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Volume 4

August Schleicher

Die Sprachen Europas in systematischer Übersicht

AUGUST SCHLEICHER DIE SPRACHEN EUROPAS IN SYSTEMATISCHER ÜBERSICHT LINGUISTISCHE UNTERSUCHUNGEN

New edition
with an introductory article
by
KONRAD KOERNER
University of Ottawa

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For

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ACKNOWLEDGEMENTS

My own files remind me that I planned to write a 'critical note' on "August Schleicher (1821-68) and the History of Linguistics",* which dates back to Spring or Summer 1970. This paper was never written, but the $1\frac{1}{2}$ -page typescript of that first attempt indicates to me that it was intended to redress the distorted picture of Schleicher in the annals of linguistic science.

More than twelve years later, I am hoping that this early impulse has at last borne fruit, with the rehabilitation of Schleicher and his rightful place in the development of linguistics duly accorded. Doubtless, it will take a number of years more until these recent studies of Schleicher find entry to the textbook literature. Many other commitments during the past ten years have prevented me till now from completing the research and the final draft of the essay which accompanies the present republication of Schleicher's Die Sprachen Europas in systematischer Uebersicht of 1850, a book in which we find his later theories and methodological principles (not to mention his philosophy of science) in nuce and in fact already partly developed in considerable detail.

I am now pleased to state that, owing to a sabbatical leave from my university, a research fellowship granted by the Social Sciences and Humanities Research Council of Canada in Ottawa, the fine facilities at the Newberry Library in Chicago, and last but not least to the selfless support and friendship received from J. Peter Maher of the Northeastern Illinois University in the same city, I have been able to conclude this long-hedged project. To all those involved in helping me in one way or another — and this includes Professor Harry Spitzbardt of the University of Jena who provided me with a photograph of a picture of Schleicher whose original belongs to the Library there — I would like to express my heartfelt thanks.

Chicago, October 1982

K. K.

^{*} The paper was meant to be published on the occasion of Schleicher's 150th birthday, on 19 February 1971.



Ang. Pohleider.

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PREFACE

The 1970s have witnessed a considerable revival of interest in the work of August Schleicher (1821-68), who during his own lifetime was widely regarded as the leader in comparative and historical Indo-European research in Europe. No doubt he was a very influential figure in general linguistic theory and philosophy of science too. Schleicher was a close contemporary of the archaeologist Heinrich Schliemann (1822-92), the anatomist and physiologist Rudolf Virchow (1821-1902), the physicist and acoustician Hermann von Helmholtz (1821-94), the physiologist and phonetician Ernst Brücke (1819-92), but also of Karl Marx (1820-84) and Friedrich Engels (1820-95), to mention distinguished figures in his homeland, but Schleicher lived only 47 years and saw few of the fruits of his important work. 1 For instance, he was never granted a full professorship at the University of Jena, where he had moved from the University of Prague in 1857, after he felt unable to live and work as professor of comparative linguistics and of Sanskrit because of constant harassment by the archconservative Austrian administration which regarded the non-Catholic freethinker distinguished in Slavic studies and fluent speaker of Czech with suspicion.² Indeed, the first chair for Slavic Philology (which Schleicher had had high hopes of obtaining) was established at Leipzig only in 1870, with August Leskien (1840-1916), probably the most promising of Schleicher's students, as its first incumbent.

The revival of interest in Schleicher seems to stem from several sources. The structuralist conception of language,

Schleicher's contemporaries in linguistics, e.g., Georg Curtius (1820-1885), Max Müller (1823-1900), Heymann Steinthal (1823-99), and Ernest Renan (1823-92), reached an average age of 70.

² Cf. Rudolf Fischer, "Erlebnisse August Schleichers in der Bach'schen Ära", Zeitschrift für Slawistik 1.101-107 (1956) for details. See also the account by the Czech Alois Vaníček (1825-83), a confidant and pupil of Schleicher's, "Erinnerungen an ... August Schleicher in Prag" of 1869 (cf. p.XXI*, note 27, below for full reference).

traditionally associated with the names of Ferdinand de Saussure and J. Baudouin de Courtenay, which swept most European and North American linguistic schools from the 1930s onwards, appears to have paved the way for a fresh appreciation of Schleicher's contribution to a general theory of language, in which his own work on Indo-European phonology and morphology was but one province. The book reprinted here (as well as the preceding one in which he made something like a tour around the world in order to show that processes of assimilation and related phenomena could be reckoned with in all languages) shows that Schleicher was not merely interested in historical-comparative work on Indo-European, with particular emphasis on the Balto-Slavic group of languages, but, more importantly, in the establishment of a clear method of linguistic research, both synchronic and diachronic. Compare the following observation made in Schleicher's Die Sprachen Europas (p.37) with what we have learned from Saussure's posthumous Cours de linguistique générale:

It is ... in the nature of a systematic survey to present only co-ordinating matter, i.e., co-occurrence, not succession; for the difference between System and History is that the latter has succession as its object, showing the subject matter in a vertical cut, whereas system executes, as it were, the horizontal cross-section of adjacent matter.³

Another reason for a reappraisal of Schleicher's work may lay in the recognition of the biological foundations of language; see, for instance, the historical survey that Otto Marx added to the late Eric Heinz Lenneberg's (1924-75) book on this subject (Marx 1967) or Robert David Stevick's earlier plea for a closer collaboration between biology and historical linguistics. That Schleicher's conception of

 $^{^{3}}$ My free translation of the original: "Es liegt ... im Begriff einer systematischen Uebersicht, dass sie nur Coordinirtes enthalte, das Nebeneinander nicht aber das Nacheinander darstelle; denn dies ist ja eben der Unterschied des Systems von der Geschichte, dass letztere das Nacheinander zum Objekt hat, gleichsam den Gegenstand im Längsdurchschnitt zeigt, während das System nur das nebeneinander Liegende zu ordnen hat, gleichsam den Querdurchschnitt ausführt." -One may well ask whether we have here an important source for Saussure's view that language history does not reveal a system. 4 R.D. Stevick, "The Biological Model and Historical Linguistics", Language 39.159-69 (1963). Interestingly enough, almost 100 years earlier, Abel Hovelacque (1843-96), who collaborated with the physiologist and neurologist Pierre Paul Broca (1824-80) at the Paris School of Anthropology, founded by the latter in 1876, pointed to the importance of Schleicher's (1865a) suggestion that the study of the evolution of the human brain should shed significant light on the

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language derived largely from the natural sciences, from their methods of analysis and their terminological and conceptual tools, has received very recently recognition and (albeit qualified) support from an unexpected quarter, to wit Geoffrey Sampson, a linguist who received his training within the Chomskyan framework. In Sampson's recent book, schools of Linguistics, Schleicher's name figures prominently, 5 and although the author tends to fall into the traditional trap of not distinguishing between evolutionism and Darwinism and is not very familiar with the literature on and by Schleicher, he rightly concludes his survey of 20th-century linguistic schools with the following prediction (pp.241, 242):

Schleicher went wrong, perhaps, by thinking in terms of a struggle for survival between languages of different morphological characteristics rather than different syntactic characteristics \dots^6

Doubtless Schleicher was wrong, too, in assuming that if Darwinism was to be applicable to linguistics then languages had to be seen as genetically-determined living 'organisms' ...

In general, though, Schleicher was right; and I venture to predict [...] that as the linguistics of the immediate past has been psychological linguistics, so the linguistics of the near future will be biological linguistics.

One other possible reason for the revival of interest in Schleicher, though still a limited and more recent development, derives from the concern of scholars such as Henry M. Hoenigswald (1963, 1974) and J. Peter Maher (1966, 1982) to correct errors of interpretation concerning the history of 19th-century linguistics and to dispel myths and misrepresentation, on the one hand, and to replace these with an informed picture of earlier scholars and their work. We tend to forget, it would seem, that the Neogrammarians and their associates and successors had a vested interest in maintaining the view that their findings eclipsed those of

development of language in man; cf. his review of the French translation of Schleicher's 'Darwinistic' essays of 1863 and 1865 (see Schleicher 1868a) in Revue de Linguistique et de Philologie comparée 2.276-80 (1869). Only 100 years later, an anatomist with a special interest in language, Joachim Hermann Scharf of the Akademie der Naturforscher Leopoldina in Halle, rediscovered Schleicher and his suggestions; cf. fn.23 of the Introduction (below) for details.

⁵ G. Sampson, Schools of Linguistics: Competition and evolution (London: Hutchinson, 1980), pp. 18-24, 26, 28, 33, 47, and elsewhere, including notes on pp. 144-45.

E Sampson is no better than Schleicher here: what possible connection would there be between morphological typology and survival of the fittest (à la Schleicher) or between survivability and, as Sampson

their immediate predecessors, notably Georg Curtius and August Schleicher, something that we have been witnessing with regard to the relationship between the transformational school led by Chomsky and the Neo-Bloomfieldians, viz. the depiction of the latter as unproductive, 'uninteresting' taxonomists by the former in recent 'histories' written by partisans of this school.

The Neogrammarians were at pains to demonstrate that they owed little to their teachers. The wanted to write off the work of Schleicher for instance — and we should remember that he had been dead for more than 10 years by the time that Delbrück and others went about to write the history of their school — as little more than the working-out of ideas and methods propounded by Franz Bopp (1791-1867), the acknowledged founder of historical-comparative linguistics. Delbrück (1882:45-53), for example, presents this still widely-held view of Schleicher as a mere (Kuhnian) mopperuper rather than the genuine codifier that we was.

This distorted picture of Schleicher prevails in the textbook tradition in large part because of his untimely death, in 1868, which prevented him from defending himself when, in the mid-1870s, the new generation came to the fore, determined to play down their indebtedness to their teachers. In this connection, it is interesting to note that of the three most prominent pupils of Schleicher at Prague and Jena, i.e. Jan Baudouin de Courtenay (1845-1929), August Leskien (1840 to 1916), and Johannes Schmidt (1843-1901), only the lastnamed went out of his way to defend his teacher and indeed. on several occasions had running battles with the Young Turks of Leipzig. Baudouin tended to denigrate Schleicher, to whom he owed so much. And Leskien, whom the Junggrammatiker regarded as their elder statesman, kept aloof of the debate between the old and the young and abstained, at least in writing, from taking sides. Nevertheless, Leskien edited in 1869, together with Hermann Ebel (1820-75) and J. Schmidt, Schleicher's Indogermanische Chrestomatie, and in 1870 and 1876, he and Schmidt collaborated to see the third and fourth edition of Schleicher's Compendium through the press. In 1871, he also edited Schleicher's work on Polabian, a Slavic language extinct since the 18th century.

The brunt of the attack on Schleicher in his home country, however, came from those members of the junggrammatische

would have it, syntactic type. (Remember that Schleicher 1869[1863]: 16 refers only to "the extinction of ancient forms, [and] the widely-spread varieties of individual species in the field of speech".)

Cf. for instance Ingeborg Slotty's Breslau dissertation, Zur Geschichte der Teleologie in der Sprachwissenschaft (Bopp, Humboldt, Schleicher) (Würzburg: K. Triltsch, 1935), who goes so far as to speak of

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Richtung who, like Brugmann and Osthoff, were former students of Curtius. Other members of the group, such as Delbrück, Hermann Paul (1846-1921), and Gustav Meyer (1850-1900), played their part in it too. These young linguists, further, received support from a scholar of the older generation, who had made his reputation as a Sanskritist and general linguist, to wit, William Dwight Whitney of Yale (1827-94), who, soon after Schleicher's death, began polemicizing against what he termed Schleicher's 'physical theory of language' (Whitney 1873:298-331) and his 'Darwinism' (Whitney 1874). These attacks were obviously meant to de-These attacks were obviously meant to demolish Schleicher's reputation in a field to which Whitney had contributed next to nothing, namely, comparative-historical Indo-European phonology and morphology. In this realm Schleicher's methodological principles however proved particularly fruitful, irrespective of the philosophy of science that Whitney was attacking, and it is evident today that the Neogrammarians in fact built on these principles.

Saussure's pitiless ridicule of Schleicher's theory of language made on the occasion of a request from the American Philological Association to appraise Whitney's work shortly after his death in 1894 reflects the importance that the Neogrammarians attached to Whitney's polemic in the heyday of their revolutionary fervor. In the same unpublished manuscript (quoted in our Introduction, p.XXV* below), Saussure also conceded that it was more interesting to have a system than a medley of confused notions, deploring at the same time that until then little had been done in general linguistic theory to replace Schleicher's frame of reference. Indeed, Schleicher had taken a position of restraint in linguistic theory, quite in agreement with Saussure's opinion on the matter, when he stated in 1863: "Besser wenig, aber mit Kritik und Methode, als viel, aber Bedenkliches und Zweifelhaftes" (quoted after Dietze 1966:210).

Outside the cartell of opinion controlled by the Neogrammarians, Schleicher continued to be held in high esteem for his accomplishments, notably in the area of Baltic and Slavic philology. His Compendium was translated into Italian and English but, curiously enough, not into French. This omission appears to have been due to Michel Bréal's (1832-1915) ambivalent attitude toward Schleicher and his work,

a "Vater-Sohn Verhältnis von Bopp and Schleicher" (p.15) with regard to certain views of these two linguists, though she later characterizes him as a transitional figure between the old school and the Neogrammarians (30 ff.).

⁸ Cf. my review of the Baudouin de Courtenay Anthology ed. by Edward Stankiewicz (Bloomington & London: Indiana Univ. Press, 1972) in Language Sciences No.27 (Oct. 1973), 45-50.

as may be gathered from the fact that, on the one hand, he wrote a preface to the French translation of Schleicher's 'Darwinistic' essays (Schleicher 1868a) and, on the other, that he decided against translating Schleicher's Compendium, opting for a translation of Bopp's Comparative Grammar instead, ⁹ although the advances made in the field had superseded Bopp's findings. A certain ambivalence can also be detected in the fact that Schleicher was awarded in 1867 only half of the Prix Volney for his Compendium, a decision in which Bréal appears to have played a role. ¹⁰

The decision of the éminence grise of historical and general linguistics in France during the last third of the 19th century may have retarded the development of comparative-historical grammar by a generation, until Saussure's former student in Paris, Antoine Meillet (1866-1936) distinguished himself by a series of grammars of individual Indo-European languages and a very influential introduction to comparative grammar. There is little to support Hans Aarsleff's recent claim that Bréal was something of an avant-gardist in general linguistics, since, as Bréal's writings clearly show, despite his fight against the use of biological metaphor in linguistics, evolutionisr naturalist concepts (e.g., 'laws') and imagery abound in his own work, in particular in his Essai de sémantique (Paris: Hachette, 1897; 6th ed., 1913). 13

Interestingly enough, there was a group of scholars in France that followed Schleicher's lead. They founded in 1867, the year of Bopp's death, the "Revue de Linguistique et de Philologie comparée", which ran through 48 volumes until 1916, the year of the 100th anniversary of Bopp's Conjugationssystem as well as of the first appearance of

⁹ François Bopp, Grammaire comparée des langues indo-européennes, 4 vols. (Paris: Hachette, 1866-72).

¹⁰ Cf. Joachim Dietze, "Briefe August Schleichers an Reinhold Köhler", Zeitschrift für Slawistik 5.267-80 (1960), p.279.

¹¹ Cf. Antoine Meillet, Introduction a l'étude comparative des langues indo-européennes (Paris: Hachette, 1903; 8th ed., prepared by Emile Benveniste, 1937).

¹² See Hans Aarsleff, From Locke to Saussure: Essays in the study of language and in intellectual history (Minneapolis, Minn.: Univ. of Minnesota Press, 1982), pp. 293-334 passim. That the author can be blinkered by preconceived ideas has recently been aptly shown by Wulf Oesterreicher, "Wem gehört Humboldt? Zum Einfluß der französischen Aufklärung auf die Sprachphilosophie der deutschen Romantik", Logos Semioticos, vol. I, ed. by Jürgen Trabant (Berlin 1981), 117-35.

¹³ Cf. J. Peter Maher's introductory article to Linguistics and Evolutionary Theory: Essays by Schleicher, Haeckel, and Bleek (Amsterdam, 1982), for a refutation of Aarsleff's claims about Bréal as the anti-Schleicher.

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Saussure's Cours. 14 This periodical successfully rivalled the establishment journal, the "Bulletin de la Societe de Linguistique de Paris", which began appearing one year later, with a number of distinguished scholars as regular contributors. The Belgian Indo-Europeanist and gentlemanscholar Honoré Joseph Chavée (1815-77) serving as elder statesman, it was Abel Hovelacque (1843-96) who was the most active promoter of Schleicher's naturalistic views. Apart from editing the "Revue de Linguistique" for some thirty years, he further developed, in his book La Linguistique (Paris: C. Reinwald, 1876; 4th ed., 1888), Schleicher's typology of language, increasing considerably the number of (especially exotic) languages in his treatment. 15 The other regular contributors to the journal included the anthropologist, mythologist and Indologist Julien Girard de Rialle (1841-1904), the general linguists Lucien Adam (1833-1918) and Albert Terrien de la Couperie (1845-94), the Romanist Emile Picot (1844-1918), the Bascologist Julien Vinson (1843-1926), and a number of others. 16

Apart from a remark here and there on Hovelacque, usually not commendable, we hardly find a single mention of any of these scholars in the annals of linguistic science, either in France or abroad. The reason for this neglect, however, does not solely lie in the fact that these men tended to espouse a Schleicherian view of language, but probably more so because a number of them were not fully accredited university teachers. This disdain on the part of the professionals (which in North America became particularly pronounced since the activities of Franz Boas and Leonard Bloomfield) appears to have been developing around the late 1860s, also in Germany. One example may illustrate the point.

¹⁴ For those who like to engage in a bit of numerology, we may insert the date of the publication of Schleicher's Compendium (note that the title starts with a 'C' as is the case with the other two books), namely, 1861, so that we have the sequence: 1816 - 1861 - 1916.

Note that only the 1922 reprint (Paris: A. Costes) carries the subtitle "Histoire naturelle du langage".

¹⁶ For instance, Henri, Comte de Charency (1832-1916), who also was an active member of the Paris Linguistic Society.

¹⁷ It would be of interest to a better understanding of the development of linguistics in France to have the work of these scholars carefully analyzed, also in terms of a sociology of science, since a number of them were aristocrats and gentleman scholars. Another interesting figure in this connection is Raoul de la Grasserie (1839-1914), a judge by profession, who wrote dozens of books on language typology, semantics, and other subjects. (Among other things, he employed the term 'synchronique' in a semantics book of 1908.) La Grasserie is referred to in Davies (1975:655, 657, 680, 681, etc.).

In 1868, the year of Schleicher's death, August Boltz 18 published a popularization of linguistics under the title Die Sprache und ihr Leben: Populäre Briefe über Sprachwissenschaft (Offenbach/M.: G. André), to which the author appended a two-page size table depicting the Schleicherian Stammbaum, "Uebersichtstabelle der indogermanischen Sprachengruppe", which, as a kind of innovation, includes the pre-historical development of language(s) in three stages of evolution, namely, monosyllabic, agglutinating, and inflectional. Johannes Schmidt, Schleicher's former student, though barely 25 years old, reviewed the book in Zeitschrift für vergleichende Sprachforschung 17.449-51 (1868), and although he acknowledges the author's respectable efforts, he expresses the view that popularizations are better produced by professional linguists.

Despite the success of the neogrammarian propaganda and the scorn later scholars heaped on Schleicher for comparing language to a living organism which has been common-place since Schleicher's death in Germany and abroad, 19 he has been regaining respect during the past few decades. Arens appears to have been the first historian of linguistics to accord Schleicher the righful place in the annals of the discipline (Arens 1955:224-42 = 1969:248-66). Brigit Beneš (1958:81-124) presented a detailed analysis of his work in comparison with that of two of his most prominent predecessors, Wilhelm von Humboldt (1767-1835) and Jacob Grimm (1785-1863). In 1966, a comprehensive account of Schleicher's life and work appeared (Dietze 1966); this was followed by Otto Zeller's appreciation of him as the scholar who perfected comparative-historical research (Zeller 1967: 111-24). German-born scholars such as Henry M. Hoenigswald (1963, 1974, 1975) and Werner F. Leopold (cf., e.g., Bar-Adon & Leopold 1971:19-20) have continued this recognition of Schleicher's importance in North America. Among non-

Boltz (1819-1907), who had done his doctorate at Jena in 1845, indicates on the title-page of his book that he had been "früher Professor der russischen Sprache an der Königlichen Kriegs-Akademie zu Berlin". He published works on literary history as well as grammars of Russian and German.

¹⁹ The most prominent follower of Schleicher in Italy appears to have been Domenico Pezzi (1844-1905), who, besides translating Schleicher's Compendium (1869), published several books of his own, e.g., a comparative grammar of Latin (1872) and of Greek (1888) as well as a 200-page survey of Indo-European research (1877), which appeared in English translation by Ernest Stewart Roberts (1847-1913) two years later: Aryan Philology according to the Most Recent Researches (London: Trübner, 1879). - Pezzi, like so many other linguists mentioned earlier, receives at best footnote treatment in the histories of linguistics available to the present day.

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Germans, J. Peter Maher appears to have been one of the few scholars to defend Schleicher against unfair criticism and a traditionally distorted picture of his theories (Maher 1966). Despite his efforts, we see still ten years later the old <code>cliché</code> repeated: "Schleicher began as a Hegelian, but in the end he totally rejected idealism and turned to <code>Darwinism."20</code>

A few years later, in 1971, Jay H. Jasanoff (cf. Romance Philology 25.154-55) defended Schleicher against a fellow-American's ridicule of Schleicher's Indo-European tale (Schleicher 1868b), the same year that Andrew M. Devine (1971:360) recognized Schleicher's importance in questions of method in historical linguistics.

Also in 1971, on the occasion of Schleicher's 150 birthday, a conference was held at Jena, the university at which he taught for the last eleven years of his life, in which his contributions to various branches of linquistic research are evaluated by modern-day specialists (Spitzbardt 1972). Many years earlier, Paul Diderichsen (1905-64) had analyzed Schleicher's views of language; written in Danish, this paper has been more widely accessible only when a German translation appeared (Diderichsen 1976:232-36). From 1972 onwards I have myself undertaken several studies in which I discussed Schleicher's theory of language and philosophy of science. 21 The present Introduction and a number of other recent papers (e.g., Koerner 1980a, b: 1981a, b; 1982) are an ongoing attempt to correct Schleicher's image in the annals of our discipline and to secure his rightful place in the history of linguistics. I especially hope that these recent articles will contribute to a revision of the traditional picture of Schleicher.²²

²⁰ Cf. James Henry Stam, Inquiries into the Origin of Language: The fate of a question (New York & London: Harper & Row, 1976), p. 234. Apart from this statement and a couple of others, there is an attempt (pp. 234-41) at a fair analysis of Schleicher's theoretical argument. One of the few scholars, however, who recognized the value of Maher's (1966) findings is A. Morpurgo Davies (1975:633) who states that Maher has "rightly argued against the common belief in Darwin's influence on Schleicher and has shown that the chronological data, Schleicher's own statements about his intellectual development, and, above all, his non-Darwinian approach to the theory of evolution, conflict with this assumption."

²¹ At the 11th International Congress of linguists held in Bologna in 1972, I gave a paper entitled "Paradigms in the 19th and 20th Century History of Linguistics: Schleicher - Saussure - Chomsky" (cf. Proceedings ... ed. by Luigi Heilmannm vol.I, 123-32. Bologna: Il Mulino, 1974). In October of the same year, I published a paper covering roughly the same grounds, "Towards a Historiography of

A few words of explanation may be in order with regard to the title of the introductory article to the present reprint. Against the view propagated by the N ogrammarians and frequently reiterated in the literature over the past 100 years, in fact as late as 1982 (cf. p.XIV* above), I maintain, in apparent (but only apparent) contradiction to what I said in another paper (Koerner 1976b), that it was Schleicher and, to some extent also Curtius, who prepared the ground for the subsequent research and findings in Indo-European philology, Indubitably it was August Schleicher's work that provided the 'disciplinary matrix' (Kuhn) for subsequent generations of comparative-historical linguists. In my opinion, this interpretation of Schleicher's position in the history of linguistics is not contradicted by the fact that we find in his work traces of ideas he took over from his predecessors, notably Bopp and Grimm, but also Humboldt, or that the outlook of the phonological system of the Indo-European protolanguage changed considerably between, say, 1876 and 1885 (cf. Benware 1974:54 and elsewhere).

Contrary to widespread belief, Schleicher's views on language and linguistics were fixed early in his career. Shortly after the publication of his first book, Zur vergleichenden Sprachengeschichte (1848), Schleicher worked out (what was already announced in this first attempt) a naturalistic conception of language and a research program inspired by the methods of the natural sciences, in particular botany and geology. His Die Sprachen Europas in systematischer Uebersicht (1850) documents this very well. In his Die Deutsche Sprache of 1860 and several other publications of the following period Schleicher repeated almost verbatim what he had first pronounced in his 1850 book. In other words, later statements of method and philosophy of science constitute nothing more than re-articulations of what Schleicher had arrived at in the course of 1849, when has was just 28 years old.

Linguistics: 19th and 20th century paradigms", in Anthropological Linguistics 14.255-80 (1972); Koerner (1976) constitutes a thoroughly revised and extended version of this paper. Koerner (1975) was in fact completed in June 1972; the section on Schleicher is on pp. 745-59.

One notices with regret that the 2nd ed. of R. H. Robins' influential book, A Short History of Linguistics (London: Longman, 1979), still maintains, contrary to Schleicher's own statements, "Schleicher's theory of linguistic history, whatever its original inspiration may have been, was in line with Darwinian ideas prevalent in the second half of the 19th century" (p. 181), and that "Schleicher, despite an emphasis on regularity, allowed apparently irregular developments to pass as etymological evidence" (p. 183; this affirmation is however much less unjustified than the affirmation found in the 1st

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Schleicher's Die Sprachen Europas not only provides us with a general exposition of his views, of the sharp lines he is drawing between linguistics and philology (cf. Koerner 1983), of the concept of 'Sprachengeschichte' (language history) in contradistinction to 'Sprachentwicklung' (language evolution), of the methodology of linguistic research, etc. (cf. Schleicher 1850:1-39), but also, what is often overlooked, with an attempt at language typology. Inspired by proposals made by Friedrich and August Wilhelm Schlegel and Wilhelm von Humboldt, Schleicher tries to provide a material, scientific basis for language classification. Thus he presents the traditional tripartite division between monosyllabic, agglutinative, and inflectional language types, giving at the same time a survey of all European languages and lanquage groups. Since none of the languages found in Europe exhibit the characteristics of monosyllabic structure (he did not wish to acknowledge, it would seem, that modern English may exhibit such traits, probably because it might have been seen as a counter-example to his view that monosyllabic languages remained at an earlier stage of language development), Schleicher is obliged, in order to complete his scheme, to include a fairly detailed treatment of Chinese ("Einsylbige Sprachklasse", 40-56). It is only then that the main part of the book begins; the book-title is repeated (p. 57), followed by two major sections; one dealing with the so-called 'agglutinirende Sprachklasse' (57-112), the other with the 'flectirende Sprachklasse' (133-234).

Among the 'agglutinating' or 'agglutinative' languages he counts Mongolian, Finno-Ugric, and Cheremiss; in a subsection (104-112) Schleicher adds a detailed description of Basque, which he calls an 'incorporating' (einverleibende) language. (Already in his 1848 book (pp. 9-10) Schleicher had rejected the division between incorporating and agglutinating languages on the ground that both language types make use of the principle of affixation.) Quite in line with his premise (cf., e.g., Schleicher 1848:4-5 and passim; cf the Introduction, p.XXXV*f.below; 1850:15, 37) according to which system and history are but a different viewpoint of one and the same thing, Schleicher hoped to account for the development of language with the help of language typology.

The 'inflected' or 'flexional' type of languages concerns almost exclusively the Indo-European language family; the Semitic group is presented by Maltese only (p. 122). Here we find a most careful presentation of the various branches of Indo-European; the only thing missing, it appears, was the family-tree diagram, which Schleicher began to draw so frequently from 1853 onwards (cf. Priestly 1975:301, 302, 315,

ed. of 1967, according to which he was not "troubled by apparent exceptions to the general run of sound changes in the language").

for relevant reproductions).²³ Indeed, I do not know of an earlier classification of the languages of Europe prior to Schleicher's Die Sprachen Europas which is of comparable lucidity and scientific accuracy.

Anna Morpurgo Davies, who has written the most valuable survey of language classification in the 19th century, stated that "for Schleicher typological classification was not simply a side interest", finding confirmation "inter alia, [in] some work which has often been neglected" (Davies 1975:665). She refers to Schleicher's book of 1848 and a much later article of his (Schleicher 1865b), but she might better have referred to Die Sprachen Europas (1850), which is much more explicit on this subject. More importantly, Schleicher developed his system of structural classification in various subsequent publications not included in Davies' (1975:708) bibliography. Although the author stated (p.635): "It is regrettable that no attempt has been made to analyze the full import of Schleicher's ideas about language classification", we find little in her otherwise well-researched survey that could have filled the lacuna.

Since the present preface does not allow for space to elaborate on Schleicher's typological theories, let me at least refer to the most important places where such a discussion and, at times, rigorous presentation can be found. probably most exhaustive statement of his theory of morphological typology of languages is in his 1858 monograph, Zur Morphologie der Sprache (see Schleicher 1859b), in which he developed mathematical formulae to express the different combination types. Whitney, who later chose to attack his more general views on the nature of language, regarded this work of Schleicher as "a very noteworthy attempt" (Whitney 1867:364) and presented his readers with Schleicher's scheme in some detail (pp. 364-67). In his Die Deutsche Sprache of 1860 (pp. 11-26), we find a simplified presentation of Schleicher's classificatory system, to which he added a number of corrections a year later (Schleicher 1861a).24

The section on Romance languages ("Romanische Sprachfamilie", 144-187) was written by a colleague of Schleicher at Jena, Nikolaus Delius (1813-88). As Schleicher (144n) indicates, the section got somewhat longer than anticipated, but we may gather from the style in which this section is written that Schleicher must have found it to his liking; indeed, it appears that especially the harsh comments on the linguistic corruptedness of Romanian and Romansh (pp. 185-87) are largely due to Schleicher.

In the 2nd ed. of *Die Deutsche Sprache* (1869) we may note a change in the notation from A B C to R R' R", etc., and from A, A'+A, A+A', A'+A+B', etc. to R [for 'radix'], R, r+R, R+r, r+R+r', etc (1860 = 21869:12ff.). Johannes Schmidt, the editor, must have found

PREFACE XXI*

The remainder of Schleicher's book consists of an Appendix (214-65), in which he publishes German translations of papers which had previously appeared in Czech only, and which address particular aspects of Slavic grammar (e.g., the supine and certain forms of the participle). The index is little else than an alphabetical listing of the languages and language groups treated in the study, together with a few of the key terms used in the discussion (e.g., 'agglutinating', 'analytical', etc.). For the present re-edition an index of authors has been prepared (pp. 271-74).

Since little biographical information on Schleicher is provided in the introductory article, but also since I believe that Schleicher's biography matters in an overall understanding of his accomplishments, reference should at least be made to a number of important accounts of Schleicher's life, work, and personality. One important paper has already been mentioned earlier (cf. fn.2), to which another article by the same author may be added. $^{2\,5}$ It was the late Rudolf Fischer (1910-70) who led Joachim Dietze to various studies of Schleicher (cf. fn.10; Dietze 1966). Important sources for Schleicher's biography are Salomon Lefmann's sketch (1870), for which however Lefmann did not have access to Schleicher's private papers. 26 this 100-page account must be supplemented by Johannes Schmidt's Nachruf (1869) and by his entry in the Allgemeine Deutsche Biographie (1890). A revealing document - because it shows Schleicher as a man of integrity and honesty engaged in matters concerning political freedom and justice, and a man of humanity in matters personal and public - are Alois Vaníček's personal reminiscences. 27 Although Schleicher had taken lessons in Czech from him on his first visit to Prague in 1849 (as a journalist reporting on the events surrounding the effects of the 1848 Revolution), Vaniček became one of his students following Schleicher's appointment at the University of Prague in 1850, where, from 1851 until his departure in 1857, he held the newly-established chair for comparative linguistics and Sanskrit (cf. Schleicher 1851). Pictures of Schleicher can be found in various

these changes in Schleicher's Handexemplar of the first edition.

25 R. Fischer, "August Schleicher 19.2.1821 - 6.12.1868: Zur Feier seines 140. Geburtstages", Wissenschaftliche Zeitschrift der Karl-Marx-Universität Leipzig; Gesellschafts- u. Sprachwiss. Reihe 10:5.811-815 (1961).

²⁶ Cf. Joachim Dietze, "Salomon Lefmann — der Biograph August Schleichers", Forschungen und Fortschritte 30:1.19-20 (1965).

The "Erinnerungen an Prof. Dr. August Schleicher in Prag", first published in the weekly "Bohemia", Nos.16-18 (1869), were reprinted "auf den freundlichen Rath des Prof. G. Curtius" in Karl Glaser's A. Vaniček: Biographische Skizze (Vienna: C. Konegen, 1885), 55-66.

places, only some of which will be listed here.28

Before closing, let me reiterate that the book here reproduced, August Schleicher's Die Sprachen Europas in systematischer Vebersicht, constitutes an important document in the development of Schleicher's linguistic thinking and also in the history of Indo-European comparative-historical linguistics, which, until the end of the First World War, was almost identical with linguistics tout court. (Scholars of the period working outside this frame of reference, e.g., Georg von der Gabelentz. Jan Baudouin de Courtenay, Franz Nikolaus Finck, and others, received, as a result, little recognition by their peers.) As I have argued this case in detail elsewhere (Koerner 1981a) and in the present introductory article, I need not repeat my argument here. In the general assessment of Schleicher I tend to agree with the view expressed by the late Bohumil Trnka (1895-1979):

[Schleicher's importance] does not lie in his linguistic metaphysics, but in his positive linguistic research ... One cannot say that he had been able to discover diachronic sound laws in the rigid neogrammarian sense, but he was well capable of grasping the linguistic facts, and this exactly.²⁹

Anyone reading my introductory article will notice that, in matters of linguistic theory and method (and not only in matters of practical research), Schleicher was much more aware of what he was doing than Trnka and many others have made us believe. How else could he have laid down the principles of comparative-historical analysis in such a manner that we have been building on his proposals, such as the use of the asterisk, the technique of reconstruction of proto-forms, the rigorous application of the sound laws, the Stammbaum theory, and many other concepts, for more than five generations after his death?

Schleicher's Offenes Sendschreiben eines ausländischen Linguisten an einen tschechischen Slawen (Leipzig: Breitkopf & Härtel, 1849) appears to be addressed to Alois Vaniček.

²⁸ Cf. Revue de Linguistique et de Philologie comparée 3.261 (1869); paper by Fischer (mentioned in fn.25 above), p.812; Othmar Feyl, Beitrage zur Geschichte der slawischen Verbindungen und internationalen Kontakte der Universität Jena (Jena, 1960), p.350; the paper by J. H. Scharf of 1975 (cf. fn.23 of Introduction), p.324, etc.

My translation of the following original: "[Schleichers Bedeutung liegt] nicht in seiner linguistischen Metaphysik, sondern in seiner positiven Forschung" ... "Man kann nicht sagen, daß er diachronische Lautgesetze im Sinne der strengen junggrammatischen Methode hätte finden können, aber den linguistischen Tatsachen wußte er sich in aller Vollständigkeit und Genauigkeit leicht zu bemächtigen." (Trnka 1952:141).

THE SCHIFTCHERIAN PARADIGM IN LINGUISTICS

Même chez ceux qui ne prennent plus au sérieux la généalogie simpliste des langues, l'image du Stammbaum [...] reste malgré tout en vigeur.

Roman Jakobson in 1938*

Die junggrammatische Doktrin, [...], ist nur eine konsequente Weiterführung der Schleicherschen Vorstellung von der Sprache als eines autonomen Organismus.

Brigit Benes (1958:123)

Until more is known we shall say that it is in the [eighteen] sixties, and with August Schleicher, that the great change occurred.

Henry M. Hoenigswald (1974:351)

0. Introduction

In his preface to the second English edition of Franz Bopp's (1791-1867) *Vergleichende Grammatik* (Berlin, 1833), the translator pointed out that the work had "created a new epoch in the science of Comparative Philology, ... corresponding to that of 'Newton's Princpia in Mathematics, Bacon's Novum Organum in Mental Science, or Blumenbach in Physiology'."

This statement — which, at least with regard to the choice of the *ter-tium comparationis*, appears strikingly close to Kuhn's (1970:10) para-

^{*} R. Jakobson, "Sur la théorie des affinités phonologiques des langues", Actes du IVe Congrès international des Linguistes (Copenhagen: Einar Munksgaard, 1938), 48-58, on p.49.

¹ See Edward Backhouse Eastwick's (1814-83) Preface to vol.I of Bopp's Comparative Grammar, 2nd ed. (London: Madden & Malcolm, 1854),p.[v]. Eastwick was quoting from an anonymous review of the first edition in the Calcutta Review 12 (July-Dec. 1849), 468-93, p.472.

digm concept - may well be taken as an indication that 19th-century scholars, one generation before Benfey (1869) and almost two before Delbrück (1880), felt that an important step in making linguistics a science had been taken by Bopp. It is worth noting that, despite the attention usually given to (the linguistic portion) of Bopp's Conjugationssystem of 1816, which is commonly referred to as marking the beginning of comparative linguistics (cf. also Bopp 1820), the revolutionary act of having provided for a framework for linguistic research was attributed to Bopp's later work, and this rightly so, as Szemerényi (1971:11) has stressed. A similar observation could be made with regard to the early work of August Schleicher (1821-68) whose theory of language represented something like a 'paradigm' or 'disciplinary matrix' (Kuhn 1970:184) for historical-comparative linguistics in the second half of the 19th century. However, such a viewpoint should not lead the historian of linguistic thought to ignore the author's earlier writings, which often reveal his sources of inspiration much more clearly. As a matter of fact, Schleicher's conception of language as well as his philosophy of science were clearly fixed by 1850, when he asserted that Linguistics, in contradistinction to Philology, an historical and intellectual (geisteswissenschaftlich) discipline, was, at least with respect to its method of investigation, a natural science (Naturwissenschaft). Indeed, while Bopp and especially Grimm characterized their work as New Philology (neue Philologie), i.e., more of a further, rejuvenated development of traditional philological work, Schleicher was opting for a clear-cut division of labour (cf. Schleicher 1850:1-5; Arbuckle 1973:18-19).

In what follows, I am trying to show that, contrary to the manner in which Schleicher has been depicted in the histories of linguistics from the late-19th century onwards, Schleicher's work served as a model for scientific research for more than one generation after him and, indeed, as far as historical-comparative linguistics is concerned, for much that has been done in the 20th century, whether acknowledged or not.

1.0 The Origin of Schleicher's Naturalistic Views, and the Question of His Alleged 'Darwinism'

It seems because most writers of histories in linguistics have had at best a nodding acquaintance of disciplines outside their own field that the allegation that Schleicher, originally an ardent Hegelian, embraced Darwinism as the basis for his theory of language later in his life, could have become common currency in the annals of linguistic science. Since traditional accounts (e.g., Benfey 1869, Thomsen 1927, Pedersen 1931) did not allege that Schleicher followed Darwin's lead, we must look for other sources from which later writers took this distorted view. To some at least it must come as a surprise to note that Pedersen, who has been referred to as the authority on 19th-century historical-comparative linguistics, simply stated that "in all seriousness Schleicher conceives of language as an organism" without making a single reference to Darwin (Pedersen 1931:242).

Some linguists have felt that Delbrück was instrumental in the cementing of what appears to have become the received opinion about Schleicher's theory of language (cf. Maher 1966:1-2). However, Delbrück (1880:44) stated clearly:

Die Wirkung der Darwin'schen Anschauungen lässt sich nicht an Schleicher beobachten, sie wird uns vielmehr in der Adaptationstheorie seines Gegners Alfred Ludwig ([1832-1912)] entgegentreten. (Spread print in the original)²

In later editions, in particular in the sixth and last of Delbrück's <code>Einleitung</code> (1919), Darwin is not even mentioned. It would therefore be difficult to put the blame on Delbrück where Darwin's influence on Schleicher is concerned, though Delbrück (1842-1922) no doubt was influential in the propagation of the view that Schleicher remained in effect a 'philologist' (quite in contrast to what he said of himself again and again from 1850 onwards), that his theories represented nothing but a development of the Boppian view of language, and that the neogrammarians provided for 'new endeavours' in linguistic science (cf. Delbrück 1882:53ff.).

 $^{^2}$ This passage is conspicuously absent from the 1882 English translation (see Delbrück 1882).

There is, however, another 19th-century scholar who, at least as far as the generation of the Neogrammarians is concerned, played an important role. I am referring to the American Sanskritist and general linguist William Dwight Whitney (1827-94), who, soon after the German scholar's death in December 1868, began a running attack on what he regarded Schleicher's 'physical theory of language' (Whitney 1871). It appears that the Young Turks at Leipzig gladly accepted Whitney's debunking of a linguist who without doubt had dominated the field of historical-comparative linguistics during the 1860s and early 1870s. In their youthful arrogance and patricidal predisposition the Junggrammatiker were ready to either completely ignore their debt to Schleicher or to ridicule him. Interestingly enough, perhaps because August Leskien (1840-1916), the original leader of the Neogrammarians, was himself a former pupil of Schleicher's, there were few attacks on Schleicher actually published, though there seem to be reasons to believe that this was done frequently orally, both in the classroom and in the Bierkeller, for Ferdinand de Saussure (1857-1913), who was a close associate of the Young Turks during the heyday of the 'junggrammatische Richtung', had this to say about Schleicher - and this in a never completed account of Whitney as, a 'comparative philologist':

... lorsqu'enfin cette science [du langage] semble <triompher> de sa torpeur, elle aboutisse à l'essai risible de Schleicher, qui croule sous son propre ridicule. Tel a été le prestige de Schleicher pour avoir simplement essayé de dire quelque chose de générale sur la langue, qu'il semble que ce soit une figure hors pair <encore aujourd'hui> dans l'histoire des études linguistiques, ... 3

Saussure's attack on Schleicher indicates at least two things: first (as is clear from the text of the manuscript), Saussure was of the opinion that little advance had been made by 1894, the year of Whitney's death, in terms of a general theory of language, and, second, that the influence of Schleicher's ideas about language and linguistic science was still felt and, in Saussure's case, oppressively so.

As a matter of fact, we may refer to statements made by contempo-

³ Quoted after the text established in Rudolf Engler's édition critique of the Saussurean Cours, tome I (Wiesbaden: Harrassowitz, 1968), p.8.

raries of the *Junggrammatiker* which suggest that Schleicher was still widely regarded as the scholar on whom later generations of linguists have built. In this section, I am quoting from writings of two German linguists, though, as will be shown later (see 4.0 below), Schleicher had a noticeable following abroad, notably in Italy and France.

For example, Hermann Collitz (1855-1935), the first President of the Linguistic Society of America, asserted in 1883 that Schleicher's work provided a 'pattern' for subsequent work in the field:

Das Erscheinen von August Schleichers Compendium der vergleichenden grammatik der indogermanischen Sprachen (1861) bezeichnet, wie auf den übrigen gebieten der vergleichenden grammatik, so vor allem auf dem des vocalismus den beginn einer neuen epoche der forschung. Zwar kann man nicht sagen, dass Schleicher den früheren ansichten* gegenüber in allen punkten das richtige getroffen habe; wol aber bildet seine darstellung ein eigenartiges, in sich fest gefügtes und nach allen seiten ein abgeschlossenes system, das von der ursprache bis zu den einzelsprachen herab in der entwicklung des vocalismus feste gesetzmässigkeit aufzuweisen suchte, jeder einzelnen vocalischen erscheinung ihren Platz anwies, und vor allem durch die art und weise, in welcher es die erforschung der sprachlichen tatsache vornahm, für die folgezeit ein muster abgab. (Italics mine: KK)⁴

Interestingly enough, Saussure, in the critique of Schleicher from which I quoted above, concedes a few lines later that only he had "un coup d'œil assez long pour avoir des vues d'ensemble", adding that in 1894 (when Saussure was writing) "ces vues ne nous satisfont plus, mais il y a une tentative vers le général et le systématique", and concluding with the statement "Il est plus intéressant d'avoir un système même qu'un amas de notions confuses." In other words, Saussure was willing to recognize Schleicher's importance even though he did not agree with either the premisses or the results of his theory.

Another German scholar of the period, writing some twenty years after Collitz, Theodor Siebs (1862-1941), who is best remembered for his work on Frisian and on account of his development of a modern Ger-

In a footnote, Collitz referred to contemporary accounts, by Hermann Berthold Rumpelt (1821-81) and Christian Wilhelm Michael Grein (1825-1877), of the linguistic views of Grimm, Bopp, and others.

⁴ H. Collitz, "Der germanische ablaut und sein verhältnis zum indogermanischen vocalismus", Zeitschrift für deutsche Philologie 15.1-10 (1883), on p.2. (For an English translation, see Koerner 1981a.)

man code for theatre speech (Bühnenaussprache), affirmed in 1902, after having spoken at length about Georg Curtius (1820-85), the acknowledged teacher of almost all original members of the *Jungarammatiker* group:

Der grösste Teil der heute führenden Sprachforscher sind von ihm [i.e., Curtius] oder von August Schleicher beeinflusst worden. Und dieser [i.e., Schleicher] ist es am allermeisten gewesen, der Zucht und Methode für die Sprachwissenschaft verlangte, und zwar so scharf und so zwingend, wie sie bis dahin niemals gefordert worden waren. Schleicher betrachtete die Sprachwissenschaft im letzten Grunde als eine mit historischem Material arbeitende Naturwissenschaft; [...] Mit gewaltiger Kenntnis lebender Sprachen, besonders der slawischen und litauischen, verband er eine klare Übersicht über den Besitzstand auch der älteren Perioden der indogermanischen Idiome. Und so war er der Mann, um "einmal Bilanz machen und in systematisch-kurzer Übersicht mit zwingender Anschaulichkeit die Resultate und Ergebnisse reichlich darlegen zu können" [Siebs is quoting from Schleicher]. Dies geschah im "Kompendium der vergleichenden Grammatik".5

Interestingly enough, neither Collitz in 1883, nor Siebs in 1902 make mention of Schleicher's alleged 'Darwinism'. Such a label, however, was given to Schleicher by Whitney (1874), and it appears that later historians of linguistics based their opinion on his judgement. Interestingly enough, in his first book, Language and the Study of Language (1867), Schleicher was cited on various occasions (e.g., pp.293, 364-366) with approval, whereas in his second book, Life and Growth of Language, Schleicher was only mentioned in passing, together with several other scholars of the period (Whitney 1875:318).

Schleicher's alleged 'Darwinism' can only be explained by the importance attributed to Whitney in matters of general linguistic theory (cf. Koerner 1980b, for details), and, perhaps even more so, by the confusion of chronological detail in the minds of later generations of linguists, who did not realize that in Schleicher the development of his naturalistic views of language and his appraisal of Darwin's evolution theory did not occur at one and the same time, but that he embraced the English biologist's theories as essentially identical with his own convictions long after he had established his own concept of language. A few statements made by Schleicher prior to the appearance of *Origin of*

⁵ Th. Siebs, "Die Entwicklung der germanistischen Wissenschaft im letzten Viertel des neunzehnten Jahrhunderts", Ergebniss und Fortschritte

Species in November of 1859 will suffice to illustrate this fact. But let us first see how Whitney's opinion on Schleicher was transmitted to subsequent statements about his 'Darwinism'.

Max Müller (1823-1900), probably the most influential 19th-century linguist writing in English, noted in 1887 about Schleicher that he was "though a Darwinian", "also one of our best students of the Science of Language". In the preface to his *Science of Thought*, however, he had noted about his own work (and thus extended the meaning of 'Darwinism'):

If Darwinism is used in the sense of Entwickelung, I was a Darwinian, as may be seen from my "Letter on the Turanian Languages [published in 1854]", long before Darwin. No student of the Science of Language can be anything but an evolutionalist, for, wherever he looks, he sees nothing but evolution going on around him.⁷

In this interpretation of the term Schleicher was no doubt a 'Darwinian', namely, someone subscribing to the idea that language evolved organically in a manner comparable to, but by no means identical with, living organisms in general, as he pointed out in his famous 'open letter' to Haeckel:

Of course no more than the principles of Darwinism could be applied to the languages. The realm of speech is too widely different from both the animal and the vegetable kingdoms to make the science of language a test of all Darwin's inductions and details. (Schleicher 1869:65-66 = 1863:31)

Some twenty years after Müller's observations, we find a much more forceful affirmation concerning Schleicher's treatment of language, an affirmation which appears to have stuck with many later writers on the history of linguistics. Thus we find in John Edwin Sandys' *History of Classical Scholarship*, vol.III (Cambridge Univ. Press, 1908), the following judgement (cited in Maher [1966:1]):

He [i.e., Schleicher] was not a classical scholar [...], he was a Darwinian botanist who handled language as if it were the subject matter of natural, and not of historical science (209).

Maybe we have here before us the source of much later affirmations, such as Schleicher was a "botaniste devenu linguiste" (Mounin 1967:193) and that he "had also been a biology professor" (Blumenthal 1970:3).

der germanistischen Wissenschaft im letzten Vierteljahrhundert ed. by Richard Bethge (Leipzig: O. R. Reisland, 1902), iii-lxxviii, on p.ix. ⁶ Science of Thought, vol.I (New York: Scribner's Sons, 1887), p.160.

In his pamphlet of 1863, written following an instigation of his colleague at the University of Jena, the biologist and enthusiastic follower of Darwin, Ernst Haeckel (1834-1919), Schleicher stated that he had completed his book, Die Deutsche Sprache (1860), before having seen Darwin's Origin of Species; in fact, he read Darwin for the first time in 1863, in the second German translation by Heinrich Georg Bronn (1800-1862). The 'missive' addressed to Haeckel⁸, is revealing in many ways, in particular since Schleicher shows himself quite well informed about Darwin's predecessors. About his own background in the natural sciences, especially botany and zoology, he said that he had learned in matters concerning method and minute observation from the work of Matthias Jacob Schleiden (1804-1881), who was professor of botany in Jena from 1839 until 1863 (cf. Schleiden 1849), and of Carl Vogt (1817-1895), who published a 2-volume popular study of physiology in 1845-47 (3rd revised ed., 1861). Schleicher recognizes Sir Charles Lyell's (1797-1875) Principles of Geology, first published in 1830-32, as one of the major sources of Darwin's inspiration, stating,

It appears, therefore, to me, that Darwin's theory is but the unavoidable result of the principles recognised in the modern science of nature. It is founded upon observation, and is indeed an attempt at a history of development. Just what Lyell has done for the history of the life of the earth, Darwin has attempted for that of the inhabitants of our planet. The theory of "the origin of species" is [...] but the true and legitimate offspring of our inquiring age. Darwin's theory is a necessity. (Schleicher 1869:29-30 = 1863:11-12)

Moreover, Schleicher (1869:16 = 1863:4) refers to passages in his 1860 book, in which he had expressed ideas about the nature of language which, in his view, are quite in line with Darwin's theory. In his *Die Deutsche Sprache*, Schleicher had noted (pp.43-44 — quoted in the English translation that Alexander Bikkers appended to his 1869 translation of Schleicher 1863):

Max Müller, Science of Thought, vol.I (London: Longmans, etc.; New York: Scribner's Sons, 1887), p.xi. Curiously enough, Müller claimed later on (cf. Indogermanische Forschungen, Anzeiger 5:10 [1895]) that Schleicher took his evolutionary ideas from his work, a claim which, I believe, the present article will refute (cf. section 2.0 below).

⁸ For a detailed study of Schleicher's influence on him, s. Koerner 1981b.

During so long a period, extending over thousands of years, the primitive relations might easily be shifted and disturbed, for languages are not as plants tied to their respective habitats; their bearers are nations capable of any change of seat and even of vernacular. Since we see in a less distant period, nay, up to the present day, how languages disappear and how the boundaries of speech are shifted, nothing is more natural than to suppose that many more languages disappeared, and that the shifting of the primitive relationship of the geographical distribution of speech was much more violent, at a time when each language was the vernacular of a comparatively limited number of individuals. Thus arose the now observable anomalies in the distribution of languages over the earth, particularly in Asia and Europe.

We assume therefore that languages arose in a very great number; such as were neighbours resembling each other, although arising independently, and — taking Indo-Germanic or Semitic, say, as the centre — spreading more or less in this or the other direction. Many of these primitive languages now, or perhaps the greater part of them, died out in the course of ages; owing to this others gradually extended their territory, and the geographical distribution of languages was so much disturbed that it became impossible to discover hardly any traces of the primitive law of distribution.

Whilst therefore the surviving idioms, with the increase of the people that spoke them, gradually divided themselves into different branches (languages, dialects &c.), many of the primitive languages which had arisen independently of each other, gradually died out. This very process — the decrease of the number of languages — is going on speedily and incessantly, even in our days, for instance in America. Here, likewise, let us be satisfied with the observation of the fact and leave it to philosophy to search for a clearer conception and explanation from the essence of mankind. (Schleicher 1869:67-69 = 1860:43-44)

This lengthy quotation from Schleicher's *Die Deutsche Sprache* (which was intended to serve as a popular introduction to the history of the German language as well as to linguistic science) may serve as the basis for a comparison between his evolutionist theories of language and Darwin's theory of the evolution of the animal kingdom. Scrutinized more closely, it appears that the similarities are less conclusive as regards a convergence between Darwin's and his own views, than Schleicher (1869:16-17 = 1863:4) made out. In the next section, we will see that Schleicher's evolutionist conceptions are essentially pre-Darwinian in nature, and that they remained that way even after his acquaintance with *Origin of Species*.

2.0 The Evolution of Schleicher's Linguistic Theory

In the section heading I have used the ambiguous English expression 'linguistic theory' since I would like to retain the two possible interpretations it permits, namely, "theory of language" and "theory of the science of language", since both are closely connected in Schleicher. If language is seen as evolving like a natural organism, linguistics must be a natural science, and, conversely, if the science of language derives its methods of investigation from the natural sciences, language will inevitably seen through the spectacles of a natural scientist, though the latter viewpoint may not be as misleading as it seems at first sight, if the field of study is restricted to certain phenomena and certain levels of language which may be open to rigorous, formal analysis.

2.1 The reader, unacquainted with Schleicher's philosophy of science, may be struck by explicit references to the work of Georg Wilhelm Friedrich Hegel (1770-1831) in August Schleicher's first book, Zur vergleichenden Sprachengeschichte (Bonn, 1848), which appeared when its author was just twenty-seven years old. Schleicher had begun his studies in the fall of 1840, first in Leipzig (where he left after only one semester) and Tübingen (1841-43), though not in the field of linguistics but in theology - his father had hoped he would become a country parson - and philosophy, and it appears that he was introduced to Hegelian philosophy at Tübingen, the 'hotbed of Hegelism' (Arbuckle 1973:25). Delbrück, in his account of Schleicher (1882:40-55), felt, as a result, compelled to investigate to what extent this German philosopher might have influenced Schleicher's linguistic thought. Delbrück (p.40) believed that Schleicher was "an adherent [of Hegel] in his youth", and that he showed "in the latter part of his life a passionate predilection" for "modern natural science". Such a view, which seems to be the standard view of Schleicher's intellectual development, is quite misleading and shows a lack of biographical knowledge (cf. the account of Schleicher's life in Dietze [1966]). Schleicher, whose father was a country doctor, had an ardent interest in nature, especially in botany, already as a schoolboy (Dietze 1966:16), and although Schleicher subscribed to the view that the study of language had to do with phenomena of an historical kind, his 1848 book makes running references to the sphere of nature, as will become obvious in our analysis below.

Schleicher's frequent references to Hegel may be taken as an indication of the intellectual climate of the period, and also that the young author was in search for a philosophy of science on which the study of language could build. Most of Hegel's writings appeared posthumously, during 1833 and 1845, and translations into the major European languages followed soon thereafter. Hegel, a contemporary of Wilhelm von Humboldt (1767-1835), August Wilhelm Schlegel (1767-1845), his brother Friedrich (1770-1829), and other members of the Romantics in Germany, did not play an important rôle in the philosophical discussions for the greater part of his life. An exception was his Encyclopädie der philosophischen Wissenschaften im Grundrisse (Heidelberg: A. Osswald, 1817), which had two further editions during the author's lifetime (1827 and 1830). Significantly, Schleicher refers to two posthumous works of Schlegel; the one, Vorlesungen über die Philosophie der Geschichte, consisting of a compilation of students' notes as well as notes by Hegel himself from his lectures on "Philosophie der Weltqeschichte" held five times at the Universities of Heidelberg, Jena, and finally Berlin between 1822 and 1831 (Berlin: Duncker & Humblot, 1833-36; 2nd ed., 1840-44); the other, Vorlesungen über Naturphilosophie (ibid., 1842; 2nd ed., 1847), constitutes an extension of Hegel's earlier Encyclopadie and in effect a compendium of the accumulated knowledge in the natural sciences of the early 19th century. 10

As noted earlier, the standard opinion about Schleicher's intellectual development is that in his early work he embraced Hegelian philosophy only to abandon it later in favour of the natural sciences. It is true that his first book, *Zur vergleichenden Sprachengeschichte*

⁹ Schleicher (1848:4n) merely refers to 'Hegel, Einleitung zur Philosophie der Geschichte', which seems to suggest that he was citing Hegel from memory rather than from a printed source.

 $^{^{10}}$ References in the text are made to the modern edition (Hegel 1970).

(1848), does not yet exhibit the crass materialism and in effect scientism characteristic of Schleicher's subsequent work, but it can be shown — and the references to Hegel do not refute but in effect support this claim — that the seed for the naturalistic views he expounded from 1850 onwards had already taken root in this earlier study. In the introductory pages, Schleicher makes an argument in favour of linguistics as an historical science, rejecting for language what Hehad identified as the characteristics of nature:

Wie sollte auch die Sprache, die durch so enge Bande mit dem Geiste des Menschen verknüft ist, einen anderen Weg gehen als dieser und dem Gange der Organismen der Natur folgen, bei welchen dasselbe Leben wieder da Platz greift, wo es eben geendet hat, um den ununzählige Male wiederholenden Lauf von Entstehung zu Vernichtung von Neuem durchzumachen. (Schleicher 1848:2)

In contrast to the perpetually cyclic movement from birth to death in nature, language as an intellectual and typically human faculty follows the analogue of history, since "in beiden zeigt sich stetiges Fortschreiten zu neuen Phasen", as Hegel had asserted. What is, however, characteristic of history is that is defined by the regularities (das Gesetzmässige) which prevails and is open to reasoned description despite constant changes occurring in its progress. The same, Schleicher argues (p.3), should hold true of the history of language.

From the close association of language with human life, Schleicher deduces that, since man, despite certain individual dissimilarities, exhibits constant features which are common to all, language should follow along the same lines. Therefore, since history reveals by and large the same path of development, a comparative approach to the history of languages would reveal these general aspects (das Allgemeine) in contrast to the individual ones (alles Einzelne) of each separate language (Schleicher 1848:3-4). But there are differences too between historical developments in general and the history of languages. Having characterized history as "das successive Hervortreten der Momente", Schleicher argues as follows concerning the relationship between an historical and a non-historical ('systematic') viewpoint:

Was in der systematischen Betrachtung neben einander erscheint,

das tritt in der Geschichte nach einander auf; was dort Moment ist, ist hier Periode. Natürlich, denn das System ist die Darstellung des Seienden, die Geschichte des Werdenden, das Sein aber setzt das Werden voraus; [...]. Keine Periode im geschichtlichen Werden wird durch das folgende vernichtet, die folgende bringt nur etwas Neues zu dem schon Bestehenden hinzu, wodurch freilich das Frühere mehr oder minder verändert wird: in jeder höheren Entwicklungsstufe sind sämmtliche frühere als aufgehobene Momente enthalten. Wenn aber die nach einander eintretenden Momente fortbestehen, so treten sie sofort in das Verhältnis des Nebeneinander: die Identität von Geschichte und System ergiebt sich von selbst. Es gilt also bei dieser materiellen Identität von System und Geschichte der Schluss vom Einen auf das Andere, ist mir das Eine bekannt, so mag ich aus ihm das Andre mit Sicherheit erschliessen; oder, es bedarf gar keines Schlusses, sondern nur einer veränderten Anschauung oder Darstellung, eines formellen Umgiessens. (Schleicher 1848:4-5)

This lengthy quotation is revealing in many ways. It is not necessary to follow the logic, or lack of it, of Schleicher's argument. What is important, however, is both his terminology and his theoretical conclusions, as they are characteristic for his procedure. To begin with, Schleicher clearly realizes the distinction between system and history (in a way anticipating Hermann Paul, Saussure, and other late 19thcentury theorists of language); in fact, he speaks on several occasions of the 'Nebeneinander des Systems' in contrast to the 'Nacheinander der Geschichte' (Schleicher 1848:5, 6, 22, 23; cf. also p. 27), repeating the distinction in subsequent writings (e.g., Schleicher 1850:15; 1860:33, 46). In a typically Hegelian fashion Schleicher believes that the system reveals itself in co-existing terms, whereas history consists of successive stages of events, of a 'Nacheinander der Momente' (1848:22). Indeed, he claims a substantive identity to exist between history and system, presupposing little else than what we may refer to as a change of the 'point de vue' (Saussure) on the part of the analyst.

When Schleicher expresses his conviction that knowledge of either of the two would suffice to deduce the other, he seems to be expressing a view which is known in geology as 'uniformitarianism', which found its most influential promoter in Charles Lyell (cf. Wells 1973, for details). At the same time it may be asked whether Schleicher,

subconsciously at least, was not concerned with reconciling the opposing views of his predecessors, the one emphasizing the comparison of languages (which presupposes the establishment of an ahistorical moment of a given set of two or more languages) represented by Bopp, the other the development of individual languages or language groups (viz. Grimm). It is also likely that Schleicher was under the deep influence of Hegel's view of the essentially systematic nature of historical development, as frequent references to his *Philosophie der Geschichte* would suggest (Schleicher 1848:4, 16, 20).

Two further ideas put forward in the above quotations deserve special attention. Both, I think, lead *nolens volens* to a naturalistic, in contrast to an historical (geisteswissenschaftlich), view of language, despite Schleicher's claim that these observations apply particularly to the study of history. The one is that each stage of development contains all previous stages (and that there is a kind of progress by accumulation); the other, closely related to the former, denies that a replacement, the annihilation of earlier periods, takes place. In order to give support to his views, Schleicher (1848:5) suggests the "systematische Betrachtung des organischen Lebens" as an analogue, distinguishing between three stages of development, i.e., mineral, vegetable, and animal organisms. In other words, the plant contains the stage of the mineral, and the animal contains the characteristics of the plant, a claim which he finds confirmed through fossil remnants from earlier periods of our planet.

It is important to note that, in the subsequent discussion, Schleicher fails to corroborate his claim that the same relation between history and system applies to the "rein geistige Sphäre", although he reiterates his assumption that it is "das Charakteristische der Geschichte überhaupt, dass sie uns das Nebeneinander des Systems, die Momente des Begriffes als ein Nacheinander, als Perioden vorführt" (p.6). Having made this assertion, Schleicher asks whether the same applies to language, and indeed he finds that Humboldt's (original)¹¹ tripartite dis-

According to Eugenio Coseriu, "Sulla tipologia linguistica di Wilhelm von Humboldt", Lingua e stile 8.235-66 (1973), the fourfold distinction is due to August Friedrich Pott (1802-87), not Humboldt.