Wheeler

Whence and Whither of the
Modern Science of Language

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THE WHENCE AND WHITHER OF THE MODERN SCIENCE OF LANGUAGE

BY

BENJ. IDE WHEELER

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THE WHENCE AND WHITHER OF THE MODERN SCIENCE OF LANGUAGE.[1]

BY

BENJ. IDE WHEELER.

It cannot be the purpose of this brief paper to present even in outline a history of the science of language in the century past; it can undertake only to set forth the chief motives and directions of its development.

A hundred years ago this year Friedrich von Schlegel was in Paris studying Persian and the mysterious, new-found Sanskrit; Franz Bopp was a thirteen-year old student in the gymnasium at Aschaffenburg; Jacob Grimm was studying law in the University of Marburg. And yet these three were to be the men who should find the paths by which the study of human speech might escape from its age-long wanderings in a wilderness without track or cairn or clue, and issue forth upon oriented highways as a veritable science.

Schlegel the Romanticist, who had peered into Sanskrit literature in the interest of the fantastic humanism modish in his day, happened to demonstrate in *Ueber die Sprache und Weisheit der Indier*, 1808, beyond cavil the existence of a genetic relationship between the chief members of what we now know as the Indo-European family of languages. Bopp[2] found a way to utilize this demonstrated fact in a quest which, though now recognized as mostly vain, incidentally set in operation the mechanism of comparative grammar. Grimm,[3] under the promptings of a national enthusiasm, sought after the sources of the German

[1] Address delivered at the St. Louis Congress of Arts and Sciences, October, 1904.

[2] First work: *Conjugationssystem der Sanskritsprache*, 1816.

[3] *Deutsche Grammatik*, Vol. 1 (1819).

national life, and, finding in language as in lore the roots of the present deep planted in the past, laid the foundations and set forth the method of historical grammar. The grafting of comparative grammar upon the stock of historical grammar gave it wider range and yielded the scientific grammar of the nineteenth century. The method of comparative grammar is merely auxiliary to historical grammar; it establishes determinations of fact far behind the point of earliest record and enables historical grammar to push its lines of descent in the form of 'dotted lines' far back into the unwritten past.

It was the discovery of Sanskrit to the attention and use of European scholars at the close of the eighteenth century that gave occasion to an effective use of the comparative method and a consequent establishment of a veritable comparative grammar. But in two other distinct ways it exercised a notable influence upon the study of language. First, it offered to observation a language whose structure yielded itself readily to analysis in terms of the adaptation of its formal mechanism to the expression of modifications of thought, and thus gave an encouragement to a dissection of words in the interest of tracing the principles of their formation. Second, the Hindoo national grammar itself presented to Western scholars an illustration of accuracy and completeness in collecting, codifying, and reporting the facts of a language, especially such as related to phonology, inflexion, and word-formation, that involved the necessity of a complete revolution in the whole attitude of grammatical procedure. The discovery of Pāṇini and the Prātiçākhyas meant far more to the science of language than the discovery of the Vedas. The grammar of the Greeks had marked a path so clear and established a tradition so strong, guaranteed in a prestige so high, that the linguistics of the West through all the generations faithfully abode in the way. The grammatical categories once taught and established became the irrefragable moulds of grammatical thought, and constituted a system so complete in its enslaving power that if any man ever suspected himself in bondage he was yet unable to identify his bonds.

The Greeks had addressed themselves to linguistic reflexion in connection with their study of the content and the forms of

thought; grammar arose as the handmaiden of philosophy. They assumed, without consciously and expressly formulating it as a doctrine, that language is the inseparable shadow of thought, and therefore proceeded without more ado to find in its structure and parts replicas of the substances and moulds of thought. They sought among the facts of language for illustrations of theories; it did not occur to them to collect the facts and organize them to yield their own doctrine. Two distinct practical uses finally brought the chief materials of rules and principles to formulation in the guise of a system of descriptive grammar: first, the interpretation of Homer and the establishment of a correct text; second, the teaching of Greek to aliens, and the establishment of a standard by which to teach. These practical uses came in however rather as fortunate opportunities for practical application of an established discipline than as the motives to its creation. With the Hindoos it was the direct reverse. They had a sacred language and sacred texts rescued from earlier days by means of oral tradition. The meaning of the texts had grown hazy, but the word was holy, and even though it remained but an empty shell to human understanding, it was pleasing to the gods and had served its purpose through the generations to bring gods and men into accord, and must be preserved; likewise the language of ritual and comment thereon, which, as the possession of a limited class, required not only to be protected from overwhelming beneath the floods of the vernacular but demanded to be extended to the use of wider circles in the dominant castes. Sanskrit had already become a moribund or semi-artificial language, before grammar laid hold upon it to continue and extend it. But from the outstart the Hindoo grammarian sat humbly at the feet of language to learn of it, and never assumed to be its master or its guide. Inasmuch as the language had existed and been perpetuated primarily as a thing of the living voice and not of ink and paper, and had been used to reach the ears rather than the eyes of the divine, it followed in a measure remotely true of no other grammatical endeavor that the Hindoo grammar was compelled to devote itself to the most exactingly accurate report upon the sounds of the language. The niceties of phonetic discrimination represented in the alpha-

het itself, the refinements of observation involved in the reports on accent and the phenomenon of *pluti;* the formulation of the principles of sentence phonetics in the rules of *sandhi;* the observations on the physiology of speech scattered through the *Prātiçākhyas* are all brilliant illustrations of the Hindoo's direct approach to the real substance of living speech. None of the national systems of grammar, the Chinese, the Egyptian, the Assyrian, the Greek, or the Arabic had anything to show remotely comparable to this; and up to the beginning of the nineteenth century, despite all the long endeavors expended on Greek and Hebrew and Latin, nothing remotely like it had been known to the Western world. The Greek grammarians had really never stormed the barriers of written language; they were mostly concerned with establishing and teaching literary forms of the language. Even when they dealt with the dialects, they had the standardized literary types thereof before their eyes rather than the spoken forms ringing in their ears. When the grammars of Colebrooke (1805), of Carey (1806), and of Wilkins (1808) opened the knowledge of Sanskrit to European scholars, it involved nothing short of a grammatical revelation, and prepared the way for an ultimate remodeling of language-study nothing short of a revolution. Though these Hindoo lessons in accurate phonetics as the basis of sure knowledge and safe procedure had their immediate and unmistakable influence upon the scientific work of the first half-century, their[1] full acceptance tarried until the second half was well on its way. Even Jakob Grimm, whose service in promoting the historical study of phonology must be rated with the highest, was still so blind to the necessity of phonetics as to express the view that historical grammar could be excused from much attention to the "bunte wirrwar mundartlicher lautverhältnisse," and though von Raumer in his *Die Aspiration und die Lautverschiebung* (1837) had not only set forth in all clearness the theoretical necessity of a phonetic basis, but given practical illustration thereof in the material with which he was dealing, it still was possible as late as 1868 for Scherer in his *Geschichte der deutschen Sprache* justly to deplore that "only rarely is a philologist found who is willing to enter upon phonetic

[1] Cf. H. Oertel, Lectures on the Study of Language, pp. 30 ff (1901).

discussion." The phonetic treatises of Brücke[1] (1849 and 1866) and of Merkel (1856 and 1866)[2] failed, though excellent of their kind, to bring the subject within the range of philological interest, and it remained for Eduard Sievers in his *Gründzüge der Lautphysiologie* (1876) and *Gründzüge der Phonetik* (1881) by stating phonetics more in terms of phonology to bridge the gap and establish phonetics as a constituent and fundamental portion of the science of language. The radical change of character assumed by the science in the last quarter of the century is due as much to the consummation of this union as to any one influence.

But it was not phonetics alone that the Indian grammarians were able to teach to the West; they had developed in their processes of identifying the roots of words a scientific phonology that was all but an historical phonology. In some of its applications it was that already, for in explaining the relations to each other of various forms of a given root as employed in different words, even though the explanation was intended to serve the purposes of word analysis and not of sound-theory, the grammarians virtually formulated in repeated instances what we now know as "phonetic laws." The recognition of *guṇa* and *vṛddhi*, which antedates Pāṇini, must rank as one of the most brilliant inductive discoveries in the history of linguistic science. The theory involved became the basis of the treatment of the Indo-European vocalism. The first thorough-going formulation, that of Schleicher in his Compendium (1861), was conceived entirely in the Hindoo sense, and it was to the opportunity which this formulation offered of overseeing the material and the problems involved that we owe the brilliant series of investigations by Georg Curtius (*Spaltung des a-Lautes*, 1864), Amelung[3] (1871, 1873, 1875), Osthoff (*N-Declination*, 1876), Brugmann (*Nasalis sonans*,

[1] E. Brücke, Untersuchungen über die Lautbildung und das naturliche System der Sprachlaute (1849); Gründzüge der Physiologie und Systematik der Sprachlaute (1856).

[2] C. L. Merkel, Anatomie und Physiologie des menschlichen Stimm-und Sprachorgans (1856); Physiologie der menschlichen Sprache (1866).

[3] A. Amelung: Die Bildung der Tempusstämme durch Vocalsteigerung im Deutschen, Berlin, 1871. Erwiderung, KZ. XXII, 361 ff. completed July, 1873, published 1874, after the author's death. Der Ursprung der deutschen a-Vocale, Haupt's Zeitschr. XVIII, 161 ff. (1875).

1876; *Geschichte der stammabstufenden Declination*, 1876), Collitz (*Ueber die Annahme mehrerer grundsprachlichen a-Laute*, 1878), Joh. Schmidt (*Zwei arische a-Laute*, 1879), which led up step by step steadily and unerringly to the definite proof that the Indo-European vocalism was to be understood in terms of the Greek rather than the Sanskrit. These articles, written in the period of intensest creative activity the science has known, represent in the cases of four of the scholars mentioned, viz., Curtius, Ameluug, Brugmann, Collitz, the masterpieces of the scientific life of each. Though dealing with a single problem, they combined both through the results they achieved and the method and outlook they embodied to give character and direction to the science of the next quarter-century. Karl Verner's famous article, *Eine Ausnahme der ersten Lautverschiebung*, (KZ. XXIII. 97 ff. July, 1875), which proved of great importance among other things in establishing a connection between I. E. ablaut and accent, belongs to this period; and Brugmann's article, *Nasalis sonans*, which served more than any other work to clear the way for the now prevailing view of ablaut, was influenced by Verner's article, which was by a few months its predecessor. Both articles, it is worthy of noting, were distinctly influenced by the new phonetic; Verner's, it would appear, chiefly by Brücke, Brugmann's, through a suggestion of Ostholf's, by Sievers, whose *Lautphysiologie* had just appeared within the same year. The full effect upon Western science of the introduction of the Indian attitude toward language study appears therefore to have been realized only with the last quarter of the century.

More prompt than the response of European science to the teachings of Hindoo phonetics and phonology had been the acceptance of the Hindoo procedure in word analysis, especially with relation to suffixes and inflexional endings. The centuries of study of Greek and Latin had yielded no clue to any classification or assorting of this material according to meaning or function. The medieval explanation of *dominicus* as *domini custos* was as good as any. Besnier in his essay, *La science des Etymologies* (1694), counted it the mark of a sound etymologist that he restrict his attention to the roots of words, for to bother with the other parts would be "useless and ludicrous." And when

Horne Tooke in the Diversions of Purley, II, 429 (1786-1805), just before the sunrise, wrote the startling words: "All those common terminations in any language . . . are themselves separate words with distinct meanings," and (II, 454): "Adjectives with such terminations (*i.e.*, *ly*, *ous*, *ful*, *some*, *ish*, etc.) are, in truth, all compound words"; and when he flung out like a challenge the analysis of Latin *ibo*, 'I shall go,' as three letters containing three words, viz. *i*, 'go,' *b* (*βούλομαι*) 'will,' *o* (*ego*) 'I,' no one seems to have been near enough to the need of such instruction to know whether or not he was to be taken seriously; for the words bore no fruit, and only years afterward, when Bopp's doctrine had been recognized, were they disinterred as antiquarian curiosities. Eleven years later, in the full light of the Sanskrit grammar, Bopp published his *Conjugationssystem*, and the clue had been found. To be sure, Bopp was misguided in his belief that he could identify each element of a word-ending with a significant word, and assign to it a distinct meaning, but he had found the key to an analysis having definite historical value and permitting the identification of such entities as mode-sign, tense-sign, personal-endings, etc. The erroneous portion of his doctrine, based upon his conception of the Indo-European as an agglutinative type of speech, dragged itself as an encumbrance through the first half-century of the science, and, though gasping, still lived in the second edition of Curtius' Verbum (1877). This, along with many other mechanical monstrosities of its kind, was gradually banished from the linguistic arena by the saner views of the life-habits of language which had their rise from linguistic psychology as a study of the relations of language to the hearing as well as speaking individual and the relations of the individual to the speech community, and which asserted themselves with full power in the seventies.

Bopp had from the beginning devoted himself to language-study, not as an end in itself, but, as we know from his teacher and sponsor Windischmann,[1] as well as infer from the direction and spirit of his work, he hoped to be able "in this way to penetrate into the mysteries of the human mind and learn something

[1] Introduction to Bopp's Conjugationssystem der Sanskritsprache, p. iv, (1816).

of its nature and its laws.'' He was therefore unmistakably of the school of the Greeks, not of the Hindoos; for the Greek grammarian in facing language asks the question 'why,' grammar being to him philosophy, whereas the Hindoo asks the question 'what,' grammar being to him a science after the manner of what we call the 'natural sciences.' There is indeed but slight reason for the common practice of dating the beginning of the modern science of language with Bopp, aside from the one simple result of his activity, which must in strict logic be treated as merely incidental thereto, namely, that he gave a practical illustration of the possibility of applying the comparative method for widening the scope and enriching the results of historical grammar.

As Bopp had tried to use the comparative method in determining the true and original meanings of the formative elements, so did his later contemporary, August Friedrich Pott[1] (1802-1887) undertake to use it in finding out the original meaning of words. The search for the etymology or real meaning of words had been a favorite and mostly bootless exercise of all European grammarians from the Greek philosophers down, having its original animus and more or less confessedly its continuing power in the broadly human, though barely on occasion half-formulated conviction, that words and their values belong by some mysterious tie naturally to each other. In the instinct to begin his task Pott was still with the traditions of the Greeks and the Greco-Europeans, but in developing it he was guided into new paths by two forces that had arisen since the century opened. Under the guidance of the comparative method, whereby the vocabularies of demonstrably cognate languages now assumed a determinate relation to each other, he came unavoidably to the recognition of certain normal correspondences of sounds between the different tongues. On the other hand, in almost entire independence hereof, Jakob Grimm in the pursuit of his historical method had formulated the regularities of the mutation of consonants in the Teutonic dialects and had set them forth in a second edition of the first volume of his grammar, appearing in 1822. In all this was contained a strong encouragement as well

[1] K. F. Pott: Etymologische Forschungen, 2 vols. Lemgo, 1833-36; 2nd edit. 6 vols., 1859-76.

as warning to apply these new definite tests to every etymological postulate, and therewith arose under Pott's hands the beginnings of a scientific etymology. It was a first promise of deliverance from a long wilderness of caprice.

The positivistic attitude which had been gradually infused into language-study under the influence of the Hindoo grammar finally reached its extremest expression in the works of August Schleicher (1821-1868). The science of language he treated under the guise of a natural science. Language became isolated from the speaking individual or the speaking community to an extent unparalleled in any of his predecessors or successors, and was viewed as an organism having a life of its own and laws of growth or decline within itself. Following the analogies of the natural sciences and trusting to the inferred laws of growth, he ventured to reconstruct from the scattered data of the cognate Indo-European languages the visible form of the mother speech. His confidence in the character of language as a natural growth made him the first great systematizer and organizer of the materials of Indo-European comparative grammar (*Compendium der vergleichenden Grammatik*, 1861); as confidence in the unerring uniformity of the action of the laws of sound made Karl Brugmann the second (*Grundriss der vergleichenden Grammatik*, 1886-1892).

It is not by accident that the first one to voice outright the dogma of the absoluteness (*Ausnahmslosigkeit*) of the laws of sound was a pupil of Schleicher, August Leskien (*Die Declination in Slavisch-litauischen und Germanischen* xxviii, 1876). The use of this dogma as a norm and test in the hands of a signally active and gifted body of scholars who followed the leadership of Leskien and were known under the title of the *Leipziger Schule* or the *Junggrammatiker*, and the adherence to it in practice of many others who did not accept the theory involved, —a use which was undoubtedly greatly stimulated by Verner's discovery (1875) that a great body of supposed exceptions to Grimm's law were in reality obedient to law, gave to the science in the two following decades, along with abundance of results, an objectivity of attitude and procedure and a firmness of structure that may fairly be said to represent the consummation of

that positivist tendency which we have sought to identify with the influence of Hindoo grammar. This movement, however, derived its impulse by no means exclusively through Schleicher. A new stream had meanwhile blended its waters with the current. The psychology of language as a study of the relations of language to the speaking individual, that is, of the conditions under which language is received, retained, and reproduced, and of the relations of the individual to his speech community, had been brought into play preëminently through the labors of Heymann Steinthal, who, though as a psychologist a follower of Herbart, must be felt to represent in general as a linguist the attitude toward language study first established by Wilhelm v. Humboldt. William D. Whitney shows in his writings on general linguistics the influence of Steinthal, as well as good schooling in the grammar of the Hindoos and much good common sense. His lectures on *Language and the Study of Language* (1867) and the *Life and Growth of Language* (1875)[1] helped chase many a goblin from the sky. Scherer's *Geschichte der deutschen Sprache* (1868), combined more than any book of its day the influences of new lines of endeavor, and especially gave hearing to the new work in the psychology as well as the physiology of speech. To this period (1865-1880), under the influence of the combination of the psychological with the physiological point of view, belongs the establishment of scientific common sense in the treatment of language. By virtue of this, as it were, binocular vision, language was thrown up into relief, isolated, and objectivised as it had never been before. Old half-mystical notions, such as the belief in a period of upbuilding in language and a period of decay,—all savoring of Hegel, and the consequent fallacy that ancient languages display a keener speech consciousness than the modern,—speedily faded away. The center of interest transferred itself from ancient and written types of speech to the modern and living. Men came to see that vivisection rather than

[1] H. Steinthal: *Der Ursprung der Sprache, im Zusammenhang mit den letzten Fragen alles Wissens*, 1851; *Characteristik der hauptsächlichsten Typen des Sprachbaues*, 1860; *Einleitung in die Psychologie und Sprachwissenschaft*, 1881; *Gesch. der Sprachen, bei den Griechen und Romern*, 1863, ²1890-91. Also editor with Lazarus of the *Zeitschrift für Völkerpsychologie und Sprachwissenschaft*, from 1859.

morbid anatomy must supply the method and spirit of linguistic research. The germs of a new idea affecting the conditions under which cognate languages may be supposed to have differentiated out of a mother speech, and conceived in terms of the observed relations of dialects to languages, were infused by Johannes Schmidt's *Verwandtschaftsverhältnisse der indogerman. Sprachen* (1872). The rigid formulas of Schleicher's *Stammbaum* melted away before Schmidt's *Wellentheorie* and its line of successors down to the destructive theories of Kretschmer's *Einleitung in die Geschichte der griech. Sprache* (1896). Herein as in many another movement of the period we trace the results of applying the lessons of living languages to the understanding of the old. A remarkable document thoroughly indicative of what was moving in the spirit of the times was the Introduction to Osthoff and Brugmann's *Morphologische Untersuchungen*, Vol. I (1878). But the gospel of the period, and its theology for that matter, was most effectively set forth in Hermann Paul's *Principien der Sprachgeschichte* (1st edit., 1880), a work that has had more influence upon the science than any since Jakob Grimm's *Deutsche Grammatik*. Paul was the real successor of Steinthal. He also represented the strictest sect of the positivists in historical grammar. As a consequence of the union in Paul of the two tendencies, his work acquires its high significance. He established the reaction from Schleicher's treatment of language science as a natural science; he showed it to be beyond peradventure one of the social sciences, and set forth the life conditions of language as a socio-historical product.

The work of the period dominated by Paul and the neo-grammarians, as well as the theories of method proclaimed, show, however, that the two factors just referred to had not reached in the scientific thought and practice of the day a perfect blending. A well-known book of Osthoff's bears the title *Das physiologische und psychologische Moment in der sprachlichen Formenbildung* (1879). The title is symptomatic of the times. The physiological and the psychological were treated as two rival interests vying for the control of language. What did not conform to the phonetic laws, in case it were not a phenomenon of mixture, was to be explained if possible as due to analogy. This dualism could

be expected to be but a temporary device like the setting up of Satan over against God, in order to account for the existence of sin. A temporary device it has proved itself to be. The close of the first century of the modern science of language is tending toward a unitary conception of the various forms of historical change in language. The process by which the language of the individual adjusts itself to the community speech differs in kind no whit from that by which dialect yields to the standard language of the larger community. The process by which the products of form-association or analogy establish themselves in language differ in no whit in kind from that by which new pronunciations of words, *i.e.*, new sounds make their way to general acceptance. The process by which loan-elements from an alien tongue adjust themselves to use in a given language differs psychologically and fundamentally no whit from either of the four processes mentioned. In fact they all, all five, are phenomena of 'mixture in language.'[1] The process, furthermore, by which a sound-change in one word tends to spread from word to word and displace the old throughout the entire vocabulary of the language is also a process of 'mixture,'[2] and depends for its momentum in last analysis upon a proportionate analogy after the same essential model as that by which an added sound or a suffix is carried by analogy from word to word. All the movements of historical change in language respond to the social motive: they all represent in some form the absorption of the individual into the community mass. It has therewith become evident that there is nothing physiological in language that is not psychologically conditioned and controlled. So then it appears that the

[1] See O. Bremer, Deutsche Phonetik, Vorwort X ff. (1893); B. I. Wheeler, Causes of Uniformity in Phonetic Change; Transac. Amer. Philol. Assoc., XXIII, 1 ff. (1901).

[2] A point of view involving the recognition of a more recondite form of speech-mixture is that first suggested by G. I. Ascoli (*Sprachwissenschaftliche Briefe*, pp. 17 ff., 1881-86; trsl. 1887), whereby the initiation of phonetic and syntactical changes in language, and ultimately the differentiation of dialects and even of languages may assume relation to languages of the substratum, as they may be termed, *i.e.*, prior and disused languages of peoples or tribes who have through the fate of conquest or assimilation been absorbed into another speech community. Notably has this point of view been urged by H. Hirt (*Indog. Forschungen*, IV, 36 ff., 1894), and by Wechssler (*Gieht es Lautgesetze*, pp. 99 ff.) With this point of view the science of language will have largely to deal, we are persuaded, in the second century of its existence.

modern science of language has fairly shaken itself free again from the natural sciences and from such influences of their method and analogies as were intruded upon it by Schleicher and his period (1860-80), and after a century of groping and experiment has definitely oriented and found itself as a social science dealing with an institution which represents more intimately and exactly than any other the total life of man in the historically determined society of men.

Within the history of the science of language the beginning of the nineteenth century establishes beyond doubt a most important frontier. To appreciate how sharp is the contrast between hither and yonder we have only to turn to any part or phase of the work yonder,—the derivation of Latin from Greek, or mayhap, to be most utterly scientific, from the Aeolic dialect of Greek, the sage libration of the claims of Dutch as against Hebrew to be the original language of mankind, the bondage to the forms of Greek and Latin grammar as well as to the traditional point of view of the philosophical grammar of the Greeks, the subordination of grammar to logic, the hopeless etymologies and form analyses culminating in the phantasies of Hemsterhuis and Valckenaeer, the lack of any guiding clue for the explanation of how sound or form came to be what it is, and the curse of arid sterility that rested upon every effort. All the ways were blind and all the toil was vain. On the hither side, however, there is everywhere a new leaven working in the mass. What was that leaven? To identify if possible what it was has been the purpose of this review. I think we have seen it was not the influence of the natural sciences, certainly not directly; wherever that influence found direct application it led astray. It was not in itself the discovery of the comparative method, for that proved but an auxiliary to a greater. If a founder must be proclaimed for the modern science of language, that founder was clearly Jakob Grimm, not Franz Bopp.

The leaven in question was comprised of two elements. One was found in the establishment of historical grammar, for this furnished the long-needed clue; the other was found in the discovery of Hindoo grammar, for this disclosed the fruitful attitude for linguistic observation. Historical grammar furnished

the missing clue, because it represented the form of language as created, what it is, not by the thought struggling for expression, but by historical conditions antecedent to it. Hindoo grammar furnished the method of observation because by its fundamental instinct it asked the question *how* in a given language does one say a given thing, rather than *why* does a given form embody the thought it does.

The germinal forces which have made this century of the science of language are not without their parallels in the century of American national life we are met to celebrate today. Jakob Grimm was of the school of the Romanticists and he gained his conception of historical grammar from his ardor to derive the institutions of his people direct from their sources in the national life. The acquaintance of European scholars with the grammar of India arose from a counter-spirit in the world of the day whereby an expansion of intercourse and rule was bringing to the wine-press fruits plucked in many various fields of national life. Thus did the spirit of national particularism reconcile itself, in the experience of a science, with the fruits of national expansion. After like sort has the American nation in its development for the century following upon the typical event of 1803 combined the widening of peaceful interchange and common standards of order with strong insistence upon the right of separate communities in things pertaining separately to them to determine their lives out of the sources thereof. Therein has the nation given fulfillment to the prophetic hope of its great democratic imperialist, Thomas Jefferson,[1] "I am persuaded no constitution was ever before so well calculated as ours for extensive empire and self-government."

The linguistic science of the second century will build upon the plateau leveled by the varied toils and experiences of the first. More than ever those who are to read the lessons of human speech will gain their power through intimate sympathetic acquaintance with the historically conceived material of the individual language. But though the wide rangings of the comparative method have for the time abated somewhat of their interest

[1] Letter to Mr. Madison, 1809.

and their yield, it will remain that he who would have largest vision must gain perspective by frequent resort to the extra-mural lookouts. Language is an offprint of human life, and to the student of human speech nothing linguistic can be ever foreign.

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