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Art. I.—*Truth, Charity, and Unity.*

Truth is either the reality of things, or such a representation in thought, word, or other signs of thought, as correctly sets forth such reality. To say that the human soul is made for truth as its formal object, its aliment and life, is only saying that it is intelligent and rational. To say that it is not preconformed to the truth, and to apprehend and enjoy it, is to declare it unintelligent, irrational, sottish, brutish. It then feeds on, and is governed by delusions, shams, unrealities. And in so far as human minds, singly or collectively, have lost the love and relish for truth, or incline to accept and obey untruths, they have fallen from their normal uprightness and integrity into depravity and blindness. God made man upright, but he hath sought out many inventions. He has so swerved from his high estate, as to turn reason, his crown and glory, into a minister of unreason, which is his degradation and shame. Madness is in the hearts of the sons of men, for they are fully set in them to do evil. They hate the light and refuse to come to the light, because their deeds are evil. Hence man's only true rectitude, and true well-being, lie in knowing, believing, loving, obeying, living the truth. All iniquity begins and ends in believing and acting lies. A life

Art. V.—*Whitney on Language.*

The appearance of Prof. Whitney's "*Language and the Science of Language*" was briefly noticed in our number for January of the present year, both among the literary notices, (p. 150), and in the opening paragraphs of the article on "The English Language," (pp. 1—4.) The importance and value of the work entitle it to the emphatic welcome which it has already received from leading journals on both sides of the Atlantic. We read with pleasure, as well as hearty concurrence, the judgment of the *London Athenæum*, that these lectures "would do honour to any country." And the *Westminster Review* says: "If the Americans go on writing so many excellent treatises on philology we shall soon have to call the English the American language. The latest American writer on the subject is one of the best." We propose to indicate somewhat more fully than in our previous brief notices some of the elements of its great worth, and to direct attention, as we are reluctantly constrained to do, to some of its errors and defects.

From no American scholar would a contribution to this department of science and scientific literature be expected with more eagerness and confidence. As the accomplished Secretary of the American Oriental Society,—we had almost said its main stay,—as a contributor to the learned periodicals of England and Germany, as well as of his own country,—discussing on equal terms with Lepsius, Weber, and others of the foremost scholars of the Old World, profound problems of linguistic science, or the Hindu Asterisms,—a co-labourer with Roth, Böhtlingk, and other Sanscrit scholars of Europe in their most colossal undertakings,—Prof. Whitney has a recognized eminence in his department that entitles him to a hearing, and will secure a large and interested circle of readers for this, his first systematic and popular presentation of his views on this ever-attractive theme.

The volume before us has grown out of a course of lectures delivered in Washington by invitation of the Smithsonian Insti-

tution, in March 1864. The course, expanded to twice the original dimensions, was repeated before the Lowell Institute of Boston. The form of lectures is retained in the published volume, while each discussion has been expanded by further development and illustration, some of the lectures having been evidently again doubled. We recognize portions of some of the earlier lectures as having formed valuable and attractive contributions to recent volumes of the *North American Review.* So much of the author and the origin of his book, and the predispositions with which we approach the examination of a work greatly needed. For while volumes not a few have appeared in the English language on either side the ocean, discussing more or less fully the nature, the history, the philosophy of language, none has ever assumed to exhibit in any adequate and popular way the methods and results of the new science. We once attempted to use as a text-book Prof. Schele de Vere's "Comparative Philology," which in its intention comes nearer than any other American work to Prof. Whitney's treatise, but found it utterly inadequate. Prof. Max Müller's "Lectures on the Science of Language," which in the attractive reprint have reached no small circle of readers among us, with all their genius and learning, greatly lack clearness, simplicity, and method, and meet the wants neither of intelligent readers nor of our institutions of learning. No other works, generally accessible, make even so much pretence as these to exhibit the science of language. Not merely teachers and students of language, but many cultivated minds throughout society, have been waiting for the instruction and assistance to be afforded them by some friend, of profound, varied and extensive learning, who has thought clearly and well upon the historical questions and philosophical problems involved even in the simplest, humblest uses of our mother tongue. To all such we commend Prof. Whitney's volume as going far beyond any other work within our knowledge in the clearness and richness with which it presents the facts and principles of its science. As another valuable result from its intelligent and thoughtful use, we anticipate an improvement in the methods according to which languages will be studied and taught, not the classical tongues merely or mainly, but our own English and the other modern

languages, from which Prof. Whitney draws many of his freshest illustrations. The partisans of science will surely have less objection to the study of language and languages when so scientifically pursuéd.

A leaf is a little thing in nature; yet science, unfolding to us its structure, functions, and relations, and pointing us to the accumulated results of the leaf-work of the ages that are gone, constrains us to exclaim with new astonishment and delight, "This also cometh forth from the Lord of hosts, which is wonderful in counsel, and excellent in working."

A word is a little thing. Yet how many inquiries does it suggest, and who can answer them all? The simple word "leaf"—what is it? It is not the simple group of signs upon this page upon which my eye may now be fixed. These are but an afterthought, an expedient employed to effect to a certain extent and under certain conditions the same result. The word "leaf" is the combination of sounds which these signs suggest; and it is this not as a chance grouping from among the myriads which human organs can produce, but as a combination which, for some reason, at some time, in some way, came to represent a certain mental conception,—and which has since been employed by a portion of the human family to convey that idea, and to describe or identify the corresponding object. And now from this little centre how many lines of curious and profitable inquiry diverge? Their results may not enable us to make the trips of the "Great Eastern" more lucrative, as investigation among dead leaves may do, yet these inquiries rightly pursued will not be without their large revenue of advantage to man and glory to God.

The word is a combination of articulate sounds. Looking then at what we may call its material or physical part, we are brought within the realm of natural history and natural philosophy. Anatomy, physiology, acoustics,—the whole phonetic system with the means of its development and its reception demand our attention. How widely in space and time is this particular phonetic system employed, and this particular combination of phonetic elements used for the expression of this one idea, and what is the nature of the determining forces? History, political and physical geography and ethnology must

lend us their aid before some of our natural and inevitable questions are answered. As we essay to pass within the form to the spiritual essence of the word, how shall we accomplish the transition? What is the connection between the signifier and the signified,—between the conception and the group of articulations that has come at some time, in some way, to be employed for its expression? How came the many millions that have used and are using this emblem of their thought, to its adoption? What brought any human being, the first who ever said "leaf" with the design of conveying our ordinary idea of a leaf, to the employment of this combination of sounds rather than some other? Vast multitudes of our race having evidently the same conception, and the same wish, impulse, and power to express it, employ very different combinations of sound. Whence this diversity? If we were to follow back the lines of descent by which these manifold terms have come to their present use, should we find them radii of a circle, leading plainly toward though we might not trace them to their common and primal centre? What approach, if any, can we make by these methods of investigation to a solution of the great problems connected with the beginnings of human history,—the time, the place,—the unity or diversity of our human origin? Or again, how came the word "leaf" or any of its equivalents whatsoever to be produced? What inward impulse, what outward necessity called human speech into being? What are the mutual relations of speech and thought, of speech and society?

These are among the questions that suggest themselves in quick succession to one who would know himself in one of the most characteristic and important powers and functions of his nature. My inquiries may not carry me back to the time when coal beds were formed of leaves, but I am well content to rest a little this side of that remote antiquity. Present and recent phenomena give me occupation enough, and I cannot think it altogether unprofitable.

Within this wide range of inquiry what are the proper bounds of the Science of Language? It is not philology, if either of the terms be defined with the precision characteristic of modern thought; not the philology illustrated by Godfrey

Hermann, whose object is literature,—nor the philology illustrated by Wolf, which includes speech, faith, art, and life under its searching survey, making the whole culture and civilization of a people, and not its literature alone, the object of study. (See Prof. G. Curtius' Inaugural at Leipsic, 1862, on "*Philologie und Sprachwissenschaft.*") Back of any literature, back of any culture lies the language of each people and the speech of the race. "Every language," says Curtius, "is fundamentally something transnational, and therefore not to be fully comprehended from the philologist's point of view." Much more inadequate, we would add, are the methods of philology to the comprehension and exhibition of those deeper facts which underlie all individual languages in the nature and developments of human speech. "The aim of linguistics," says Prof. Whitney, in the *North American Review*, (October, 1867, p. 522,) "is to comprehend language in the largest and most unrestricted sense,—the whole body of human speech, in all its manifestations and all its relations, in all its known varieties, with their history and the reasons of their discordance."

Thus to define the aims of the science of language is at the same time to set forth the grounds on which it is claimed that a new science has been within the last fifty years ushered into being. Were not the phenomena of human speech among the earliest that arrested the attention of thinking man? Have we not copious records of ancient speculations and debates in regard to the nature of language? From that day to this has not every school of philosophy that has laid claim to any completeness in its survey of the objects of knowledge, set forth its theories concerning the nature of words and the faculty of speech? With what fitness then, after the inquiry and controversy that have been matter of record for fifty times fifty years, is it claimed that the science of language is a growth of the present century? Some question whether the time has even yet come for conceding the name of a "science" to this department of human knowledge and inquiry,—whether the claim be not too ambitious, and to concede it premature. Its methods however are so far determined and its positive results so valuable within limits of easy definition, that we

apprehend no general denial of the claim. Without entering even in outline into the history and progress of linguistic research within the last fifty or sixty years, it may be enough for our present purpose to say that the progress of Sanscrit studies and of investigations in Comparative Philology has put even abstract inquiry into the nature of human language upon an entirely new basis. Large classes of facts of vital importance are now for the first time accessible, and inductions are now possible and justifiable that two generations ago would have been utterly impossible. Theories that before might plead at least plausibility, are now in many cases wholly repudiated, and on the other hand strong presumptions established at many points where certainties are still in the future. Here again there are those who question whether there has not been undue prominence given to Sanscrit studies both in Comparative Philology and linguistic science. In an article in the *North American Review* for October, 1867, Prof. Whitney defends his science with great keenness and spirit against such attacks from Profs. Key of London and Oppert of Paris.

Studies in language have been and are pursued with very various prepossessions and presumptions, and of course with a corresponding diversity of method. Here again, as in regard to the nature of his science, we make Prof. Whitney the interpreter of his own position. In the *North American Review* for January, 1867, he speaks as follows, (see pp. 31, 32): "Linguistic science, not less than some of the physical sciences, has had its triple course of development, as formulated in the philosophy of Comte, and each of these stages is more or less distinctly recognizable in the views of some of its present votaries. The 'theological' stage is represented by the once prevailing opinion that language is a divine creation, elaborated in all its parts by the Deity, and miraculously placed in men's possession; parallel with which, moreover, though so unlike in many aspects, is the doctrine, seriously put forward by some scientists, that speech is a direct product of the physical constitution of its speakers, a kind of secretion of organs provided for that purpose, and that its varieties represent differences of animal organization. Both these alike cut off all possibility of

a science of language.* The 'metaphysical' stage is seen in a personification of language itself as an independent existence, an organism, and of its laws and processes as actual powers literally working themselves out, governing the material in which they are exhibited, and producing effects after the manner of gravity, cohesion, chemical affinity, and the other forces which are active in the changes of matter. The final or 'positive' stage is entered upon when linguistic scholars are minded to keep themselves strictly upon the basis of fact and legitimate induction, to avoid the acceptance of figures as realities, to see clearly and describe definitely, and not to cover up ignorance and obscurity of thought with sounding and philosophical phraseology."

Of course Prof. Whitney is thus "minded"; he plants himself upon this platform. The work before us we regard as in most respects an admirable specimen of a scientific treatise aiming to popularize the results of learning. We find here great breadth, variety, and richness of resources, great skill in the combination and presentation of facts, usually great caution in induction of principles, great clearness and precision of statement (with an occasional excess in abstractness), copiousness of illustration, with the enlivening infusion now and then of keen criticisms and refreshing pleasantries. Such qualities cannot fail to widen and deepen the public interest in the studies which the book advocates and represents, and will gain many adherents for the views which it sets forth. We apprehend, however, that this "positive" stage will not be found to be "final." We are confident that there are important truths concerning language that are sought, and in some measure already reached, by the "psychological" school, of which Steinthal is perhaps the ablest representative, which must yet be brought into more perfect combination with the results of empirical study. Many of the imperfections of Humboldt's view are already in good degree removed by Steinthal and others, who are correcting, extending, and sup-

* Is there then no science of anything that has a supernatural origin? Let us understand one another. If that only is science which denies God both the right to act, and the right to tell of what he has done, the world may yet wish itself well rid of it.

plementing the wonderfully stimulating and yet perplexing and often inconsistent utterances of that great master of linguistic science. We regret that we must add that this work of Prof. Whitney affords likewise a specimen in some particulars of the ordinary and necessary working of that hyper-scientific spirit which loves to regard itself as having reached "the final and *positive* stage" in any department of investigation. Herbert Spencer, in his work on Education, (pp. 91, 92), pronounces true science "essentially religious" among other reasons "inasmuch as it generates a profound respect for, and an implicit faith in, those uniform laws which underlie all things. By accumulated experiences the man of science acquires a thorough belief in the unchanging relations of phenomena—in the invariable connection of cause and consequence—in the necessity of good or evil results." We fear that Prof. Whitney has become too "religious" after this type. When he reaches points in his inquiry at which side-lights and lights from above fall upon his subject, he seems wholly ignorant that such is the fact, or to hold that the most incidental recognition of the fact would be out of place in a "scientific" treatise. We shall illustrate this point when we come to the doctrine of the book, express or implied, concerning the unity of the race and the antiquity of man.

One other preliminary inquiry demands a moment's attention before we proceed to our examination in detail. The science of language—what, where is its place in the circle of the sciences? The answer to this question will, of course, conform to the view one entertains of the nature of language. Prof. Max Müller (see Lecture I. 1st series) defining physical science as dealing with the works of God, while historical science deals with the works of man,—and finding (p. 37), that "nothing new has ever been added to the substance of language, that all its changes have been changes of form, that no new root or radical has ever been invented by later generations, as little as one single element has ever been added to the material world in which we live,"—and in view of the further fact that the proper treatment of the science accords with that of the inductive sciences, passing through its empirical, classificatory, and theoretical days, pronounces his science physical. Further,

in reply to an objection, he says, (p. 47), "Art, science, philosophy, and religion, all have a history; language or any other production of nature, admits only of growth." Once more (p. 77) he says: "If that modification which takes place in time by continually new combinations of given elements, which withdraws itself from the control of free agents, and can in the end be recognized as the result of natural agencies, may be called a growth; and if, so defined, we may apply it to the growth of the crust of the earth; the same word in the same sense will be applicable to language, and will justify us in removing the science of language from the pale of the historical to that of the physical sciences." Accordingly Müller shapes his remaining lectures (iii—ix) so as to conform to the standards of the inductive sciences, presenting in due order and proportion the three stages that are normal for a physical science.

In opposition to this whole conception of language and its proper treatment, Prof. Whitney in his second lecture (and with some variety both of argument and illustration in an article in the *North American Review*, for October, 1865), maintains that language is of historical growth, and its study a moral science whose methods are historical.

We cannot present or comment upon Prof. Whitney's view without advancing from the inquiry where the science of language belongs among the sciences, to the more specific question, What is language,—the object of this science?

Humboldt, to whom the science of language owes so much, defines language as "the effort of the spirit continually repeating itself to make articulate sound capable of the expression of thought." (*Ueber die Verschiedenheit des menschlichen Sprachbaues u. s. w.*,—Vol. 6 of his collected works,—p. 42.) Heyse, whose *System der Sprachwissenschaft* is so remarkable for its clear, distinct, concise and philosophical presentation of his subject, defines language (p. 35) as "the utterance (or objectively, the form of the utterance) of the thinking spirit in articulated sounds." A very compact definition of Schleicher's (*Zur vergleichenden Sprachengeschichte*, p. 6) makes language "the vocally articulated expression of spiritual life." We have multiplied and varied these definitions coming from different linguistic schools to emphasize the idea that language

is the expression of thought in articulate sound,—thought its spiritual, articulate sound its formal part,—articulate sound the container, thought the contents,—articulate sound as it were the body, thought the soul,—and these brought into this relation in every actual occurrence of speech by the conscious activity of the thinking spirit seeking expression for its thought. Of course there are various auxiliary and supplementary contrivances that may be called language,—written language, pictorial or alphabetic—the sign-language of deaf mutes or of those cast away in a strange land,—and other such things; but as the word *language* etymologically testifies of the *tongue* as a chief organ in its production, so a true theory makes articulated sound the vehicle for the conveyance of thought in language, properly so called.

Here we plunge at once into the midst of a group of the most subtle and abstruse problems involved in language. Intimately as the subject is connected with our own personal life and experience, and partly because the connection is with life, the most mysterious of all the terrestrial objects of our investigation, opinions have been very various and sharply conflicting. Then there are several distinct lines of inquiry to be pursued which are not always carefully discriminated.

What are the relations of speech to our humanity, to nationality, to our individual and our social life? We may ask a series of questions with regard to speech as a faculty or function of humanity,—and when the same series in whole or in part recurs with respect to the languages that have been and are used by the races and nations of men, may reach a very different series of answers. Few writers have thought their way through this labyrinth so as to be clear and self-consistent,—and few who quote them have thought their way through so as to quote others correctly. Therefore many a writer on language may find himself quoted in support of views that he never held, and in opposition to those to the maintenance of which he devotes his life. And there is no subject in which array of names and citations is less conclusive. Words too are very differently used by different schools, and at the best convey only single aspects of the thought or truth which they symbolize.

Is language voluntary or involuntary? If the question be asked with reference to speech as a function or faculty of our humanity, language is instinctive and involuntary. If it be asked, why we speak at all, it is not because we choose to speak instead of never speaking. Speech is one of the distinctive and characteristic endowments of our nature, without which we should not be what we are. But in every individual instance of speech since the creation of the world man has spoken voluntarily, (we mean of course in those conditions in which he is master of himself.) He had a thought to express. He had an end, he had a means, and he consciously and intentionally employed the means for the end.

Yet those who would agree without hesitation in these answers to the question, whether speech is voluntary or involuntary, divide at once into conflicting parties when the same question is put with reference to any given form of human speech, or every actual form that language has ever assumed.

Humboldt, and a host of writers on language, differing widely in their philosophy but agreeing in their result, maintain that language is not voluntary in the forms in which it appears. Humboldt, for example, (as above, p. 5), says, "language is no product, but an involuntary emanation of the spirit," and again, (p. 35), "it cannot be strictly taught, but only waked up in the soul;" and again, (p. 10), "the production of language is an inward necessity of humanity, not merely an outward necessity for the maintenance of social intercourse, but one lying in the very nature of humanity, indispensable to the development of its spiritual powers, and to the gaining a view of the world to which man can attain only by bringing his thoughts to clearness and definiteness through common thinking with others." In the passage last quoted there are important hints in regard to the reflex influence of language upon thought that are well worthy of consideration. Other writers, some Hegelians and some the bitterest opponents of Hegelianism, reach and state in their several ways the same substantial conclusion that language is "an involuntary emanation of the spirit," or something tantamount to that as contrasted with all products of the human will. We have seen above why Müller classes the science of language with

the physical sciences. In an entirely different quarter theologians by processes of exegesis have reached similar conclusions. Baumgarten (in his *Theologischer Commentar zum Pentateuch*, i. 46), commenting on Gen. ii. 19, 20, argues that language is "the involuntary necessary utterance of thought," because "when Adam gave names to all animals no other human being existed to whom he spoke,"—so that language in its first use was certainly not a means of intercommunication.

The "psychological" school holds that speech exists both for the individual and for society. Language is defined by Steinthal as "the most general, altogether peculiar means of spiritual perception, and its activity consists in the consolidation (*Verdichtung*) of thought; it is not only (according to Humboldt) mediatrix between the outer material world and our inner spiritual nature; it is this only because it at the same time by its mediation unites clear consciousness with all the knowledges that lie in the depths of the soul, and so is a mediatrix within the soul itself." Another writer in the same interest (Boltz, *Die Sprache und ihr Leben*, Leipsic, 1868,) says, (p. 15): Speaking is therefore now defined "sensation (*Empfindung*) and thought, *i. e.*, the rendering possible and furthering perception, comprehension and intelligible communication (*Wahrnehmung, Verständniss und Verständigung*) in regard both to the known and to the unknown by means of language." Why this process is called language through all these stages these writers fail to satisfy us. They insist that the common element is the feeling which seizes upon the unshapen, unformed material of thought within the mind, and moulds it into conceptions which become the first objects of consciousness,—which same feeling lays hold upon vocal utterances, before void of signification, and moulds them into forms appropriate and adapted to the expression of the idea. The identity of this feeling requires a little more proof. And we want a more perfect definition of the "*innere Sprachform*" upon which they so insist. Yet the theories of this school do certainly give expression to a deep conviction of the permanence and vitality of language that is not found in the old doctrines of the conventionalists.

Another large class of writers hold that language exists not

for the individual but for society. They reject every emanation theory. They reject the Hegelian doctrine that thought must present itself to itself in an exterior and cognizable form, which form is language, before it can become real, conscious thought. And so with every other doctrine which identifies speech with thought or makes them logically inseparable. These writers vary in the terms they use and the philosophical systems out of which their theories of language spring. They agree in making language truly a human product, distinctively voluntary in its origin. Human speech, not the faculty, not the power, but in the form which it assumes in the world, is a human invention, discovery or institution; its forms are conventional. This philosophy of language has been assailed by ridicule as well as argument. Ludicrous pictures have been drawn of the conclave of primitive savans deliberating speechless as to the nature and forms of their future speech. The *odium theologicum* has been invoked to put its ban upon a doctrine that ascribes to man so vast a power, so lofty an office. The theory stands however, as we think, much stronger now, than at any former time, as its positions are more considerately taken, its terms better defined, and its correspondence more clearly indicated with all that we know empirically of the development of human language. We can nowhere watch the creative process in language, but so far as experience can be summoned as a witness its testimony seems to bear wholly in favour of the conventional theory, with reference to all of language that lies under historical observation.

Prof. Whitney,—and it is time that we should indicate more explicitly his position regarding the questions at which we have been glancing,—warmly advocates this doctrine, that language is an "institution." In his second lecture (p. 35) he says: "Language has in fact no existence save in the minds and mouths of those who use it; it is made up of separate articulated signs of thought, each of which is attached by a mental association to the idea it represents, is uttered by voluntary effort, and has its value and currency only by the agreement of speakers and hearers. It is in their power, subject to their will; as it is kept up, so is it modified and altered, so may it be abandoned, by their joint and consenting action, and in no

other way whatever." In regard to the much abused term "convention," he expresses himself thus in the *North American Review*, (Oct. 1865, p. 467): "that one man proposes, and that his comrade, his family, his locality or his country accepts, and that the proposed sign or modification of a sign is understood and passes current, is language as far as it is accepted and no farther,—this is linguistic convention, the convention which makes and changes language, from its primitive inception down to the very latest steps of its history." This is all very well until we come to apply these reasonings to the origin of human speech.

We confess that we are at a loss how to reconcile with Müller's earnest reasonings and remonstrances against this "conventional" theory of language, some utterances of his in which he seems to go far beyond all convention. In his letter to Bunsen on the Turanian family of languages (Bunsen's *Outlines of the Philosophy of Universal History*, i. 475, 478), he says: "On all these languages (the Arian) there is one common stamp—a stamp of definite individuality—inexplicable if viewed as a product of nature, and intelligible only as the work of one creative genius"; and again, "it is possible that the Semitic and Arian languages also passed through a stage of mechanical crystallization, or uncontrolled conglomeration of grammatical elements; but they left it and entered into a new phase of growth and decay, and that through the agency of one creative genius grasping the floating elements of speech and preventing by his fiat their further atomical concretion." (The same idea is emphatically repeated in vol. ii. p. 17.) Here is not joint voluntary action determining the form of language, but "one creative genius"!

Prof. Whitney, starting on *terra firma*, not with *a priori* reasonings, with an admirable naturalness of method begins with the simple inquiry, why we individually speak as we do? Not because our "mother tongue" is "waked up" in us, but because we are taught it. The speech of a community or of a nation is made up of the average or aggregate of the individual languages of men who have severally come into possession of their languages in the same simple way. The wish and the necessity that we be mutually intelligible, holds us to the use

of the language used by our fellows. This is surely far more comprehensible than Humboldt's idea, (pp. 35, 40), that "languages are creations of nations, and yet self-creations of individuals, inasmuch as they can be created only in every several man, in him however in such a way that every one presupposes the understanding of all, and all meet this expectation." "Language is, as it were, the external manifestation of the spirit of the people; their language is their spirit, and their spirit their language; we can never think of them as identical enough." There is a mystery about this individualized national spirit within which individual spirits do the work, they creating, it controlling.

An inquiry into the nature of the forces which produce the changes in language that are ever in progress with more than the restlessness of the tides, points us to the same seat of power. Those who use any given language are in perpetual convention in regard to these changes, and among every people characterized by intellectual life a few generations are sufficient to work such changes as to make a glossary indispensable, if one would know what his forefathers said and meant. This transmutation, which is all of creation that comes within the view of history, affects both forms and significations. And as the successive phases or the co-existing dialects of each language are thus produced, why not by a like divergence within broader limits of time and space, yet still under the same controlling power, the manifold and diverse languages of earth?

While maintaining strenuously this general view of the nature of language, Prof. Whitney recognizes various analogies existing between language and "growth" and "organisms" and such other things not voluntary, as language has by different schools been held to be. Thus he teaches (p. 50) "that what the linguistic student seeks in language is not what men have voluntarily or intentionally placed there. * * * Each single part is conscious and intentional; the whole is instinctive and natural. The unity and symmetry of the system is the unconscious product of the efforts of the human mind, grappling with the facts of the world without and the world within itself, and recording each separate result in speech."

One other theory demands brief notice before we pass to other topics. Agreeing with the conventional theory in regard to the way in which men in all historical generations have received their speech, each from his fellows and predecessors, it makes language at the beginning a Divine creation, and so stands upon ground of its own, both in regard to the nature and the origin of language. There are two forms of this theory,—one making language a Divine creation simultaneous with the creation of man, the other a gift bestowed subsequently to the origin of our race. With some this theory seems to be a refuge from the perplexities involved in the problems of human speech,—with some a devout impulse to extend as far as may be the prerogatives and activities of the Creator. The former class seem to blind themselves to the greater difficulties of the solution which they adopt,—the latter surely detract quite as much from the honours of the Creator of man as they would confer upon the Divine author of language. The former class should teach us how words are created and communicated antecedently to and independently of ideas and experiences, and how so created, they are made signs available for thought and the communication of thought. And the latter class should beware lest by over-frequent recourse to miracle, by finding on all sides the "*nodus vindice dignus*," they disparage the merits of creation in its very masterpiece.

The emphatic and weighty objection of Cousin to this theory is often quoted. "The institution of language by the Deity removes the difficulty but does not solve it; the revealed signs would be for us no signs at all, but things which it would be forthwith necessary to elevate to the rank of signs by attaching to them certain significations." Was the first human mind created full of conceptions of which these divinely created words were to be the signs,—or did man develope the conceptions naturally, and afterward mate them with the already existent words? In every man since the first, the conceptions which language has to set forth have been the result of mental processes of his own; of whose mental processes were the first conceptions of the first man the result? If not of his own, what would they be to his mind, but strange, foreign, and unintelligible? Ideas without thinking,—or ideas and language

as products of different minds, we confess appear to us beyond the reach of miracle. Jacob Grimm sums up his discussion of the two forms of the theory which ascribes to language a Divine origin in this way: "An innate language would have made men beasts, a revealed language would have assumed them gods." The former theory, as he argues, obliterates the distinction between human speech and inarticulate animal cries; the latter, in supposing man capable of comprehending such a revelation does away with its necessity. Very few men of science now deem this theory either necessary or defensible. In Dwight's *Comparative Philology*, (i. 164—177), we find this philosophy of language still defended. One argument, the exegetical, deserves an allusion. We have seen Gen. ii. 19—20 employed by Baumgarten to prove that language exists for the individual and not primarily for society. Mr. Dwight's interpretation leads him to this result (p. 171): "As God looked upon his works at the end of each of the great days of creation to see that they were all very good; so, in the record here furnished he seems to call upon Adam to use the speech which he had taught him; as if looking on to enjoy the pleasing result of his contriving skill." The author appears to take a professional view of the matter; Adam's recitation hour had come, and it is now to be ascertained whether he had learned his lesson! And if we were looking for that which would afford gratification to the Divine mind, man's correct use of a language previously taught him appears to us a far inferior object of delight, as compared with some more productive use of the powers which the great Creator had bestowed.

We are aware that very excellent men look askance at every suggestion of a human origin for language, as though to entertain the idea were in itself a quasi scepticism. It is abundantly assumed that the Scriptures tolerate no such idea. To our view however the Scriptures not only tolerate it, but by the plainest and most necessary implication teach it. The first mention of human speech in the Bible is quite incidental. It occurs among the steps taken preparatory to the creation of woman (although of course with no reference to any peculiar needs, tastes, or tendencies of Eve and her daughters). All the nobler part of the animal kingdom is brought before Adam,

incidentally to see how he would name them, but primarily to show him that a help meet for him was not yet created. This is, so far as we know, the all but universal interpretation of this passage, as might be shown by the amplest citations. No hint of anything but Adam's naming the animals, and naming them under circumstances implying a comprehension underlying and determining the name. And if this passage fails so completely to support the cause in whose support it is so often adduced, we know not what substitute can be found. What Prof. Whitney has to say upon this theory may be found on pp. 399—403. (For fuller arguments on the same side see, *e. g.* Farrar's *Origin of Language*, pp. 20—31, *Chapters on Language*, pp. 1—12, Charma, *Essai sur le Langage*, pp. 126—130 and notes.)

Dismissing now this subject of the nature of language, let us direct our attention to some of those processes of linguistic growth, through the study of which some of the vital principles of the science of language are reached. This discussion, with the classification of languages, to which it leads, occupies more than two-thirds of Prof. Whitney's volume. We have no space, nor is it necessary to enter into a detailed exhibition of the way in which comparison is made now between different historical stages of some one language, and then between this language and others known historically or from interior evidence to be cognate to it, and then again between this group and others alien in origin and structure. Suffice it to say, that these comparisons made year by year with increasing caution and discrimination, are also made with growing confidence, and are more prolific in interesting, reliable, and valuable results. The constant change which is revealed to us by the most superficial inspection of any living language at two or three different periods, is the first significant fact that strikes us. Its real meaning and method (if it has any) are matters for later inquiry. According to the phraseology of one of the schools, but with an import recognized and admitted by nearly all the others, this incessant change is "the life process of a language." Empirically how far and in what direction can we trace it, and what are the legitimate deductions in regard to the periods that lie beyond our immediate scrutiny?

In every living language whose course we have the means of tracing, and in each according to the degree in which it is living, the change is in the direction and of the nature of external decay. This tendency lays hold not merely upon the formative parts of words, the prefixes and suffixes, mutilating and destroying them; it intrudes into the most radical syllables, so confusing and obscuring the original as in many cases to defy direct recognition. "Culture," says Diefenbach, in his vigorous way, (*Origines Europææ*, p. 30), "is anything but conservative! It rather attacks its very finest organ, language, worst of all, and degrades the significant phonetic image originating in natural necessity into a mere conventional label." "This is precisely the great and attractive thing," says Curtius, (*Philologie und Sprachwissenschaft*, p. 21), "in the history of language, that the external decay produces new life,—that the spirit employs for its ends the weakening of the material, and only then unfolds its pinions most freely when the phonetic substance of words has subtilized itself to a more delicate web." The fact of this prevalent formal decay in cultivated languages we need not stay to establish or illustrate. Let modern English be compared with Anglo-Saxon, the Romance languages with the Latin, any modern tongue of the Indo-European family with such older languages as the Greek and Sanscrit. Nor need we demonstrate the connection of this tendency with culture. It is not modern degeneracy, either a physical feebleness that shrinks from the expenditure of breath upon vowels so broad and full, or syllables so numerous,—nor is it a mental weariness that throws out an imperfect suggestion of an idea in place of the highly elaborated pictures of two or three thousand years ago. It is rather a wise and necessary economy both of productive and of graphic power. It is a dispensing with that which in its time and place was both beautiful and useful, so soon as it becomes an incumbrance. It is the mind's girding itself up for more rapid progress and more effective work. The mind is more thoroughly master of its material and is no longer mastered by it. Here is in appearance, but only in appearance, a returning toward the meagreness and nakedness now illustrated in the world's least developed languages.

But when we speak of "returning" we are insensibly anticipating the next inquiry. We follow back the path along which we have remarked so clearly both the fact of decay in linguistic forms, and the nature of that decay. We reverse the analytic process. When we reach the most fully organized and amplest forms of the languages that we have been inspecting, have we reached their primitive stage? So some have argued, maintaining that the original condition was precisely this—of most exuberant fulness in form, most balanced and symmetrical proportion, most minute and perfect pictorial power. We might be tempted to this conclusion if we were to disregard the nature of the earlier exuberance. If that fulness of form and roundness in development found its analogy in the many members of an organic body, each member ministering to life while incapable of an independent life, we might imagine something more highly and delicately organized than Greek and Sanscrit to have been the speech of the first forefathers of our race. But some of the earliest stages of our inquiry reveal the fact that many of these enveloping syllables are not simply like the slips which we take from plants in our conservatories to root and grow up into an independent and productive life. They had a strong and independent life of their own before they were themselves taken up and made accessory to the more perfect manifestation of other more substantial and essential ideas. They were, not all, but to a very large extent, words before they became mere syllables, auxiliary to the inflection of some stronger word. Not merely by judicious nurture could they be made words; they were words. If this be so, there must have been a synthetic process back of the analytic process, which is not simply one of our expedients in studying language but a method of nature herself. It is not the whole truth that our anatomy of language results in many forms that bear a striking resemblance to others that exist independently. For hundreds of years nature, we mean the human mind working naturally, has been pursuing in general this analytic method. And as the devout geologist, taking in hand a piece of conglomerate or flint imbedded in chalk, which, admitting that the materials might have come in this combination from the Creator's hand, nevertheless believes

the combination a mediate rather than immediate work of God, so the linguist reasons that these elements which he finds combined in the words of many languages came together after a previous separate existence. Agreeing heartily with Prof. Whitney in this view, we are almost ready to protest against the undue and dogmatic vehemence with which he presses his reasoning. (Pp. 253, 254.)

What then are our conclusions in regard to the primitive condition of human speech? The general division of the languages of earth into three classes, the inflectional, the agglutinative or amalgamating, and the monosyllabic, is retained by Prof. Whitney as sufficiently full and accurate. Are these consecutive stages in the development of human speech, or coexistent and independent types of language? If the inflectional languages, the most perfect in their articulation, point us back to a monosyllabic nucleus as marking their primitive stage,—and if the structure of the agglutinative languages is so much looser that on a simple shaking of no great violence they fall asunder, there seems to be only one answer warranted. These various types of language, though we are not yet able and may never be able to trace the whole process in any one section of the path of development, though difficult and perplexing questions remain to be answered, are consecutive in logical and natural order, although in time and space coexistent. We ask without answering some of the questions that suggest themselves in the face of this theory of human speech,—questions, some of which are at times put as though the simplest asking of them was a triumphant refutation of the theory,—while others of them are the mere proposing in an interrogative form of difficulties to be cleared up. Has man, whose historical work in language has everywhere seemed to be that of mutilation and disorganization, ever shown the constructive and creative power which this theory demands? Again, these groups of languages lie well defined and in classification widely separated one from another; if the theory were true, should we not find the intermediate spaces filled with languages here just emerging from one state, there just preparing for transition into another? Again, languages are classed by grammatical structure mainly; "the principle of a language

will never change; it is the very essence of the language;" these groups are distinct in principle; how then is the transition brought about? Once more, is the theory consonant with what we otherwise know of the growth of humanity and its institutions? What view does it give us of the beginnings of human society? These and other kindred questions we must dismiss with the asking. To one other we must attend for a moment; what length of time is required by this theory for the existence of the human race upon the earth?

Most writers on language are cautious in the matter of computation. We have recently found one marked exception. Dr. Boltz in his *Sprache und ihr Leben*, (p. 71), makes these estimates. Both Arian and Semitic history and tradition put various peoples of these families into their historical position earlier than the year 2000 B. C. Assuming a thousand years for the previous migratory period we have their oldest languages existing in their present form at least 5000 years. At the beginning of this period the languages already show signs of decay. We must therefore assume a prehistorical period of equal length as intervening between the culmination of their perfection and the state in which we find them at the dawn of documentary history. At least an equal period was requisite for the development of that perfection which they attained as inflecting languages. The preceding stages of agglutination with its successive phases of formation, development, and decay, must have demanded 20,000 years more. Allowing only ten thousand years for the monosyllabic stage, we have as the minimum period some 50,000 years,—a period "more imperceptible and transitory than the tick of a pendulum within the narrow bounds of human life—a breath, a wink of the eye of the body of nature, that lives for unnumbered, innumerable æons!"

Prof. Whitney, we need not say, indulges in no such folly as this wild play with figures. We confess however that we are disappointed with the way in which he leaves this part of his subject. On pages 277, 287, 377, 382, there are statements more or less specific of the conclusions which he thinks warranted by the present state of linguistic science. On the last mentioned page, after some allusions to changes wrought by geological science in the views formerly universal in regard to

the method and order of creation, to the tone of which we must take exception, Prof. Whitney proceeds as follows: "In like manner has it been supposed that the first introduction of man into the midst of the prepared creation was distant but six or seven thousand years from our day, and we have hoped to be able to read the record of so brief a career, even back to its beginning; but science is accumulating at present so rapidly, and from so many quarters, proofs that the time must be greatly lengthened out, and even perhaps many times multiplied, that this new modification of a prevailing view seems likely to win as general acceptance as the other has done." Has this really "been supposed?" Has the supposition any better warrant than the thousands of suppositions that are continually made in the course of human speculation? When it is the word of God in its most direct and obvious interpretation that has led to the supposition that these were the limits of human existence on the earth, we claim from Christian men of science a slight recognition of the fact that it is between the Scriptures and their science that an adjustment is to be made. They may leave it to theologians to reconstruct Biblical chronology, but they should not leave it perfectly possible to confound them with that class of infidel scientists who enjoy nothing so much as to exaggerate the ignorances and errors of past religious faith. No infidel could have more completely ignored the Scriptures as having anything to say bearing however indirectly upon the antiquity of man upon the earth. We had not expected Prof. Whitney to do the theologian's work, but we had expected a little hint somewhere that it is only a readjustment of Biblical chronology that will be requisite when science is less wise in her own conceit, and more wise in fact than she now sometimes appears. We are not objecting to Prof. Whitney's conclusions that the human race may have been somewhat longer upon the earth than was formerly supposed; we agree with him in setting aside as invalid the arguments drawn from the rapidity with which the English and the Romance languages, *e. g.*, have been developed,—for these are comparatively slight changes upon one common plane, and within narrow bounds; but we do object to his utterly ignoring all other evidence upon the

subject than that which lies in the line of his science, and a few others historical and physical. This style of dealing with such subjects is too "positive" for our taste, and for our reason and conscience likewise.

Returning a few steps to the conclusion now commanding quite general assent among linguists, that the primitive type of human speech is monosyllabic, we encounter a new series of inquiries in regard to the nature of these primitive roots. Of what were they significant? How did they become significant at all? What class of ideas did they represent, and in what probable order was the range of their application widened? Were they wholly conventional, or had they a necessary intrinsic meaning, or if neither of these, what was the connection between the thought and the word?

As we have seen, Prof. Whitney holds the "conventional" theory in regard to the nature of language. He explains the changeable meaning as well as the changeable form of words, (p. 102) by the fact "that there is no internal and necessary connection between a word and the idea suggested by it, that no tie save a mental association binds the two together." But is it not philosophical to admit that explanations perfectly valid when we have only the continuance of an existence to account for, fail utterly when we come to deal with origins? Methods adequate to the propagation of being, only mock us when we resort to them for the primary creation. It has been well said, "there is this enormous difference between our speaking and that of the first man, that with him the inner and outer form of speech (*sprachform*) corresponded; our designations are with few exceptions arbitrary." Prof. Whitney fails to do justice to this vast difference of condition between the first and all subsequent speakers. Children sometimes curiously illustrate to us the most profound and subtle principles in the philosophy of language. A little boy in the family of a friend had often heard sung, "We're going home to die no more." In his mind the phrase "die no more" became associated with some conspicuous and familiar object about his father's house; it happened to be a weathercock upon a neighbour's barn, one of the most noticeable objects under his daily observation. This was his "die-no-more," to which he was

in the habit of going home, and the name answered every purpose; it was to him a pertinent and adequate designation of its object. When we go back to the primitive stage of language, is there no more vital connection between the sound and the sense? Bunsen holds (as above, ii. 80, 81) that "every sound had originally a meaning, and every unity of sounds (every syllable) answers to a unity of object in the outward world for the world of mind." Shall this be our theory, or going to the other extreme, shall we hold that at no stage, developed or radical, does the word stand in any other relation to the idea than that of the algebraic symbol to the object which it may be chosen to represent? Or is there more tenable ground between the two extremes?

In Lecture vii. the author exhibits the results reached by a scientific examination of the Indo-European language with reference to the nature and import of their roots. This department of linguistic science is best developed, and Wedgwood is fullyjustified in his criticism upon Müller's claim, that we must wait for an equally thorough scrutiny of the other families of human languages before constructing our theories. "We cannot suppose," he says, (*On the Origin of Language*, p. 15), "that the Creator would provide one scheme for the origination of language among the Aryan nations, another for the Semitic or the Turanian, etc." Prof. Whitney adopts and defends the division of Indo-European roots into demonstrative or pronominal, which are subjective and serve merely to mark relation,—and predicative or verbal roots, which are "of objective import, designating the properties and activities inherent in natural objects—and prevailingly those that are of a sensible phenomenal character." (P. 259.) Each of these, he adds, with reference to their form, "represents its own meaning in nakedness, in an indeterminate condition from which it is equally ready to take on the semblance of verb or of noun." Again, in further definition of his view, he says, (pp. 260, 261), "that the first traceable linguistic entities are not names of concrete objects, but designate actions, motions, phenomenal conditions, is a truth resting on authority that overrides all preconceived theories and subjective opinions." He does not hold that we have reached or can reach empiri-

cally the actual beginnings of human speech, but that these results positively reached "represent to us the incipient stage of speech."

In Lecture xi. Prof. Whitney treats briefly of the more abstract question "what class of ideas should have first found incorporation in speech?" And he holds that a true view of the nature of language justifies, if it would not have suggested *a priori* the doctrine of roots which the historical method of inquiry has established. Not confining ourselves to his order or method, let us glance a moment at this, which is one of the most subtle inquiries anywhere suggested by our general theme.

Were names originally specific and individual designations, or general and widely applicable? Great names in philosophy can be cited in support of each of these views. Let us consider that names are not designed to be, nor are they capable of being fully descriptive of the corresponding objects. Even if a name as an actual existence were the counterpart of its object, its *alter ego*, it could not embody the fulness of the qualities of that object. To define with completeness and precision many a simple object would require a paragraph, a chapter, a volume. Words do not find their analogy in plaster casts or in paintings. They aim simply at securing an adequate identification of the conception for the purposes of thought and communication. For neither of these purposes is it essential that the name should be anything more than suggestive of its object. For the purpose of communication it is enough if the object be really and clearly called up in the mind of the person addressed. And though we refuse to hold, as some would have us, that language is thought, or that language is essential to thought, we admit that language greatly facilitates thought, and is indispensable to many of its best processes and most valuable results. Here again it is by no means essential that the name contain symbols of all the qualities of its object. Nor again need naming wait for our full comprehension of the object to be named. Research constantly reveals new qualities in objects that may have received their name ages ago, and in the depths of comparative ignorance. If the name identifies and suggests the object, however imperfectly comprehended

by either party, it is enough. Objects will then be fitly and adequately described by the suggestion of a part, possibly and usually of a single one of the qualities belonging to it. And mere weariness would soon compel the abandonment of names that should undertake much more than this.

But what quality shall have the right of fixing the appellation? Those objects are rare which have qualities so exclusively their own that the same name could not be applied to others. Most names, apart from some limitation imposed by human consent or otherwise, might be applied to a considerable number of objects. According to the mental constitution, or the relations of the namegiver, different qualities would be conspicuous, so as to be naturally chosen for the identification of the object. According to the preponderance of reason or of imagination, for example, or according to some experience of the individual in connection with the object, the designating quality which shall be accounted worthy to supply the name will vary. We should expect then to find a great variety of designations at first, and in fact we find great numbers of roots cast out in later languages as superfluous. "There are 2000 roots in Sanscrit," says Benloew, (*Aperçu general*, etc., p. 22), "we reach the figure of 600 only in Gothic, 250 suffice the modern German tongue to form its 80,000 words." To illustrate the variety of designations found for the same object let us glance at some of the Sanscrit names for the elephant, not all monosyllabic or simple, be it observed.) The examples are taken from Boltz (as above, p. 107); the "hand-possessing" animal,—the "toothed,"—the "thrust-toothed" or "tusked,"—the "two tusked,"—the "great-toothed,"—the "pounder,"—the "roarer,"—the "forest roarer,"—the "mailed,"—the "twice drinking,"—the "mountain born,"—the "vagabond,"—the "vagrant-born,"—the "splendid."

To what were names first applied? Our acquaintance is primarily with individual objects. These would naturally first call for names. Experience enlarges the number of objects known to us, but also prompts in many ways to classification, and reveals the evils of an undue multiplication of terms. Generalization and abstraction in their fuller developments require time and imply some intellectual progress. Neverthe-

less name-giving from the first, by an absolute necessity requires the abstraction of some distinctive quality, and its appropriation to the purposes of speech. And unless there are to be as many languages as there are talking men, there must be some limitation through human convention. If we are to avoid the crudities of the old conventional theory, implying a conference and agreement among men antecedent to the application of names, the name-giving must depend upon or be controlled by some principle, which, if it would not have secured in advance concert of action, so that by common consent, or something less voluntary, the same quality should be selected, will at least ensure the ready acceptance of some one as the prevailing designation. The revelation of names would afford an easy relief, and to this explanation some resort. The development of names by some organic involuntary action of the mind would afford relief, and this is the theory of others. But rejecting this quasi-physical theory also, we find that notwithstanding the original possession by men of common impulses and equal rights in this matter, there are not as many systems as there are name-givers. The necessity of a mutual understanding has been the mighty regulator. And of the names that have come down to us from a far distant past there are many that cannot be primitive. Time and experience would be requisite to the ascertaining of the very facts which the names now symbolize. To take a familiar example, the moon, the "measurer," cannot have been so denominated until a somewhat prolonged observation had shown what use might be made of its courses. This is by no means one of the first qualities that would arrest the attention of primæval man. There must have been a sifting process, after the results of the word-creating power were in considerable numbers before the minds of men. And multitudes of influences, many of them too delicate for our calculation, would come in to determine the final decision. Some tongues have retained many synonyms, others have stripped themselves of all such superfluities, apparently intending that there should be a real difference between the approximating appellations of the same thing.

With reference to the inquiry how terms were found for the designation of the qualities that were judged sufficiently significant to become the basis of names, we can only say that Prof. Whitney, concurring with Farrar, Wedgwood, and others of the best recent writers, traces them largely to onomatopœia, and to primitive interjections, both greatly widened in the range of their applicability, by metaphorical transfer from the domain of one sense to that of another, and from one department of thought to another. Fuller discussion and illustration may be found in Farrar and Wedgwood than in Prof. Whitney's volume.

But we must pass over many interesting topics, the characteristics of different languages and families and types of languages,—the relative advantages of various methods of classification,—the mutual relations of language and thought, language and race, language and culture, to say a few closing words on the relations of our subject to the unity of the race. Prof. Whitney devotes a portion of his tenth lecture to this discussion, and thus sums up his result, (p. 394.) "If the tribes of men are of different parentage, their language could not be expected to be more unlike than they in fact are; while, on the other hand, if all mankind are of one blood, their tongues need not be more alike than we actually find them to be. The evidence of language can never guide us to any positive conclusion respecting the specific unity or diversity of human races." Cardinal Wiseman in his second lecture argues more hopefully in regard to the positive corroboration by linguistic science of the doctrine of human unity, and quotes at length from some of the authorities that stood highest in the opening decades of this century. Dr. Duns of Edinburgh, in the concluding chapter of his "*Science and Christian Thought*" takes a similar view, and adduces in its support quotations from Humboldt, Müller, Bunsen, and Hincks. We confess that we are more disposed to take Prof. Whitney's view, and do not anticipate from this department of science proof of human unity. Arguments drawn from the diversities of human speech against the doctrine we expect to find more abundantly refuted as science makes progress. But we are more and more inclined

to think that there are some things even in nature which we must not expect to find science demonstrating or materially confirming. They must be received on God's own revealed testimony, and he who is not content with this kind of evidence will not believe them.

Here again, where Prof. Whitney is reasoning within the bounds of his science, we greatly admire his clearness and his caution. But when, in one of the opening paragraphs of the next lecture, he gives a résumé of his preceding argument, he quite needlessly lays himself open to a different judgment. He says, (p. 397), "Happily, the question is one of little practical consequence; the brotherhood of men, the obligation of mutual justice and mutual kindness, rests upon the possession of a common nature and a common destiny, not upon the tie of fleshly relationship." How this "common nature and common destiny" are to be established in disregard of the revealed fact that God "hath made of one blood all nations of men for to dwell on all the face of the earth," is not quite clear to us. Nor do we feel any great assurance that these obligations would be recognized either in theory or practice even as much as they are now. But we are quite sure that the "fleshly relationship," which the Scriptures assert, stands in vital connection with the moral condition of our race. The problem of one Adam's fall is quite enough for us in itself and its consequences. And "happily" for our deliverance we are not invited to trust in a Saviour who assumed the nature of some one among several sinning and ruined races coexisting upon earth, but in one who stands thus related by a simple single bond, to every human being that needs his salvation. And "happily" our faith rests on foundations more positive and abiding than any human science, historical or physical.