

III.—*Strictures on the Views of August Schleicher respecting the Nature of Language and kindred subjects.*

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THE name of Schleicher cannot be uttered by any student of comparative philology of the present generation without respect and admiration. Especially now, when the memory of his early and lamented death is so recent, no one can desire to remember aught of him save his immense industry and erudition, his ardor in the pursuit of the science to which his life was devoted, his critical acuteness, his liberal and independent spirit, his love of freedom, and the many other excellencies of his character as man and as scholar. His part in the development of the historical study of language was no unimportant one. His manual of Indo-European comparative grammar\* has been the convenient and instructive text-book out of which many, in various lands, have drawn a knowledge and love of the subject; and, being now in process of translation into English, its usefulness among English speakers will soon be largely increased. If I, then, take the liberty to criticise and combat in this paper some of his fundamental views of language, I do it with no abatement of due respect to him, but because he stands forth as a very conspicuous representative of what I cannot but think a false and hurtful tendency in a part of modern linguistic science; and because his great and deserved reputation as a philologist, a comparative student of the facts of language and their concrete relations, gives a dangerous importance to his opinions as a glossologist, or student of the theory and philosophy of language. There is, unfortunately, no necessary connection between eminence in one of these characters and in the other; many a great comparative philologist has either left untouched the principles and laws underlying the phenomena with which

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\* *Compendium der vergleichenden Grammatik der Indogermanischen Sprachen.* Third edition, Weimar, 1870.

he deals, or has held respecting them views wholly superficial, or even preposterous and absurd. This state of things is one which marks the formative period of a science; there is every reason why it should now come to an end, and why certain fundamental truths, at least, should be accepted as so thoroughly established that he who denies them shall have no right to be seriously reasoned with, and may be simply passed by as a humorist.

The views which I shall here criticise are put forth in two brief pamphlets, both published toward the end of their author's life. The first appeared in 1863, and is entitled "The Darwinian Theory and the Science of Language."\* It is in the form of an "open letter" to Prof. Hackel, the well-known zoologist, who, by dint of much urging, had persuaded its author to read Darwin on the Origin of Species. The work, once read, had won Schleicher's hearty and unqualified approval; it seemed to him to be simply the natural and inevitable next step forward in zoological science—in fact, the analogue of what had been already done in linguistic science; he had himself happened to state, at just about the same time, and in nearly equivalent terms, in his book on the German language,† the same conclusions respecting language which Darwin had put forth in attractive form respecting the history of animal life. And he goes on to draw out more fully the parallel between the two sciences, and to make the facts and principles of language demonstrate the truth of Darwinism. Now this parallelism has impressed many minds, and been used once and again, in the way of illustration or of analogical argument, on the one side or the other; but no one, so far as I know, has hitherto attempted to make so much out of it as Professor Schleicher here does—to prove that one species of animals must have descended from another very unlike it, because a modern dialect comes from an exceedingly dissimilar ancient one; and that animals of higher structure must be

\* *Die Darwinsche Theorie und die Sprachwissenschaft*. Offenes Sendschreiben an Herrn Dr. Ernst Hackel, a. o. Professor der Zoologie und Director des Zoologischen Museums an der Universitat Jenu, von Aug. Schleicher. Weimar, 1863. 8vo. pp. 29.

† *Die Deutsche Sprache*. Von August Schleicher. Stuttgart, 1860. 8vo. Second improved and augmented edition, 1869.)

developed from those of lower, because complicated tongues are derived from monosyllabic roots; and so on. Such reasoning, of course, implies something like a real and substantial identity between an organized being, an animal or plant, on the one hand, and a language on the other. And this identity Schleicher is logical enough, and bold enough, to assume. His fundamental view of language he lays down in these terms (pp. 6, 7): "Languages are natural organisms, which, without being determinable by the will of man, arose, grew, and developed themselves, in accordance with fixed laws, and then again grow old and die out; to them, too, belongs that succession of phenomena which is wont to be termed 'life.' *Glottik*, the science of language, is accordingly a natural science; its method is on the whole and in general the same with that of the other natural sciences."

Here, again, we have statements akin with those which are not seldom made by writers on language, only usually in less definite and categorical shape. Schleicher has put forth the theory of the independent and organic life of language in an extreme form, and has drawn from it extreme consequences, as if in order that we may be provoked to give it a thorough examination, and see whether it is a valuable guiding truth, or only a delusive figure of speech.

Our author does not attempt any proof of his dogma, or even let us see clearly the grounds on which it rests in his own mind. For aught that appears, he regards it as self-evident, or as sufficiently supported by the further expositions which he makes, and which involve it as an element. This is to be regretted, as imposing additional trouble and perplexity upon one who would fain test and, if possible, refute the doctrine; since it may remain to a certain extent doubtful whether the considerations which were held to be of the most importance have been after all touched. But Schleicher gives us in his statement two hints which we are justified in taking up and dwelling on, as very probably indicating the grounds of his faith: languages are "not determinable by the will of man," and their growth and change is "according to fixed laws."

Of these two, the former is evidently the more important. If the voluntary action of men has anything to do with making and changing language, then language is so far not a natural organism, but a human product. And if that action is the only force that makes and changes language, then language is not a natural organism at all, nor its study a natural science. Let us, then, look first and especially into this.

If we desire to understand the forces which are at work in language, we must be willing to examine their operations in petty and prosaic detail, not content with standing in admiring awe before their collective result. That language is a glorious thing, a divine gift, a characteristic of human nature, the sign and instrument of our superiority to the brute, and all that, is unquestionably true, and might be indefinitely enlarged upon, if pertinent to the present inquiry. Of somewhat the same character is a Beethoven symphony, a Grecian temple, an Egyptian pyramid. But if I wish to ascertain whether a certain pyramid is a work of human art, or, rather, a stupendous natural crystal, indeterminable by the will of man, and developed under government of the eternal laws of regular solids, I look to see how it is made up in its parts, and whether it is composed of independent stones, bearing the marks of human tools, and apparently fitted together by human hands; I do not stand at a distance and wonder at its regularity and immensity, contrasting these with the feeble powers of the men whom even a climb to its summit now exhausts. That no man can make a language, any more than he can make a pyramid; that no man, unaided, can make any item of language, any more than he can move or set in place one of the stones of the pyramid; that no man, nor any number or generation of men, can affect the present of a language except as they have its past behind them, any more than they can lay the top-stone of a pyramid without having its lower courses beneath them, is all obvious enough; only, so far as I can judge, these and others like them have been the considerations that have led some people to deny human agency in language;—for the equally reasonable purpose of disproving it in the pyramids, I do not remember to have seen them adduced.

Every one acknowledges that languages at the present time, not less than in the earlier stages of linguistic history, are in a state of constant change, or "growth," as it is often and properly enough called; and it ought not to be impossible, nor very difficult, to recognize the forces which are effective in producing this growth, and then, by comparing the modes and results of earlier growth, to satisfy one's self whether any other force or set of forces may or must be assumed as causing the latter. Now the difference which separates any given language, modern or ancient, from its predecessor at any distance in the past, is not a single integral thing, but rather the sum of a great number of particular items; and these items admit of being classified, in order to the better determination of the causes producing them. Let us briefly examine the classes, and see what kind of action they imply.

In the first place, the words of a language come to have a different meaning from that which they had formerly. Of all the modes of change, this is the most insidious and unavoidable in its action, and, in languages circumstanced like our own, the most deep-reaching and important in its effects. Every part and particle of every vocabulary is liable to it. And does it come about by an interior force, working in the substance of the spoken word? Not the least in the world; it is simply a consequence and accompaniment of the growth of men's knowledge, the change of men's conceptions and beliefs and institutions. It is as purely extraneous to language as the fact that the name *John Smith* given to the puling infant is borne also by the tottering old man into whom that infant grows. The world-wide change in the value of *priest*, from the simple 'older person (elder)' that it originally designated to its present sense of 'consecrated (and, in some religions, half-divine) minister of God,' is wholly subordinate to the change of men's ideas as to the character of the official to whom it is applied. The words *faith* and *love*, and *God* itself, are, in the meaning we give them, indexes of the education in point of religion and refinement which our part of the human race has enjoyed. The peculiar American sense of *college*, quite different from the English, is due to the peculiar circumstances

which have governed the development of our educational system; just as the names *robin* and *blackbird* have been applied by us, for the sake of convenience and under the government of old associations, to birds essentially unlike, and only superficially like, those to which they belong in the mother country. That the name of a race, *Slave*, has become in Germanic speech the name of a bondman, has no other foundation than the historical circumstances which made so many Slaves bondmen of the Germans. The peculiar sacredness of association of *home*, the pregnant sense conveyed by *comfort*, have nothing to do with the phonetic texture of those vocables themselves, but are what the habits and feelings of English speakers have endowed them with. *Talent* is a term borrowed from a parable by men who had read and studied the Bible, and is applied, in accordance with the significance of the parable, to designate the treasure of ability which one possesses, as it were by gift of the Creator. And there are hosts of words like *light*, and *heat*, and *earth*, and *sun*, which have been, not indeed changed in outward application, but indefinitely widened and deepened in inner and apprehended significance, by the results of men's study of the universe and its relations.

So is it also with that developed wealth of word and phrase by which intellectual and moral acts, conditions, and relations have come by degrees to be signified. All, as the historical study of language distinctly shows, has been won through the transfer to an ideal use of words and phrases which had before designated something physical and sensible. And the transfer was made in the usage of individuals and communities who saw a resemblance or analogy between the physical act and the mental, and who were ingenious enough to make an application of material already familiar to new and needed uses. Take as examples one or two of the terms we have just been employing: *application* is a 'bending to,' a physical adaptation of one line or surface to another; *transfer* means 'carry across;' *intellectual* comes, by an intricate series of changes, from a verb signifying 'pick among.' What agency other than that of the speakers of language has been at work here? We are ourselves all the time repeating the same processes in lively phrase. *Circumvent* and *get around* are but one

metaphor, in an older and younger form; *comprehend* and *understand* are often familiarly replaced by the nearly equivalent modern phrases *grasp* or *get hold of* and *get to the bottom* (or *into the heart*) *of*, the figurative use of which is certainly a human product.

Once more, that large and conspicuous class of changes by which certain words are reduced from fulness and independence of meaning to the value of connectives, signs of form and relation, equivalents of grammatical terminations, is of the same origin. We trace, for example, the history of *have*, from the time when it signified possession only, to that when it has become in a part of its uses a mere sign of completed action, an "auxiliary" forming a "perfect tense" (as in *I have sat*); and we find no trace of any alterative agency save a slowly changing usage, through which the speakers of English (as of sundry other modern languages), without being conscious of what they were doing, or working reflectively toward an anticipated end, have converted the one thing into the other. So with *of*, which, from being in Anglo-Saxon time a full preposition, the same both in form and meaning with *off*, has now grown into a kind of detached and prefixed genitive ending. So, again, with *to*, once a preposition governing a verbal noun, now an arbitrary "sign of the infinitive," and even convertible and converted in childish and colloquial phrase into a representative of that verbal form (thus: "will you do it? no, I don't want *to*"). I have taken as examples some of the latest cases of this change, because, while not less fairly and fully illustrative than any which might be taken from other periods of linguistic growth, they are more directly intelligible in their process. We say sometimes that such words change themselves in people's mouths, without the knowledge of their speakers; but we know, at the same time, that we are only talking figuratively, in the same way in which we might say that a fashion changes itself, or a law, or a popular opinion.

My illustrations of this immense and varied department of linguistic growth are scanty, but I think that they ought to be sufficient for their purpose. If there is in the whole de-

partment anything of a kind essentially different from them, or calling into action other forces than they imply, it has at any rate entirely escaped my quest. Nor am I aware that any student of language has ever attempted to point out anything inconsistent with them. Such alterations are all the time going on in our own speech without any question as to whence they proceed; and the burden of proof evidently rests upon those who claim that in other times they have involved forces of a different character.

A hardly less extensive department is that which includes changes in the forms of words, alteration of their uttered substance—phonetic decay, as it is sometimes loosely called, from the prevailing direction of the movement. I may be briefer in my notice and illustration of this, inasmuch as all authorities are virtually agreed in their attribution of its phenomena to a single prevailing cause—namely, a disposition to economy of effort in utterance. This disposition, felt in human minds and directing the operations of human organs of speech, it is, which in all languages abbreviates long words, wears off endings, gets rid of harsh combinations by assimilation, dissimilation, omission, insertion, compensation, and all the other figures of phonology, changes the tone of vowels and the place and mode of articulation of consonants, brings new alphabetic sounds into existence and lets old ones go into desuetude—and so on, through the whole vast list of modes of phonetic change. The ways in which the tendency works itself out are indefinitely various, depending upon the variety of human circumstances and human habits, as well as upon preferences and caprices which come up in a community in a manner often strange and unaccountable, though never justly awakening the suspicion of an agency apart from and independent of man. Every word which any one of us has learned to utter he has the power to utter always completely, if he will take the pains; but the same carelessness and haste which bring about the vulgarism *pro'able* and the colloquialism *cap'n*, which make us say *bus* for *omnibus* and *cab* for *cabriolet*, tend to transmute gradually the whole aspect of our speech.

When we learn German, we are conscious of a little special effort in pronouncing *Knecht*; and the same feeling, in a less conscious form, converted the almost identical *eniht* of the Anglo-Saxons into our *knight*. The laws of phonetic mutation in speech are in part the laws of the physical relations of articulate sounds; but only in part, for else the phonetic history of all related tongues would be essentially the same: the other great and indeterminable factor in the process is the will of men, in the forms of choice, willingness or aversion to articulating effort, sense for proportion and euphony, conservative tendency or its opposite, and other the like. And this, again, acts under the influence of all the inducements and motives, external and internal, which direct human action in other respects also. There is just as much and just as little that is arbitrary in the action of men on the form of language as in their action on any other of the elements which go to make up the sum of their culture.

There is another form of mental inertia which leads to changes in the constitution of words. Something of exertion is involved in the learning and remembering of apparently irregular forms, like *went* from *go*, or *brought* from *bring*, or *worse* from *bad*, or *feet* from *foot*. If the great majority of past tenses in English are made by adding *ed*, of comparatives by *er*, of plurals by *s*, there is economy of mental effort in making these usages universal, and saying *goed*, *bringed*, *badder*, *foots*. These particular alterations, it is true, being in very familiar and frequent words, sound strange and shocking to us; yet their like have borne no insignificant part in the reduction of English to its present shape; and that their root has been in the mind and will of man admits of no denial or question.

If we thus need to call in the aid of no extra-human agencies in order to account for the changes of words, in respect either of meaning or of form, how is it with the production of new words and forms? This ought to be, if anything, the distinctively characteristic part of the growth of language, which should bring to light whatever of mysterious forces there may be involved in it. If names are given to things by

speaking men, then the will of men has at least something to do with the determination of language; if, on the contrary, names are given, always or ever, otherwise than by speaking men, then we ought to be able to catch the power in the act, and to analyze and describe it, and see whether it be like that which is exhibited in the growth of animal organisms.

Now, in the first place, every one will have to acknowledge that men do sometimes give names to things. The father names his son, the author his book, the discoverer his isle, or bay, or plant, or animal, the inventor his machine or application of force, the scientist his stratum or epoch, the metaphysician his generalization—and so on, through an immense series of objects of thought and knowledge. Much of this, to be sure, does not gain universal use, does not get into the very heart of the popular speech; but that is perhaps because the essentials of popular speech were produced, not after a different fashion, but a long time ago. Parts of it, as circumstances determine, do make their way into familiar and every day use, becoming as thoroughly English as any words that “came in with the Conqueror,” or even with his freebooting predecessors, the Angles and Saxons. Again, it must be confessed that these are for the most part not productions of words wholly new, but adaptations or borrowings of elements already existing in this or in other tongues. Yet this also is a matter of subordinate consequence. To the great majority of the men who are to use them, the words *telegraph*, *dahlia*, *petroleum*, *miocene*, with all their kith and kin, are precisely the same as if they were forged brand-new out of the nomenclator’s brain. And in the occasional instances in which such new fabrications are made, they answer the same purpose, and just as well, as the others. It is the easier and the customary way to apply already existing material to new uses in the extension of language; men will sooner assent to and adopt your name if it be of that kind; but their assent and adoption is all that is needed to make language of it, from whatever source it may come. We have already examined, and referred without hesitation to human agency, the process by which appellations for new ideas are chiefly won—

namely, by changing and adapting an old name to fit them. What is accomplished otherwise than in this method is in part by taking in consciously words out of other tongues. Thus, certain animals, or plants, or products, or peculiar instruments, or strange institutions, are brought within our sphere of knowledge in connection with the names which they have borne where they were before at home, and we go on to call them by the same names; our English language coming by such means to include scattered elements from languages all over the globe. Or, what is of much more importance, there is some foreign tongue, to the stores of which customary resort is had when anything new requires to be expressed. Such a source of new expression to the English is the Latin, and, in a less degree, the Greek. No one, I believe, perplexes himself as to what may be the recondite organic affinity between English and the classical tongues, whereby, when a new term is wanted, a Latin vocable presents itself, and is seized and put to use. The act of choice involved in the process, the determination by the will of man, is clear and undeniable; all that the philologist attempts respecting the matter is to set forth the historical causes which have rendered possible and recommended our resort to these subsidiary sources. And when it is considered to what an enormous extent we have drawn upon the classical tongues, the dogma that men's will has nothing to do with determining language gains by this alone a very doubtful aspect. But farther, still another part of the new names called for in the uses of language is obtained by combining elements already existing in the language itself, by making new compounds, or new derivatives with the aid of such formative elements, prefixes and suffixes, as the language has in living use. In English, to be sure, this method of production is of minor importance, since the habit of composition and abundant and varied derivation has become deadened with us. But English differs here only in degree from languages like the German, Latin, Greek, and Sanskrit. We do make compounds still, either loose ones, like *ink bottle*, *steam-whistle*, *rail-fence*, or closer, like *inkstand*, *steam-boat*, *railroad*; and it has probably never entered into any

one's mind to doubt that such were actually made by us, and that the parts composing them did not grow together by any inherent force, separate from the determining action of the will of English speakers. And if this is the case with our compounds, it cannot be otherwise with the more abundant and various compounds of the other tongues to which we have referred. If any one be bold enough to maintain the contrary, he may be challenged to bring forward his proof, and to instance an example of a word of which the constituent members have combined by an internal organic attraction.

In this conclusion, however, is involved another, yet more important and far-reaching. On looking back into the history of our family of languages, we find that the combination of independent elements to form new words has been a process of the widest range and most conspicuous consequence. Not only have names been thus made, but grammatical forms also; the whole structure of inflective speech has had no other origin. Every formative element, whether prefix or suffix, was once an independent vocable, which first entered into composition with another vocable, and then, by a succession of changes of form and of meaning (changes which have been shown above to be due to human action alone), gradually arrived at its final shape and office. This can be proved by clear and acceptable evidence respecting so many formative elements, modern and ancient, that the argument by analogy from these to the rest is of a force which cannot be resisted. The *-ful* and *-less* by which we make adjectives, the *-ly* which forms adverbs, the *-d* of the past tense in our "regular" verbs, the *m* of *am*, the *-th* or *-s* of *loveth* or *loves*, are all demonstrably the relics of independent words; and if these (along with many others which might be instanced), then, by fair inference, all the rest. The grammatical apparatus of those languages whose history we best understand is essentially of the same kind with the *-ful* of *helpful*, and to whatever force we attribute the production of the latter we must attribute that of the former also. There are, it is true, left alive a few representatives of the antediluvian period of linguistic science, who hold that endings exuded from roots and themes by

some indefinable force, having no analogy with anything that appears in language now-a-days; and such may, without appreciable damage to their reputation either for consistency or for insight, maintain the independent organic existence of language; but all adherents of the prevailing modern school of historical philology, the school in which Schleicher himself is one of the leading masters, accept an explanation of structural growth which not only admits but demands the will of man as a determining force.

We will give our attention to but one other mode of change in language, namely the loss of words and phrases, their obsolescence and final disappearance. This doubtless presents analogies with the wasting of tissues in organized bodies. But it really means and is nothing save that communities who have formerly used certain words come to use them more and more rarely, and finally cease to use them altogether. When we look for reasons, we seek them in the grounds of human action, and only there; the thing which this vocable designated has gone out of use and so out of mind, and there has been no farther occasion for its name to appear in men's mouths; for this other, new expressions have chanced to arise and win acceptance, crowding this out of employment, which is existence; for yet another, no explanation, perhaps, can be given save the unaccountable, but human, caprices of popular favor and disfavor. Forms are lost, too, by the operation of phonetic decay, which destroys their distinctive signs, and so brings about their abandonment and oblivion; cases and genders, persons and moods, as our language more than others abundantly testifies, can go in this way; but they can go in no other. The same force which makes can unmake also, and nothing else can do it.

We have thus seen, or seemed to see, that words are neither made, nor altered in form or meaning, nor lost, except by the action of men; whence it would also follow that that congeries of changes which makes up the so-called growth or life of language is produced solely by human action; and that, since human action depends on human will, languages,

instead of being undeterminable by the will of man, are determinable by that will, and by nothing else. And the strangest thing about it all is that I have made no assertion respecting matters of detail, and have instanced no case in illustration, which would not probably have been accepted by Professor Schleicher and those who hold with him. So far as I am aware, no believer in language as a natural organism has ever professed or attempted to put his finger on this, that, or the other item in language as impossible to human agency, and exhibiting the peculiar organic force in action. Schleicher himself, certainly, abundantly admits in detail that which he denies in the totality. All the parts are as we have described them; only the whole is something entirely different. The parts are white, but put them together and they are black; every factor is positive, but the sum is negative! Passing strange indeed it is that the utter illogicalness of such a conclusion escapes these people's notice. As we have already seen, that by which a certain dialect differs from its ancestor, nearer or more remote, is not an indivisible whole; it is a mass of particulars, some of them isolated, others hanging together in classes; and each of these particulars or classes has its own time, place, occasion, origin, and effects; their cumulative sum makes up the general result. Now it is easy to throw a group of objects, by distance and perspective, into such apparent shape as shall obscure or conceal their true character and mutual relations. Look at a village only a little way off upon the plain, and its houses are flung together into a mass; trees grow out from their roofs; a cloud rests on the summit of the church spire; the mountains behind are lower than the house-tops. If you refuse to judge appearances there exhibited by those of the similar village in the midst of which you stand, you may arrive at any the most ungrounded and absurd views respecting them. So in language: if you insist on standing aloof from the items of linguistic change and massing them together, if you will not estimate the remoter facts by the nearer, you will never attain a true comprehension of them. And this is just what Schleicher has done in

the essay of which we are treating. He rejects the genuine scientific method, which is to study thoroughly the phenomena which fall under immediate observation, with the forces they involve, and to reason cautiously back from these into the obscurer distance, always making due allowance for change of circumstances, but never needlessly postulating a new force. There is not a vestige of scientific character in his fundamental dogma; it is worthy only of the mythologic stage of linguistic study, when men were accustomed to veil plain facts in obscure and fantastic phraseology, and to assume *quasi*-personal causes for effects which are really due to the secondary workings of obvious and every-day agencies.

If the argument presented above, as to the presence of the human will as a factor in the growth of language, be found well-grounded and acceptable, then the question of the "fixed laws" alleged to govern that growth is also virtually settled, and does not require detailed discussion. What we call "laws" are traceable everywhere, in the action of individuals and of communities, in the progress of human culture and human history, as well as in the changes of physical nature; the term is used, to be sure, in more than one sense, as designating generalizations and inferred causations of quite diverse character; but for that very reason a close examination is necessary in each particular case where the government of law is asserted, that we may avoid the gross, though too common, blunder of confounding the various orders of law, and identifying their results. An egg goes into the hatching-room and comes out a chicken; a bale of cotton goes into the factory and comes out a piece of cloth; there is a palpable analogy between the two cases so far; and there are, beyond all question, laws in plenty, even physical laws, concerned in producing the latter result, as well as the former; but we do not therefore decline to peep inside the factory door, and satisfy ourselves with assuming that the cloth is a purely physical product, and an organism, because the chicken is so. Yet this, in my opinion, is precisely what Schleicher has done. A very little unprejudiced and common-sense research applied to language suffices to show us that the laws under which its so-called life goes on are

essentially different from those which determine the development of living organisms, animal or vegetable; they are simply modes of human action. Every law of speech has its foundation and reason in the users of speech—in their mental operations, their capacities, their wants and preferences, their physical structure, their circumstances, natural or historical, and their habits, the accumulated and concentered effects of all the rest. There is not less of linguistic mythology in setting up the government of language by law than the absence in it of human action as a reason why it should be regarded as an organism.

It would be great cause for rejoicing if this mythologic mode of treating the facts of language were confined to a single scholar, or a single school. But it does, in truth, characterize no small part of the current linguistic philosophy—even, or especially, in Germany, and among those who most affect profundity. Many an able and acute scholar seems minded to indemnify himself for dry and tedious grubblings among the roots and forms of comparative philology by the most airy ventures in the way of constructing Spanish castles of linguistic science.

Languages, then, far from being natural organisms, are the gradually elaborated products of the application by human beings of means to ends, of the devising of signs by which conceptions may be communicated and the operations of thought carried on. They are a constituent part of the hardly won substance of human civilization. They are necessary results of human endowments and dispositions, and also highly characteristic results; yet only results, and not the sole characteristic ones, of man's peculiar powers. Every human being, if endowed with the ordinary gifts of humanity, is put in possession, as part of his training, of a language, as he is of all the other elements of the civilization into the midst of which he happens to be born, and the acquisition of which makes him a developed man, instead of a mere crude savage, a being little higher than the highest of the other animals. If we are to give language a name which shall bring out its essential character most distinctly and sharply, and even in

defiance of those who would make of it an organism, we shall call it an INSTITUTION, one of the institutions that make up human culture. The term, probably enough, offends the prejudices of not a few; yet it is well chosen and correctly applied, and involves not a particle of derogation to the high dignity and infinite importance of human speech.

The study, moreover, which takes for its object languages, their varieties, structure, and laws of growth, is not a natural science, any more than is the study of civilization at large, or of any of its other constituents, of architecture, of jurisprudence, of history. Its many and striking analogies with the physical sciences cover a central diversity; its essential method is historical.

Of course, its foundation being withdrawn, Schleicher's whole argument in support of Darwinism falls to the ground, and there remains merely an interesting, and, if rightly used, instructive analogy between the two classes of facts and phenomena compared—one which Lyell (in his *Antiquity of Man*, chap. xxiii.), with a soberness of judgment strangely in contrast with the over-rash zeal of the German scholar, was content to set forth as an analogy only. Darwinism must stand or fall by its own merits; it cannot be bolstered up by linguistic science.

The second of the two pamphlets which I have undertaken to criticise is entitled "On the Importance of Language for the Natural History of Man."\* It was published a couple of years later than the other, to which it endeavors to fill the office of a defense and support. Some persons, namely, having raised objections to the unsupported assumption there made, that languages are real concrete organisms, having a material existence, the second essay is intended to supply the lacking demonstration of that doctrine. Let us see how the demonstration is conducted.

The author begins with pointing out that the characteristic mode of activity of any organ—as, for example, of the stomach, the brain, the muscles—is now generally acknowledged to

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\* *Ueber die Bedeutung der Sprache für die Naturgeschichte des Menschen.* Von August Schleicher. Weimar, 1865. 12mo. pp. 29.

depend upon the material constitution of that organ. So the locomotion of different animals, even the peculiar gait of individual men, is conditioned by the structure of their organs of motion. The same is the case with language. This is the "audible symptom of the activity of a complex of material relations in the formation of the brain and of the organs of speech, with their nerves, bones, muscles, etc." The material differences of structure on which the differences of language in different individuals depend have never been anatomically demonstrated, and they may even prove forever too subtle for demonstration; but that does not show that they are not real. What light is to the sun, that audible sound is to these efficient peculiarities of organization; it manifests them; and it may, in a philosophical sense, be said to be identical with them. Hence, languages have an independent material existence, and the objections brought against their treatment as such are to be deemed and taken as set aside!

I solemnly affirm that this is, so far as I am able to make it, a faithful abstract of Schleicher's argument; and I refer incredulous readers to his text for its verification.

The most hasty examination of it cannot but make clear, in the first place, that the author, whether aware of it or not, has completely shifted his ground. A natural organism, which has grown and developed by inherent powers of its own, and under fixed laws, through a succession of ages, is one thing; a symptom or manifestation of a structural difference, which, speaking philosophically, may be said to be that difference itself, in the same sense (rather a Pickwickian one, surely) in which light is the sun, is another and a very different thing: one is a being, the other is a function; one is an actor, or at least an agency, the other is an act or effect. All the inferences, for Darwinism and everything else, which Professor Schleicher founded on his former doctrine, are virtually abandoned; you cannot make the history of a function prove the transmutability of animal and vegetable species. The only feature, so far as I can discover, which the two doctrines have in common is their denial of the agency of the human will: voluntary action is ruled out, on the one hand,

because language is an organism, growing and developing by its own internal forces; on the other hand, because it is the necessary effect of real physical peculiarities of structure. This, then, is the point to which our attention has still to be particularly directed.

We have first to notice that it is not the uttered and audible part or side of speech alone that Schleicher has in view. He does not intend simply that, constituted as we are, we must produce the articulated sounds, the alphabetic elements, which we actually produce, and no others. For this by itself would never lead to unity of speech in a community or race. Out of our alphabet alone, without importing a click, or a guttural, or a tone, from other tongues, we might build up a language which should be as unlike our own as any that is spoken upon the face of the earth. No; his doctrine, as evinced by the whole course of his reasonings, is plainly this: the reason why I, for example, say *hat*, instead of *hut*, or *chapeau*, or *causia*, or any other of the thousand words which people in various parts of the world use or have used to designate their head-coverings, is that my brain and my organs of speech are so constituted and connected that *hat* is to me the natural and necessary sign of this particular conception—and so with all the other signs that make up my language. Truly a most astounding doctrine! There are, I believe, few writers on language who would have the hardihood to maintain it. Hardly one would fail to acknowledge that, whatever natural internal connection there may have been in the initial stage of language between sound and sense, there is, at least, none now; that the English-speaking child *learns* to call a hat a *hat*, and could have learned to call it a *hut* or *chapeau*—as, indeed, he often does, earlier or later; which of the names he acquires being a matter of entire indifference to him until he has acquired one, and become so accustomed to it that it seems to him the “natural” name for his tile, and he can only by an effort change his habit and come to call it by any other name. Or, generalizing this—for what is true of this one sign is true of every other of which our language is composed—while each human being has the capacity of speech,

none is directed by nature to speak any one language rather than any other; the infant, of whatever race, acquires the language of those who are about him, or sometimes more than one, and could have acquired any other equally well; but the older he grows, the more the language he has acquired becomes to him that habit which is justly called a "second nature," and the harder it is for him to lay it aside for another, or add another to it. These are, it appears to me, clear and undeniable truths; there is neither mystery nor doubt about them; and their importance is so fundamental that he who overlooks or denies them cannot fail to make shipwreck of his whole linguistic philosophy.

Our view of the acquisition of language is not in the least at variance with modern scientific theories of cerebral structure and action. There may be in the physical constitution of my brain something that makes me say *hat*; there may be atomic equivalents and atomic connections determining every item of my speech and all its combinations and uses; but it is a secondary or acquired something, a peculiarity effected by external causes, not inherent and self-determining. It is analogous with all the knowledge, the memories, the preferences, the habits, the special aptitudes, which my experience and opportunities, working on a general and specific basis of capacities, have produced in me. That I choose to wear a hat at all, that I prefer one of a certain size and color, that I take my hat off when I meet a friend, that I remember the hats I have worn and where and when I got them, that I know how many I possess at this moment and where they are—all this depends, if you will, on infinitesimal peculiarities in the present structure of my brain; and it is all of the same kind with my capacity and habit of using the word *hat*. This is a trivial example; but it is not less instructive and decisive of the points involved than the most dignified one that could have been selected.

Again, our view does not make against the theory of the transmission to a certain degree of the effects of culture in the form of higher inherited capacity. Among a certain number of persons born into such circumstances that they acquire

English as their "mother-tongue," one may possess by descent a genius upon which even English, with all its force and beauty, imposes a laming constraint; while, on the other hand, and much more probably, there will be others whose meaner powers would be more in harmony with some lower form of speech, as Chinese or Malay. So it is everywhere; if men were divided and languaged according to the kinship of their endowments, the present boundaries of races would be entirely broken up, and every community on earth would become a Babel. As things are, every man learns that language which circumstances place within his reach, whatever it may be, and works out and exhibits his higher or lower endowment inside of it, in his management and use of it. Even the humblest language that exists is so far beyond the capacity of even the ablest human being to produce unaided, that its acquisition raises him to a plane of power indefinitely higher than he could ever have attained if left to grow up speechless. All that he can have reason to regret is that circumstances should not have been still more favorable to him, and enabled him to work out the whole force which it was in him to develop. And what is thus true of language is true of culture in general, in its other elements not less than in the linguistic.

Professor Schleicher has noticed, or has had his attention called to, the objection to his theory of language which is involved in the power to learn other languages than one's mother-tongue; and he endeavors to set it aside—after the following fashion. First, pushing further a comparison already made, he says that a man can also learn to go on all fours, or to walk on his hands, while nevertheless no one can doubt that we have a natural gait as men, conditioned by our bodily structure. But it must be evident at a glance that this comparison, at any rate, does not run on all fours. To make it other than helplessly lame, we ought to see that a human being if brought up by quadrupeds would move naturally on hands and feet together; if by birds, would fly; if by fishes, would swim; in each case, without ever feeling a disposition to walk erect upon his feet. For he who has never

learned any language but English, of whatever parentage he may really be, is undistinguishable from an Englishman, and never exhibits the slightest tendency to relapse into the ancestral dialect. But Professor Schleicher goes on to argue the matter upon other grounds. Again ignoring the question as to how a person obtains his "mother-tongue" at the outset, he raises a doubt as to whether any one ever really acquires in a complete manner any other language; and, granting even that that be done, he suggests, as the very simple explanation, that such a one becomes in fact a different man from what he was; another constitution of brain and organs of speech is substituted for, or added to, his natural one. Further, he continues, even if (which is not to be conceded) a person becomes thus at the same time an Englishman, a Frenchman, and a German, it is still to be observed that these are related languages—in a certain sense, species of the same genus. But it is not at all to be credited that the same man can be master at once of wholly diverse tongues, like German and Chinese, or Arabic and Hottentot, any more than that he can walk easily and comfortably both on two feet and on all fours. Now it is an easy way of disposing of an adverse argument to discredit the facts on which it is founded; but we are convinced that what Schleicher refuses to believe is an undeniable truth: children of European parents do learn, where circumstances favor it, those outlandish tongues along with their own, as readily and surely as those of the most nearly related European nations; they do not perceive or feel the difference between a related and a non-related tongue; that is discoverable only by a process of reflection and learned comparison of which no young child is capable. Instances of persons learning at once languages like German and Chinese are merely less frequent than the others, and for the simple reason that circumstances do not so often bring them about. When one has once schooled his thoughts to one form of expression, it is true, the difficulty of acquiring a second will be partly proportioned to the resemblance or diversity between the latter and the former: but in this there is nothing strange or peculiar, nor does it in the least favor Schleicher's theory.

One might just as well say of a person who has mastered a musical instrument, as the flute, that he makes it his mode of musical expression because the minute constitution of his brain and of his blowing and fingering apparatus render it a necessity to him ; that he never acquires an equal mastery over any other instrument, or, if he does so, it is only in virtue of his becoming so far another being ; that he may at the utmost become able to play kindred instruments, like the clarionet and bassoon ; but that the violin and the piano are entirely beyond his reach — proceeding then to argue that the musical notes of the flutist, as they reflect and represent peculiarities of his organism otherwise unmanifested, are themselves material existences ; and that the development of modern flute melody from the first rude tones of the ancient pipes exhibits the essential characteristics of organic life, and proves the truth of the Darwinian theory ! I say it in all seriousness, such an argument would be precisely as good as that which Professor Schleicher has constructed, and which is one of the most striking examples I have ever seen of the way in which a man of high merit and worthy achievement in one department of a subject can in another deny the most fundamental principles, be blind to the plainest truths, and employ a mode of reasoning in which there is neither logic nor common sense.

The subsidiary statements and reasonings of these two pamphlets partake fully of the unsoundness of their main argument. Thus, in the immediate sequel of what we have just been considering, the author declares that speech is the sole exclusive characteristic of man, and that any given anthropoid ape who should be able to speak would be called by us a man, [and a brother,] however unlike a human being he might be in other respects. As to this last assertion, it is so easy to speculate where the test of fact can never be applied, that I will not take the trouble to contradict it, although my own conviction is strongly against it, and I cannot but doubt whether Schleicher himself would have proved equal to fraternizing with his fellow-man if the case had been realized. But certainly, speech is so far from being man's sole distinc-

tive quality that it is not a quality at all, in our author's sense ; it is only a possession. The capacity of forming and acquiring speech is a quality, and one among the many which constitute the higher endowment of man ; but let the child of the most gifted family of the most highly cultivated race grow up untaught, in solitude, and he will no more employ a language than he will build a temple, paint a picture, or construct a locomotive. Not all the boasted development of the race will enable a single individual, if thrown upon his own unaided resources, to speak ; because speech, like the other elements of civilization, does not go down by inheritance, but by the process of teaching and learning.

It is not true, then, as our author argues later, that linguistic science leads us to the conclusion that man developed out of lower forms of animal life because language has been of slow development, and without language man would not be man. The rise of language had nothing to do with the growth of man out of an apish stock, but only with his rise out of savagery and barbarism. Its non-acquisition by a given individual cuts off, not his human nature, physical or intellectual, but his human culture ; it puts him back into a condition from which he would at once begin to advance by slow degrees to that of a speaking man, as his remote ancestors had already done before him. Man was man before the development of speech began ; he did not become man through and by means of it.

In connection with this, Schleicher brings forward again a dogma which he has repeatedly laid down elsewhere with great positiveness and confidence : namely, that "it is absolutely impossible to carry back all languages to one and the same original language ;" that there must necessarily have been at least as many original languages as there are now-existing families of language. This is entirely wrong, and even a complete *non sequitur* from the premises which he himself accepts. For he holds, with the historical philologists in general, that all languages had the same morphological form at the outset ; that is to say, that they began in the condition of bare roots, designating the simplest and most obvious

physical conceptions. He doubtless holds, also (I do not find a specific statement upon the subject, but it is an obvious and necessary inference from his expressed views), as others do, that it is not possible to point out with certainty the precise roots and conceptions with which the different families of language began; they are too much disguised and overlaid by the changes and additions of later linguistic growth to admit of being distinctly traced. Where, then, is the impossibility that the same roots should have served as basis of development to more than one family of languages? The question of probability we may discuss in any given instance as much as we please, but the assumption of impossibility is ruled out by the very nature of the case. To make this assumption, as Schleicher does, on the mere ground of the great unlikeness between the developed families, is quite illogical: for if languages starting even with the same completely developed structure can come to be as unlike as are English, Welsh, and Hindi, for example, there is absolutely no amount or degree of dissimilarity which might not arise between tongues which had in common only their first rude elements. This seems a truth so incontestable that its denial is one of the strangest points in Schleicher's linguistic creed, one that betrays most tellingly the character of that creed, as made up of prejudices rather than of cautious and well-founded deductions.

If there is another point in the creed entitled to contest the palm of unreasonableness with this one, it is our author's view of language as an infallible test of race, and the only firm basis for a classification of mankind. "How inconstant," he exclaims, "are the form of skull and other so-called distinctions of race! Language, on the other hand, is always a completely constant characteristic." And he goes on to point out that a German (we will say instead, an Englishman) may well enough chance to rival in wooliness and prognathism the most pronounced negro-head, while nevertheless he will never speak naturally (*von Hause aus*) a negro language. To exhibit the preposterousness of this claim, we have only to invert it, and say that it may well enough happen now and then

that a person of African blood should rival in complexion, hair and Caucasian cast of features a descendant of purest Puritan stock or of the first families of Virginia, while nevertheless he will never, never speak as his mother-tongue the English language. I fancy that some of us have chanced upon facts not entirely consistent with that statement. I should like to see some adherent of Schleicher's opinions going around in our American community with an English grammar and dictionary, determining by the evidence of language to what race its various constituents belong. It would not be difficult in almost any American village to set up before him for examination a row of human beings who should show unmistakable traces of African, Milesian, Scottish, and German, as well as English, descent; and yet every mother's son of them should speak English as his mother-tongue, and should not know a word of any other language under the sun. And our author's imagined wooly and prognathic German, or any other German, would only need to be brought up from infancy in an African *kraal*, in order to speak African as naturally (*von Kraale aus*) as the child whose ancestors had lived for ten thousand years on the *karroo*. It is nothing short of gross judicial blindness that can make one overlook the infinite number of facts like these which the history of languages presents, and their bearing, and set up the mere accident, as we may fairly call it, of one's mother tongue as the sole and sufficient test of race. One's "mother-tongue" is determined simply by one's teachers; and it is only because one's teachers are usually one's parents and a community akin in race with them that language becomes an indication, a *prima-facie* evidence, of race. On the broad scale, it is to a considerable extent a trustworthy evidence; and its contributions to ethnology are of extraordinary and unsurpassed value; but its degree of force in any individual case is to be measured by the degree of probability, determinable in part on other grounds than linguistic, that the given community is one of descent and not of agglomeration or mixture.

Another fallacy of Professor Schleicher's—one, however, which stands in a more logical connection with his general

theory of language—is his assumption that the primary differences of language are geographical: that is to say, that forms of speech grew up in the outset resembling one another in the ratio of their proximity and of the accordance of the surrounding physical conditions. There is no good reason for holding any such doctrine; it falls to the ground, at any rate, with the doctrine of the necessary physical origin of language, and is not unavoidably involved even in that. Not physical causes, but historical, determine language: dwellers in the same plain speak different tongues, without the slightest tendency toward unification, save as the effect of communication and mixture; dwellers in the plain and on the mountains, in the interior and by the sea, in icy, temperate, and torrid climes, speak the same or nearly related speech, because it comes down to them by tradition through the separated representatives of a single community. Schleicher says farther that “in the later life of language, among men who live under essentially similar conditions, the language also changes itself uniformly, or spontaneously and in corresponding manner in all individuals who speak that language:” thus ignoring the fact that only individual action tends to diversify language, and only communication to keep it uniform, and once more explaining as the result of physical forces phenomena which are in truth ascribable to human action, and to that alone.

In drawing his second pamphlet to a close, our author refers again to a very peculiar theory of his, more fully set forth elsewhere (in the introductory part of his *Deutsche Sprache*), that language-making and historical activity necessarily belong to different and successive periods in the life of a race or nation, the former absorbing the whole national force while it is in progress, and rendering the latter impossible. A community lies *perdu* while it is developing its speech (not learning to talk simply, but working the language up to its highest point of synthetic structure), and then steps confidently forward to play its part in the drama of general history. This is so palpable a fancy, and a fancy only, that we need lose no time over its confutation; we may simply notice that it in-

volves a most peculiar conception of language-making, since this really goes on as long as the race lives, and cannot be shown to exhaust more nervous force in synthesis than in analysis; a most peculiar conception of history, as if there were no history without record and publicity; and a most peculiar understanding of the circumstances which by their concurrence operate to bring a race forward into conspicuousness, or to make it take a part in those interworkings whose result is the higher civilization of the more gifted and favored races.

Finally, Professor Schleicher winds up with a bit of theory. in pure natural history, which does not precisely concern us as philologists, but yet is too characteristic to pass over, and which I accordingly give in his own words: "It is in the highest degree probable that not all organisms which entered upon the road toward becoming man have worked their way up to the formation of language. A part of them were left behind in their development, did not enter upon the second stage of development, but fell under a law of retrogression, and, as is the case with all such deteriorations, of gradual decay. The remains of these beings, who continued speechless, deteriorated, and did not arrive at the condition of becoming human, lie before us in the anthropoid apes"! This looks like Darwinism reversed: the apes do not so much represent a condition out of which man has arisen as that into which creatures that might have been men have fallen, through simple neglect of learning to talk! If we accept the doctrine, we cannot but be impressed with the grandeur of the work in which we, as a Philological Association, are bearing our humble part. By encouraging and promoting, to the extent of our associated capacity, the maintenance and progress of language, we perhaps contribute to preserve our own remote posterity and the whole human race from sinking to the condition of the gorilla and the chimpanzee!

- These peculiar and indefensible views of Schleicher appear more or less in all his later works which have occasion to deal with general questions of language. Thus for example, in the introductory part of his *Deutsche Sprache* (already more than

once referred to), they make so much of a figure as to render that work, interesting and suggestive as it is, a most unsafe one to put in the hands of persons not qualified to use it in an independent critical spirit. But in the two pamphlets which we have been considering, they are presented almost pure and simple; there is hardly room beside them for the acuteness of the comparative philologist to appear; while we are, of course, able to pick out here and there a remark or a paragraph which sustains the reputation of the author, yet, as a whole, the essays are utterly unworthy of him, and can only be read with pain and regret by those who admire him and respect his memory. From the beginning to the end, in foundation and superstructure, they are unsound, illogical, and untrue, and must hurt the cause of science just so far as they are read and accepted. I had supposed that, in the bare and overstrained quality of their errors, they would carry everywhere their own refutation with them; but facts show that this is not so; there are still incautious sciolists by whom every error that has a great name attached to it is liable to be received as pure truth, and who are even especially attracted by good hearty paradoxes. These two papers have been translated into French as the first and inaugural fascicle of a "Philological Collection," or international series of important essays in philology; and even so sound and careful a philologist as M. Bréal has been misled into giving the inauspicious beginning an implied sanction by letting his name appear alone upon the title-page, as author of the Introduction.\* And the former of the two has been done into English and published in London by a Dr. Bickers, who in his preface lauds it to the skies, as containing (with the sole exception of the dogma of the necessary diversity of primitive languages, which he rejects) only such doctrines as are to be taken for

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\* *Collection Philologique. Recueil de Travaux originaux ou traduits relatifs à la Philologie et à l'Histoire Littéraire avec un avant propos de M. Michel Bréal. Premier Fascicule. La théorie de Darwin.—De l'importance du Langage pour l'Histoire naturelle de l'Homme, par A. Schleicher.* Paris, 1868. 8vo. pp. vi. 31. M. Bréal's preface is of but a page or two, and in it he indicates—though, in my opinion, in a manner much less distinct and decided than the case demanded—his at least partial non-acceptance of Schleicher's views.

the established truths, the "axioms," of modern linguistic science (axioms they indeed are, in one respect: namely, that they are incapable of demonstration).\* It was the falling in by chance with Dr. Bickers's version, a few weeks since, in a library where it could only do unmixed harm, that led me to draw out and present these strictures.† Views which might seem to be self-refuting require to be elaborately argued down when they are in danger of winning currency and acceptance; especially if they have to do, like these, with principles of fundamental importance. And reverence for the name and works of a truly great man should not lead us to cover up or treat with indulgence his errors, when they are sought to be propagated under the shield of his reputation, and tend, if accepted, to cast the science of language back into a chaos as deep as that from which it has lately begun to emerge.

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\* *Darwinism tested by the Science of Language*. Translated from the German of Professor August Schleicher, with preface and additional notes, by Dr. Alexander V. W. Bickers. London, 1869. 12mo. pp. 70.

† I had given the substance of them before a local society several years ago, on the first appearance of the second essay, but had no intention of making them more publicly.