AUGUST SCHLEICHER

ON THE SIGNIFICANCE OF LANGUAGE FOR THE NATURAL HISTORY OF MAN

Translated from the German

by

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Über

die Bedeutung der Sprache

für die

Naturgeschichte des Menschen.

Von

August Schleicher.

Weimar

Hermann Böhlau.

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[PREFACE]*

[3] The following paper was presented, with some amplifications and clarifications, to a small private circle here in Jena. Its publication now serves to answer an objection which has been raised several times against my booklet on 'The Darwinian Theory and the Science of Language, Weimar 1863'. I was challenged for treating languages as material things, as real natural entities, which in fact I presumed there without argument. In what follows I seek indeed to show that they are just that. Thus the following may be considered an amplification of the cited work. Since I cannot however presume that readers of the present piece have access to the above work, I have had to discuss again certain matters dealt with there.

In 'The Darwinian Theory and the Science of Language' I unfortunately omitted a qualification of what I wrote there, which I allow myself to append here. It should be inserted at page 6, line 6 from the bottom [= page 20, beginning with line 13, of the (1869) English translation], and should read:

> "Of course, only the descriptive natural sciences are meant here. The significance of the aprioristic, mathematical method for astronomy and physics can naturally not be questioned in the least."

Jena, End of December 1864.

Aug. Schleicher.

* Items enclosed in square brackets constitute additions by the editor, unless marked differently. In particular, numbers in square brackets indicate the beginning of a new page in the original German text.

[7] A natural scientist in our day would hardly doubt that the activity of a given organ, whether the digestive organs, the glands, the brain, the muscles, etc. is dependent upon the character of that organ. [1] The gait of different animals, even the gaits of particular humans, are obviously determined by the different character of the parts of the body operative in walking. The activity, the function of the organs is, so to speak, only an aspect of the organ itself, even if the scientist's scalpel and microscope do not always succeed in showing the material cause of every [8] phenomenon. It is exactly the same with language as with walking. Language is the audible symptom of the activity of a complex of material relations in the structure of the brain and speech organs, with nerves, bones, muscles, etc. [2] Of course the material basis of language and language differences has not yet been established. And, as far as I know a comparative investigation of the speech organs of linguistically diverse peoples has not yet even been begun. It is possible, maybe even probable, that such an investigation would lead to no satisfactory results. Such negative results could nevertheless hardly shake our conviction about the presence of material, bodily bases of speech. For whoever wanted anyway [9] to deny the existence of such material relations! It is just that at present they escape direct perception and perhaps never will be directly observable objects! The effect of minimal quantities and relations is not seldom an uncommonly important one. Just consider the phenomena of the spectrum, of color and fragrance in plants, or of the effect of the fertilizing spermatozoids etc. It is possible that language differences are the result of such minimal differences in the character of the brain and the speech organs.[3]

Be that as it may, since we do not have the material foundations of speech immediately before us, we can only take into account effects of those foundations [10] and to proceed with language more or less as the chemists do with the sun: they investigate its light, as they cannot directly take the source into their investigations.

1 [Translator's note: Schleicher's style here, with a negative *(unabhängig)* embedded in the complement of a covert negative verb (*bezweifeln* 'doubt, be unsure') results in a murky passage, one that ill accords with the following text: on the one hand he avers that an organ's activity *is* independent of the character of the organ, on the other his examples show the opposite. The issue that concerns him however is not the dependence or independence of function from structure in organisms but the fact, as his text subsequently bears out, that the functions themselves can be observed even when we are in no position to know the underlying physical structures.]

2 This thought is not new. Lorenz Diefenbach, *Vorschule der Völkerkunde*, Frankfurt am Main, 1864, page 40ff. had already enunciated it. Cf. also the following note [3].

3 Cf. Th[omas] H[enry] Huxley [(1825-95)], *Zeugnisse für die Stellung des Menschen in der Natur,* übersetzt von J[ulius] V[ictor] Carus [(1823-1903)]. Braunschweig 1863, p.117, note. [English original, *Evidence as to Man's Place in Nature* (London & Edinburgh: Williams & Norgate; New York: Appleton & Co., 1863).]

To remain with the same analogy, what light is to the sun, so audible sound is to language. As, in the former case, light attests a material basis, so in the latter case does sound. The material conditions underlying language and the audible signal stand to each other in a cause-effect relationship, or as essence and appearance. The philosopher would say they are identical. We therefore consider ourselves justified in considering languages as something with material existence, even if we cannot grasp them with the hand or see them with the eye, but only perceive them through the ear.

The charge that I erroneously treat language structures as [11] really existent, when they are but the result of activities of the speech organs, I believe to have refuted with the above argument.

Before I attempt, however, to evaluate language so considered for human natural history, let me answer yet another objection against the alleged substantiality of language that may have occurred to this or that reader: I refer to the learning of foreign languages.

If language really rests on a particular quality of brain and speech organs, how can anyone learn one or more foreign languages? Adverting to an analogy used at the outset above, I could reply in brief here that one could learn to walk on all fours or on the hands without questioning that our natural gait is determined by the character of our body and is but [12] a mere manifestation of the same. But let us consider a bit closer the objection about foreign language learning. First of all one should ask if there is any perfect mastering of a second language. I doubt it, and I concede it only for the case where one exchanges a foreign language for the mother tongue in earliest youth. But in that case he becomes another person than he was: brain and speech organs develop differently than they otherwise would have. Don't tell me so-and-so speaks and writes German, English, and French, etc. with equal facility. I would deny the 'fact' directly. But, for the sake of argument, conceding such were possible, i.e. that one might be simultaneously a German, an Englishman, and a Frenchman, then I would for one suggest that all Indo-European languages belong to one and the same language family and can be more broadly considered as variants of one and the same language. First, though, show me the person who thinks and speaks equally well in German and Chinese, [13] or in Maori and Kirghiz, or in Arabic and Hottentot, or in any two fundamentally different languages. I do not believe that such a person can exist. It is so often the case that we cannot even produce the characteristic sounds of a foreign language or catch them right with our ear, any more than one and the same

person can both walk on his hands and all fours. Up to a certain point our organs are, so to speak, flexible and able to develop abilities that are not really 'native' to them; but one function will always be the proper one of a given organ. Thus it is with the organs that have language as their function. Hence there is no argument to be found against the postulated material basis of [14] language in the brain and speech organs.

If we are correct in seeing language as something really and materially existent, then a far deeper significance attaches to the view that language, and (after Huxley's well-known investigations) language alone, is the defining characteristic separating man from the nearest anthropoid apes (the gorilla, chimpanzee, orang, and gibbon).[4] Language, that is the expression of thoughts through words, is man's sole exclusive trait. Animals possess sound signals, even highly developed ones for the direct expression of feelings and desires; and by means of these communication is possible among animals, as well as by other displays. [15] Indeed expressions of feelings by one animal can produce ideas in others. Therefore one is accustomed to speak of animal 'languages'. The ability, however, to directly express *thought* by means of sound is possessed by no animal, and only this is meant by the term 'language'. How strongly this is recognized in our consciousness and in our actions is shown by the remark, that doubtless an ape with the gift of speech, though an animal externally different from man, would be considered human if it possessed speech. It is well-known that deaf mutes possess language *in potentia* no less than actually speaking humans. That is, their brain and speech organs are essentially as developed as those of hearing persons. If this were not the case, they could never learn to speak or write. As opposed to these, truly speechless defectives, the microcephalous etc., are not to be reckoned as really human, since they lack [16] not only language, but also the means of producing it.

If language is the human trait par excellence, then the question arises why it should not serve as the prime criterion for a scientific classification of humanity; it seems we have found in language the basis of a Systema Naturae[5] of the Genus Homo.

How inconstant are such matters as cranial shape and other racial traits! Language, on the other hand, is a totally constant trait. A German can match

4 Th. H. Huxley, *Zeugnisse für die Stellung des Menschen in der Natur*, ... [see note 3 (above) for full reference], p. 127.

5 [Translator's note: I render Schleicher's 'natürliches System' this way because I believe that he had Linné's *magnum opus* (1735) in mind.]

a Negro in kinkiness of hair or prognathism, but will never speak an African language of his own doing. How insignificant the so-called racial differences are for man is shown by the fact that members of one and the same language family can present different racial traits. Thus the sessile Osman Turk is of Caucasian race, while other, [17] so-called Tatar Turkic tribes represent a Mongoloid type. The Hungarian and the Basque are indistinguishable physically from Indo-Europeans, while linguistically Basques, Magyars, and Indo-Europeans diverge greatly. Besides their instability, racial differences could be classified only with the greatest difficulty. On the other hand, languages can be arranged with relative ease in a *systema naturae*, especially in their morphobiological side, no less than other organisms. But this is not the place to go into greater detail on this matter. For us then the externally observable form of the cranial, facial, and bodily skeleton is markedly less important for the human than that no less material, though infinitely finer, bodily characteristic, of which the symptom is language. The *systema naturae* of languages in my view is at the same time that [18] of humanity. The whole higher activity of human life is inseparable from language, and it is for language above all that humanity merits attention.

Naturally however I will not in any way deny that brain formation and brain-determined cranial form might have implications for language. Nor would I dream of questioning the deep significance of exact investigation of human anatomical differences. I would only put in question the justifiability of these as the basis of a typology of now existing humanity. One can classify animals according to their morphological structure. For humans, however, outer appearances now seem to me to be a matter relatively insignificant and passé. To classify humanity we need, so it seems to me, finer, higher criteria, exclusively proper [19] to man. These we find in language.

But language is of significance not only for the elaboration of a scientific [i.e., taxonomic] systematization of humanity, but also for the evolutionary history of man. In previous work I reached the conclusion that language above all characterizes man as human and that accordingly the various stages of language are to be considered as the perceptible, characteristic traits of various grades of man. (I deliberately avoid the terms 'genus', 'species', 'variety' for reasons close at hand.) Now language has revealed itself to science as something that has evolved very gradually, as something that once did not even exist. The comparative anatomy of languages shows that the more highly organized languages evolved very gradually out of simpler language organisms, probably in the course of very long time spans. [20] Linguistics finds, at least, no contradiction of the assumption that the simplest expression of thought through sound or that the languages of simplest structure are des-

cended by degrees from vocal displays and mimicry, such as possessed by animals. To document such here would lead too far afield. Besides, I believe that these results of linguistics are generally considered the least unlikely.

I believe I can spare myself the refutation of the view of language as the supposed invention of some individual or that is was handed down from some external source. Language, even in the short span of human history to the present day, can be seen in the grip of constant change, as the product of a gradual evolution according to definite "laws of life", which we are in a position to detail in their essential traits. With assumption of a material basis for language in the somatic [21] character of man, the only compatible theory for the origin of language is one assuming an evolutionary theory of language together with that of the brain and speech organs.

If language is what makes man then our ancestors were not what we could call 'man' from the beginning, but became human only when language appeared. Development of language however means the same for me as development of the brain and speech organs. Thus the accomplishments of linguistics lead quite decisively to the assumption of a gradual evolution of man from lower forms, a conclusion which, it is well-known, modern natural science has reached by a completely different route. For that reason alone language would be of significance for natural science, especially for the evolution of man. But observation and classification of languages also gives us the basis to conclude even more exact views of the prehistory of our race.

[22] The languages that to date have been dissected into their ultimate elements and those that have remained on the simplest stage of evolution show that the oldest form of language was everywhere the same. The oldest material of language was sounds designating objects and concepts. There was as yet no expression of relations, nor differentiation of word classes, nor declension, nor conjugation. All such developments obviously developed later. In this regard indeed some languages have never evolved to this level at all, and others have not reached this stage to an equal degree. To name just one example, Chinese to this day has no phonic differentiation of word classes. True verbs, in opposition to nouns, I have found in the languages known to me only in Indo-European languages. [6] Morphologically, but only morphologically, according to my studies, [23] all languages are in origin essentially the same. But these first beginnings must have differed in their phonetic shape, as

6 Cf. "Die Unterscheidung von Nomen und Verbum in der lautlichen Form", in *Abhandlungen der philosophisch-histor[ischen] Classe der Kön[iglich-] S[ächsischen] Gesellschaft der Wissenschaften*, Band IV, No.V, [pp. 497-587]. Leipzig 1865.

well as in the concepts and objects reflected in sound, not to speak of their evolutionary capacity. For it is impossible to derive all languages from one and the same original language. Rather, unprejudiced research reveals as many languages [Ursprachen]* as there are distinct language families. In the course of time however languages die out, new ones never appear, since such could only appear during the time when man was becoming man. In the certainly very long period before historical records, untold numbers of languages, most probably, became extinct, while others spread far beyond their original territory and in the process differentiated into a multitude of forms. [24] We must accordingly presume an indefinitely large number of original languages [Ursprachen].

The later life of languages is known to us from direct observation. For eras beyond our observation we presume, with equal validity, the principles we can establish for observable periods, even for the first emergence of languages, which can only be envisioned as a gradual becoming [i.e., not as a human invention or divine gift or revelation: JPM]. In the later life of language among humans who live under essentially the same conditions, we see that languages have changed uniformly and spontaneously among all individuals speaking the same tongue. Therefore we are forced to conclude that one and the same language arose among beings that lived under the same conditions, i.e, who lived close together. The more diverse the environmental conditions were under which humans envolved into humans, [25] the greater was the difference in the configuration of their languages.

Despite the disruption, both in historical times and in the incomparably longer period of prehistory, of original conditions through the agency of migrations, wars, natural catastrophe, etc., one can still recognize that languages of whole areas, even conceding their great differences, nevertheless present a uniform character, in the matter of flora and fauna. This is particularly true of the aboriginal languages in the New World, as well as of all the languages of The South Sea Islands and of the languages of the Australian aborigines known to date. In these vast areas a remarkable uniformity of languages is apparent, without our being able to trace them all from a single proto-language [Grundsprache]. The most variegated assemblage appears in Eurasia, which for us counts linguistically as a single area, doubtless the consequence of the quite early awakening [26] of history here. But even here can be recognized the traces of a common type in whole groups of diverse language families. [7]

7 Cf. *Die Darwinsche Theorie und die Sprachwissenschaft*, Weimar: Böhlau, 1863, p.24ff. [English translation, p.53ff.]

The rise of language forms on earth, i.e., the emergence of language-producing organs, appears to have depended on certain conditions. We have reason to believe that in essentially similar neighboring regions similar languages arose independently, and that in other regions different language types evolved. Such conclusions for a certain epoch of human evolution based on observation of languages, ought to be of some value to modern natural science, even if scholars are not inclined to acknowledge the great significance of language [27] and its material basis in human anatomy, as I claim they should.

At the conclusion of this sketch, let me just mention that the genesis and evolution of language falls in the period before 'history' in the proper and more narrow sense. What we call 'history' or 'historical life' fills only a tiny fraction of the time which man as such has lived through. Within history we see languages age according to set laws in sound and form. The languages that we now speak, as all languages of historically significant peoples, are senile language examples. All languages and therefore also the bodily speech organs of historically developed peoples, to the extent they are known to us in sufficient measure, are far advanced in retrograde metamorphosis: In the course of human existence language evolution and historical life are mutually exclusive.

[28] Thus it may be permitted to divide the life of the human race to date in three great periods of development. Naturally, the transition from one to the next is gradual and not everywhere contemporary. These periods are: 1) The period of evolution of the physical organism according to its essential feature, probably a period incomparably longer than the following and treated by us here as an interval only for the sake of brevity, 2) The period of the evolution of language, 3) The period of historical life, in the beginnings of which we still stand, and into which some peoples of the earth seem not yet to have entered.

As we can now perceive, certain peoples, such as the North American Indian tribes, are unfitted for historical life because of their endlessly complicated, languages, bristling with overabundant forms; they can only undergo retrogression, even extinction. Accordingly, it is most probable that not all [29] organisms that found themselves on the path to becoming human have attained to the evolution of language. One part of these creatures was left behind in evolution and never entered our second period, but succumbed to retrogression and as all such stunted beings, to gradual extinction. The rest of these stunted creatures remaining without language, and never achieving the human state, we see in the anthropoid apes. And with this reference to the darlings of contemporary natural science let me close these fleeting remarks on the significance of language for the natural history of man.

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ON THE ORIGIN OF LANGUAGE

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