

La grammatica tra storia e teoria
Scritti in onore di Giorgio Graffi

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In copertina:

Laurent de La Hire, *Allegoria della Grammatica*, 1650, National Gallery, London
“vox litterata et articulata debito modo pronunciata”

Dynamic, organic, mechanical: the general significance of the debate about Indo-European Ablaut in the early nineteenth century

Anna Morpurgo Davies

La linguistica dell'Ottocento è affascinata e ossessionata dal problema dell'apofonia vocalica. Perché in alcune lingue indoeuropee antiche (e moderne) basta un'alternanza vocalica per indicare un contrasto di forma grammaticale? Si pensi a alternanze del tipo inglese 'I sing / I sang' (canto/ho cantato), dove il contrasto presente/passato è segnalato soltanto dal cambiamento di [i] in [a]. Per alcuni l'apofonia basta a distinguere le lingue in due tipi distinti e irricongiungibili con conseguenze che non sono solo linguistiche. Si cerca di spiegare le alternanze ricollegandole a fattori 'meccanici', come la lunghezza della parola, la qualità delle altre vocali, l'accento, ecc., spiegazioni che sono simili a quelle attuali sia pur con delle divergenze e che per quanto valide hanno pur sempre numerose eccezioni. Ma ancor prima si delinea una spiegazione 'organica' che rimane importante almeno fino alla fine del secolo e che iniziata da Friedrich Schlegel ha tutto l'appoggio di linguisti importanti come Jacob Grimm e August Schleicher. Di Grimm si è detto che per lui lo studio dell'apofonia era una religione. Come possiamo capire il significato di questa passione per l'apofonia e anche del fatto che basta dire che è organica perché questo valga come una spiegazione? Questo studio riconsidera le posizioni prese dal primo Ottocento nel contesto dell'organicismo e dello storicismo prevalente, le reinterpretazioni della metà del secolo per arrivare alla conclusione che, se si riesce a penetrare l'oscurità della terminologia inconsueta, le spiegazioni organiche hanno un loro significato e una loro logica importanti e non sono così assurde come sembrano al lettore sprovvisto.

1. While reading nineteenth century linguistic work one oscillates between boundless admiration for the greatness of the achievements and amazement at the absurdity or incomprehensibility of some general statements or the direction in which the subject is moving. One and the same discussion or subject may prompt both reactions. Nowhere is this clearer than in the accounts of Indo-European Ablaut. Indo-European languages often mark grammatical contrasts with vocalic alternation or Ablaut; the contrast may depend entirely on it (as in English *drive* present vs. *drove* past) or Ablaut may be accompanied by various forms of affixation (as in ancient Greek *leipō* 'I leave' present vs. *elipon* 'I left' aorist or in the Sanskrit contrast of forms like *veda* 'I know' vs. *vidma* 'we know'). The definition and interpre-

tation of the phenomenon dominates the historical work of the nineteenth century acquiring and shedding in turn metaphysical, typological, cultural, and even racial overtones, and at the same time opening the way to methodological developments which are still influential nowadays. I do not think that the few pages which follow will dissipate the general confusion since I am simply scratching the surface of the various problems, but I would like to offer these meanderings through the byways of nineteenth century philology to Giorgio on his sixtieth birthday because he is more capable than most linguists of treating with respect our predecessors, while dissecting their thought and separating the substance from the jargon; few people combine theoretical clarity and historical awareness as he does.

The debate about Ablaut cannot be taken in isolation. In various, often contradictory, ways it becomes part of all the major questions which dominate the linguistic thought of the early nineteenth century: how do we classify languages? what are the major language types? is it possible to establish a hierarchy of language types from the most advanced to the most primitive? how do we conceive of language evolution? can one and the same language change type in the course of its evolution? More specifically, and with reference to the Indo-European languages, Ablaut theory plays a major role in the discussions about the theory of the root (did IE roots originally have an independent existence and what form did they have?), and the beliefs about the nature and origin of inflection. More than that, it attracts a strength of feeling that is now difficult to recognize, let alone understand, even though Ablaut studies are now as flourishing as ever among Indo-Europeanists. Of Jacob Grimm it was said by a twentieth-century scholar that his *Ablautlehre* was religion and indeed in his *Deutsche Mythologie* Grimm himself compared the development of vocalic contrasts to that of the Germanic gods (MUSCHG 1935: 115).

2. The question then is twofold: first, what was actually said about Ablaut and how can we make sense of it? Second, why this central role of Ablaut theory? In what follows I shall concentrate on the more strictly linguistic contributions of the first part of the nineteenth century with only brief references to a few later works. Unfortunately this limited chronological brief prevents me from even mentioning the most outstanding work prompted by the study of Ablaut: Saussure's *Mémoire sur le système primitif des voyelles dans les langues indo-européennes* (1879). At the same time the concentration on the technical linguistic work means that I shall not be able to follow the typological and ethnological implications of whatever theory prevailed.

The early work is well known and has often been summarized, e.g. by

BENWARE (1974) and SCHLERATH (1986).¹ In the nineteenth century, whatever the earlier antecedents, the discussion clearly starts with Friedrich Schlegel and his book *Über die Sprache und Weisheit der Indier* (1808), where his quasi mystical dithyramb about the beauty and importance of Sanskrit, which he takes to be the mother language of those which we now call Indo-European languages, is accompanied by a series of general statements about the defining features of that group of languages. As the following passage shows, internal change and alteration (which refers to Ablaut) is given a prominent place:

One must accept that the structure of the [Indic] language, which is organically built through and through, branches (*ramificirt*) into all its meanings through inflections or internal changes and alterations (*Umbiegungen*) of the root's phonetic form, that is to say it is not merely composed mechanically with words and particles, which would leave the root itself unchanged and unproductive (*unfruchtbar*). (SCHLEGEL 1808: 41f.)²

Later on this 'organic' criterion is taken as the main feature used to divide the languages of the world into two categories:

The real essence of the linguistic principle which prevails in Indic and in all languages derived from it is best shown through contrast. For not all languages share the grammatical structure (*Grammatik*) whose ingenious simplicity we admire in Indic and Greek. [...]. In many other languages, and in fact in the majority, we find characteristics and laws of grammar quite different from this, indeed in complete contrast with it. The secondary specifications of meaning are indicated either through an inner change of the root's phonetic shape, through inflection, or, on the other hand, through the addition of a separate word, which in itself indicates plurality, past, future obligation or other relations of the kind. These two simpler structures also characterize the two main types of languages. On closer inspection all other structures are only modifications and secondary forms of these two types. (SCHLEGEL 1808: 44)

Clearly the contrast is between those languages which later on will be

¹ Cf. also MAYRHOFER (2002-2003). Jean ROUSSEAU (1980) adds a very useful comparison with Adelung. Summaries of the various contributions from the time of Bopp and Grimm to the date of publication of each work can be found in RUMPELT (1860: 105-29), GREIN (1862), MASING (1878). For the later period see BECHTEL (1892).

² Here and elsewhere I have translated the text as literally as possible. One should not use the 1849 translation by E. J. Millington reprinted as an appendix in SCHLEGEL (1977) without checking it since at times it is misleading. Note, for instance, that the word 'organic' is avoided and often replaced by 'organized' which for us at least has a very different meaning. On the other hand one can use with profit the new Italian translation by Fedalto and Zagatti (SCHLEGEL 2008).

called ‘agglutinative’ and the ‘inflected languages’. In Schlegel’s view the latter are characterized by roots which carry the lexical meaning and which are ‘organically’ modified in order to indicate the grammatical role of the word in the sentence. The same statement is reiterated again and again:

“In the Indic or Greek languages each root is really what the name implies and is like a living germ; since the relational values are indicated through internal modification, its unfolding is given free play and the fullness of its development knows no limits and is often wonderfully rich.” (SCHLEGEL1808: 50f.)

To this feature Schlegel attributes the fact that the various forms derived from the same root are immediately recognizable as such and guarantee the stability of the mother language and its descendants so that, in spite of the passage of time and the geographic separation, these can now be identified as having a common origin. The implication, though this is not stated, is that this stability makes it easier to identify what he would call the Sanskrit family, i.e. the Indo-European family, than other families.

We have here the main starting point of that classification of languages into three categories (inflectional like Greek or Sanskrit, agglutinative like Turkish, isolating like Chinese) which was largely due to Friedrich’s older brother, August Wilhelm Schlegel, and which, with the further addition of a class of incorporating languages largely attested in America, dominated the nineteenth century. The importance of the so called morphological classification was considerable, not least because it came to be linked with an assessment of the value and status of each language, from the most perfect to the most primitive. Predictably, given the prevailing Eurocentrism, the inflectional languages were deemed to be at the top of the pyramid, but these linguistic distinctions were not merely logical and esthetic, though both points were important; in the period of colonialism and in some circles they also acquired political importance, sometimes, or perhaps mostly, to the dismay of professional linguists and philologists. ‘Lower’ languages could be connected to ‘lower races’ and the colonial enterprise could be intellectually justified because it established the dominance of the ‘superior races’ who spoke a ‘superior language’ over the ‘inferior races’ who spoke an ‘inferior language’. Much depended on the views about polygenesis or monogenesis: those who, like Friedrich Schlegel, thought that languages could not become inflectional if they were not so from the origin accepted a polygenetic view of the origin of language; others, like e.g. Max Müller, assumed that there was a possibility of development from isolating to agglutinative to inflectional and thus were entitled to preserve the idea of monogenesis.³

³ The basic texts here are two articles by Sebastiano Timpanaro on ‘Friedrich

So much is known but it was necessary to repeat it in order to define the broader scenario against which to consider Schlegel's statements. Most recently the rationale and the philosophical and intellectual antecedents of Schlegel's dichotomy of languages into two main categories (inflectional and non-inflectional) have been excellently discussed by MAGGI (2008). However, here my aim is different. I shall ignore the broader implications which I have adumbrated above and shall try to look at the question from the point of view of the practicing linguist. What exactly is inflection in the view of Schlegel and those who followed him, why does it count as an internal modification of the root, and what has all this got to do with Ablaut?

2.1. A passage of the 1808 book where Schlegel highlights the grammatical similarities of the various Indo-European languages and of Germanic, Sanskrit and Greek in particular, may clarify some of the ambiguities:

German (*deutschen*) grammar shows many other agreements with Greek and Indic besides those which it shares with Persian. In German, as throughout in Indic, *n* is characteristic of the accusative, *s* of the genitive. In Indic the final syllable *-tvon* forms substantives which indicate a quality, just as *-thum* is used in German. The subjunctive is in part marked by a change of the vowel, as in all languages which follow the old grammar. Also comparable is the formation of the imperfect marked by a change of the vowel in one class at least of German verbs. If in another class the imperfect is formed inserting a *t*, this, to be sure, is a special characteristic, just as is the *b* in the Latin imperfect; the principle, however, is still the same, namely that the secondary determination of the meaning for time and other relational features is not marked with special words or with particles added from outside the word, but through an inner modification of the root. (SCHLEGEL 1808: 32f.)⁴

The examples are reasonably clear. Nowadays we tend to speak of inflection with reference to the nominal and verbal endings of case forms, numbers, tenses, persons etc. and clearly Schlegel too includes under inflection this type of formation, as shown by the reference to the dental preterit of Germanic (English *loved*, German *liebte*, etc.). But he mentions first the vocalic alternation found in the contrast of present and preterit (as in English *sing*, *sang* or German *singen*, *sang*) and that of the indicative and

Schlegel e gli inizi della linguistica indoeuropea in Germania', and 'Il contrasto tra I fratelli Schlegel e Franz Bopp sulla struttura e la genesi delle lingue indoeuropee', reprinted in TIMPANARO (2005: 17-56, 57-103). The first is also available in English translation in SCHLEGEL (1977: xi-xxxviii).

⁴ Here and later, when discussing Grimm, I translate *deutsch* with either 'German' or 'Germanic', but the choice is never easy. Note that in Schlegel's time Skt. <a> was transliterated as <o> and <ā> as <a>.

subjunctive (German preterit indicative *sang* vs. subjunctive *sänge*, Skt. indicative *bharati* ‘carries’ vs. subjunctive *bharāti*).⁵ Why he does this is clear if looked at in its context. The crucial difference for most linguists in the early nineteenth century is between what we would now call lexical meaning, which in Indo-European languages is seen as carried by the root, and ‘form’ or grammatical function which may not be marked at all (as in the view of the period happened with Chinese) or is marked in a number of different ways. In other words a distinction is made between meaning (largely identified with reference) and linguistic structure, or, in terminology closer to that of the time, grammar (which mainly includes phonology, morphology and morphosyntax). From the point of view of grammar Schlegel’s main aim is to distinguish inflection from what we now call agglutination which in his view arises from the addition to lexical items of other meaningful lexical items meant to indicate time, person, origin, etc. Once again, this needs some interpretation. On the fully agglutinative model envisaged by Schlegel there is no contrast – in the earliest period at least — between a level of ‘meaning’ and a level of ‘form’ or ‘grammar’, since ‘grammar’ too is obtained joining meaningful lexical items. If so, one can begin to see how a language which has no such contrast may seem less sophisticated than a language which does; one remembers similar observations made about the isolating languages.

But how can we be certain that the ‘sanskritic’ languages were not agglutinative, at least in part, given that we are also told that agglutinative languages may develop an appearance of inflection? Schlegel is aware of the problem and indeed points out that some of the Greek endings or suffixes have been interpreted in that way, i.e. as due to ‘agglutination’ (not his word), but then immediately rejects the hypothesis as only demonstrable on the basis of completely unscientific etymologies and in any case not applicable to Sanskrit.

It is at this point in the discussion that we begin to see why vocalic alternation or Ablaut is so crucial in the argument, even if, once again, this is not explicitly stated. I shall try to reconstruct what the argument could have been, while knowing of course that this is not how Schlegel would have formulated it. Let us admit that, perhaps on the basis of wild etymologies, a case may be made for an agglutinative origin of the endings and suffixes of Greek, Sanskrit, Germanic, etc.; still this cannot be done for the vocalic alternation found in the roots and affixes. It would be difficult to argue that

⁵ These examples are mine and not Schlegel’s. For the German contrast we would now speak of Umlaut rather than Ablaut but the distinction was not known at the time and indeed synchronically Schlegel was right in noticing a vocalic alternation.

an alternation such as that found in Greek *leipō* / *elipōn* ‘I leave / I left’ with /ei/ vs. /i/ or in the Sanskrit vocative singular *pitar* vs. the dative plural *pitr-bhyas* ‘father /to the fathers’ with /ar/ vs. /r/ is due to the agglutination of separate meaningful units; /e/ and /a/ do not seem likely to fulfill this role and in any case if they did we would also have to allow e.g. for a root /l/ or an element /p/ in *leipō*. In other words vocalic alternation can be used as the clinching argument against the possibility that the ‘sanskritic’ languages are fully agglutinative and as a supporting argument against the assumption that all their affixes and endings are due to agglutination. Whenever we are confronted with impossible etymologies aimed at accounting for an independent origin of affixes and endings, we may reject them arguing that whatever accounts for vocalic alternation may also account for affixes and endings.

But if so, what is this ‘whatever’ which accounts for vocalic alternation and affixation in the non agglutinative languages? For Schlegel, we have seen it, the answer is provided by a single concept: ‘organic’. A root is like a living germ and in the period of language development spontaneously produces inflections, i.e. the forms (vocalic alternation, affixes, endings, etc.) which define the grammar or the organism of the language. Steinthal (1855: 129) labelled this attitude *Mystik* and contrasted it with that of Humboldt who was eager to stress that organism and organic are simply metaphors. However Steinthal was writing almost fifty years later, when the subject had moved on and the organicism of the Romantic movement had taken different forms, which were even more extreme (with Schleicher), or much milder and anodyne (as with Bopp and later with Schleicher’s opponents).⁶

3. Schlegel was and remained an *homme de lettres*; how was the problem envisaged by those who came after him and count as the first ‘professional’ linguists? Part at least of the story is well known. The two main protagonists at the start are the sanskritist who also counts as the first Indo-Europeanist, Franz Bopp (1791-1867), and the Germanist par excellence, Jacob Grimm (1785-1863). Bopp in his first book, written when he was still

⁶ In my view Bopp was making fun of Schlegel’s proposals when he wrote apropos of the organic theory of inflection, which he rejected: “one may prefer to see those sounds, so to speak, as feet, which have been added to a root or somehow have grown to it, so that it can stir itself into a declension; one may also see them as spiritual emanations of the root, which emerge from its inner core - one does not need to explain how - and have only an appearance of individuality, but are at one with the root or are merely its organically developed flowers or fruits” (BOPP 1831: 15). However SCHLERATH (1986: 7, with the right text and the wrong reference) takes this statement seriously.

in his early twenties and was overawed by Schlegel's fame, speaks of the languages derived from Sanskrit or with it from a common mother (BOPP 1816: 9) and refers to the truly organic way in which in Sanskrit the root syllable expresses the various relations through "innere Umbiegung und Gestaltung der Stammsylbe" (BOPP 1816: 7). The book is nevertheless aimed at demonstrating that the oldest verbal forms of Sanskrit and of the languages most closely related to it arose from the addition to the lexical stem of forms of the verb 'to be'. Thus the *-s-* of the Greek and Sanskrit aorist is related to Skt. *as-mi* 'I am'; in contrast with Schlegel the *-b-* of Latin *amabam* 'I loved' (imperfect) and *amabo* 'I shall love' (future) is related to the root of Skt. *bhav-* / *bhū-* 'to be'. In the 1820 English version of his book Bopp is much more sanguine and more prepared openly to challenge Schlegel's views. We are now told that Sanskrit is just one of the related languages and not their parent language (BOPP [1820] 1974: 15); Bopp then dissociates himself from Schlegel and argues that the only 'real inflection' possible in a language with monosyllabic roots like the parent language of Sanskrit, etc., is "the change of [...] vowels and the repetition of [...] radical consonants, otherwise called reduplication" (ibid.: 21). For him all the other endings and suffixes are due to some form of composition (agglutination). Partially following the eighteenth-century Dutch etymological school he then argues for the identification in the conjugational inflection (modes, tenses, persons, etc.) of forms of the verb to be or of pronominal forms, with the latter being used to mark person. A recent formation like the Latin *potest* 'unites in itself the three essential parts of speech, *t* being the subject, *es* the copula, and *pot* the attribute' (ibid.: 23); the general thesis is that the original verbal forms were similarly composed, though the copula could also be understood rather than expressed. Two additional points are worth mentioning. The first is that for Bopp the monosyllabic nature of the roots joined to his definition of 'real inflection' as consisting purely of vocalic alternation and reduplication excludes the possibility that the parent language was entirely inflectional since vocalic alternation and reduplication could not yield enough modifications of the root to indicate all the different grammatical functions required if a language was to function as an efficient means of communication. In this way also Schlegel's dichotomy between organic and non organic languages collapses; for Bopp inflection and agglutination occur in all languages with the possible exception of Chinese (ibid.: 20). The second point partly clarifies Bopp's definition of 'real inflection' quoted above, but also may seem partially to contradict it. Discussing the contrasts of the type (Doric) Greek *phāti* 'says' vs. *phanti* 'they say', he notes that the nasal prefixed to the ending clearly marks plural and adds: 'This way of indicating plurality, I consider as a mere inflection because a nasal is sometimes even inserted in the midst of a root, where it may be regarded as modifying only the pronunciation of the vowel; and in the

Sanskrit alphabet the *anusvāra*, a sign which may represent any of the five nasals, is ranged among the vowels'. This statement is somewhat confused but what emerges is that Bopp is prepared to consider an apparently inexplicable change in the root as an instance of inflection rather than agglutination. Some thirteen years later, in the *Vergleichende Grammatik* (BOPP 1833-1836, I: 275, 662f.) he explains further; in his view the nasal in the accusative plural ending **-ns* and in the 3rd person plural ending **-nti* is simply the indication of a lengthening of the previous vowel which is meant to indicate plurality. In a sense then we are dealing again with a type of vocalic alternation and it looks as if Bopp is appealing to some form of iconic explanation. However, as early as 1827, in a review of Grimm's work, Bopp had moved much further in his views about vocalic alternation. He first considered whether the vocalic alternations found in Sanskrit, Greek, Latin and Germanic could all be continuations of an inherited phenomenon. This could not be taken for granted because, while in Sanskrit the contrast was envisaged as one of accretion between e.g. the basic *-i-* or *-u-* of the root and the so-called *guṇa* forms with *-e-* or *-o-* arising from an added *-a-* (Skt. *ai* > *e*, *au* > *o*) or *vṛddhi* with *-ai-* or *-au-* arising from an added *-ā-* (Skt. *āi* > *ai*, *āu* > *au*), in the other languages vocalic quality was also relevant, as in Gothic *nima* 'I take' vs. *nam* 'I took' (BOPP [1827] 1836: 10). Moreover in Germanic Ablaut was by itself sufficient to distinguish tenses and moods, while in Sanskrit it simply accompanied affixation. Yet, as Bopp argued (*ibid.*: 13f.), it is difficult to resist the conclusion that the parallelism of e.g. Skt. *veda* 'I know', *vidma* 'we know' on the one hand and Greek *oida* ~ *idmen*, Gothic *wait* ~ *witum* on the other, where the first person singular always has a diphthong or the outcome of a diphthong (Skt. *-e-* < *-ai-*) and the first person plural does not, proves that the alternation is inherited. If so, any attempt to account for it, will have to start from the oldest available forms. In Bopp's time this meant turning to Sanskrit and Bopp observes that in a sizable number of Sanskrit instances shorter endings call for a longer vowel in the root (*guṇa*) as in *ved-a* 'I know' < *vaid-a*, while longer endings seem to trigger a reduction of the vowel as in *vid-ma* 'we know'. If this principle is generalizable, Bopp argued, we have solved the problem of Ablaut which then becomes a purely 'mechanical' phenomenon, a sort of gravitational law; the introduction or loss of an *a*-vowel is prompted by the weight of the syllables that follow. In Germanic, where there is also a change in vocalic quality, this will be due to a later development. On this assumption organicism and perhaps the consequent mysticism lose their foothold in the Ablaut camp. The discussion about the link between weight of the endings and Ablaut form of the root continued. Bopp's assumptions were rightly challenged. He kept refining them but it was convincingly shown that the exceptions to his rules were too many to be dismissed. After more was known about the Vedic accent, the theory

which slowly began to prevail linked the vocalism of the root to the presence or absence of the accent on the relevant syllable. In the 1870s further complications arose when it was established that the basic /a/ vocalism of Sanskrit was due to an innovation, while the /a, e, o/ contrast of the classical languages was much closer to the system of the parent language. However, this is a different, later, and more technical story; in general terms an important step was taken by Bopp with his demonstration that the Ablaut contrasts of Germanic and Sanskrit as well as those of Greek, Latin, etc. were inherited and that it was conceivable that they had arisen as the result of a ‘mechanical’ development.

4. Bopp’s conclusion about Ablaut first appeared in an 1827 review of Grimm’s *Deutsche Grammatik* which was then reprinted in a separate volume dedicated to the Germanic and Indo-European vocalic system (BOPP 1836); the two successive editions of the *Vergleichende Grammatik* (BOPP 1833-1852; 1857-1861) restate the same conclusion in various forms. While in the 1816 and indeed in the 1820 works the main point of reference (as a precursor or an antagonist) was Friedrich Schlegel, starting with the mid 1820s this changes, as is shown not only by the review and book just quoted but also by the following programmatic passage. In the 1833 preface Bopp referred to his aim to describe the organism of the languages considered and to research their “*physischen und mechanischen Gesetze*” (Bopp 1833-1852, I: iii); later on in answer to an inquiry by Michel Bréal, who was preparing the French translation of the second edition, he gave an explanation of his terminology which is worth quoting in full.

Par lois *mécaniques*, j’entends principalement les lois de la pesanteur [...], et en particulier l’influence que le poids des désinences personnelles exerce sur la syllabe précédente [...]. Si, contrairement à mon opinion, l’on admet avec Grimm que le changement de la voyelle dans la conjugaison germanique, a une signification grammaticale, et si, par exemple, l’a du prétérit gothique *band* ‘je liai’ est regardé comme l’expression du passé, en opposition avec l’i du présent *binda* ‘je lie’, on sera autorisé à dire que cet *a* est doué d’une force *dynamique*. Par lois *physiques*, je désigne les autres règles de la grammaire et notamment les lois phoniques. Ainsi quand on dit en sanscrit *at-ti* ‘il mange’ au lieu de *ad-ti* (de la racine *ad* ‘manger’), le changement du *d* en *t* a pour cause une loi physique (BOPP 1866-1872, I: 1).

Clearly in the question of Ablaut Grimm is the main opponent. We should now turn to him, but his views are not so easy to describe, not least because they kept changing, since he reluctantly accepted some of the results of the comparativists and had to integrate them into his own account. Yet some points remained firm. Even in the very early stages of his interest in linguistics Grimm contrasted the vocalic and consonantal

changes of the root with the various types of affixation. Later on, after his discovery that the German Umlaut was not organic, i.e. was a relatively late development determined by an *i*-syllable which was then lost or altered (as in *wari* > *wäre*)⁷, he concentrated on Ablaut, i.e. on those vocalic alternations for which no obvious explanation was available.⁸ In both the first and the second edition of the first volume of the *Deutsche Grammatik* (1819 and 1822) Ablaut is seen as the main characteristic of the Germanic languages; it is the soul (*Seele*) of the strong verbs, which are the oldest verbal type. In their turn the ablauting verbs are not, as was normally assumed, irregular and secondary but on the contrary reveal the profound order of the *Sprachgeist* (GRIMM 1819: 546f.). Ablaut then becomes the classifying principle of all strong verbs and, since the verbs are seen as the basis of all words, is also relevant to all word formation. In the third edition of the first volume of the *Deutsche Grammatik* (1840) Ablaut is contrasted with Umlaut and Grimm excludes that it may have originated as a secondary device. “Ablaut occurs when a vowel is changed into a completely different one without any external influence” (GRIMM 1840:34). We are then given a list of the possible alternations and told that they are all controlled and organized by the three *Urelemente A I U*, i.e. the three vowels which Grimm considered fundamental. In the Ablaut, according to Grimm, we recognize the “proper life and at the same time the breathing strength of the Germanic roots” (Grimm 1840: 35).⁹ It is not easy to understand exactly how Grimm envisages the process of vocalic alternation but it is clear that in spite of the kinship, which he reluctantly accepts, with the alternations of the other related languages (and particularly Sanskrit), he envisages the Germanic Ablaut as having a special role which differs from that of the

⁷ For Grimm’s first discovery of Umlaut in 1816 (well after Rask’s similar discovery for Icelandic) which signs the beginning of his serious philological work see GINSCHER 1967: 357ff. Note also that, as she observes, Grimm originally used *Umlaut* to indicate all consonantal and vocalic modifications of the root; the terminological contrast between Umlaut and Ablaut is later. For Grimm’s attitude to Ablaut WYSS (1979: 144-160) is important.

⁸ It is not often noted that for Grimm Ablaut often indicates an actual sound, rather than a process. In his view, for instance, the present of strong verbs has the *Laut*, i.e. the basic vowel, and the preterit the *Ablaut*, i.e. the replacing vowel. (GRIMM 1826: 79) Ablaut, however, is also used for the whole process, instead of the expected *Ablautung*, which is found e.g. in GRIMM (1826: 89, cf. also RUMPELT (1860: 114 note)).

⁹ “Das wichtigste aber ist, dass alle formeln wiederum durch die drei urelemente A, I, U gelenkt und geordnet werden. In diesen ablaut setze ich das eigentliche leben, gleichsam die athmende kraft der deutschen wurzeln und finde in seiner anmutigen abwechslung die fülle unsers vocalischen wollauts” (GRIMM 1840: 35).

Sanskrit vocalic alternations. For him the crucial point is that, in contrast with the Sanskrit *guṇa* and *vr̥ddhi* which are not sufficient to define a grammatical category without further affixes, the Germanic Ablaut does just that, i.e. derives the preterit from the present or the plural from the singular.¹⁰ In 1840 Grimm considered the possibility supported by Bopp that Ablaut had started as a sort of ‘mechanical’ alternation, perhaps due to the weight of the endings, and in Germanic had changed its nature and become ‘dynamic’, i.e. functional; one could compare the development of Umlaut, which in some modern Germanic languages is sufficient to distinguish grammatical forms. But he also mentioned an alternative possibility: the original structure could have been like that of Germanic, with a dynamic Ablaut which starts in the verb and from there is extended to the nominal formations; overextension would have led to the position of Sanskrit and of other languages where the real Ablaut is on its way out. In favour of this position Grimm points out that in Germanic too Ablaut had been disappearing, the strong verbs are replaced by weak verbs, etc. (Grimm 1840: 36) If Ablaut was comparable to Umlaut in its origin we would expect it to be spreading rather than otherwise. Grimm does not reach a definitive conclusion but it is clear that he prefers this second hypothesis, which would allow him to attribute to Germanic the preservation of an incredibly archaic phenomenon.¹¹

But how is the phenomenon to be explained? We do not find in Grimm the equivalent of Schlegel’s explicit statement about the germination of roots into Ablaut and affixes, nor is there much talk of organicism. On the other hand, he calls organic the inherited forms which contrast with the ‘non organic’ innovations like Umlaut, he tells us that words are living units (“es gibt kein ursprüngliches unlebendiges wort”, GRIMM 1826: 84), and we have seen the reference to the breathing strength of the Germanic roots. A few facts seem to be established: for Grimm the verb is the original part of the lexicon out of which all other words seem to derive. Ablaut marks the fundamental distinction in the verb between present and preterit and is based on the alternation of the primordial vowels [a, i, u] which happen to be those found in the oldest presents of the Germanic strong verbs. If we

¹⁰ The Sanskrit grammarians saw *guṇa* and *vr̥ddhi* as forms of increments due to the addition of successive *a*-vowels or of *-a-* and *-ā-* to the basic root; hence a root *vid-* ‘to know’ has a *guṇa* form *ved-* (< *vaid-*) and a *vr̥ddhi* form *vaid-* (< *vāid-*). Western scholars initially accepted this description and pointed out that neither *guṇa* nor *vr̥ddhi* by themselves could mark grammatical or semantic contrasts. For Grimm on the contrary Ablaut in the verb is meant to mark grammatical contrasts (present vs. past, perhaps singular vs. plural).

¹¹ Cf. also the long discussion which culminates in GRIMM (1840: 578).

prod further we gain the impression, which may be no more than that, that Grimm saw a non arbitrary link between the vowels [a, i, u], the Ablaut grade that they indicated in the root, and the semantic / grammatical role that these grades fulfilled. But this is not specifically stated, nor are we told how the verbal roots came into being. As Wyss put it: ‘Words are from very start living beings and the *Sprachgeist* can only pull out the right words at the right moment, when we come to naming things. But from where does it extract the words? Evidently, Grimm suggests, from the given stock of verbs from which nouns can be formed through derivation. But from where do the verbs come? Grimm leaves the question open. The verbs appear in origin together with all other living beings of the earth and are at the start of a genealogy which allows us to explain all words from the branching of the verbal stem.’ (Wyss 1979: 154). We emerge with the feeling that, for Germanic at least, Grimm is not prepared to accept a mechanical explanation of Ablaut, which he sees as a primordial feature of the language; we suspect, on the other hand, that he would favour a symbolic or iconic account, if one was available.

7. Bopp’s monumental comparative grammar of the Indo-European languages appeared between 1833 and 1852 and in a second edition between 1857 and 1861, though it was soon superseded by Schleicher’s *Compendium* (1861-1862). The first edition of Grimm’s equally monumental *Deutsche Grammatik* was completed in 1837 and the third edition of vol. I appeared in 1840. From the late 1840s onwards what we now call Indo-European studies reached a much higher level of professionalism and most papers acquire a more technical aspect. Among comparativists Friedrich Schlegel was almost entirely forgotten; indirectly his influence survived only in the distinction between inflectional and agglutinative languages which, in his brother’s reformulation, became the backbone of the so called morphological classification, but inflection is no longer defined in terms of vocalic gradation and the inflectional languages are not necessarily ablauting languages. This does not mean that the link between Ablaut and high-status languages disappears altogether. It is sometimes reinterpreted in a way which we may find surprising. Thus as late as 1872 a Cambridge scholar writes in his *Introduction to Greek and Latin Etymology* about vowel-intensification, “an important method of strengthening the idea contained in a root, that of modifying the radical vowel” and states that “It is obvious that this method, if carried out completely, could be employed only by a people whose perception of the distinction of sounds was nice and cultivated” (Peile 1872: 179f.). The discussion about Ablaut continues, but the numerous papers or monographs use as a starting point the controversy between Bopp and Grimm which I summarized above. The terminology oscillates. The very terms *Ablaut* or *Ablautung* used by Grimm eventually will be gen-

eralized but not for a while; people speak of *guṇa* or gradation or *Steigerung* or apophony or compensation, etc. As late as 1878 in a Leipzig dissertation Ferdinand Masing followed a suggestion by Osthoff and used *Vokalabstufung* (Masing 1878: iii). Particularly for the Germanic languages, however, the distinction between Ablaut, Umlaut and breaking is established. There is no doubt that most of the attention now concentrates on the technical problems which concern the exact definition of Ablaut in the various languages, the nature of vocalism and, after something was learned about Sanskrit accentuation, the link between Ablaut and accent. In view of the early discussion, however, it is interesting to find that the post-1840 work begins to classify the interpretations of Ablaut into two classes which start respectively with Bopp and Grimm. As late as 1878, Masing contrasts the phonetic or mechanical *Erklärungsprinzip* with the dynamic or organic one. There is a long list of supporters of the mechanical approach starting, of course with Bopp, all of whom accepted somewhat different mechanical theories; on the other hand for the organic approach the supporters are not numerous.¹² The main exponent is August Schleicher (1821-1868), who assumes that from the start the roots of the reconstructed parent language included one of the three basic vowels [a, i, u], which could undergo *Steigerung* in order to indicate their grammatical relations (*zum Zwecke des Beziehungsausdruckes*); the root indicates meaning without relations, but Ablaut limits it to a specific relation, such as duration, present, past, or marks it as a substantive, etc. (SCHLEICHER [1860] 1879: 134).¹³ That

¹² Masing (1878), who was mainly interested in the German Ablaut, listed, after Bopp, the germanists Adolf Holtzmann (1810-1870), C.W.M.Grein (1825-1877) and Wilhelm Scherer (1841-1886) as well as the Sanskritists and Indo-Europeanists Theodor Benfey (1809-1881) and Adalbert Kuhn (1812-1881) before moving to the later scholars. In the dynamic or organic camp, which was headed by Jacob Grimm (1785-1863), he mentions above all the Indo-Europeanists August Schleicher (1821-1868) and A. F. Pott (1802-1887), at least in so far he disagreed with Bopp, as well as A. Amelung.

¹³ The same statement appears in an even more succinct form in the Compendium (Schleicher [1861-62] 1871: 12): “Jeder vocal kann sich nur in seiner reihe bewegen; diß geschicht zum zwecke des außdruckes der beziehung an der wurzel selbst. Die vocale der stamm- und wortbildenden suffixa sind ebenfalls der steigerung fähig, da sie auß ursprünglich selbständigen wurzeln hervor gegangen sind.” The last clause is striking for anyone who goes back in the history of the question. Schleicher – the archetypal organicist – adopts Schlegel’s position as far as the Ablaut is concerned, but at the same time and without any discussion takes for granted that suffixes, i.e. in Schlegel’s terms inflections, arose from the agglutination of meaningful elements. Through a strange quirk of the discussion now we return to the point where Ablaut is the only purely grammatical form.

Schleicher belongs to the organic approach is not surprising; for him language was an organism in the strict sense of the word, which also explains why he feels no need to justify his conclusions.

7.1. A few years before Masing, Whitney (1874) had also distinguished the organic from the phonetic interpretation of Ablaut, and with his usual sharpness and wit had made a case for joining the latter group. His definition of the problem is worth reporting in full because of its clarity:

The main point in question is, whether the increment or gradation of vowels (*vocalsteigerung*), which plays an important part in Indo-European word and form-making [...], whether this system of changes is of organic or of phonetic origin? — that is to say, whether the modification of the vowel was originally significant, made for the express purpose of intimating a modification of meaning, or whether it was at the outset incidental only, a result of phonetic influences, though in many cases afterward applied to the uses of expression? (WHITNEY 1874: 299f.)

Here we have a definition of organic which does not make us think of hands and feet, of fruits and branches (see note 6), but which in practice makes organic synonymous with ‘original and unexplained’. However, for once Whitney had been anticipated and even beaten in a context of clarity, acumen and even wit. Some thirty years earlier a young and far less famous German scholar, Adolf Holtzmann, had started with a review of the third edition of Grimm’s *Deutsche Grammatik* vol. I (1840) but had then ended publishing two pamphlets on Umlaut (1843) and Ablaut (1844) respectively (HOLTZMANN 1977). His general proposal was that in Germanic ‘breaking’, i.e. the lowering of high vowels, was due to the presence of an [a] in the following syllable; at the same time he argued that *guṇa* in Sanskrit happened when the vowel was accented and followed by an [a] in the next syllable. In other words the Ablaut of Sanskrit and Indo-European was a form of Umlaut. The great achievement, from an Indo-European point of view, was to establish a link between Ablaut and accent and this at a time when the first ever evidence about Vedic accent was just beginning to appear in print; contrasts like that between *dvésmi* ‘I hate’ with *guṇa* in the accented root and *dvisánti* ‘they hate’ without *guṇa* or accent on the root did, of course, support his view, a view which eventually prevailed. However his work did not have much impact, partly because his theory of the Sanskrit Ablaut as *a*-Umlaut was soon rejected since in numerous instances, perhaps the majority, the *guṇa* vowels was not followed by an *a*-syllable; this rejection meant that the remaining conclusions were mostly ignored. A very few scholars gave him credit for establishing a link with the accent but in general he was forgotten. The 1977 reprint of his two pamphlets, with a well informed introduction by Benware, did not do much to change the situa-

tion. And yet both in his time and more recently he should have also made history for the way in which he was the first to define in general terms the mechanical/ dynamic contrast and explore the consequences of accepting the one or the other approach. It is worth summarizing or quoting the first two pages or so of the 1844 booklet on the Ablaut (HOLTZMANN 1844: 2-4) before proceeding to some conclusions.

Holtzmann starts with the observation that linguistics has borrowed from metaphysics the contrast between the atomistic or mechanical approach and the dynamic approach. From the mechanical point of view linguistics aims at analyzing language into its original monosyllabic elements, at establishing their meaning and identifying the laws according to which words have been formed and a grammatical structure is created. A second (impossible) aim would be that of segmenting the roots further into their components and of determining why one or the other combination of sounds has the meaning that it has. On the other hand the dynamic approach assumes that the changes which the roots have undergone, partly through internal modification, partly through the addition of inflections, are not due to the composition of meaningful elements but rather to the fact that from the start, thanks to an internal force, certain meaningless syllables or vowel modifications have indicated the grammatical relations of words. The task of the linguist would then be that of determining what syllables and what vowel modifications have the power to express what relations and what meaning. Holtzmann declares that he belongs to the first camp. Why? In the second camp, he explains, if one asks why the *-is* of Latin *regis* indicates the genitive relation, one must answer that it is because *-is*, in itself meaningless, had from the start the power to indicate this genitive relationship. But that means that one mentions the facts and gives up any attempt at an explanation. One cannot help thinking of Molière's putative doctor who at the question why opium makes one sleep replies to the faculty's great applause: *quia est in eo virtus dormitiva, cuius est natura sensus assopire*.¹⁴

And yet Holtzmann himself is ready to admit that within Germanic it is legitimate to say that Ablaut is dynamic, though he makes clear that all that this means is that forms like *du gibst* and *du gabst* contrast present and past in a way which within Germanic cannot be explained. To find an explanation of Ablaut we must abandon Germanic where Ablaut is fully established and see if it is possible to observe its beginning in another related language. "A real explanation will be available only when we can bring back

¹⁴ "Because it has a dormancy force, whose nature is to lead to slumber". The reference is to Molière's *Malade imaginaire*.

the vowel alternation to an external influence". The task is then that of accounting for Ablaut through external influence, which means, Holtzmann concludes, to account for it in the light of the atomistic approach.

8. We can stop here. Let us now turn back in the light of Holtzmann's observations and of the later statements by Whitney, Masing, etc. to the questions that we asked in 2. But first notice another point in Holtzmann's account. It is not made explicit but we have here by implication a clear statement that all explanation must be historical – a view which is normally attributed to Hermann Paul some decades later. If Ablaut cannot be accounted for within Germanic, we are told, we must go back within the history of the language family until we find an explanation. Consider now our trajectory. We are puzzled as Bopp was (both if he made fun of it and if did not) by the idea of the germinating roots which produce inflections as contrasted with the clear assumption that meaningful elements combine to produce inflection or that a phonetic change of some sort is grammaticalized and acquires specific functions. But in practice what were Schlegel and then Grimm and Schleicher really saying, when they were using the images and metaphors of the time? Ablaut is characteristic of Germanic in particular or of the Indo-European languages in general; we should not necessarily ask where it comes from, no more than we ask (or at least Bopp explicitly did not ask) where the roots come from. (BOPP 1833-52 I: iii) To say that Ablaut is organic may simply mean that it is a constituent part of the language system and it is not by chance that one of the meanings attributed to organic is 'original' as contrasted with un-organic = 'innovative'. On the other hand to assume that both Ablaut and inflection represent from as far back as we can go the way in which the language indicates its grammatical functions cannot be wrong, it may not be informative but nowadays in contrast with Holtzmann we may be prepared to find explanations which are not historical but are couched in terms of language universals or the like. It might even be argued that the onus of the proof is on those like Holtzmann who are aiming at finding a pattern which matches Ablaut and other linguistic features. Until such a pattern is found the 'organic or dynamic' account (not explanation) may be the correct one: it simply states that Ablaut is part of the inner core of the language. In contrast with e.g. Umlaut, we are not able to say more.

But why this obsession with Ablaut in the first part of the century? The answer was given earlier. In Germanic Ablaut is archetypically a means of marking grammatical contrasts; outside Germanic it may be so or it may have been so. If we cannot bring it back to another 'phonetic' pattern as we can do in the case of Umlaut, we may be confronted with a formal distinction between the linguistic material which marks lexical meaning and that which marks grammatical features – a not uninteresting fact. Let us not for-

get that even Bopp assumed that there were two types of roots and that the pronominal rather than the lexical roots entered into composition to create inflection.

I could continue but the main jest of what I have been saying is that, if one tries to move behind the puzzling terminology, the old statements are not as nonsensical as they appear at first sight. In my view in these old debates the ‘sensible’ mechanical camp made a series of statements which were partly correct but partly overconfident; the ‘nonsensical’ organic or dynamic camp was in fact the one which turned out to be more restrained. If speaking of *virtus dormitiva* means admitting ignorance this may not be a bad thing. But, if nothing else, and at much more mundane level, this interpretation may at least solve one of the puzzles which Whitney mentioned in his brilliant paper. Why, Whitney asked, “the soundest and safest of comparative philologists, Georg Curtius, as yet withholds his assent from the view here advocated [viz. that of the link of Ablaut and accent]; although also, it must be added, without accepting the other”? (WHITNEY 1874: 315). Perhaps that soundest and safest comparative philologist subscribed to the view that no real solution had been found.

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