of the syllable to represent the natural cry of pain, and to explain the meaning of the root by a hypothetical connection between the sense and sound implanted by the Creator in the mind of the primitive man, would be to reason like one who doubted that the fossils of Monte Bolca were the remains of fishes, which once swam in the basin of the Mediterranean, and regarded them as sports of Nature originally created, as we see them at the

present day, in the rocks in which they are found.

UGH! OUF!

The effects of cold and fear on the human frame closely resemble each other. They check the action of the heart and depress the vital powers, producing a convulsive shudder, under which the sufferer cowers together with his arms pressed against his chest, and utters a deep guttural cry, the vocal representation of which will afford a convenient designation of the attitude, mental or bodily, with which it is associated. Hence, in the first place, the interjection *ugh!* (in German *uh!* *hu!* in French *ouf!*) expressive of cold or horror, and commonly pronounced with a conscious imitation of the sound which accompanies a shudder. Then losing its imitative character the representative syllable appears under the form of *ug* or *hug*, as the root of verbs and adjectives indicating shuddering and horror. Thus *ug* or *houge* was formerly used in the sense of shudder at, feel abhorrence at.

The rattling drum and trumpet's tout
 Delight young swankies that are stout;
 What his kind frightened mother *ugs*
 Is musick to the sodger's lugs.

Jamieson, Sc. Dict.

In a passage of Hardyng cited by Jamieson it is related how the Abbess of Coldinghame having cut off her own nose and lips for the purpose of striking the Danish ravishers with horror,—

“ Counseiled al her systers to do the same
 To make their foes *to houge* so with the sight.
 And so they did, afore the enemies came
 Eche-on their nose and overlip full right
 Cut off anon, which was an *hougly* sight.”

Here, as Jamieson observes, the passage clearly points out the origin of the word *ugly* as signifying what causes dread or abhorrence, or (carrying the derivation to its original source) what makes us shudder and cry ugh!

Ugh! the odious ugly fellow.

Countess of St Albans.

It may be observed that we familiarly use frightful or dreadfully ugly for the extreme of ugliness. The radical syllable is compounded with a different termination in Scotch *ugsome*, what causes horror.

The *ugsomeness* and silence of the nycht
 In every place my sprete made sore aghast.

Douglas, Virgil.

From the same root are ON. *ugga*, to fear, to have apprehension of; *uggr*, fright, apprehension;

uggligr, frightful, threatening ; *uggsamr*, timorous. Then as things of extraordinary size have a tendency to strike us with awe and terror, to make us *hough* at them (in the language of Hardyng) the term *huge* is used to signify excessive size, a fearful size. The connection of the cry with a certain bodily attitude comes next into play, and the word *hug* is applied to the act of pressing the arms against the breast, which forms a prominent feature in the shudder of cold or horror, and is done in a voluntary way in a close embrace or the like.

The same root is seen in Dutch *huggheren*, to shudder or shiver.—Kiliaan.

GR. βαβαι ! LAT. BABÆ ! PAPÆ !

The manifestation of astonishment or absorption in intent observation, by the instinctive opening of the mouth, is familiar to every one.

I saw a smith stand with his hammer—thus,
The whilst his iron did on his anvil cool,
With open mouth swallowing a tailor's news.

K. John.

The cause is probably the fact that we hear better when the air which carries the sound is freely admitted within the jaws, in consequence of the internal connection between the mouth and ears.

Hence it seems that when our faculties are taxed to the utmost in the observation of an object of wonder, the mouth instinctively opens in order to catch the slightest sound that may proceed from the object, and the parting lips seem to give utterance to the syllable *ba* which thence is found as the root of words in the most distant languages signifying wonder, intently observe, watch, expect, wait, remain, endure, or (passing from the mental to the bodily phenomenon) gape or open the mouth, and thence open in general. The repetition of the syllable *ba! ba!* gives the interjection of wonder in Greek and Latin, *βαβαι!* *babæ!* *papæ!* The exclamation *ba!* is used in the North of France in a similar manner, according to Hécart (Dict. Rouchi), and the same author explains *babaie* as one who stares with open mouth, a gaping *booby*. Walloon *bawi*, to gaze with open mouth (Grandgagnage); *esbawi*, Old English *abaw*, Fr. *ébahir*, *abaubir*, to cause to cry *ba!* to set agape, to astonish.

In himself was all his state

More solemn than the tedious pomp which waits
 On princes, when their rich retinue long
 Of horses led and grooms besmeared with gold
 Dazzles the crowd, and sets them all agape.—Milton.

In the remote Zulu we find *babaza*, to astonish. The significant syllable is strengthened by a final *d* in several of the Romance dialects ("the *d* being in ancient Latin the regular stopgap of the hiatus."—Quart. Rev. No. 148), as in It. *badare*, to be intent upon, to watch, to loiter, tarry, stay; *stare a bada*, to observe, to watch, to wait; *sbadigliare*, Parmesan *badacciar*, Provençal *badalhar*, to yawn; *badar*, to open the mouth, *gola badada*, with open mouth; *pouerto badiero*, an open door; Fr. *bader*, to open (Vocab. de Berri); Catalan *badia*, Portuguese *bahia*, an opening where the sea runs up into the land, a bay; Breton *badalein*, to yawn; *bada*, *badaoui*, to be stupified, dazzled, astonished. In France the simpler form of the root, without the addition of the final *d*, gives Old Fr. *baer*, *baier*, *béer*, to be intent upon, to hanker after, to gape; *bouche béante*, *à gueule bée*, with open mouth; *bailler*, to gape or yawn. *Abaier* is explained by Lacombe, "écouter avec étonnement, bouche béante, inhiare loquenti." The adoption of Fr. *abaier* gave rise to E. *abeyance*, expectation, suspense, and Old E. *abie*, to remain, abide, endure.

At sight of her they sudden all arose
 In great amaze, ne wist which way to chuse,
 But Jove all fearless forced them to *abie*.—F. Queen.

Chaucer, in his translation of Boethius, uses *abie* in the sense of enduring torments. The same transition from the sense of earnest observation to that of expectation or mere endurance until a certain end, is seen in Latin *attendere*, to observe, to direct the mind to, and Fr. *attendre*, to expect, to wait; and again in Italian *guatare*, to look, to watch, compared with E. *wait*, which is radically identical, and was itself originally used in the sense of look.

Beryn clepyd a maryner, and bad hym sty on loft,
And *weyte* aftir our four shippis aftir us doith dryve.

As the vowel of the root is thinned down from *a* to *i* in the series *baer*, *baier*, *abaier*, *aby*, or in Gr. $\chi\alpha\omega$, $\chi\alpha\upsilon\omega$, compared with Lat. *hio*, to gape, we learn to recognize a similar series in It. *badare*, Gothic *beidan*, to look out for, to expect, await, and E. *bide*, *abide*, to wait. The passage in Mat. xi. 3, which in our version is rendered "do we look for another," is in AS. "we othres sceolon *abidan*."

HUSH! HIST!

Occasions for enjoining silence would occur early in savage life, where hostile tribes are intermingled, and the safety of the nightly camp requires an anxious look-out for the approach of

danger. When the watcher first catches the sounds for which his ear is on the stretch, the rustling of branches, or crackling of leaves under-foot made by the approach of strangers, the low whisper of subdued voices, or the sound of breath, he would give notice to his companions by a whispered utterance like *sh! st! ss!* representing the rustling sounds which caught his ear, while the circumstances of the case would give the announcement the effect of a warning to keep silence and listen. In a more developed state of language the exclamation of warning takes the shape of the interjections *hush! hist! whist!* Gaelic *uist!* German *pst!* Danish *tys!* Swedish *tyst!* Fr. *chut!* It. *zitto!* which may either be used to signify the low whispering sounds they were originally meant to represent, or may be taken in the sense of Peace! Be still; do not let your breath be heard; listen. Thus syllables, springing from imitation of a whispering sound, become the roots of words signifying silence, and the obviously connected sense of listening and thence of hearing. The Greek $\sigma\iota\zeta\omega$, preterite $\sigma\epsilon\sigma\iota\gamma\alpha$, to hiss, signifies also, like the secondary form $\sigma\iota\gamma\alpha\zeta\omega$, to cry *hush!* to command silence, whence $\sigma\iota\gamma\alpha\omega$, Latin *sileo*, to be hushed or silent. The origin of

our *hist!* is seen in Welsh *hust* (pronounced *hist*), a low or buzzing noise; *husting*, a whisper, a mutter.—Lewis. The Scotch *whish* is explained, any least sound.

Lat her yalp on, be you as calm's a mouse,
Nor lat your *whish* be heard into the house.

That such also is the primary meaning of It. *zitto* is apparent from such expressions as Non fare *zitto*, Non sentirse un *zitto*, not to let a breath be heard, to be mouse-still or leaf-still, as it is expressed in German, not to let such a noise be heard as the rustling of a leaf or a mouse. *Zitto* is then hushed, whist, silent; *sittire*, to be silent. The radical meaning of the Fr. interj. *chut!* *hist!* is apparent in the derivate verb *chuchoter*, to mutter, and a like connection may be observed between E. *whist!* provincially *pist!* and the provincial *whister*, *pister*, to whisper.—Halliwell. In imitative words the form is often varied by the introduction of an *l* after an initial *k*, *h*, *p*, *f*, without change of significance. Thus from forms like *whisper*, *whister*, we pass to German *flisperm*, *flüstern*, to whisper, with the first of which must be classed Anglo-Saxon *wlisp*, speaking imperfectly, and E. *lisp*; while *flüstern* leads imme-

diately to Dutch *luysteren*, to whisper, and also to listen; Platt Deutsch *lustern*, ON. *hlusta*, to listen; AS. *hlyst*, *gehlyst*, the sense of hearing. Thus we are brought round to our own interjectional *list!* synonymous with *hist!* Even *hark!* with the derivative *hearken*, may be explained by the same metaphor from Old Norse *hark*, Bohemian *hrk*, noise, *hrčeti*, to rustle, murmur.

MUM!

The slight inarticulate sounds that are made with the mouth in a half-involuntary way, are represented by syllables like *mum*, *muk*, *mut*, *mus*, *mu*, *knuck*, *gny*, γρν, *kuk*, *kik*, from whence are formed words (commonly used with a negative) signifying to speak low or indistinctly, to utter the least sound, then (with ellipse of the negative) to be silent and even dumb.

The author of *Piers Plowman*, speaking of the avarice of the monks, says that you may sooner

—mete the mist on Malvern hills,
Than get a *mum* of their mouths ere money be them shewed.

Here *mum* is used in the sense of the least word a person can utter, from whence, by the ellipse of the negative, *mum*, silent; *mumming*, acting in dumb-show. So Latin *mussare*, to mutter, then to be silent.

The German *mucks*, Danish *muk*, a weak half-audible sound, with the corresponding verbs, are chiefly used with the negative to signify silence or stillness. Han gav ikke en *muk*, en *kny*, he did not give a *muk*, a *kny*, not the slightest sound escaped him. Other varieties of the syllable representing a slight sound are shown in Spanish, no decir *mus ni chus* ; ni *mistar ni chistar* ; Italian, non far *motto ni tutto* ; Gr. *μυζειν μητε γρυζειν* ; Latin, ne *mutire* quidem, or as Lucilius has it, non dicere *muttum* ; Dutch, noch *mikken* noch *kikken* ; German, nicht *mix*, nicht *kix* sagen ; Swiss, nicht *mutz* thun, not to utter a syllable, to be totally silent.

From *μυζειν* is formed *μυστηριον*, the secret rites of the Greeks, and thence any secret or *mystery*, an idea of so abstract a nature, and so remote from connection with sound, as to afford a striking example of the capacity of the mimetic principle.

From the signification of the least inarticulate sound of the voice is further developed the sense of It. *motto*, Fr. *mot*, the least element of speech, a word, and figuratively, a saying. On the other hand, the ellipse of the negative gives rise to what appears exactly the contrary sense in Lat. *mut-us*,

dumb, as from Magyar *kuk*, a slight sound, *kukk-anni* (parallel with Du. *kikken*), to mutter, is formed *kuka*, dumb.

If onomatopœia can furnish expressions for the ideas of endurance, of silence, and of dumbness, what are the significations which we can reasonably suppose to be beyond its reach?

ENJOYMENT AND DISGUST.

The most universal and direct source of pleasure in animal life is the appetite for food, and it is accordingly from this source that are taken the types used in expressing the ideas of gratification or dislike. The savage expresses his admiration and pleasure by smacking his lips or rubbing his belly, as if relishing food or rejoicing in a hearty meal; he indicates distaste and rejection by signs of spitting out a nauseous mouthful. Thus Petherick, speaking of a tribe of negroes on the Upper Nile, says, "The astonishment and delight of these people at our display of beads was great, and was expressed by laughter and a general rubbing of their bellies."—*Egypt and the Nile*, p. 448. And similar evidence is adduced by Leichardt from the remoter savages in Australia. "They very much admired our horses and bullocks, and par-

ticularly our kangaroo-dog. They expressed their admiration by a peculiar smacking or clacking with their mouth and lips."—Australia, p. 336.

The syllable *smack*, by which we represent the sound made by the lips or tongue in kissing or tasting, is used in English, Swedish, German, Polish, &c., in the sense of taste. Dutch *smaeck*, taste; *smaecklic*, sweet, palatable, agreeable to the taste. In the Finnish languages, which do not admit of a double consonant at the beginning of words, the loss of the initial *s* gives Esthonian *maggo*, *makko*, taste; *maggus*, *makke*, Finnish *makia*, sweet, well-tasting; *maiskia*, to smack the lips; *maisto*, taste; *maiskis*, a smack, a kiss, also relishing food, delicacies. The initial *s* is lost also in Frisian *macke*, to kiss. The initial consonant is somewhat varied without impairing the imitative effect in Bohemian *mlaskati*, to smack in eating; *mlaskanina*, delicacies; and in Finnish *naskia*, G. *knatschen*, to smack with the mouth in eating, showing the origin of Lettish *naschkeht*, G. *naschen*, to be nice in eating, to love delicacies; *näscherei*, dainties.

Again, we have seen that Leichardt employs the syllables *smack* and *clack* as equally appropriate to represent the sound made by the tongue

and palate in the enjoyment of tasty food, and in French, *claquer de la langue* is employed for the same purpose. We speak of a *click* with the tongue, though we do not happen to apply it to the smack in tasting. The Welsh has *gwefusglec* (*gwefus*, lip), a smack with the lips, a kiss. From this source then we may derive Gr. γλυκὺς, sweet, analogous to Du. *smaecklic*, Fin. *makia*, from the imitative *smack*. The sound of an initial *cl* or *gl* is readily confounded with that of *tl* or *dl*, as some people pronounce *glove*, *dlove*, and formerly *tlick* was used where we now say *click*. Thus Cotgrave renders Fr. *niquet*, a *tnicke*, *tlick*, snap with the fingers. In Bavaria, according to Schmeller, *tl* and *tn* are locally used for *gl* or *kl* and *gn*, *kn*. The same combination is found in Bohemian *tlaskati*, to smack in eating, *tleskati*, to clap hands; and Lat. *stloppus*, parallel with *sclopus*, a pop or click with the mouth. From the sound of a smack represented by the form *tlick* or *dlick* I would explain Lat. *deliciæ*, anything one takes pleasure in, delight, darling; together with the cognate *delicatus*, what one smacks one's chops at, dainty, nice, agreeable, as corruptions of an earlier form, *dlicicæ*, *dlicatus*. And as we have supposed Gr. γλυκὺς (*glykys*) to be derived from

the form *click* or *glick*, so from *tlick* or *dlick* would be formed *dlykis* or *dhlukis* (dlucis), and ultimately *dulcis*, sweet, the radical identity or rather parallelism of which with Gr. γλυκὺς has been recognized on the principle of such an inversion. When the sound of an initial *tl* or *dl* became distasteful to Latin ears, it would be slurred over in different ways, and *dhlukis* would pass into *dulcis* by inverting the places of the liquid and vowel, while the insertion of an *e* in *dlicia*, *dlicatus*, as in the vulgar *umberella* for *umbrella*, would produce *delicia*, *delicatus*. It is true that an intrusive vowel in such cases as the foregoing is commonly (though not universally) short, but the long *e* in these words may have arisen from their being erroneously regarded as compounds with the preposition *de*.

POOH ! PSHAW !

The attitude of dislike and rejection is typified by signs of spitting out an unsavoury morsel, as clearly as the feelings of admiration and pleasure by signs of the relishing of food. Thus Gawaine Douglas expresses his disgust at the way in which the harmonious lines of Virgil were mangled by incompetent translators.

His ornate goldin verses mare than gilt,
I spitte for disspite to se thame spylte
 By sic ane wicht.—5. 44.

“Would to God therefore that we were come to such a detestation and loathing of lying *that we would even spatte at it*, and cry fy upon it and all that use it.”—Dent’s Pathway in Halliwell. The Swedish *spott* signifies spittle, and also derision, contempt, insult. The traveller Leichardt met with the same mode of expression among the savages of Australia. “The men commenced talking to them, but occasionally interrupted their speeches by spitting and uttering a noise like pooh! pooh! apparently expressive of their disgust.”—p. 189. It is probable that this Australian interjection was in fact identical with our own pooh! and like it intended to represent the sound of spitting, for which purpose Burton in his African travels uses the native *tooh!* “To-o-h! Tuh! exclaims the Muzunga, spitting with disgust upon the ground.”—Lake Regions of Africa, 2. 246.

The sound of spitting is represented indifferently with an initial *p*, as in Maori *puhwa*, to spit out; Latin *spuere*, to spit; *respuere* (to spit back), to reject with disdain; *despuere*, to express disgust or disdain; or with an initial *t*, as in Arabic *tust*,

spittle; *Galla tiou!* representing the sound of spitting; *tufa*, to spit; *tufada*, to spit, to despise, scorn, disdain; with which may be joined English *tuff*, to spit like a cat. In Greek $\pi\tau\upsilon\omega$ the imitation is rendered more vivid by the union of both the initial sounds.

BLURT! PET! TROTZ!

The feelings of one dwelling on his own merits and angry at the short-comings of another are marked by a frowning brow, a set jaw, and inflated cheeks, while the breath is drawn in deep inspirations and sent out in puffs through the nostrils and passive lips. Hence such expressions of breathing vengeance, fuming with anger, swelling with pride; which is a readiness to take offence arising from an exaggerated notion of our own claims to deference.

Sharp breaths of anger puffed
Her fairy nostrils out.—Tennyson.

The sound of hard breathing or blowing is represented by the syllables *puff*, *huff*, *whiff*, whence *a huff* is a fit of ill temper; *to huff*, to swell with indignation or pride, to bluster, to storm.—Johnson. A representation of an angry whiff gives rise to the Welsh interjection *wfft!* (pronounced

ooft), explained by Davis, vox abhorrentis et exprobrantis. *Wfft*, a scorn or slight, a fie; *ufftio*, to cry shame or fie, to push away with disapprobation.—Lewis. The It. *buffa* is explained in Thomas' Italian Dictionary, "the despising blast of the mouth which we call shirping."—Halliwell. Brescian *bofà*, to breathe hard, to puff, especially with anger.—Melchiori. Then, as ill-will vents itself in derision, *buffa*, *beffa*, a jest, a trick; *beffare*, to trick or cheat; *beffarsi*, to laugh at; *buffone*, a jester, a buffoon.

When the puff of anger or disdain is uttered with exaggerated feeling it produces an explosive sound with the lips, represented by the syllable *blurt*, which was formerly used as an interjection of defiance. *To blurt* a thing out is to bring it out with a sudden explosion as if spitting something out of the mouth. A *blirt* of greeting in Scotch is a burst of crying. Florio explains Italian *chichere* as a blurt with the mouth in scorn or derision. And probably the expression is often heightened by an unconscious representation of the act of spitting, as when in familiar speech we make use of contemptuous sounds like psh! tsh! pt! which in written language take the form of the interjections *pish!* *pscha!* *tush!* and the

equivalent Old Norse *putt!* Danish *pytt!* the last of which is explained by Ferrall as equivalent to our pshaw, tut, phoo.

The interjection which we write pish! psha! takes the form of *feuche!* *fuche!* in the North of France (Hécart. Dict. Rouchi), whence are to be explained such expressions as *se ficher de*, to treat with contempt; *ficher à la porte*, to drive out, to send packing; *fichu*, contemptible, poor. In Normandy *pett!* is used in a similar sense (pour imposer un silence absolu—Decorde); pooh, nonsense! The origin of this form of the interjection is seen in Italian *petto*, a blurt; *petteggiare*, *pettachiare*, to blurt with the mouth or lips—Florio; *pétarade*, a noise made with the mouth in contempt.—Sadler's Fr. Dict.

From this mode of expressing displeasure we have E. *pet*, a fit of ill humour or of anger; *to take pet*, to take huff, to take offence; *pettish*, passionate, ill-humoured; Latin *petulans*, saucy, proud. *To pet* a child is to indulge it in ill-humour, and thence *a pet*, a darling, an indulged child or animal. Then as a child gives vent to his ill-humour by thrusting out his lips and making a snout or making a lip as it is called in nursery language, a hanging lip is called a *pet lip*

in the North of England. To *pout*, or in Devonshire to *poutch* or *poutle*, in the South of France *fa las poutos*, is to show ill-humour by hanging the lip, and thence *pouto* or *poto*, a lip. Then (in the same way that It. *buffa*, *beffa*, signifying in the first instance a blurt with the mouth, are applied to a trick or jest) we have Danish *puds*, Swedish *puts* (to be compared with Devon. *poutch* above mentioned), German *posse*, a trick. The sound of a contemptuous blurt or pop with the mouth is represented by a great variety of imitative forms, most of which have been used as interjections of scorn, defiance, or derision, and have given rise to words signifying derision, cheating, defrauding, tricking. It is in this way that *pop* came to signify to treat contemptuously, to cheat.

Do you *pop* me off with this slight answer?

Beaumont and Fletcher.

That is my brother's plea,

The which if he can prove, he *pops* me out

At least from fair five hundred pounds a year.

Shakspeare.

In the same way from the representation of the contemptuous sound by the syllable *trump*, we speak of *trumping* up a story, *trumping* a story fraudulently upon one.

Fortune—

When she is pleased to trick or *trump* mankind.

B. Jonson.

Hence also French *tromper*, to cheat, to deceive. Italian *strombare*, *strombettare*, to blurt with one's mouth, to flurt at in scorn and reproach.—Florio. Another mode of representing the sound produces the Old English interjections of scorn, *Ptrot!* *Tprot!* *Prut!* the French *Trut!* and German *Trotz!*

The Manuel des Pecchés, treating of the sin of Pride, takes as first example the man

—that is unbuxome all

Ayens his fader spirital,

And seyth *Prut!* for thy cursyng, prest.

l. 3016.

Hence are formed the Old English *prute*, *prout*, now written *proud*, and the Northern E. *prutten*, to hold up the head with pride and disdain (Halliwell), which in the West of E. (with inversion of the liquid and vowel) takes the form of *purt*, to pout, to be sulky or sullen. German *protzen*, Dutch *pratten*, to sulk; *protzig*, *prat*, surly, proud, arrogant. Then as before, passing from the figure of a contemptuous gesture to a piece of con-

temptuous treatment, we have Old Norse *pretta*, to play a trick, to cheat; *prettr*, a trick.

The Italian *truscare*, to blurt or pop with one's lips or mouth (Florio), French *truc*, the popping with the lips to a horse, show the origin of Fr. *trut* (an interjection importing indignation), tush, tut, fy man (Cotgrave); as well as of German *trotz*, an interjection originally representing a blurt with the lips. *Trotz bieten*, to bid defiance; *trotzen*, to defy, to be forward or obstinate, to pout or sulk, to be proud of; *trotzig*, haughty, insolent, perverse, peevish, sulky.—Griebe, Germ. Dict. Du. *trotsen*, *torten*, Platt Deutsch *tum tort*, *daon* (Danneil), to irritate, insult. Scotch *dort*, pet, sullen humour; *to take the dorts*, to be in a pet; *dorty*, pettish, saucy, dainty. In the dialect of Valencia *trotar* is to deride, to make a jest of.

The analogy of Italian *tronfare*, *tronfiare*, to snort, also to huff, snuff, or chafe with anger; also to trump; and thence *tronfio*, puffed or ruffled with chafing, as a strutting turkeycock (Florio), leads us to believe that the representation of a blurt or snort of anger by the syllable *trotz* is the origin of German *strotzen*, and English *strut*, properly to puff or swell with pride and anger, then simply to swell or stand out.

Another application of the interjection of displeasure has been touched on in the derivation of Fr. *ficher à la porte*, to send packing, from *feuche! fuche!* pish! pshaw! fudge! When the superior receives a dependent with an expression of impatience and displeasure, it is naturally taken by the latter as an intimation to take himself off. Thus the interjection assumes the sense of Off! Begone! giving rise to verbs signifying to make off, to go along as if driven, and to adverbs signifying off, away. So from *truc* is formed Italian *truccare*, to send, to trudge or pack away nimbly (Florio); *truca via!* be off with you. The Gaelic *truis!* (trush) is explained by Macleod, a word by which dogs are silenced or driven out. *Trus a mach!* *Trus ort* (*mach*, out; *ort*, upon you), begone, get away. The same interjection was used in Old English.

Lyere—was nowher welcome, For his manye tales
Over al yhonted and yhote, *trusse*.

Piers Plowman's Vision, v. 1316.

To hete trus is an exact equivalent of the German *trotz bieten*. It is reasonable to suppose that our *trudge* is another version of the same imitation.

This tale once told none other speech prevailed,
But pack and *trudge!* all leysure was to long.

Gascoigne in Richardson.

From the same root the Venetian dialect has *trozare*, to send away.

FY! FAUGH!

There is a strong analogy between the senses of taste and smell, as between sight and hearing. When we are sensible of an odour which pleases us we snuff up the air through the nostrils, as we eagerly swallow food that is agreeable to the palate; and as we spit out a disagreeable morsel, so we reject an offensive odour by stopping the nose and driving out the infected air through the protruded lips, with a noise of which various representations are exhibited in the interjections of disgust. "Feculent, ferruginous, and fuliginous!" says a popular writer. "How nicely these epithets intimate a specific impression on the olfactory nerves. They have a force exceeding that of adjectives, and equal to the energy of interjections. Piff! Phew! Phit! They have all the significance of those exclamatory whiffs which we propel from our lips when we are compelled to hold our noses."—*Punch*, Sept. 2, 1863.

It must be observed that the sound of blowing or breathing out is represented all over the world by the syllable *pu* or *fu*, as in Old Norse *pua*,

Lettish *pust* (present tense *puschu*), German *pusen*, *pusten*, *pfausen*, *pfausten*, Finnish *puhhata*, *puhkia*, *puhaltaa*, Hawaii *puhi*, Maori *pupuhi*, *puhipuhi*, Malay *puput*, Illyrian *puhati*, Gaelic *puh* (pronounced *puh*), English *puff*, Scotch *fuff*, Magyar *fu*,* he blows, *furni*, Galla *afufa*, to puff, blow, breathe. Zulu *vuta*, to sound *vu*, to blow, to blaze; *futa*, to blow, breathe, puff; *pupuza*, to puff; Hebrew *pouahh*, he has blown. Sanders, in his excellent German dictionary, explains *pu!* as an interjection representing the sound made by blowing through the barely opened lips, and thence expressing (among other things) the rejection of anything nasty. "Ha *puh!* wie stank der alte mist!" Spanish *puf*, *pu*, exclamation of disgust at a bad smell; *fu!* interjection of disgust.—Neuman. Venetian *puh!* *fi!* interjection of one who is sensible of something disgusting.—

* This representation of the sound of blowing or breathing may not improbably be the origin of the root *fu*, Sanscrit *bhu*, of the verb to be. The negro who is without the verb *to be* in his own language supplies its place by *live*. He says, Your hat no *lib* that place you put him in.—Farrar, p. 54. A two-year-old nephew of mine would say, Where it *live?* where is it? Now the breath is universally taken as the type of life.

Patriarchi. French *pouah!* Breton *foei'!* *fec'h!*
E. *faugh!* *foh!*

Faugh! I have known a charnel-house smell sweeter.
Beaumont and Fletcher.

Foh! one may smell in him a will most rank.—Shakspeare.

Now it is obvious that the utterance of these interjections of disgust is the simplest and most forcible mode of announcing the existence of a bad smell, and if the interjection is accompanied by gestures indicating a particular object, it will be equivalent to an assertion that the thing stinks or is rotten. It will then be necessary only to clothe the significant syllable in verbal or adjectival forms in order to give rise to words signifying stink or rot. Thus from the form *pu* are derived French *puer*, Latin *putere*, *putidus*, *putris*, while from a form corresponding to Breton *foei* and E. *faugh*, *foh*, are Latin *fœtere*, and *fœtidus*, fetid. In like manner from the form *fu* (often spelt in English phoo! or phew!) we have Old Norse *fúinn*, rotten; *fúki*, stench or anything stinking; *fúll*, stinking, rotten; *fýla*, stench. In the Gothic Testament the disciple speaking of the body of Lazarus says *Jah fuls ist*: by this time he stinketh. Modern Norse *fúl*, disgusting, of bad taste or smell, troublesome,

vexatious, angry, bitter. *Han va fúl aat os*, he was enraged with us. The E. equivalent is *foul*, properly ill smelling, then anything opposed to our taste or requirements, loathsome, ugly in look, dirty, turbid (of water), rainy and stormy of the weather, unfair, underhand in the transactions of life. ON. *Fúlyrði*, foul words; *fúlmenni*, a scoundrel. From the adjective again are derived the verb to *file* or *defile*, to make foul; and *filth*, that which makes foul.

The disagreeable impressions of smell produce a much more vivid repugnance than those of taste, and being besides sensible to all around, they afford the most convenient type of moral reprobation and displeasure. And probably the earliest expression of these feelings would occur in teaching cleanliness to the infant. The interjection *fy!* expresses in the first instance the speaker's sense of a bad smell, but it is used to the child in such a manner as to signify, That is dirty; do not touch that; do not do that; and then generally, You have done something displeasing to me, something of which you ought to be ashamed. Laura Bridgeman, who was born deaf and blind, used to utter the sound *ff* or *fi* when displeased at being touched by strangers.

When used in a figurative sense to express general reprobation the interjection often assumes a slightly different form from that which expresses disgust at a bad smell. Thus in English *faugh!* or *foh!* express disgust, *fie!* reprobation. In German *fuy* or *fy* are used in the former sense, *pfui* (Lithuanian *pui*, Illyrian *pi*) in the latter. In other cases the original form is used in the enlarged application, as in Russian *fu!* Romaunsch *fu!* *fudi!* fy for shame! shame on you!

The addition of verbal forms produces G. *pfuien*, Norse *fyne*, to cry *pfui* or *fy*, to express displeasure, to scold; *ein fynt'e hund*, a scolded dog. The meaning is carried on a stage further in Russian *fukat*, to abominate, detest, and Gothic *fijan*, ON. *fjá*, AS. *fian*, to hate, where the verb expresses the feelings which prompt the utterance of the interjection *fu!* *fie!* From the participle *fjand* are G *feind*, an enemy, ON. *fjandi*, properly an enemy, then as E. *fiend*, the great enemy of the human race. From the same verb are *foe* (ON. *fiái?*), and *feud*, enmity or deadly quarrel.

The aptness of the figure by which the natural disgust at stench is made the type of the feelings of hatred is witnessed by the expression of "stinking in the nostrils" said of anything that is pecu-

liarily hateful to us. In the same way Italian *puzzar*, or *tufar*, to stink, are figuratively used of what is odious or displeasing. "La i tufa fort, la i puzza fort:" that grieves him much.—Ferrari, Bolognese Dict. From the Welsh *ffi!* *fie!* are formed *ffiaidd*, loathsome, detestable; *ffieiddio*, to loathe, abominate, detest.

I have dilated at greater length on the interjections of smell, not only because they afford a good example of the application of imitative syllables to the expression of moral feeling, but because the derivation from them of words like *fiend* and *foul* has been made by Professor Müller the main ground of his attack on the interjectional origin of language. He argues that if such words as these were derived from the interjection *faugh!* *foh!* *fie!* "we should suppose that the expression of contempt was chiefly conveyed by the aspirate *f*, by the strong emission of the breathing with half-closed lips. But *fiend* is a participle from a root *fian*, to hate, in Gothic *fijan*; and as a Gothic aspirate always corresponds to a tenuis in Sanscrit, the same root would at once lose its expressive power. It exists, in fact, in Sanscrit as *pîy*, to hate, to destroy."—I., p. 355. If there be such a root in Sanscrit it would tend in no degree to

invalidate the derivation of Gothic *fjan* from the interjection *fie!* For it is obvious that the idiosyncrasy which induces the use of an initial *p* in Sanscrit corresponding to a Gothic *f*, in accordance with Grimm's law of consonantal change, would have led the speakers of Sanscrit to pronounce their interjection of disgust and reprobation like Venetian *puh!* Spanish *pu!* Lithuanian *pui!* or Illyrian *pi!* We might then account in the most natural way for the use of the root *píy* in the sense of scold (which is one of those given by Lottner) as signifying to say *pi!* as Norse *fyne*, to say *fy!* to scold. Accordingly in his second series of lectures Müller seems to abandon his former objection, and to rest his opposition on the ground of apprehensions that if the interjectional origin of the words in question were admitted "all would be mere scramble and confusion; Grimm's law would be broken; and roots kept distinct in Sanscrit, Greek, Latin, and German would be mixed up together. For besides *píy*, to hate, there is another root in Sanscrit, *púy*, to decay. From it we have Latin *pus*, *puteo*, *putridus*; Greek *pyon* and *pythò*; Lithuanian *pulei*, matter, and, in strict accordance with Grimm's law, Gothic *fuls*, English *foul*."—p. 93. We can only answer the charge in as far

as it is explained by the instance which is brought in support of it. Now we have seen that two forms of the interjection have been developed in English; *phoo!* *foh!* *faugh!* expressing disgust at a bad smell; and *fie!* expressing reprobation and displeasure. And it will be perceived that the two modifications of the English interjection closely correspond both in sense and sound with the two Sanscrit roots above mentioned.

So far then there would be no evidence of that scramble or confusion which Müller apprehends. The interjectional theory merely carries on the investigation a stage further than the analysis of the Sanscrit grammarians, and gives a rational account of the origin of the roots *pîy* and *pûy*, which Müller is content to leave as ultimate facts.

NO.

The simple negative particle *ne* has become obsolete in English, and has been replaced by strengthened forms, as *no*, corresponding to Gothic *niain*, never, and *not*, resolvable into *ne whit*, not a bit. The origin of the negative signification may perhaps be studied best in the bodily gestures by which acceptance or agreement and refusal or denial are so widely signified. If the negative *n*

can be traced to the same figure, which accounts both for the expression of approval by a nod of the head, and of denial by a shake, the chances will be greatly increased that we have hit on the true explanation. Now the earliest instance in the life of Man when he has occasion to indicate acceptance or refusal is in answer to the offer of the mother's breast. If the infant is hungry he moves his head eagerly forwards in order to seize the breast with his mouth, and as soon as he is satiated he withdraws his mouth, and endeavours to avoid the breast by moving his head from side to side. In this earliest exercise of choice on the part of the infant is found a natural type of agreement or dissent, which are accordingly expressed by slight movements of the head, symbolical of those of the infant in accepting or rejecting the earliest proffer of food.*

When the action which furnishes the type of dissent has to be symbolized in speech instead of gesture, the part performed by the mouth becomes the prominent feature of the action; and as the infant closes his mouth against the breast which is pressed against his lips, the refusal of the offer may be symbolized as well by a conspicuous closure

* Charma.

of the mouth as by the motion of the head. But when the voice is exerted with closed teeth or lips, it produces the sound of the letter *n* or *m*. Hence we may account for the use of the particle *ne* to signify negation, and possibly also of Greek $\mu\eta$ in the same sense. From *ne* are formed Lat. *nego*, Fr. *nier*, Illyrian *nekati*, ON. *neita*, *nita*, to say *ne*, to deny, refuse.

HEM!

The last interjection that we shall notice is the cry of *hem!* used for a variety of purposes, all founded in the first instance on calling the attention of the hearer to the speaker himself. Thus the exclamation *hem!* or *ahem!* is used as a preparation to engage attention before we begin to speak; or uttered in the course of speaking it is meant to retain the hearers' attention until the speaker has matured his thoughts, and is thus equivalent to holding by the button. In Latin it often has the sense of lo! *Hem Davum tibi*, lo there is Davus. Here also the primary object of the interjection is to call attention to the speaker while he points out Davus by some bodily gesture.

The primary object is still to call attention to the speaker when we *hem* after a person in order to make him stop or come back. Hence German

hemmen, to stop, check, restrain; *ein rad hemmen*, to drag a wheel. From the notion of stopping or restraining, the signification is in English extended to that of confining, surrounding, and is specially applied to the doubling down which confines the edge of a piece of cloth and hinders it from ravelling out, a signification which one would think à priori as far as any that could be devised from the possibility of an origin in onomatopœia.

ME.

But if the primary purpose of the interjection *hem* is to call attention to the actual presence of the speaker, why may it not be the origin of the pronoun *me*, Greek $\epsilon\mu\epsilon$, $\mu\epsilon$, the import of which is simply to bring the speaker before the thoughts of the hearer? *Me* signifies the person of the speaker, and in the Latin verse

Me, me, adsum qui feci, in me convertite tela,

the sense would in no degree be altered by reading the passage

Hem! hem! adsum qui feci——.

The principle which leads to the use of the syllable *hem* in calling the attention of another to oneself, seems to lie in the fact that the letter *m* marks the

sound uttered with closed lips. When I intend to call the attention of another to myself, I begin by clearing my throat in order to catch his ear, and then by closing my lips I seem to keep the utterance within myself, and to confine the signification to what is within me. If an angry child has been put out of the room and comes back for re-admittance before he has recovered his temper, when asked from the inside who is there? instead of giving his name or saying *me*, he will answer by an angry roar with closed lips, sounding *m—m!* The sound *mm* thus uttered by an angry child to bring himself before the mind of another, is found in the language of the Bushmen as the pronoun of the first person, and it has been shown by Dr Lottner in the Philological Transactions for 1859, that the letters *m* or *n* are made the basis of the pronoun in languages scattered over the face of the whole earth. Thus in a list of ninety Negro languages the syllables *ma*, *mau*, *me*, *mi*, *mo*, *mu*, *na*, *ne*, *ni*, *in* (or *m* and *n* as prefix), are found as pronoun of the first person in upwards of seventy instances. A similar tendency to the use of *m*, *n*, or *ng* is found in Asia, Siberia, and America.

If an imitative origin can be found for the

pronoun of the first person, there is no reason why those of the second and third person should not be accounted for on a similar principle, although we are not at present in possession of a clue to their explanation.

PAPA, MAMMA.

There is a limited class of words common to almost all languages, which owe their signification to a principle different from any of the foregoing. These are words formed by repetition of the simplest articulations, *mama*, *baba*, *papa*, *nana*, *dada*, *tata*, or with the vowel in the inverse order *amma*, *abba*, *atta*, &c. They doubtless arise in the first instance from the mother caressing the infant by an imitation of his own unmeaning mutterings : mummumum ! dada ! They thus appear rather as adoptions of the natural language of the infant than as inventions of the parent. It is, however, she who gives them their articulate shape, and appropriates their signification to the objects embraced within the narrow range of the infant's thoughts,* the mother and father, the mother's breast, the act of taking food, the infant himself. The sounds represented by the syllables *ma ma* being those earliest and most frequently uttered

* See Appendix,

by the infant, the name of *mama* is commonly appropriated to the mother herself, leaving the choice of *baba*, *papa*, *dada*, &c., to signify the father, as chance may settle. Thus in Latin nurseries *mamma* was used for a mother, a nurse, a grandmother, and with the diminutive *manilla* was retained in ordinary speech in the sense of the breast. With English children of the upper ranks *mamma* and *papa* are mother and father, while among the peasantry the corresponding terms are *mammy* and *daddy*, agreeing with Welsh *mâm* and *tâd*, which are the ordinary words of the latter language. In Esthonian we have *emma*, mother, corresponding to Old Norse *ammi*, grandmother, and German *amme*, the wet-nurse who supplies the place of a mother. But this selection of the syllables *am* and *ma* to designate the mother is not without exception, and we find in Georgian *mama*, father, and *baba*, mother.

Latin *papas* was father in nursery language; *pappus*, grandfather. That *pappa* must once have been used in the place of the diminutive *papilla* to signify the breast or nipple appears from It. *poppa*, the breast, *poppare*, to give suck; parallel with Lat. *pappo*, to eat, in children's language, properly to take the breast, to take food. Hence

pappa, *pap*, food prepared for the soft gums of infancy. With Illyrian children also *papati* is to eat, as *pappen* in Bavaria. Hence may be explained Polish *papinki*, dainties, tidbits, or the terms *pappe*, *pappele*, used by Tyrolean children to signify anything nice to eat: *zuckerpappele*, sugar plums. In our own *lollipops* the latter half of the word is from the same source, while the former half is to be explained from Bavarian *lallen*, *lullen*, to suck.

On the other hand, the imitation of the muttering sounds of a child by the syllables *ba*, *pa*, is often applied by way of direct representation to signify prattling, talking senselessly, then talking in general. On this principle are formed Dutch *babelen*, Fr. *babiller*, and E. *babble*; Fr. *papoter*; G. *papeln* or *pappeln* and *pappern*, to babble, prattle; whence Bavarian *der Papp'l*, the parrot, a sense which explains the Italian name of the bird, *papagallo*, the talking cock, the origin of our obsolete *popinjay*. Magyar, *papolni*, to tattle.

Returning to the significations arising from arbitrary appropriation, we pass from It. *poppa*, the breast, to Fr. *poupon*, a baby or infant at the breast; *poupée*, a doll or imitation baby, a babe of clouts as it was formerly called, a milliner's block. Hence the figurative expression of a *puppy*, an

empty-headed youth thinking of nothing but his fine habiliments. On the other hand, the same name is given to a young dog from the resemblance of his confiding innocence to that of a sucking child.

From Hebrew *abba*, father, the name of *abbas* was given to monks, whence *abbatia*, a society of monks, an abbey. The name of abbot was afterwards confined to the chief of the society, as *abbess* to the chief of a society of nuns. In the same way from *papa*, father, the name of *papa* is given in the Greek Church to priests in general, and has been retained by the Pope (in Italian *Papa*), the universal head of the Catholic Church. The Illyrian *nana*, mother, leads to It. *nonno*, grandfather, *nonna*, grandmother, and thence a nun, a name given by way of respect to a religious recluse.

The echo by the mother of the wrangling or contented tones of the infant, as she jogs it to sleep, produces the nurse's song or lullaby, *la, la, la, na, na, na*. From the repetition *la, lu*, is formed the verb *to lull*, primarily to set a child to sleep, then to still the violence of any kind of action, as of the wind or waves, or of bodily pain. The same imitation of the infant's utterance gives rise to German *lallen*, to speak imperfectly as a child, from

whence the signification is extended to the sense of talking in general, in Gr. λαλεω, to speak.

In Servian the nurse's song sounds *lyu, lyu*, whence *lyulyati*, to rock, to swing; *lyulyaska*, a cradle. In Italian nurseries the lullaby sounds *ninna nanna*, or *na, na, na*. Hence *ninnare*; *ninnellare*, to rock, and in children's language *nanna*, bed, sleep: *far la nanna*, *andare a nanna*, to go to bed, to go to sleep. In the Mpongwe, a language of the West of Africa, we find *nana*, and in the Sowhylee of the Eastern coast, *lala*, in the sense of sleep. A different turn of thought leads to the Milanese *nan, nanin*, a caressing term for an infant; *caro el me nan*, my darling baby; *ninna, ninæu*, a little girl. In Latin *nanus*, a dwarf, the designation of a child is transferred to a person of childlike stature; as in modern Greek *νινιον*, a young child, a childish person, and English *ninny*, the designation is transferred to a person of childish understanding.

The inarticulate utterance of the infant when he exhales his spirits in the exercise of his limbs seems to be represented by the syllables *da* or *ta*, which thence are applied to signify muscular action, as in Galla *dadada goda*, to knock, to beat. The French child, according to Menage, says

da-da-da when he wants something or wants to name something, *i. e.* when he stretches out his hand for it, or points to it. In our own nurseries it is certain that the child is taught to say *ta*, when he stretches out his hand to receive something, or to bid good-bye. Hence may be explained the use of the root *da* or *ta* in the sense of give, or in that of the demonstrative pronoun, which is the spoken equivalent of the act of pointing. The use of *da* in the sense of give is not confined to the Aryan stock, but is found in the Yoruba of Western Africa, where it signifies strike, give, pay.

CHAPTER IV.

ANALOGY.

THE greater part of our thoughts seem at the first glance so wholly unconnected with the idea of sound as to throw great difficulty in the way of a practical belief in the imitative origin of language. "That sounds can be rendered in language by sounds," says Müller, "and that each language possesses a large stock of words imitating the sounds given out by certain things, who would deny? And who would deny that some words originally expressive of sound only might be transferred to other things which have some analogy with sound? But how are things which do not appeal to the sense of hearing—how are the ideas of going, moving, standing, sinking, tasting, thinking, to be expressed?"—2nd Series, p. 89. The answer to the query is already given in the former part of the passage: by analogy, or metaphor, which is the transference of a word to some

analogous signification, the conveyance of a meaning by mention of something which has an analogy with the thing to be signified. But in several of the instances specified by Müller it is not difficult to show a direct connection with sound. Thus we have seen that the conceptions of taste are expressed by reference to the smacking of the lips and tongue in the enjoyment of food. The idea of going is common to a hundred modes of progression that occur in actual existence, of which any one may, and one in particular must, in every mode of expressing the idea, have been the type from which the name was originally taken. In the case of the word *go* itself, for which Johnson gives seventy meanings, the original is that which he places first : to walk, to move step by step, a sense which lends itself in the most obvious manner to imitative expression, by a representation of the sound of the footfall. The connection between thought and speech is so obvious that we need be at no loss for the means of expressing the idea of thinking. Thus Greek *φραζω* is to say ; *φραζομαι*, to say to oneself, to think, while *λογος* signifies both speech and thought. In some of the languages of the Pacific thinking is said to be called speaking in the belly. Maori *mea* is to speak, say,

think, do; *hua*, to name, think, know; *ki*, to speak, to think.

The analogy between the senses of taste and smell has been already mentioned, in consequence of which words originally applying to the sense of taste are transferred to the impressions of the analogous faculty. Thus from Latin *sapor*, taste, is descended the English *savour*, which is applied as well to the impressions of the nostrils as to those of the palate. The German *schmecken*, to taste, is used in Bavaria in the sense of smell. In like manner the analogy between sight and hearing enables us to signify conceptions of sight by metaphors from the domain of sound. Thus the idea of sparkling, or rapid flashing of a small concentrated light, is expressed by the figure of a crackling sound, consisting of a similar repetition of short sharp impressions on the ear. The word *sparkle* is a derivation from the same imitative root from which spring Swedish *spraka*, Danish *sprage*, Lithuanian *spragēti*, to crackle as firewood, to explode, rattle. The meaning of French *pétiller* is first to crackle, then to sparkle. Dutch *tintelen* is first to tinkle, then to twinkle, glitter. The Latin *scintilla*, a spark, has its origin in a form like Danish *skingre*, Norse *singla*, to ring, to klink.

Again, French *éclat* (in Old Fr. *ésclat*), properly a clap or explosion, is used in the sense of brightness, splendour, brilliancy. The word *bright* had a similar origin. It is the equivalent of G. *pracht*, splendour, magnificence, which in Old High German signified a clear sound, outcry, tumult. Bavarian *bracht*, clang, noise. In AS. we have *beorhtian*, to resound, and *beorht*, bright.

Leod was asungen

Gleomannes gyd,

Gameu eft astah,

Beorhtede benc-sweg :

The lay was sung, the gleeman's song, the sport grew high, the bench-notes resounded.—Beowulf, 2315.

In the old poem of the Owl and the Nightingale *bright* is applied to the clear notes of a bird.

Heo—song so schille and so *brihte*

That far and ner me hit iherde.—l. 1654.

Dutch *schateren*, *scheteren*, to make a loud noise, to shriek with laughter; *schiteren*, to shine, to glisten; Dan. *knistre*, *knittre*, *gnittre*, to crackle; *gnistre*, to sparkle. Many striking examples of the same transference of signification may be quoted from the Finnish language, as *kilina*, a ringing sound, a brilliant light; *kiliä*, tinkling, glittering; *wilistä*, to ring as a glass; *willata*,

wilella, *wilahtaa*, to flash, to glitter; *kimistå*, to sound clear (parallel with E. *chime*), *kimmaltaa*, *kiimottaa*, to shine, to glitter, &c. In Galla, *bilbila*, a ringing noise as of a bell; *bilbilgoda* (to make *bilbil*), to ring, to glitter, beam, glisten.—Tutschek

The language of painters is full of musical metaphor. It speaks of harmonious or discordant colouring, discusses the tone of a picture. So in modern slang, which mainly consists in the use of new and violent metaphors (though perhaps, in truth, not more violent than those in which the terms of ordinary language had their origin), we hear of screaming colours, of dressing loud.

But besides the analogy between external objects which enables us to give names taken from direct imitation to things unconnected with sound, it seems that no inconsiderable number of words are derived from a feeling of something analogous in the effort of utterance with the thing to be signified, as for instance, in the case of the interjection *hem!* from the feeling of the speaker that he is confining the signification within himself when he closes his mouth in the utterance of the final *m*. It was to analogies of this kind that the attention of the ancients was mainly directed, and it must be admitted that they open a wide door for that

loose speculation into which their linguistic philosophy is so apt to fall. Of this we have a fair example in the Cratylus, where Socrates is made to explain the inherent fitness of the letter sounds to signify phenomena of analogous nature in external existence. The letter *r*, he says, from the mobility of the tongue in pronouncing it, seemed to him who settled names an appropriate instrument for the imitation of movement. He accordingly used it for that purpose in $\rho\acute{\epsilon}\iota\nu$ and $\rho\acute{o}\eta$, flow and flux, then in $\tau\rho\omicron\mu\omicron\varsigma$, $\tau\rho\alpha\chi\upsilon\varsigma$, $\kappa\rho\upsilon\epsilon\iota\nu$, $\theta\rho\alpha\upsilon\epsilon\iota\nu$, $\acute{\epsilon}\rho\epsilon\iota\kappa\epsilon\iota\nu$, $\kappa\epsilon\rho\mu\alpha\tau\iota\zeta\epsilon\iota\nu$, $\rho\upsilon\mu\beta\epsilon\iota\nu$, tremour, rough, strike, break, rend, shatter, whirl. Observing that the tongue chiefly slides in pronouncing *l*, he used it in forming the imitative words $\lambda\epsilon\iota\omicron\varsigma$, smooth, $\lambda\iota\pi\alpha\rho\omicron\varsigma$, oily, $\kappa\omicron\lambda\lambda\omega\delta\eta\varsigma$, gluey, $\omicron\lambda\iota\sigma\theta\alpha\upsilon\epsilon\iota\nu$, slide. And observing that *n* kept the voice within, he framed the words $\epsilon\nu\delta\omicron\nu$, $\epsilon\nu\tau\omicron\varsigma$, within, inside, fitting the letters to the sense.

Much of the same kind is found in an interesting passage of Augustine, which is quoted by Lersch and Müller.

“The Stoics,” he says, “hold that there is no word of which a clear account cannot be given. And if you said that it would be equally necessary to trace the origin of the words in which the

origin of the former one was explained and so on ad infinitum, they would admit that so it would be until you came to the point where there is direct resemblance between the sound of the word and the thing signified, as when we speak of the tinkling (tinnitum) of brass, the neighing of horses, the bleating of sheep, the clang (clangorem) of trumpets, the clank (stridorem) of chains, for you perceive that these words sound like the things which are signified by them. But because there are things which do not sound, with these the similitude of touch comes into play, so that if the things are soft or rough to the touch, they are fitted with names that by the nature of the letters are felt as soft or rough to the ear. Thus the word *lene*, soft, itself sounds soft to the ear; and who does not feel also that the word *asperitas*, roughness, is rough like the thing which it signifies? *Voluptas*, pleasure, is soft to the ear; *crux*, the cross, rough. The things themselves affect our feelings in accordance with the sound of the words. As honey is sweet to the taste, so the name, *mel*, is felt as soft by the ear. *Acre*, sharp, is rough in both ways. *Lana*, wool, and *repres*, briars, affect the ear in accordance with the way in which the things signified are felt by touch.

“It was believed that the first germs of language were to be found in the words where there was actual resemblance between the sound of the word and the thing which it signified : that from thence the invention of names proceeded to take hold of the resemblance of things between themselves ; as when, for example, the cross is called *crux* because the rough sound of the word agrees with the roughness of the pain which is suffered on the cross ; while the legs are called *crura*, not on account of the roughness of pain, but because in length and hardness they are like wood in comparison with the other members of the body.”*

We can only smile at this philosophic trifling, but that there is a true analogy between sound and shape or movement is shown by the fact that we apply the same qualifications to both classes of phenomena. We speak of a rough or a smooth sound and a rough or smooth motion or outline. The ground of this relation between the two conceptions is, that both sound and motion are the effect of mechanical action, and are constantly associated in our experience, so that hardly a sound can be heard which does not suggest the thought of some kind of movement, from the crack of a gun

* The original is given at the end of the volume.

to the rustle of a leaf. At the same time we have an internal knowledge of the phenomena from the power we possess of producing sound by the exertion of the voice, and motion by the voluntary action of the hand or foot. We recognize in both cases the dependance of the phenomenon on the effort exerted, and we attribute to the sound or the movement the quality of the effort by which it was produced. Thus we speak of an abrupt, a tremulous, or a broken sound as well as motion, and we thence employ a vocal utterance of an abrupt, a tremulous, or a broken nature to signify a movement of analogous character, although the movement itself may be wholly unaccompanied by noise of any kind. Thus there is a direct imitation of action by the voice, and not merely an imitation of sound, although doubtless whenever action was thus represented, the meaning of the utterance would at first be explained by accompanying gestures, as the symbols of Chinese and hieroglyphic writing frequently are by the keys or distinctive characters indicating the general nature of the thing signified. Now among the consonantal sounds those of the mutes, or checks as they are called by Müller, consisting of the letters b, d, g, p, t, k, are distinguished from all other consonants by

this, "that for a time they stop the emission of breath altogether."—Müller, 2nd Series, p. 138. Hence in pronouncing a syllable ending in a mute or check we are conscious of an abrupt termination of the vocal effort, and we employ a wide range of syllables constructed on that principle to signify a movement abruptly checked, as *shag*, *shog*, *jag*, *jog*, *jig*, *dag*, *dig*, *stag* (in *stagger*, to reel abruptly from side to side), *job*, *jib*, *stab*, *rug*, *tug*; Fr. *sag-oter*, to jog; *sac-cade*, a rough and sudden jerk, motion, or check.—Sadler, Fr. Dict.

The syllable *suk* is used in Bremen to represent a jog in riding or going; Dat geit jummer *suk!* *suk!* of a rough horse. *Ene olde suksuk*, an old worthless horse or carriage, a rattle trap. *Sukkeln*, German *schuckeln*, *schockeln*, to jog. On the same principle the component syllables in *zigzag* fundamentally represent short impulses abruptly changing in direction, and thence the shape of the line traced out by such a movement, the changes in direction being indicated by the change of vowel from *i* to *a*. *G. zacke*, a jag or sharp projection; *sickzack*, zigzag, a line or movement composed of a series of jogs. The syllables *tick*, *tack*, *tock*, represent sharp smart sounds of various kinds, and the associated or analogous movements. Thus the

component syllables of Bolognese *tec-tac*, *cec-ciac*, a cracker, represent the successive explosions of the firework, in which it jumps sharply about in different directions. We have then English *tick-tack* for the beat of a clock, Italian *tecche-tocche*, Brescian *tech-tech*, *toch-toch*, for the sound of knocking at a door, Parmesan *tic-toc* for the beat of the heart or the pulse, or the ticking of a watch. Hence *tick* or *tock* for any light sharp movement. *To tick* a thing off, to mark it with a touch of the pen; to take a thing *on tick*, to have it ticked or marked on the score; *to tickle*, to incite by light touches. Bolognese *tocc*, Brescian *toch*, the blow of the clapper on a bell or knocker on a door, lead to Spanish *tocar*, to knock, to ring a bell, to beat or play on a musical instrument, and also (with the meaning softened down) as Italian *toccare*, French *toucher*, to touch. The Milanese *toch*, like English *tick*, is a stroke with a pen or pencil, then, figuratively, a certain space, so much as is traversed at a stroke; *on bell tocch di strada*, a good piece of road; then, as Italian *tocco*, a piece or bit of anything.

The sound of a crack suggests the idea of a sudden start or abrupt movement, and when repeated it indicates broken movement, movement sharply

changing in direction, and thence a jagged or crooked outline, as in the Norse expression, *i krok aa i krik*, in a crooked path, with many bendings first on one side, then on the other. The syllable *crack* thus becomes adapted to signify a sudden change of direction or sharp bend, or anything bent, as in ON. *krakr*, *krokr*, a hook, loop, angle, bending, turn; E. *crook*, *crooked*, Latin *cruz*, cross, an implement in which (as also in a *crutch*) the arm is brought at right angles across the stem. From the same source are Greek *κῑρκος*, and with inversion of the vowel *κῑρκος*, Lat. *circus*, *circulus*, a ring, circle. The addition of a nasal to the imitative syllable gives *crincum-crankum*, with twists and turnings; *cringle-crangle*, a zigzag (Halliwell); *crinkle*, to go in and out, rumple, wrinkle; *crankling*, twisting and turning; *crank*, a twist, a handle bent at right angles; ON. *kringla*, *kringr*, *hringr*, Danish *ring*, a circle.

In other cases the representation of a crackling sound is applied to signify the multifarious movement of a complex body. So French *pétiller*, to crackle, expresses the twitching of the limbs of a person who cannot keep still for impatience. The Swedish *prassla*, to rustle or crackle, in a secondary application signifies to flutter with the wings,

sprawl like an infant, flounder like a fish out of water, wag the tail, tremble like the leaves of a tree. The sister form *sprassla*, to crackle, preserves the same original sense, while the secondary application is marked by a slight modification of sound in *sprattla*, to sprawl, or throw about the legs, corresponding to provincial English *sprottle*, to struggle, to throw about the arms and legs, and *spruttle*, to sprinkle or scatter drops of liquid in all directions.* Another instance, where the original and secondary applications are distinguished by a slight modification in the form of the word, is found in Swedish *spraka*, to crackle, and *sparka* (with inversion of the liquid and vowel), to kick, to sprawl. In the North of England *to spark* is to splash, to scatter abroad particles of wet. "I *sparkyll* abrode, I sprede thynges asonder."—Palsgrave

The same transference from ideas of sound to those of extension takes place with the syllables *muk*, *mik*, *mot*, *tot*, *kuk*, *kik*, &c., which were formerly mentioned as being used (generally with a negative) to express the least appreciable sound. The closeness of the connection between such a meaning and the least appreciable movement is

* Compare Zulu *sabulala*, to struggle violently, to disperse, lie scattered about.

witnessed by the use of the same word *still* to express alike the absence of sound or motion. Accordingly the G. *muck*, representing in the first instance a sound barely audible, is made to signify a slight movement. *Mucken*, to mutter, to say a word ; also to stir, to make the least movement.

The representative syllable takes the form of *mick* or *kick* in the Dutch phrase noch *micken* noch *kicken*, not to utter a syllable. Then, passing to the signification of motion, it produces Dutch *micken*, Illyrian *migati*, to wink ; *micati* (*mitsati*), to stir ; Lat. *micare*, to glitter, to move rapidly to and fro. The analogy is then carried a step further, and the sense of a slight movement is made a stepping-stone to the signification of a material atom, a small bodily object. Hence Lat. and It. *mica*, Spanish *miga*, Fr. *mie*, a crum, a little bit, G. *mücke*, a midge, the smallest kind of fly. The train of thought runs through the same course in Dutch *kicken*, to utter a slight sound ; It. *cicalare*, *chichirillare*, to chatter ; Fr. *chicoter*, to sprawl like an infant ; Welsh *cicio*, and E. *kick*, to strike with the foot. Then in the sense of any least portion of bodily substance, It. *cica*, Fr. *chic*, *chiquet*, a little bit ; *chique*, a quid of tobacco, a playing-marble, properly a small lump of clay ; Sp.

chico, little. In the same way from the representation of a slight sound by the syllable *mot*, *mut*, as in E. *mutter*, or in the Italian phrase *non fare ne motto ne tutto*, not to utter a syllable, we have E. *mote*, an atom, and *mite*, the least visible insect; Du. *mot*, dust, fragments; It. *motta*, Fr. *motte*, a lump of earth. From Du. *mot* again must be explained *motte*, a *moth*, the worm that corrupts our stores of clothes and reduces them to *motes* or fragments; or the fly that springs from it.

The use of a syllable like *tot* to represent a short indefinite sound is shown in the Italian phrase above quoted; in Old E. *totle*, to whisper (Promptorium), Du. *tateren*, to stammer, to sound like a trumpet; Old Norse *tauta*, to mutter; Norse *tot*, muttering, murmur; E. *tootle*, to make noises on a flute or horn; *titter*, to laugh in a subdued manner. The expression passes on to the idea of movement in E. *totter*, *tottle*, to move slightly to and fro, to toddle like a child; *tot*, to jot down or note with a slight movement of the pen; *titter*, to tremble, to seesaw (Halliwell); Lat. *titillo*, Provincial E. *to tittle*, to tickle or excite by slight touches or movements. Then, passing from the sense of a slight movement to that of a small bodily matter, we have E. *tot*, anything very

small; *totty*, little (Halliwell); Danish, *tot*, Scotch *tait*, a bunch or flock of flax, wool, or the like; It. *tozzo*, a bit, a morsel; E. *tit*, a bit, a morsel, anything small of its kind, a small horse, a little girl; *titty*, tiny, small; *titfaggots*, small short faggots; *titlark*, a small kind of lark; *titmouse* (Dutch *mossche*, a sparrow), a small bird; *tittle*, a jot or little bit. It. *citto*, *zitto*, a lad; *citta*, *zitella*, a girl. The passage from the sense of a light movement to that of a small portion is seen also in *pat*, a light quick blow and a small lump of matter; *to dot*, to touch lightly with a pen, to make a slight mark, and *dot*, a small lump or pat.—Halliwell. *To jot*, to touch, to jog, to note a thing hastily on paper; *jot*, a small quantity.

The change of vowel from *a* or *o* to *i*, which was seen above in *tot* and *tit*, is another example of correspondence between modifications in the effort of utterance and the character of the thing signified. The vowels *a* and *o* are pronounced with open throat and the full sound of the voice, while the orifice of the windpipe is narrowed and the volume of sound diminished in the pronunciation of *i*. Hence we unconsciously pass to the use of the vowel *i* in expressing diminution of action or of size.

The sound of the footfall is represented in German by the syllables *trapp-trapp-trapp*; from whence Du. *trap*, a step, *trappen*, to tread, Swedish *trappa*, stairs. The change to the short compressed *i* in *trip* adapts the syllable to signify a light quick step: Du. *trippen*, *trippelen*, *trepelen*, to leap, to dance (Kiliaan); Fr. *trépigner*, to beat the ground with the feet. *Clank* represents the sound of something large, as chains; *clink*, or *chink*, of smaller things, as money. *To sup up*, is to take up liquids by large spoonfuls; *to sip*, to sup up by little and little, with lips barely open. *Top*, *nab*, *knob*, signify an extremity of a broad round shape; *tip*, *nib*, *nipple*, a similar object of a smaller size and pointed shape.

A young relation of my own adopted the use of *baby** as a diminutival prefix. *Baby-Thomas* was the smaller of two men-servants of that name. But when he wishes to carry the diminution further he narrows the sound to *bee-bee*, and at last it becomes a *beebee-beebee* thing. Thus he has practically invented the word *beebee* in the sense of little. It is possible that such a pronunciation of *baby* may have been the origin of *wee* or *wee-wee*, small, but

* So in the Vei language of Western Africa, *den*, child, and also, little, small.

it is more likely that it is a mere representation of the utterance when we make the voice small for the purpose of expressing smallness of size. It will be observed that we increase the force of the expression by dwelling on the narrow vowel and contracting the voice to a thread. A little *tee-eeny* thing; a *teeny-weeny* thing.

The consciousness of forcing the voice through a narrow opening in the pronunciation of the sound *ee* leads to the use of syllables like *peep*, *keek*, *teet*, to signify a thing making its way through a narrow opening, just beginning to appear, looking through between obstacles. Danish *at pippe frem* is to spring forth, to make its way through the bursting envelope, whence French *pepin*, the *pip* or *pippin*, the germ from whence the plant is to spring. The Swedish has *titta frem*, to peep through, to begin to appear; *titta*, to peep, in old English *to teet*.

The rois knoppis *tetand* furth thare hed
 Gan chyp and kythe thare vernale lippis red.

Douglas Virgil, 401. 8.

The *peep* of dawn is when the curtain of darkness begins to lift and the first streaks of light to push through the opening.

The syllables *ba*, *pa* are among those that come

the readiest to the lips, and thence they are used in the construction of words representing a light murmuring sound, as that of broken water or of voices indistinctly heard. Hence Du. *bàbelen*, G. *papeln*, Fr. *papoter*, to babble, chatter, tattle; Du. *popelen*, to mutter, murmur; Fr. *papelard*, a mutterer of prayers, a hypocrite; E. *popple*, to sound like broken water, to bubble up, and then (with the signification transferred from sound to motion) to tumble about like the surface of boiling water. The same transition from sound to movement explains the name of the *poplar* (properly *poppler*) from the tremulous movement of the leaves characteristic of that kind of tree: Lat. *populus*, Du. *popelen-boom*, *popelier*, Prov. E. *popple*, G. *pappel*. On the same principle the Lat. *papilio*, a butterfly, expresses the fluttering flight of the creature, which never seems to have a settled aim, but keeps constantly changing in direction from one moment to another. The Walachian has *fluturá*, to flutter; *fluturu*, a butterfly. Zulu *papa*, *papama*, to flutter; *pape*, a wing, feather.

Assyllables ending in a mute or check are adapted to represent a sound or a movement brought abruptly to a conclusion, so a ringing or prolonged sound is commonly represented by a syllable ending with

one of the liquids *l, m, n, ng, r*, which are sounded by a continuous emission of the breath.

Thus *squeak* expresses a short acute cry ; *squeal* a prolonged sound of similar character. *Clap, clack, rap, rat-tat-tat*, represent abrupt sounds like those arising from the collision of hard bodies ; *knell, boom, din, ring, clang*, sounds with more or less of resonance. And from sounds of such a nature the signification is frequently transferred to a swinging movement, in which the impulse gradually dies away instead of stopping abruptly. Thus from E. *boom, bum*, It. *rimbombare*, to resound, Du. *bommen*, to resound, to beat a drum, *bombammen*, to ring bells, we pass to G. *bammelen*, to dangle, to swing. The same relation is seen between E. *ding-dong* for the sound of bells and the verb to *dangle* ; or between It. *din-din, don-don*, for the sound of bells, and *dondolare*, to swing, toss, shake to and fro, and thence dally, spend the time idly ; Fr. *dandinier*, to sway to and fro ; E. *dandle*, to toss a child up and down. The train of thought is continued in It. *dondola*, a child's toy or playing baby ; Scotch *dandilly*, made for play rather than use, showy ; E. *dandy*, properly a toy or puppet, then a puppy, an overdressed coxcomb.

On the same principle we pass from Lat. *tintinire*, to ring or tingle, to Italian *tentennare*, to shake, jog, stir; *tentennare all' uscio*, to knock at the door. And as from *tintinire* is formed Fr. *tinter*, to tingle, so it seems that a similar modification must have given rise to Latin *tentare*, to try or tempt, properly to shake at a thing in order to learn whether it is firm. Italian *tentennio*, jogging, agitation; *tentennio*, the tempter, the Devil.

FREQUENTATIVES.

It must not be supposed that every separate syllable of our inflected words is the remains of what was once a self-significant element. The *el* or *er* or *it* of frequentative verbs like *rattle*, *clatter*, *palp-it-o*, have probably never had an independent existence. The simplest mode of expressing continuance of action would be by actual repetition of the syllable representing a single pulsation or momentary element of the action in question, as in *murmur*; *turtur*, a dove whose cry is *tur tur*; *tintinio*, I sound *tin, tin*, &c. Words of this formation are exceedingly common in barbarous languages,* and in the Pacific dialects they form a

* Reduplication is a regular mood of the verb in some African languages expressing indefinite continuance. . Thus

large proportion of the dictionary. But the principle is one that can be called into use in the coining of fresh words even in our own language, as in the case of the verb *pooh-pooh*, to use the interjection *pooh!* to a thing, to treat it with contempt. Then on the same principle, on which the word representing the cry of an animal is used to designate the author of the cry, the mode of expressing continuance of action by repetition of the significant element is carried on to the agent or to the instrument of action. Thus in Maori we find *mawhiti*, to skip; *mawhitiwhiti*, a grasshopper; *puka*, to pant; *puka-puka*, the lungs, the agent in panting; *muka*, flax, *mukamuka*, to wipe or rub, for which purpose a bunch of flax would be employed; *mura*, to flame, *muramura*, flame. Malay *ayun*, to rock; *ayunayunan*, a cradle.

In more cultivated languages this constant repetition is found monotonous, and the significant syllable is slurred over more or less in repetition, as in *susurrus* for *sur-sur-us*, a whisper; *rat-at-at-at* for the knocking at a door. Or the element expressing continuance may be a mere echo of the fundamental

in Wolof *sopa* is to love; *sopsopa*, to love constantly. In Mpongwe, *kamba*, speak; *kambagamba*, talk at random; *kenda*, walk; *kendagenda*, walk about for amusement.

syllable, as in *rack-et*, a clattering noise ; French *cliqu-et-is*, clash, a continued sound of *click, click*. The syllable *et* or *it* could only properly be used in this manner as the echo of a hard sound, but many devices of expression are extended by analogy far beyond their original aim, and thus the addition of the syllable *it* has become the common expression of repetition or continuance in Latin, as from *clamo*, to call, *clamito*, to keep calling, to call frequently. The elements usually employed by us for the same purpose are composed of an obscure vowel with the consonants *l* or *r*, on which the voice can dwell for a length of time with a more or less sensible vibration, representing the effect on the ear when a rapid succession of beats has merged in a continuous whirr. Thus in the *pat-tering* of rain or hail, expressing the fall of a rapid succession of drops on a sonorous surface, the syllable *pat* imitates the sound of a single drop, while the vibration of the *r* in the second syllable represents the murmuring sound of the shower when the attention is not directed to the individual taps of which it is composed. In like manner *to clatter* is to do anything accompanied by a succession of noises that might be represented by the syllable *clat* ; *to crackle*, to make a suc-

cession of *cracks*; to *rattle*, *dabble*, *bubble*, *guggle*, to make a succession of noises that might be represented individually by the syllables *rat*, *dab*, *bub*, *gug*. The expression is then extended to signify continued action unconnected with any particular noise, as *grapple*, to make a succession of grabs; *shuffle*, to make a succession of shoves; *draggle*, *waggle*, *joggle*, to continue dragging, wagging, jogging. The final *el* or *er* is frequently replaced by a simple *l*, which, as Ihre remarks under *gnælla*, has something ringing (*aliquid tinnuli*) in it. Thus to *mewl* and *pule*, in French *miauler* and *piauler*, are to cry *mew* and *pew*; to *wail* is to cry *wæe*, to *howl* or *growl*, to cry *hoo* or *groo*.

The use of the termination signifying continuance or repetition is further extended when it is added to an element that does not of itself involve the idea of action, as in *kneel* from *knee*, *prowl* from French *proie*, prey. Here the final *l* vaguely indicates action having reference to the prior element of the word. To *kneel* is to use the knee, to rest upon the knee; to *prowl*, to act in reference to prey, to seek for prey.

In this use of the frequentative element it adds nothing to the sense that is not already implied by the verbal form of the word, and therefore it is

frequently omitted in one dialect while it is found in the corresponding word of another dialect. Thus in English we speak of the *mew-ing* of a cat where the French use *miau-l-er*. The Germans have *knie-en* corresponding to our *knee-l*.

But the element is employed in the construction of adjectives and nouns as well as verbs. Thus Anglo-Saxon *ficol*, *wancol*, *wancl*, fickle, inconstant, habitually wavering, are formed by the addition of the frequentative element to the roots shown in German *fickfacken*, to move to and fro, to fidge, and *wanken*, *wankelen*, to wag, to waver.

When used as a substantive the frequentative form has the sense of the agent or instrument of action, as in Anglo-Saxon *rynel*, a runner; or in *rubber*, what rubs or what is used in rubbing, and it thus performs the same office which was filled by the repetition of the significant syllable in Maori.

CHAPTER V.

CONCLUSION.

WHEN we come to sum up the evidence of the imitative origin of language, we find that words are to be found in every dialect that are used with a conscious intention of directly imitating sound, such as flap, crack, smack, or the interjections ah! ugh! But sometimes the signification is carried on, either by a figurative mode of expression, or by association, to something quite distinct from the sound originally represented, although the connection between the two may be so close as to be rarely absent from the mind in the use of the word. Thus the word *flap* originally imitates the sound made by the blow of a flat surface, as the wing of a bird or the corner of a sail. It then passes on to signify the movement to and fro of a flat surface, and is thence applied to the moveable leaf of a table, the part that moves on a hinge up and down, where all direct connection with sound

is lost. In like manner *crack* imitates the sound made by a hard body breaking, and is applied in a secondary way to the effects of the breach, to the separation between the broken parts, or to a narrow separation between adjoining edges, such as might have arisen from a breach between them. But when we speak of looking through the *crack* of a door we have no thought of the sound made by a body breaking, although it is not difficult, on a moment's reflection, to trace the connection between such a sound and the narrow opening which is our real meaning. It is probable that *smack* is often used in the sense of taste without a thought of the *smacking* sound of the tongue in the enjoyment of food, which is the origin of the word.

When an imitative word is used in a secondary sense, it is obviously a mere chance how long, or how generally, the connection with the sound it was originally intended to represent, will continue to be felt in daily speech. Sometimes the connecting links are to be found only in a foreign language, or in forms that have become obsolete in our own, when the unlettered man can only regard the word he is using as an arbitrary symbol. It is admitted on all hands that the childish name of *papa* for father arises from imita-

tion of the imperfect babbling of infancy, but no one acquainted only with English would recognize the same word in the name of the *Pope*, the father of the Catholic Church. We should hardly have connected *ugly* with the interjection *ugh!* if we had not been aware of the obsolete verb *ug*, to cry *ugh!* or feel horror at, and it is only the accidental preservation of one or two passages where the verb is written *houge*, that gives us the clue by which *huge* and *hug* are traced to the same source.

Thus the imitative power of words is gradually obscured by figurative use and the loss of intermediate forms, until all suspicion of the original principle of their signification has faded away in the minds of all but the few who have made the subject their special study. There is, moreover, no sort of difference either in outward appearance, or in mode of use, or in aptness to combine with other elements, between words which we are any how able to trace to an imitative source, and others of whose significance the grounds are wholly unknown. It would be impossible for a person who knew nothing of the origin of the words *huge* and *vast*, to guess from the nature of the words which of the two was derived from the imitation of sound; and when he was informed that

huge had been explained on this principle, it would be difficult to avoid the inference that a similar origin might possibly be found for *vast* also. Nor can we doubt that a wider acquaintance with the forms through which our language has past would make manifest the imitative origin of numerous words whose signification now appears to be wholly arbitrary. And why should it be assumed that any words whatever are beyond the reach of such an explanation?

If onomatopœia is a vera causa as far as it goes; if it affords an adequate account of the origin of words signifying things not themselves apprehensible by the ear, it behoves the objectors to the theory to explain what are the limits of its reach, to specify the kind of thought for which it is inadequate to find expression, and the grounds of its shortcomings. And as the difficulty certainly does not lie in the capacity of the voice to represent any kind of sound, it can only be found in the limited powers of metaphor, that is, in the capacity of one thing to put us in mind of another. It will be necessary then to show that there are thoughts so essentially differing in kind from any of those that have been shown to be capable of expression on the principle of imitation, as to escape the infer-

ence in favour of the general possibility of that mode of expression. Hitherto, however, no one has ventured to bring the contest to such an issue. The arguments of objectors have been taken almost exclusively from cases where the explanations offered by the supporters of the theory are either ridiculous on the face of them, or are founded in manifest blunder, or are too far-fetched to afford satisfaction ; while the positive evidence of the validity of the principle, arising from cases where it is impossible to resist the evidence of an imitative origin, is slurred over, as if the number of such cases was too inconsiderable to merit attention in a comprehensive survey of language.

That the words of imitative origin are neither inconsiderable in number, nor restricted in signification to any limited class of ideas, is sufficiently shown by the examples given in the foregoing pages. We cannot open a dictionary without meeting with them, and in any piece of descriptive writing they are found in abundance. Take an instance from the first novel that comes to hand :

“ Then came a light *pattering* of feet, the *flutter* of a muslin dress, the *resonant bang* of a heavy door ; and the *prettiest* woman I had ever seen in

my life came *tripping* along the churchyard *path*.”
—Sir Jasper’s Tenant, ii. 131.

Here, without special intention on the part of the writer, we have seven examples in five lines.

No doubt the number of words which remain unexplained on this principle would constitute much the larger portion of the dictionary, but this is no more than should be expected by any reasonable believer in the theory. As long as the imitative power of a word is felt in speech it will be kept pretty close to the original form. But when the signification is diverted from the object of imitation, and the word is used in a secondary sense, it immediately becomes liable to corruption from various causes, and the imitative character is rapidly obscured. The imitative force of the interjections *ah!* or *ach!* and *ugh!* mainly depends upon the aspiration, but when the vocable is no longer used directly to represent the cry of pain or of shuddering, the sound of the aspirate is changed to that of a hard guttural, as in *ache* (*ake*) and *ugly*, and the consciousness of imitation is wholly lost.

In savage life, when the communities are small and ideas few, language is liable to rapid change. To this effect we may cite the testimony

of a thoughtful traveller who had unusual opportunities of observation. "There are certain peculiarities in Indian habits which lead to a quick corruption of language and segregation of dialects. When Indians are conversing among themselves they seem to have pleasure in inventing new modes of pronunciation and in distorting words. It is amusing to notice how the whole party will laugh when the wit of the circle perpetrates a new slang term, and these words are very often retained. I have noticed this during long voyages made with Indian crews. When such alterations occur amongst a family or horde which often live many years without communication with the rest of their tribe, the local corruption of language becomes perpetuated. Single hordes belonging to the same tribe and inhabiting the banks of the same river thus become, in the course of many years' isolation, unintelligible to other hordes, as happens with the Collinas on the Jurua. I think it very probable, therefore, that the disposition to invent new words and new modes of pronunciation, added to the small population and habits of isolation of hordes and tribes, are the causes of the wonderful diversity of languages in South America."—Bates, *Naturalist on the Amazons*, i. 330.

But even in civilized life, where the habitual use

of writing has so strong a tendency to fix the forms of language, words are continually changing in pronunciation and in application from one generation to another; and in no very long period compared with the duration of man, the speech of the ancestors becomes unintelligible to their descendants. In such cases it is only the art of writing that preserves the pedigree of the altered forms. If English, French, and Spanish were barbarous unwritten languages no one would dream of any relation between *bishop*, *evêque*, and *vescovo*, all immediate descendants of the Latin *episcopus*. Who, without knowledge of the intermediate *diurnus* and *giorno*, would suspect that such a word as *jour* could be derived from *dies*? or without written evidence would have thought of resolving *Goodbye* into *God be with you* (God b' w' ye), or *topsyturvy* into *topside the other way* (top si' t' o'er way)? or who would have detected the name of St Olave in *Tooley Street*? Suppose that in any of these cases the word had been mimetic in its earlier form, how vain it would have been to look for any traces of imitation in the later! If we allow the influences which have produced such changes as the above to operate through that vast lapse of time required to mould out of a common stock such languages as English, Welsh, and Russian, we

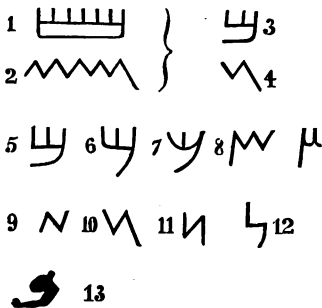
shall wonder rather at the large than the small number of cases, in which traces of the original imitation are still to be made out.

The letters of the alphabet have a strong analogy with the case of language. The letters are signs which represent articulate sounds through the sense of sight, as words are signs which represent every subject of thought through the sense of hearing. Now the significance of the names by which the letters are known in Hebrew and Greek affords a strong presumption that they were originally pictorial imitations of material things, and the presumption is converted into moral certainty by the accidental preservation in one or two cases of the original portraiture. The zigzag line which represents the wavy surface of water when used as the symbol of Aquarius among the signs of the zodiac is found in Egyptian hieroglyphics with the force of the letter *n*.* If we cut the sym-

* The evidence for the derivation of the letter N from the symbol representing water (in Egyptian, *noun*) cannot be duly appreciated unless taken in conjunction with the case of the letter M. The combination of the symbols 1 and 2, as shown at the head of the figure, occurs very frequently in hieroglyphics with the force of MN. The lower symbol is used for *n*, and thus in this combination the

bol down to the three last strokes of the zigzag we shall have the *n* of the early Greek inscriptions, which does not materially differ from the capital N of the present day.

But no one from the mere form of the letter could have suspected an intention of representing water. Nor is there one of the letters, the actual form of which would afford us the least assistance upper symbol undoubtedly has the force of *m*, although it is said to be never used independently for that letter.



Now if the two symbols be epitomized by cutting them down to their extremity, as a lion is represented (fig. 13) by his head and fore-legs, it will leave figures 3 and 4, which are identical with the M and N of the early Phœnician and Greek. Figures 5, 6, 7, are forms of Phœnician M from Gesenius; 8, ancient Greek M; 9, Greek N from Gesenius; 10 and 11 from inscriptions in the British Museum; 12, Phœnician N.

in guessing at the object it was meant to represent. Why then should it be made a difficulty in admitting the imitative origin of the oral signs, that the aim at imitation can be detected in only a third or a fifth, or whatever the proportion may be, of the radical elements of our speech? If imitation is the only intelligible origin of language, the instances in which it throws no light on the signification of the word are only examples of our ignorance. However numerous the words may be of whose origin we know nothing, they can no more be cited to limit the reach of a principle which is known to be efficient in other cases, than the assertion of a hundred witnesses that they had not seen a murder committed, can avail against the evidence of one who did.

I find then that a considerable proportion of the roots of language can be explained on the only intelligible principle of signification, viz. the indication of something that shall serve to put the hearer in mind of the thing to be signified; as when the deaf and dumb man points to his lip to signify red, or the nurse makes a sound like the lowing of the animal to signify a cow. But the imitative principle imprints no ear-mark upon its progeny, indelibly marking the stock throughout the entire

period of growth. On the contrary, it is seen that the evidence of an imitative origin is easily obliterated by the development and wear and tear of language, and progress of metaphor, and can often be recovered only by a careful comparison with obsolete forms and foreign correlatives. And since I find that we are able, with our imperfect knowledge of the links of language, to demonstrate an imitative origin in numerous cases where there is no consciousness of imitation in the daily use of the words, I conclude that a much larger proportion (and why not the entire stock?) might be accounted for on the same principle if the whole pedigree of language was open before us. But if our progenitors might so have stumbled into language by the natural exercise of their faculties, it is surely irrational to suppose that they were lifted over the first difficulties of the path by any supernatural go-cart, whether in the shape of direct inspiration, or of some temporary instinct specially lent for the purpose and since allowed to die out.

It cannot be denied that the difficulty of imagining a speechless condition of mankind does oppose a serious obstacle to any rational solution of the problem. And this difficulty may arise either from an excusable repugnance to think of Man in

so brutish a condition as that to which he would be reduced by the want of speech, or from mere inability to realize the mental condition of an intelligent being whose thoughts did not clothe themselves more or less in words.

The first objection has been well answered by Mr Farrar, who points out that we ought to form our judgment of the mode in which it has seemed fit to the Creator to deal with the education of Man, from the evidence of fact, and not from the standard of our own feelings as to what is demanded by the dignity of our race. If savages are found in a condition of life little above the brutes, it is plain that the existence of Man in such a condition cannot be incompatible either with the goodness of God or with his views of the dignity of the human race. Nor have we any pretension to claim for our ancestors a higher consideration in the eyes of Providence than is accorded to the Australian or the Negro. God is no respecter of persons or of races. We have only the choice of two alternatives: we must either suppose that Man was created in a civilized state and was permitted to fall back into the degraded condition which we witness among savage tribes; or that he started from the lowest grade, and rose under

favourable circumstances by the cultivation of his natural faculties to the condition of civilized life. It is not easy to see why the first of these suppositions should be considered more to the honour of the Divine Providence than the second, although it may gratify some to think that their progenitors at least were at no time in the condition of the naked savage. Yet the latter alternative is more in accordance with everything we know of the progress of the race in the arts of life. History everywhere shows us the advance from barbarism to civilization. The step from savage to barbarous life is beyond the reach of history.

We are accustomed to think of our ancestors as the rudest barbarians, and if we could go a stage further back and believe that we descended from the savage tribes, the discovery of whose rude flint weapons among the bones of the extinct races of animals with which they struggled, has lately opened a new chapter in history, it would probably be a small additional shock to carry on our thoughts to a period when the struggling savage had not even attained the use of speech.

Where the difficulty of conceiving a speechless condition of the human race is merely intellectual, it may be helped by considering the case of an in-

telligent dog. A dog thinks of the absent as we do, and is subject to the same mental law that associates the things in thought that have been connected in actual experience. When the dog sees his master put on his hat he knows that he is going to walk, and he shows his pleasure at the thoughts of being taken with him. The dog dreams; he passes mentally in sleep through scenes similar to those which constitute his waking life. He understands signs, although he is without the instinct of making them. Even in our own case there is much of our thoughts which is wholly independent of words, as when we think of a landscape, a picture, a colour, an air of music. Now all that we can think without words, all that the mind of the dog can compass, would lie within the capacity of the human mute. There would then be ample stores in his mind on which the daily business of life would make it desirable to communicate with his fellows. And if he resembled the deaf and dumb of the present day it is certain that he would sooner or later devise signs adequate for that purpose. "The mother tongue (so to speak)," says Mr Tyler in his very interesting work on the Early History of Mankind, "of the deaf and dumb is the language of signs. The evidence of

the best observers tends to prove that they are capable of developing the gesture-language out of their own minds without the aid of speaking men." And to this effect he cites Kruse, who was himself deaf and dumb, and a well-known teacher of the deaf and dumb. "Thus the deaf and dumb must have a language, without which no thought can be brought to pass. But here nature soon comes to his help. What strikes him most, or what makes a distinction to him between one thing and another, such distinctive signs of objects are at once signs by which he knows these objects, and knows them again; they become tokens of things. And whilst he silently elaborates the signs he has found for single objects, that is, whilst he describes for himself their forms in the air, or imitates them in thought with hands, fingers, and gestures, he develops for himself suitable signs to represent ideas, which serve him as a means of fixing ideas of different kinds in his mind and recalling them to his memory. And thus he makes himself a language, the so-called gesture-language, and with these few scanty and imperfect signs a way for thought is already broken, and with his thought as it now opens out, the language cultivates and forms itself further and further."—Tyler, p. 20.

The range of thought would be extremely limited without the aid of some fixed symbols to rest on as it proceeds, and thus the use of language has been compared by Sir William Hamilton to the masonry by which an engineer secures his work as he tunnels in sandy ground. The tunnel is continually driven a little in advance, but all progress will be stopped by the crumbling in of the ground unless every foot of the boring is supported by the solid brickwork as it proceeds. So it is with thought and language. Without the aid of language, or of something equivalent, it would be possible for the mind to make little or no progress in the process of abstraction beyond the sensible images which supply the first materials of thought.

Now, gestures are the readiest means of representing by far the majority of things. We see, in fact, that wherever the need of communication has been felt between tribes that were "tongueless" to each other, the want has been supplied by the use of gestures. "It is well known," says Tyler, "that the Indians of North America, whose nomade habits and immense variety of languages must continually make it needful for them to communicate with tribes whose language they cannot speak, carry the gesture-language to a high degree of

perfection, and the same signs serve as a medium of converse from Hudson's Bay to the Gulf of Mexico. Several writers make mention of the Indian Pantomime, and it has been carefully described in the account of Major Long's expedition, and more recently by Captain Burton. The latter writer considers it to be a mixture of natural and conventional signs, but so far as I can judge from the hundred and fifty or so which he describes, and those I find mentioned elsewhere, I do not believe there is a really arbitrary sign amongst them. There are only about half a dozen of which the meaning is not at once evident, and even these appear on close inspection to be natural signs, perhaps a little abbreviated or conventionalized. I am sure that a skilled deaf-and-dumb talker would understand an Indian interpreter, and be himself understood at first sight with scarcely any difficulty."— p. 35. Burton says that the forefinger extended from the mouth means to tell truth: "one word;" but two fingers means to tell lies: "double tongue." And Tyler says he found that deaf-and-dumb children understood this Indian sign for *lie* quite as well as their own.

The practical use of communication by gestures in ancient times is illustrated by a story which

Lucian relates of a certain barbarian prince of Pontus who was at Nero's court, and saw a pantomime perform so well, that, though he could not understand the songs which the player was accompanying with his gestures, he could follow the performance from the acting alone. When afterwards asked to choose what he would have for a present, the prince begged to have the player given to him, saying that it was difficult to get interpreters to communicate with some of the tribes in his neighbourhood, but that this man would answer the purpose perfectly.

It is probable that the instinct of sign-making may have become more deeply ingrained in the mind by the use of speech through a thousand generations, but if it were somewhat less decided in the earliest period, it would only make the development of the gesture-language a slower process. Sooner or later the use of significant gestures would infallibly begin, and while some objects were easily imitated by drawing in the air or by actions of the arms and body, the aid of the voice would be required for the imitation of sounds, and would be found convenient for the representation of things of which sounds constituted the most striking characteristic, as of animals, for example, from their cries.

Thus a mixed system of communication would gradually be developed, consisting of gestures aided more or less by the exercise of the voice. But the superior convenience of the vocal element would give it a continually increasing importance in comparison with gesture-signs, until at last the position of the two would be completely reversed, and communication would be carried on, as is seen among savages, by speech with the aid of gesticulation. Thus Captain Cook says of the Tahitians, after mentioning their habit of counting on their fingers, that "in other instances, we observed that when they were conversing with each other they joined signs to their words, which were so expressive that a stranger might easily apprehend their meaning." And Charlevoix describes in almost the same words the expressive pantomime with which an Indian orator accompanied his discourse.—Tyler, p. 44.

A very few gesture-signs remain in use among ourselves, as beckoning with the finger or holding it up as if threatening with a stick, nodding or shaking the head in token of assent or dissent, joining hands in token of amity, snapping the fingers in token of contempt. The meaning of this last gesture, which is by no means apparent

on the face of it, is plausibly explained by Mr Tyler, who tells us that the same sign made quite gently, as if rolling some tiny object away between the finger and thumb, or the sign of flipping it away with the thumb nail and forefinger, are well-understood deaf-and-dumb gestures denoting anything tiny, insignificant, contemptible. But he surely misses the true significance of the hands being joined in prayer, when he explains that gesture as if intended to represent the act of warding off a blow. For that would belong to the attitude of resistance and defence, whereas prayer calls for the expression of entire submission, so clearly shown in the figure of prostration. When the suppliant kneels and holds up his hands with the palms joined, he represents a captive who proves the completeness of his submission by offering up his hands to be bound by the victor. It is the pictorial representation of the Latin *dare manus*, to signify submission.

It seems that Grammar is altogether the product of speech. The language of gesture possesses no inflections; it makes no distinction between verb and noun and adjective. The same sign stands for *walk, walkest, walking, walker*. If a deaf-and-dumb person meant to state that a black

handsome horse trots and canters, he would signal, horse-black-handsome-trot-canter. Each sign, like the interjections of speech, presents a sensible image to the mind, to be understood literally or figuratively. The sign for butter is a pretence of spreading it on the palm of one hand with the finger of the other; for man, the motion of taking off the hat. To hold the first two fingers apart like the letter V and dart the finger-tips from the eyes is to see. Thinking is expressed by passing sharply the forefinger across the left breast as an image of a thought passing through the heart. To signify green the left hand is held flat to represent the ground, and the tips of the fingers of the other hand are pushed up beyond the edge to represent the growth of grass. For children the flat hand is held low down towards the ground and gradually raised to represent their growth, and the same sign stands for *great*; while *little* is signified by first holding the hand high and then depressing it. Truth, as straightforwardly speaking, is signified by moving the finger straightforwardly from the mouth; while the finger is moved to one side to express *lie*, as sideways speaking.*

* It is remarkable that the word *lie* itself seems to have its origin in the same figure. The Lettish *lecks*, crooked (from

The construction of the sentence in gesture-language is to be gathered from the order of utterance. "That which seems most important to the deaf-mute," says Schmalz, "he always sets before the rest, and that which seems to him superfluous he leaves out. For instance, to say, My father gave me an apple, he makes the sign for apple, then for father, then for I, without adding that for give." A look of inquiry converts an assertion into a question. The interrogations *who*, *which*, are made by looking or pointing about in an inquiring manner, in fact, by a number of unsuccessful attempts to say *he*, *that*. The deaf-and-dumb child's way of asking Who has beaten you, would be, You beaten, who was it? Instead of asking What did you have for dinner? he would put it, Did you have soup? porridge? and so forth. The deaf-mute may be taught a sign for the verb to be, but he makes no use of it in

leekt, to bend), is used in the sense of wrong, erroneous, false, uneven, and in composition is applied to signify a Will-o'-the-wisp, a wig or false hair, a by-way, a painted face or a mask, &c. In Esthonian it takes the form of *liig*, and in addition to several of the foregoing senses, when joined to *paiatus*, speech [*liigpaiatus*], it signifies a lie, and thus affords a plausible explanation of the German *lüge* and English *lie*.

familiar intercourse. *To make* is too abstract an idea for him. To show that the tailor makes the coat, or that the carpenter makes the table, he would represent the tailor sewing the coat and the carpenter sawing and planing the table. Such a proposition as, Rain makes the land fruitful, would not come into his way of thinking: rain falls, plants grow, would be his pictorial expression.—Tyler, 31.

The low capacity of the gesture-language for the expression of abstract conceptions throws great doubt on the analysis of the Sanscrit grammarians, who for the most part attribute to their primary roots meanings of the most general kind, such as to go, which alone is given for forty or fifty of the roots. We never, says Professor Müller, meet with primitive roots expressive of such special acts as raining, thundering, hailing, sneezing. (2nd Series, p. 352.)

Professor Müller would persuade us that thunder, instead of being connected with such words as Old Norse *dunr*, *dynr*, rumbling noise, crash, din, English *din*, *dun*, *stun*, or Latin *tundere*, is derived from the Sanscrit root *tan*, which from signifying stretch is used to express “that tension of the air which gives rise to sound.” So that

thunder, of all things in the world, remained without a name until so philosophic an idea could be entertained as the dependence of sound upon the elasticity of the air! But if any object whatever was named from imitation there would be none more likely to take its designation from that principle than thunder. And in fact the significant element in the German form of the word, *donner*, is identical with the imitative syllable used in Italian to represent the loud clang of bells, *dondon*. In the same language *tontonare*, a manifest onomatopœia, is to make a thundering noise, to murmur and grumble.—Florio.

Now wendeth this ost in wardes ten,
 Ful wel araied with noblemen.
 The dust arose, the contre had wonder,
 The erthe *doned* like the *thonder*.

Sir Generides, l. 3774.

Yoruba, *dondon*, a kind of drum.

It is well known that there is small power of abstraction among barbarous people, whose words for the most part signify things apprehensible by sense. They are said also to be very poor in general terms, which is not quite the same thing. "The Malay," says Mr Crawford, "is very deficient in abstract words, and the usual train of ideas

of the people who speak it does not lead them to make a frequent use even of the few they possess. They have copious words for colours, yet borrow the word colour, *warna*, from the Sanscrit. With this poverty of the abstract is united an abundance of the concrete." The Australians have no *generic* word for fish, bird, or tree; and the Eskimo, though he has verbs for seal fishing, whale fishing, and every other kind of fishing, has no verb meaning simply to fish.* Where the things to be named are natural objects, it does not require a greater effort of abstraction to conceive a more comprehensive, or generic, than a more restricted distinction. The conception of an object as a thing of a certain kind depends upon our recognition in it of the points of resemblance which constitute our notion of the kind in question. And if these generic features are matters apprehensible by sense, as well as the specific distinctions by which the genus is broken up into subordinate kinds, it will be matter of chance whether the genus first gets a name or the species. Thus the power of flight which is characteristic of birds (speaking broadly) may be recognized by the same direct observation which distinguishes the special features of a goose and a

* Farrar, Chapters on Language, 199.

duck, and we cannot doubt that the feathered race (whether they received a name or not) would be thought of as distinct from other animals, at least as early as the discrimination of any particular kind of bird. It is certain, at any rate, that man would have known such a genus as a hawk before he distinguished a kestrel or a sparrow-hawk; he would have been familiar with a wagtail before he recognized the distinction between a pied wagtail and a grey one. But the idea of colour as the generic character, compared with blue and red and yellow as subordinate species, stands on a different footing. I can only apprehend an object as coloured by seeing it as blue or red or yellow. Colour in general is that which is common to these subordinate species. It cannot be exhibited to the bodily eye in a separate form, and can only be made an object of thought by an effort which appears to be beyond the natural requirements of the barbarian mind, or of those who are confined to the language of gesture.

Thus it would appear that the use of speech is essential to any progress in abstract thought. As long as we were without names for blue or red or yellow, we could only think of one of those colours by recalling a picture of the hue to the remembrance

or imagination, an operation in which the mind would be fully occupied with what was before it for the time being, with no spare attention to bestow on the comparison of the present with any absent object. But when the particular object is associated with a certain name, it can be kept before the mind by a much slighter effort, and the grasp of the understanding is rendered proportionally more comprehensive. When we have names for blue and red and yellow, we are able by their means to retain the conceptions before the mind while we compare them with each other or with other things. We observe that they all have something in common which does not belong to round or square, and thus we rise to the abstract conceptions of colour and of shape.

But if language is thus important in the formation of abstract conceptions, it is hardly possible that the earliest roots should have those abstract significations which are attributed to them by the Sanscrit scholars. We cannot doubt that language would proceed *pari passu* with the development of thought. And as thought undoubtedly proceeds from the concrete to the abstract, we may be sure that language would follow in the same direction.

I have quoted largely from Mr Tyler's instruct-

ive chapters of gesture-signs because a familiarity with that mode of expression brings home to the mind, in a way that nothing else can do, the possibility of a natural origin of language as an historical fact. No one has any difficulty in understanding the origin of gesture-signs, and though there are some of these, such as nodding and shaking the head, that we use every day with as little conception of the principle of their significance as we have of the words *yes* and *no*, yet it never occurred to any one to suppose that they had any more abstruse origin than the presentation of some forgotten action typical of acceptance or rejection. I only ask that the inquirer should act on the same principles in his search for the origin of the vocal signs, and when he finds that a sensible portion of these may be explained on the same imitative principle, that he should not at once look out for a different origin for those which remain unexplained, but should be ready to admit the same presumption of uniformity of causation, and to make the same allowance for the disfigurement of the symbol by the wear and tear of ages, as in the case of the gesture-signs. Thus all analogy tends to the belief that the whole of language would be found to spring from an imitative source, if the

entire pedigree of every word were open before us. It is a question of probabilities as to matter of fact, and though it may be considered that the theory will not be conclusively established until it has been made to account for every word of the language, yet our conviction in the soundness of the theory will continually grow in strength as we study the subject, and learn from repeated experience the light it throws upon the significance of words.

APPENDIX.

I.

THE following table is extracted from a paper by Professor J. C. E. Buschman, originally published in the Transactions of the Berlin Academy der Wissenschaften for 1852, and translated by Mr Campbell Clarke, in the Proceedings of the Philological Society, Vol. vi. p. 188.

PA, FATHER.

pa—Karean, Malayan, Movimi, New Zealand, Tungusian, Timmanee.

ba—Bullom, Hottentot, Kirautee (India), Malagasi, Shilli (Barbary).

bap—Arinzi (on the Yenesei), Bengali, Canarese.

pap—Nicobar.

bab—Arabic, Begarmi, Hindustani, Kurd, Romansh.

papa—Bullom, Carib, Darien, &c.

paba—Muysca.

bapa—Bali, Javanese, Malayan, &c.

baba—Albanian, Arabic, Bengali, Carib, Kabyle,
Turkish, &c.

bawa—Gujeratti, Hindustani, Malabar.

fafa—Susu.

fabe—Seracole.

PA, MOTHER.

ba, fa, mba, bamo—Mandingo.

fafa, fawa—Japanese.

papai—Araucanian.

be, bi, bo, bibi—Galibi, Otomi.

baba—Nepaul.

bama—Fulah.

AP, FATHER.

ab—Arabic, Ethiopic, Hebrew, Siberian.

apa—Ava, Bhoteea, Hungarian.

appa—Bhutan, Cingalese, N. American, Tshu-
ktshi.

aba—Ethiopic, &c.

abba—Galla, Telinga.

avva—Walachian.

epe—Koriak.

ipa—Arinzi.

obo, abam, abbeda—Siberian.
 abob—Hottentot, Korana.
 abami—Korea.
 ubaba—Fingo, Zulu.
 ahban, appin—Tamul.

AP, MOTHER.

amba—Bengalee, Vogul.
 aapu—Kurilian.
 ambu—Madura.
 ewa—Samoiede.
 ibu—Javanese, Malayan, &c.
 abai—Tsheremiss.
 ambok—Javanese.

TA, FATHER.

ta—Botocudo, Mexican, Mandingo, Otomi.
 da—Shilli (Barbary).
 nda—Tapua (Africa).
 tho—Hottentot.
 tat—Bengalee, Celtic, Congo, &c.
 taat, tättä—Esthonian.
 tad—Welsh.
 dad—English.
 tata—Angola, Congo, Polish, &c.
 tantai—Minetari.

dada—Mandara, Shilli, &c.
 tatai—Mordvin.
 dade, tati—Africa.
 dadi—Gipsy.
 tato—Karelian.
 titi—Japanese.
 tata—Rocky Mountains.

TA, MOTHER.

de, nde—Jaloof.
 tai—Bengalee, New Zealand.
 dai—Gipsy.
 deda—Georgian.
 tite—Cora.

AT, FATHER.

at—Celtic.
 aat—Albanian.
 ata—Turkish, Moko (Afr.), Assiniboine.
 atta—Gothic, Greek.
 otah, otta—Dakotah.
 aita—Basque.
 atya—Hungarian.

AT, MOTHER.

hada—Galla.

etta—Tartar.

ote—Zamuca.

MA, MOTHER.

ma—Bengalee, Celtic, Javanese, Malayan, African, Thibetan.

me—Tonquin, Otomi, Siamese.

mi—Burmese.

mu—Chinese.

mai—Hindustani, Portuguese, Sindhee.

mai-ka—Illyrian.

mau—Annamite, Coptic.

maia—Brazilian.

mam—Arabic, Breton, Permian, Welsh.

mama—Angola, Congo, Hindustani, Hottentot, Peruvian, &c.

mamma—Albanian, Finnish, Shilli, &c.

mamo—Karelian.

meme—Bali.

memme—Koriak.

moma—Lithuanian.

MA, FATHER.

ma—Ende, Madura.

mi—Kroo.

mu—Georgian.

mam—New Holland.
 mama, muma—Georgian, Iberian.
 mamma—Kartulinian.
 mamman, mammer—New Holland.

AM, MOTHER.

am—Ostiak, Vogul.
 em—Hebrew.
 iim—Korana.
 ama—Basque, Malayan, &c.
 amma—Cingalese, Samoiede, &c.
 hamma—Fula.
 amme—Malabar.
 emma—Esthonian.
 imma—Kabyle.
 unma—Bhoteea.
 uhma—Caffre.
 amam—Eskimo.

AM, FATHER

ama, amma—Philippines, Sunda, Formosa, &c.
 àmi, ammu, ammen—Siberian.

NA, MOTHER.

na—Maya.
 mna—Ashantee.

ni—Croo.
 nu—Kyen (India).
 nah-hah, nohah—N. America.
 nan—Mexican.
 nana—Darien.
 nanna—Pottawotami.
 nene—Tartar.
 neni—Fulah.
 nine—Turkish.
 nama—Benin.

NA, FATHER.

nna—Eboe.
 nan—Albanian, Wendish.
 nanna—Albanian.
 ninna—Blackfoots.
 nang—Africa.
 nape—Maipure.

AN, MOTHER.

ana—Tartar, Turkish, Turgusian.
 anah—Tuscarora.
 anna—Delaware, &c., Tartar.
 ena, oni—Ashantee, &c.
 enna—Guinea.
 eenah—Dacotah.

ina—Philippines, &c.

onny—Tungusian.

anan—Huron.

inan—Dacotah.

unina—Caffre.

ananak—Greenland.

AN, FATHER.

anneh—Seneca.

ina—Ceram, Guarami.

una—Aino.

II.

Extract from Augustinus de Dialecticâ, mentioned at p. 108.

Stoici autumant nullum esse verbum cujus non certa ratio explicari possit. Et quia hoc modo suggerere facile fuit, si diceres hoc infinitum esse quibus verbis alterius verbi originem interpretaris, eorum rursus a te originem quærendam esse, donec perveniatur eo ut res cum sono verbi aliqua similitudine concinnat, ut cum dicimus, æris tintum, equorum hinnitum, ovium balatum, tubarum clangorem, stridorem catenarum; perspicias enim hæc verba ita sonare ut ipsæ res quæ his verbis significantur. Sed quia sunt res quæ non sonant, in his similitudinem tactus valere, ut si leniter vel aspere sensum tangunt, lenitas vel asperitas literarum ut tangit auditum sic eis nomina peperit: ut ipsum *lene* cum dicimus leniter sonat, quis item et *asperitatem* non et ipso nomine asperam judicet?

lene est auribus cum dicimus *voluptas*, asperum cum dicimus *crux*. Ita res ipsæ afficiunt ut verba sentiuntur. *Mel* quam suaviter gustum res ipsa, tam leniter nomine tangit auditum; *acre* in utroque asperum est. *Lana* et *repres* ut audiuntur verba sic illa tanguntur.

Hæc quasi cunabula verborum esse crediderunt ubi sensus rerum cum sonorum sensu concordarent. Hinc ad ipsarum inter se rerum similitudinem processisse licentiam nominandi; ut cum verbi causa *crux* propterea dicta sit quod ipsius verbi asperitas cum doloris quem *crux* efficit asperitate concordat; *crura* tamen non propter asperitatem doloris, sed quod longitudine atque duritia inter membra cetera sint ligno similia, sic appellata sint.

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