

UNIVERSITY OF TORONTO



3 1761 01255233 7

Digitized by the Internet Archive  
in 2008 with funding from  
Microsoft Corporation











C981e

.Ea

L

# ELUCIDATIONS

OF

## THE STUDENT'S GREEK GRAMMAR

BY

PROF. CURTIUS.

[Translation]

FROM THE GERMAN, WITH THE AUTHOR'S SANCTION

BY

EVELYN ABBOTT.

LONDON:

JOHN MURRAY, ALBEMARLE STREET.

1870.

PH  
258  
2713

2157

~~2153~~

23/4/12/10

6

## P R E F A C E.

---

THE following pages are a translation of the '*Erläuterungen zu meiner Griechischen Schulgrammatik*', published in 1863 by Professor Curtius together with the sixth edition of the Grammar. Being merely 'elucidations', they must be read in connection with the Grammar in order to be fully intelligible. Here and there, it is true, quotations and notes have been added in order to make the reading more continuous, but it was impossible to render the book an independent one. Nor, indeed, was it necessary, as the Grammar of Professor Curtius is within the reach of English readers. (The Student's Greek Grammar, London 1862).

The present volume then is a companion to the Grammar. The whole work may be considered a manual of the Greek language embodying in brief the latest results of Comparative Grammar, so far as these illustrate the Greek language. In many respects it will be found to differ widely from the grammars and philological works used in England: but the most distinctive characteristic is the *scientific* method, which Professor Curtius pursues in dealing with language. Throughout, he recognizes language

as an organism, dependent, indeed, upon man, and, therefore, parasitic, but still an organism with definite laws of growth and decay. As such, therefore, it must be studied. We must not approach it with *a priori* ideas derived from metaphysics, but with the watchful and observant eye of the student of nature. What we see, we know; what we deduce from our observations is probable; what we imagine is the baseless fabric of a vision.

On this conception of language two observations may be made.

I.—It may become of great practical value. At the present time there is a widely spread desire for scientific method in education. It is often said, and not without reason, that the classics are studied in our schools to the exclusion of physical science, of our advances in which we are justly proud. Without doubt, the desire would be more readily met, were not classics and science felt to be widely separated. The study of one is regarded as incompatible with the study of the other; and as it is impossible to study *both* in the time usually set apart for education, the classics maintain their prescriptive position. And yet this separation of the two subjects is detrimental to both. The scholar accuses the man of science of a 'want of taste': the man of science regards the scholar as one who neglects the present for the past. But when we regard language as an organism, and the science of language as a physical science, this unfortunate separation is bridged over. A common point is found where the advocates of both

systems can meet. Scientific method can be introduced into our schools without drawing boys away from classics, or increasing in the least the material amount of instruction.

Again. Many boys leave school with little or no knowledge of Greek and Latin. Now it is not altogether easy to answer satisfactorily those who ask what is the value of this minimum of knowledge. The practical value is nothing: the educational value is little more, if the tasks have been learned merely by rote. To be able to decline *musa* is not a great accomplishment if we merely know how to decline it, and remain in ignorance of the meaning of declension. Yet the distinction between *musa* and *musam* conveys in the simplest manner the distinction between subject and object, a distinction which it is impossible to illustrate in an equally simple and regular manner from our own language, because in form the nominative and accusative—except in the personal pronouns—are identical, and the difference is expressed by position merely. This is indeed the great value of the study of inflected language. It presents to the eye differences which in uninflected language must be grasped by the mind. Now by teaching language scientifically all these distinctions and the reasons for them are impressed upon the pupil; and thus even a knowledge of the declensions becomes of value. For though the boy leaves school knowing little or nothing of Latin and Greek, he knows something of language. And of all knowledge this is the most valuable. For language is in nearer relation to the

mind than anything else. It stands between us and the outward world; we may almost say between us and our own thoughts. Unless we know something of its true nature it is almost impossible for us to emancipate ourselves from its dominion, and become thinking, not merely speaking, beings.

II.—The view advocated by Professor Curtius is, in the main, correct. The organic nature of language is seen in the fact that the changes take place in obedience to some internal force, and are beyond the power of man to hasten or retard. No one could introduce a new sound, or a new rule of syntax into language. Even the attempt to do so argues a certain imbecility of mind. Yet the constant use of books and writing tends to give us too material a view of language. We are apt to regard it as existing apart from the mind. As easily could the plant exist apart from the parent soil. Written language stands to spoken language much in the same relation as the plants in a herbarium to those in a garden, as dead structures to living. And yet, though we speak of the science of language as a natural science, and of the mind as the soil in which language, the plant, grows, we must not be misled by the metaphor. There is this important difference. The plant is wholly an organic structure: but language is not so. It is organic only so far as it is unconscious. Thus inflections changes of sound, &c., are organic: not so the order of words in a sentence or the mode of connecting one sentence with another. Here rhetoric and logic have invaded the natural domain of lan-



guage. Or we may say that there is in language a physiological, and an intellectual element, and that it is in virtue of the former rather than the latter that language is brought within the sphere of natural science.

It may not be altogether superfluous to point out that a distinction must be drawn between *Roots*, *Stems*, and *Words*. A root is a 'sound of meaning'; it is that part of a word which conveys the meaning divested of any addition or modification. It is a sound, not a word. Thus  $\text{ἴδ}$  is the root in  $\text{ἴδω}$ ,  $\text{ἴδεις}$ ,  $\text{ἴδουσι}$ . But when a root has become modified in any manner, by the addition of syllables, or by internal change, it becomes a stem: thus  $\text{ἴδω}$  is a stem formed to express the present tense;  $\text{ἴδεις}$  a stem formed to express an action. As compared with roots, stems are changeable. But  $\text{ἴδω}$ , and  $\text{ἴδεις}$  are not words: to complete the structure a termination is needed,  $\text{ἴδωσις}$ ,  $\text{ἴδεται}$ . As inflection is accomplished by terminations, it follows that stems are uninflected: and that, though changeable as compared with roots, they are the unchangeable elements in words. The three terms, therefore, express three distinct stages of analysis, and in this respect are of the greatest value in both in grammar and etymology. Whether they also represent three stages in the historical growth of language is a matter which in no way concerns the Grammarian however interesting in itself. They are not arbitrary distinctions. In language, it is true,

the sentence is the unit; and all divisions of it are fractional. Thus even words are fractions: δῶρον is unintelligible without δίδωσι; δίδωσι necessitates a δῶρον. Yet the distinction of words is useful in practice, and defensible in science; it is based on definite principles, and not an open question to be decided at the caprice of the individual. The same may be said of the division of words into Roots, Stems, and Terminations. The parts are fractions no doubt: they are, it may be said, fractions of a fraction. Yet the division is not capricious. The distinction between a 'sound of meaning' and a 'sound of relation'; between a 'variable' and an 'invariable' element is as logical as that between subject and predicate, substantive and attribute. The practical use of the distinction in exhibiting the unity of words in conjugation and declension is beyond a doubt.

The Rev. W. Sanday, Fellow of Trinity College, has rendered me very valuable assistance in revising the proofs; the Greek Index also I owe to the kindness of a friend.

The chapters and sections are those to which the Elucidations refer.

OXFORD, *June 25th, 1870.*

E. A.

# CONTENTS.

INTRODUCTION . . . . .	Page 1
------------------------	-----------

## PART I.—ACCIDENCE.

### CHAPTER I.

#### OF THE GREEK ALPHABET.

Writing and Sound . . . . .	17
<i>t</i> before <i>i</i> . . . . .	18
zeta . . . . .	—
theta . . . . .	19

#### PRONUNCIATION OF THE VOWELS AND DIPHTHONGS . . . . . 20

<i>ai</i> not <i>ã</i> . . . . .	23
<i>ei</i> not <i>ai</i> . . . . .	—
<i>oi</i> not <i>t</i> . . . . .	24
<i>eu</i> not <i>oi</i> . . . . .	26
<i>ou</i> . . . . .	—
iota subscriptum . . . . .	27

### CHAPTER II.

#### OF THE SOUNDS.

Hard and soft vowels . . . . .	28
Epic lengthening . . . . .	30
Consonants . . . . .	—
Momentary and continuous sounds . . . . .	31
Spirants . . . . .	32
Digamma . . . . .	—

### CHAPTER III.

#### OF THE COMBINATIONS AND CHANGES OF SOUNDS.

Organic lengthening . . . . .	35
Compensatory lengthening . . . . .	37
Dissimilation . . . . .	—

	Page
Changes before $\mu$ . . . . .	38
Changes before $\sigma$ . . . . .	39
$\sigma$ for double $\sigma$ . . . . .	—
Auxiliary consonants . . . . .	40
Changes with $\iota$ . . . . .	—
Metathesis of $\iota$ . . . . .	42
$\lambda\lambda$ . . . . .	—
$\sigma\sigma$ ( $\tau\tau$ ) . . . . .	—
Double consonants . . . . .	44

## CHAPTER VI.

## DECLENSION OF SUBSTANTIVES AND ADJECTIVES.

Arrangement . . . . .	48
Stem and termination . . . . .	49
Reality of stems . . . . .	54
Division of Declension . . . . .	—
Stems in $\upsilon$ and $\iota$ . . . . .	56
Stems in $\sigma$ . . . . .	57
Vowel-declension . . . . .	60
A-declension . . . . .	61
O-declension . . . . .	62
Genitive Sing. . . . .	64
Attic declension . . . . .	65
Acc. Plural . . . . .	66
Nom. Sing. of the consonant-declension . . . . .	—
Vocative. . . . .	69
Dental stems. . . . .	70
Diphthong stems . . . . .	—
Stems in $\epsilon\upsilon$ . . . . .	71
Elided stems . . . . .	72
Sigma stems . . . . .	—
T-stems . . . . .	73
Comparative stems . . . . .	74
Stems in $\alpha\pi\tau$ . . . . .	75
Anomalies . . . . .	—
Locatives . . . . .	78
Suffix $\varphi\iota$ . . . . .	79

## CHAPTER VII.

## OTHER INFLECTIONS OF THE ADJECTIVE.

$\sigma\alpha$ from $\iota\alpha$ . . . . .	80
$\upsilon\alpha$ . . . . .	—

	Page
πολύς . . . . .	81
βράσων . . . . .	82
Anomalies . . . . .	—

## CHAPTER VIII.

## INFLECTIONS OF PRONOUNS.

Reflexive stems . . . . .	85
Æolisms . . . . .	—
Nenter Sing. . . . .	86
Relative stems . . . . .	—
Interrogative stems . . . . .	87

## CHAPTER X—XII.

## THE INFLECTION OF THE VERB.

Arrangement . . . . .	88
Tense stems . . . . .	93
Leading conjugations . . . . .	95
Classification . . . . .	96
Arrangement . . . . .	99
Present stem . . . . .	—
Strong Aorist . . . . .	100
Future . . . . .	101
Weak Aorist . . . . .	—
Perfect . . . . .	102
Passive stems . . . . .	103
'Strong' and 'weak' . . . . .	—
Classes of verbs . . . . .	104
Person-terminations . . . . .	105
Moods . . . . .	107
Connecting vowel . . . . .	—
Augment . . . . .	110
Extension . . . . .	113
Verb- and Noun-stems . . . . .	116
Lengthened class . . . . .	117
T-class . . . . .	—
I-class . . . . .	—
Future stem . . . . .	118
Weak Aorist . . . . .	120
Perfect stem . . . . .	121
Active Perfect . . . . .	123
Aspirated Perfect . . . . .	—
Pluperfect . . . . .	129

	Page
Third Future . . . . .	131
Passive stems . . . . .	—
Short vowels . . . . .	133
Verbs in $\mu\iota$ . . . . .	135
Nasalization . . . . .	136
Vowel roots . . . . .	137
Nasal class . . . . .	138
Inchoative class . . . . .	141
E-class . . . . .	144
$\varepsilon$ an auxiliary vowel . . . . .	146
Mixed class . . . . .	147
Concealed Inchoatives . . . . .	150
Synonymous stems united . . . . .	151
Future middle . . . . .	154
Intransitive and transitive meaning . . . . .	156

## CHAPTER XIII.

## DERIVATION.

Formation of nouns . . . . .	158
Derivative verbs . . . . .	161
Composition . . . . .	164
Connection of the stems . . . . .	165
Compound verbs . . . . .	167
Meaning of compounds . . . . .	171
Determinatives . . . . .	172
Attributives . . . . .	173
Compounds of dependency . . . . .	175

## PART II.—SYNTAX.

GENERAL REMARKS . . . . .	177
Comparison . . . . .	180
Translations . . . . .	181
Selection of the material . . . . .	182

## CHAPTER XVI.

## THE CASES.

Local theory . . . . .	184
Traces of lost cases . . . . .	188
Replacement of lost cases . . . . .	189
Mixed cases . . . . .	190
Accusative . . . . .	192
Inner object . . . . .	193

CONTENTS.

xiii

	Page
Genitive . . . . .	194
Genitive with verbs. . . . .	195
Looser Genitive . . . . .	196
Dative. . . . .	197

CHAPTER XVII.

THE PREPOSITIONS.

Government of Prepositions . . . . .	200
--------------------------------------	-----

CHAPTER XX.

THE TENSES.

Double distinction of Time . . . . .	203
Grade of Time. . . . .	204
Kind of Time . . . . .	—
Triple kind of Time . . . . .	205
Aoristic Action. . . . .	—
Ingressive Aorist . . . . .	207
Effective Aorist . . . . .	208
The Aorist in other languages . . . . .	—
Aorist Participle . . . . .	210

CHAPTER XXI.

COMPOUND SENTENCES.

Form of the Sentence . . . . .	213
Parataxis . . . . .	—
Correlation . . . . .	214
Hypotaxis . . . . .	215
Particles. . . . .	—
Meaning of Sentences. . . . .	217
Conjunctions . . . . .	—
Case-forms and conjunctions . . . . .	218

CHAPTER XXII.

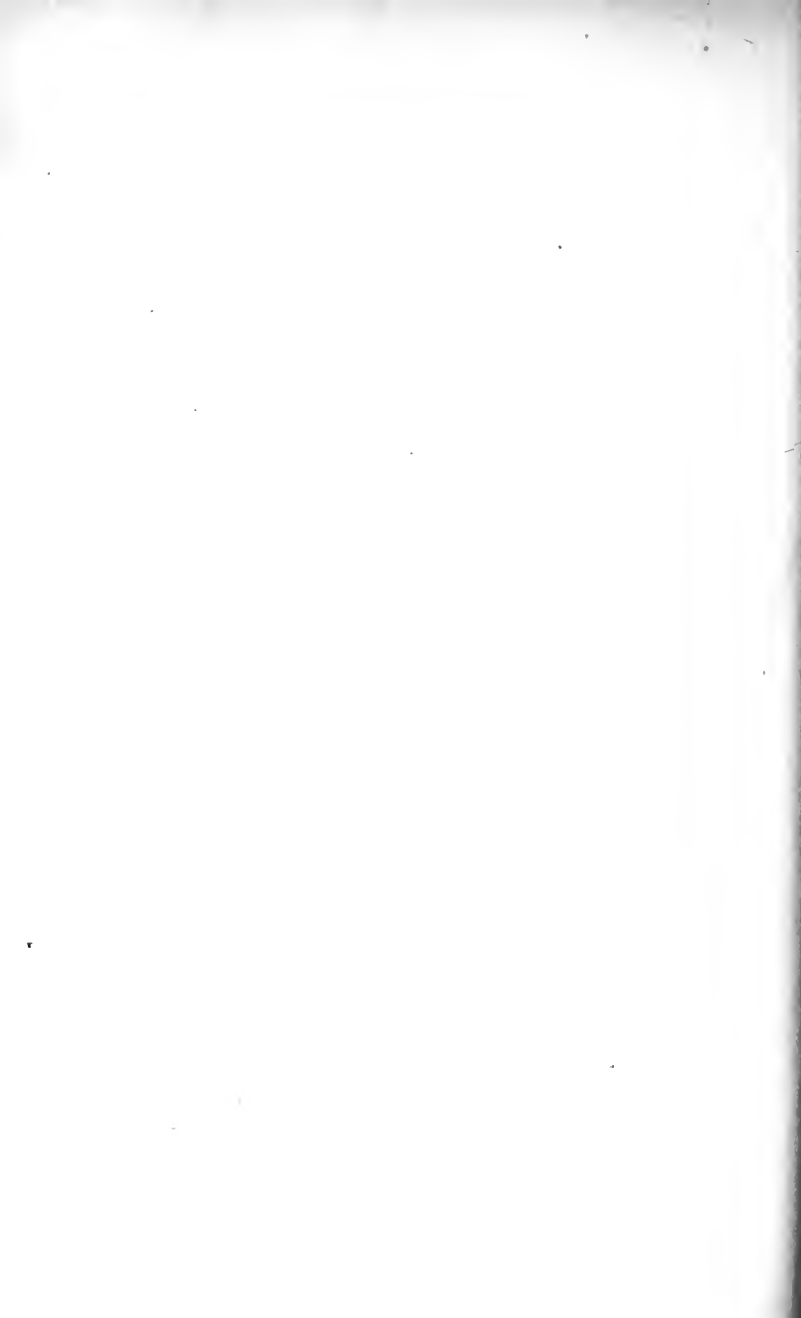
THE INFINITIVE.

Form of the Infinitive. . . . .	221
---------------------------------	-----

CHAPTER XXIII.

THE PARTICIPLE.

Kinds of Participle . . . . .	223
Predicative Participle . . . . .	—





## INTRODUCTION.

THE Greek and Latin languages are commonly termed classical. If used in the old sense, as implying that no other language has been born to a similar heritage of dignity and delicacy, the epithet is no longer, strictly speaking, correct; since modern science has rather taught us to regard every language as in itself a marvellous product of man's intellectual activity, and to find in many of those already investigated a high degree of development. But nevertheless, as the circle embraced by this science spreads wider, the conclusion becomes more certain, that in general framework and principle of structure the Indogermanic family remains unsurpassed. And among these again Sanskrit alone perhaps can contest with Greek the claim to the richest and most happy development of the germs common to all. Still, when we direct our attention, not so much to the faithful preservation of old sounds and forms, and the consequent transparency of the whole structure—on which account the language of the Indians is of such vast importance for the general study of language—as to the consistent accomplishment of aims which from the remotest period floated before the genius of language, to the light and flexible character of the forms retained, and the delicate shades of meaning expressed by them, to the richness of the vocabulary which reflects every side of

Greek intellectual life—we can hardly avoid the conclusion that the language of the Hellenes is that in which, on the whole, the most complete structure is brought before us in the highest degree of development.

At the present time this language forms a necessary part of advanced instruction at school. This position, it is true, it has attained, not by excellency of structure, but by the contents of the literature of which it is the key. And not even the most enthusiastic admirer of Greek as a language will go so far as not to recognize the object of learning Greek in a knowledge of Homer, Sophocles and Demosthenes, no less than in understanding the form of the Aorist, or use of the Optative. But since the only way by which the intellectual treasures to be found in the Greek language can become so perfectly familiar as to have a real influence in education, is an accurate knowledge of the language; and the study of the language in the literal sense, that is, careful practice in the forms and their uses, and the gradual unlocking of the treasures of the vocabulary, justly lay claim to a large part of the time devoted to learning Greek—two considerations seem to be suggested by the present position of in Greek our schools.

It is, on the one hand, altogether monstrous that a number of our schoolmasters should proceed, as they do, to this their most important task of teaching languages—what I say holds good of Latin no less than Greek—without ever studying the structure of the language they have to teach, and that in many German universities no opportunity is ever afforded for this study. That this defect operates beneficially on the delight of the teacher in undertaking his task is what no one will believe. On the contrary, as we always find most pleasure in teaching subjects which

we love, because we have laboured upon them, and admire, because we apprehend their internal organization, we may suppose that those will teach languages—and Greek especially—with more enthusiasm, and, therefore, with better results, to whom the forms are something different from a motley multitude of unintelligible structures, and something more than an unavoidable task to be learned mechanically. Now the task of teaching the elements of language is chiefly in the hands of young men, and for these the transition from the regions of science to the practical teaching of a school is always very abrupt. For in the first attempts at teaching it is almost impossible to apply the studies in criticism, exegesis, literary history, and antiquities, which fill up the time spent at the university. But with the science of language the case is different. Language becomes at once the subject of instruction. And though of course, even here, scientific investigation and the practical teaching required at school are naturally far apart, it is by no means impossible to enliven the latter even from the very first by the insight obtained in the paths of science. Changes of sounds, rules of accentuation, forms of inflection are no longer what they were in the eyes of one who has learnt to combine them into a whole, and to recognize even in the smallest details the web woven by the genius of language. To him even elementary teaching offers many of the charms of science. The study of language at the university has, therefore, a peculiar value as reconciling science and practice, though such a reconciliation, it is true, is only possible when instruction at school is so arranged—and in Greek this can be done the soonest and most widely—that the charms of science are to a certain extent embodied in practical teaching.

But not merely the pleasure of teaching—that of

learning also will be increased, if instruction in language is not cut off from contact with science. For in this way something of the delight which every glimpse of order and law ensures, will come even to the pupil's aid. If, when the forms have been impressed on the memory, the pupil is taught to recognize them in their origin by correct analysis, and to perceive the special causes of apparent irregularities, there is no doubt that by such a course the attention is sharpened, and the memory rendered more tenacious. And who would refuse to recognize the exercise of the understanding, also called into play by such a process? Nay, more than exercise of the understanding. For to be habituated to combine complicated details into a whole, to seek for analogies, to reject the shallow admission of mere caprice and exception, contains a higher element of culture. And this can be brought to the help of the youthful pupil without in the least increasing the material amount of his studies, but in the closest combination with the acquisition of that which without this must be learned for quite other objects.

In earlier times when instruction in the ancient languages—which at that time was almost identical with instruction in Latin—far outweighed instruction of any other kind, an accurate and lasting knowledge of language was acquired by a method essentially the same as that now followed in learning modern languages, that is, by a certain passive devotion to the material part of the language, in acquiring which the imitative instincts chiefly were taken into consideration. And if at the present time complaints are very frequently made that the acquaintance of pupils with the ancient languages on leaving school is not always in a satisfactory proportion to the important space of time devoted to learning them, the reason of this is still without a doubt to be found mainly in the fact that

in modern times it is very difficult to maintain an equally concentrated devotion to the object of study among pupils. Under such circumstances we ought not to despise any means calculated to excite the student's attention to the phenomena of language. And I should think that in a more scientific treatment of instruction such a means would be found; and that even those who take no part in the science of language, would readily avail themselves of it as conducing to an end which all schoolmasters recognize as desirable. For no one will deny that subjects are best remembered which have been learned with pleasure and enthusiasm.

As a fact, the Greek language has not for these many years been taught in school merely as a task for the memory. On the contrary, more than a century has elapsed since the attempt has been made in various ways to make the forms more intelligible, and, therefore, more easy to teach, by tracing them to their origin, and by distinguishing between stems and terminations. While our Latin grammars of the ordinary stamp content themselves with paradigms of the conjugations, and e. g. in *tango*, *tetigi*, *tactum*, are careful to conceal the fact that the perfect and supine are formed from the stem *tag*, but the present from the longer stem *tang*, there is scarcely a Greek school-grammar to be found in which  $\Lambda\text{AB}\Omega$  or  $\lambda\alpha\beta$  is not mentioned as a stem or 'theme' beside  $\lambda\alpha\mu\beta\acute{\alpha}\nu\omega$ ; and thus one of the most essential facts in the structure of the Greek and Indogermanic verb, the distinction between the present-stem and the verb-stem, is noticed as a fact in individual instances, though not recognized as a principle. Even the existence of several dialects in Greek with which the pupil must be familiarised, led necessarily to a accurate study of the sounds in their relation to each other. The difference between the Homeric  $\tilde{\delta}\text{-}\mu\epsilon\nu$

and the Attic ἴσ-μεν made an observation necessary on the relation of δ and σ; and it was then almost impossible to avoid the conclusion that σ had arisen out of δ, not only in κεκορυσμένος as compared with Homeric κεκορυσμένος, but also in πέπυσμαι beside πύσσομαι, and in consequence to take the same view of the sigma in πέπυσται, πύσσις, πίσ-τις; and in spite of any aversion to further linguistic analysis to allow some little of this discovery to transpire even in the presence of the pupil. But in Latin, on the other hand, the change from *d* to *s* in *es-tis*, from *ed-tis*, which is quite analogous to the last mentioned change in Greek, is often regarded as a mystery lying far beyond the sphere of the schoolmaster, and many would perhaps even yet regard the comparison of it with the corresponding change in Greek as an improper innovation.

There is no doubt that Greek accidence has for a long time been treated in a far more scientific manner than Latin. Hence the step, which still remained for the grammarian to take, was in reality not very great. His labour was directed chiefly to increasing and correcting the analyses already long in use by others at once deeper and more trustworthy—because resting on a wider basis—which are brought forward by the modern science of languages with the aid of the comparative method tried and proved with such signal success in Sanskrit. Other changes, especially in the arrangement of the material and the terminology, were also rendered necessary. And it is the main object of the following pages to make many things of this kind clearer and more accessible to persons unacquainted with the science of language in a strict sense.

The science of Comparative Grammar which in regard to the Indogermanic family of languages begins with the publication of Bopp's '*Conjugationssystem*'

in 1816, has now run its course for half a century, and scarcely any person whatever, competent to form an opinion, will treat it any longer with that contempt which forms by no means a creditable page in the history of modern philology. Indeed it would now be a mere waste of words to dwell upon the importance of such studies, and the value of the results obtained. Bopp's '*Vergleichende Grammatik*' (2nd ed.), Schleicher's '*Compendium der vergleichenden Grammatik*' (Weimar 1861. 62. 2nd ed. 1866), not to mention other works of a more special character, or touching less upon grammar in the narrower sense, put it in the power of everyone who chooses, to make himself acquainted with this new science, even without a previous knowledge of Sanskrit, an important advantage which is sometimes overlooked. The results of this science have also been reproduced in a popular form suited to general readers by Schleicher in the '*Deutsche Sprache*' (Stuttgart 1860), and Max Müller in his '*Lectures on the Science of Language*', 1st and 2nd series.

In regard also to the position which comparative grammar occupies in respect to philology in the stricter sense, I may here be permitted to refer to other works, especially to my inaugural lecture '*Philologie und Sprachwissenschaft*' (Leipsic 1862); and in regard to the relation between Greek and the kindred languages to my '*Grundzüge der Griechischen Etymologie*', I, p. 21 sq.

On the other hand, a few words may here be added on the particular position which the author of a school book has to take up in this respect. In her first attempts to reach the mighty aims proposed, our science could not always avoid falling into mistakes; and, as is usually the case in the youth of science, regarded much as easy of attainment which it was found on repeated trials beyond our power

to comprehend or teach. Excessive enthusiasm was followed by indifference; unhesitating confidence in our own powers of vision gave way to a more accurate inquiry into our means of vision, and method generally. In this way a small nucleus of truths was gained, which, though perhaps it was still possible to look at them from more than one point of view, were nevertheless in themselves beyond all reasonable doubt. On the other hand there were other deeper questions in regard to which, as was natural in the ever-increasing spread of the science, opinions were divided, and more than one path struck out. From a work of a practical nature the latter are of course to be rigorously excluded; and we must strictly adhere to facts which are accepted with scarcely any hesitation or variety of opinion by those familiar with the science. Hence it was my first principle entirely to exclude everything which did not seem to me proved to demonstration; and, therefore, though often requested by critics of my grammar to insert this or that theory, which, while not altogether beyond a doubt, appeared plausible to them, I have not allowed myself to be misled, believing as I do that in a school book we must certainly keep a step in the rear. In every vigorously advancing science, there are investigations which though commenced and not without important results, are not as yet brought to a conclusion and fully ripened. The attempt to teach such theories in a school, where all hypothesis is out of place, and simple 'yes' and 'no' are absolutely necessary, is just the very thing which often brings out in the plainest manner the weak or missing links in the chain of our researches. So long as such are to be found we must adhere to the old explanation. For it is in a school-grammar as in a state: reforms, however desirable, must be abandoned when obviously beyond our reach,



and we must be content with the old established laws. Our principle must be to keep the old explanation unless some important and certain gain is to be obtained by a change; and to this I have adhered, at the risk of being accounted overcautious by many fellow students of language, and finding myself and my book cast aside by advanced enquirers. Nevertheless I do not of course imagine that I have not fallen into mistakes in this respect; but I have at least acted upon the most conscientious conviction in every case.

Further; those results of science only could be introduced which can easily be rendered intelligible from Greek alone, or at most from Greek with the aid of Latin and German. The limits imposed by this principle were not without the corresponding advantage, that the language is thus made to appear throughout as a connected whole, an advantage from which even science gains an additional charm. It cannot be denied that the student, comparing a number of individual facts in different languages, is occasionally in danger of losing the connecting thread which combines all the phenomena of a given language together, and unites them into a single product of the national genius. For this reason the studies of linguistic enquirers constantly require to be mutually supplemented by works proceeding from different points of view. The special grammar of a given language must endeavour mainly to set in the clearest light the analogies which prevail throughout the language as a whole, together with the more special rules and types found only in certain limits, and floating, as it were, before the linguistic genius of the nation. Thus, to take an instance from Greek, it is absolutely necessary that one common name should be found to denote the so-called *tempora secunda et prima*, that is, shorter and longer forms having the same

function, though not always standing on exactly the same level. The system of the Greek language makes that indispensable. In such matters the individual character of every language must be carefully vindicated. The distinction mentioned between the tenses which I call 'strong' and 'weak', is as necessary in Greek as similar distinctions in German grammar; though *scientific enquiry* has to arrange and explain many things of this kind in a different manner. But in as much as every phenomenon must be made clear from the Greek itself—though proved, perhaps by comparison with other languages, the grammarian is compelled to make many omissions. Thus, for instance, the relationship between the personal terminations of the verb in the Sing.,  $-\mu\iota$ ,  $-\sigma\iota$ ,  $-\tau\iota$ , and the pronoun-stems  $\mu\epsilon$ ,  $\sigma\epsilon$ ,  $\tau\omicron$ , can be pointed out even when we confine ourselves to Greek forms; but, on the other hand, we should be led too far away from the form  $\sigma\iota$  of the second person, were we to go back to the older stem *tva* which may be obtained from the Sanskrit and from which, on the one hand, the  $-\sigma\tau\alpha$  ( $\sigma\tau\alpha$ ) sometimes found in the second person singular, and, on the other, the  $-\sigma\tau\iota$  of the imperative can be explained. In other cases also this compendious treatment compels us to assume auxiliary and intermediate forms, which, though certainly in existence at some time or another, may perhaps never have existed on Greek ground. This also is a point often too little regarded in linguistic enquiry. Science indeed cannot be too exact in this respect; but in a school-grammar some freedom may be allowed in favour of the language which has to be taught. An instance in point will be found in the fem. of the Part. Pref. Act. The Skt. *-ushi* beside the masc. *-vat* (*vas*) proves that  $-\upsilon\alpha$  has arisen out of  $-\upsilon\sigma\tau\alpha$ ,  $\tau$  being weakened to  $\sigma$  and then dropped. But whether this change took place when Greek had already become

separated from the kindred languages, or whether the Greeks brought with them the form *-usia* from a pre-Greek period, must be left undecided. The intermediate form  $\text{F}\sigma\sigma\alpha$ , therefore, assumed in § 188, though perhaps unknown to Greek lips, was nevertheless introduced as a connecting form absolutely necessary for the object in view.

The dialects are a very essential instrument in explaining Greek forms. They must, however, be used with the greatest moderation in a school-grammar where the material must be kept within due limits; such forms only being available in explanation as occur in books read at school. Happily Homer presents so great a number of the most instructive formations that this book alone is of more importance than all the other dialects. Of it the most extensive use must be made as being the most natural and convenient instrument for explanation. The best method is to bring the corresponding forms together before the eye on one page, in which case the Attic forms in the text are often at once explained by a glance at the Homeric forms beneath. This arrangement presents a further advantage to the teacher who proceeds intelligently with his work. Attic Greek must, in my opinion, form the central point in instruction, and must be first impressed firmly on the memory as the most delicate and complete development of the language. But when the first and, so to speak, dullest drudgery is over, and the forms are being established and fixed in the mind by analysis, no harm will be done by occasionally quoting a few Homeric forms in support of the analysis; and more especially at a later period, when the Homeric dialect must of necessity be studied in order to read the book, the most frequent opportunities will be given for comparing it with the Attic, and renewing an acquaintance with the latter. This indispensable

comparison of the dialects replaces to a great extent the more extensive comparison of different languages which lies beyond the sphere of a school. It is, and always was a scientific leaven in instruction in Greek, and even the most declared opponents of all anatomy of language have not the power to eliminate it. In fact analysis of some kind is here absolutely necessary; unless like the ancient grammarians, who derived everything in the world except their language from Homer, we would again teach that *θεοῖο* has arisen from *θεοῦ*, *Μουσάων* from *Μουσῶν*, *λλαισαι* from *λλαιήη*, *ἐδέλησι* from *ἐδέληη* by Paragoge, Pleonasmus &c. But no intelligent teacher will venture to act in such complete contradiction to science and his own better knowledge. Yet if this plan is not adopted, what remains? Must every enquiry of a clever pupil after the why and how be steadily set aside, and the meaningless phrases 'instead of', or 'for' used with cautious indecision in order to conceal what is unintelligible, and to repress every innocent desire, as I think, for the tree of knowledge. Such a course would I fear be as unworthy of a teacher as of a man of science.

Hence the need of a more scientific treatment of the Greek language is so widely felt that I am not alone in my attempt to satisfy it. Ahrens' '*Griechische Formenlehre des homerischen und attischen Dialekts*' appeared in 1852 simultaneously with the first edition of my grammar; and there are many points in which the two works agree. A later school-book, also proceeding from a correct insight into the study of language, is the '*Griechische Formenlehre für Gymnasien*', by H. D. Müller and Jul. Lattmann (Göttingen 1863). This is not the place to enter upon a detailed criticism of these works. My grammar is distinguished from both, inasmuch as it includes not only a more complete and systematic account of the whole æ-

vidence, so far as is needed in schools, but also a sketch of the syntax. The latter, though brief, is I believe sufficient for the object in view. Accidence and syntax have already been separated too long, to the mutual detriment of both. It is now high time to reunite them; and in explaining the syntax to avail ourselves, at least to some extent, of the results of our enquiries into the forms upon which all syntactical constructions ought to rest; and conversely, to enliven and deepen the analysis of the forms, which in some parts is very easily done, by a reference to their usage. This object has at present, it must be allowed, been attained to a very limited degree; nevertheless it is important that both parts of grammar should at least be based upon the same view of language, and carried out in the same spirit. In practice I consider it essential—and my opinion is shared by many teachers of experience—that one book, and one only, should be used by the pupil in learning Greek, from the time that he enters school till he leaves it. With this he will become perfectly familiar, and though at the present time there is a common, and not perhaps unreasonable desire for concentration in instruction, for my part, I can imagine nothing more likely to distract the student's attention in this very important branch of instruction than the successive perusal of a number of entirely different manuals.

Such a plan of course pre-supposes that the teacher will make a selection for those commencing the study of Greek. This I do not on the whole regard as a very difficult matter. Experience and practical instinct, together with the special character of the class taught, will supply the necessary clue. Much as my book is used in schools, few complaints on this subject have come to my ears; on the contrary many intelligent teachers have expressed the opinion that the necessity for a personal study of the grammar,

and for teaching it to pupils according to a plan of their own, has been a peculiar source of delight to them. And the systematic arrangement of the material, which I have attempted, unquestionably renders the book more useful for reference, which is and ought to be an important point in every grammar.

In conclusion I must say a word on the external limitation of the contents in my book. All exceptional forms or constructions of no importance in the pupil's reading had of course to be excluded. Hence those writers only are kept in view which are usually read in schools, i. e. of the poets, Homer, Sophocles and Euripides; and of the prose authors Herodotus, Thucydides, Xenophon, Plato and the Orators. Even in these, phenomena which would hardly be discussed in a school, are entirely omitted. With regard to the statistical citations commonly given, every one who has studied the subject knows how misleading they are. Notwithstanding the careful collections in Krüger's Greek grammar, and the quotations in our lexicons, much has been omitted, especially in reference to the compound verbs, of which owing to the arrangement in our lexicons, it is often very difficult to obtain a connected view, to the great detriment of linguistic science. In some cases also we must allow that it is mere accident that a form quite usual in the Attic period is not known to us till a later era. With such forms we must not be too strict. Thus according to Krüger the Perf. Med. ἤχουσαι is first found in Apollonius Dyscolus. But it is hardly possible that no Perf. Med. of so common a verb existed in the Attic times, and since there is nothing in the formation which points to a later origin (cp. ἤχουσαδην), ἤχουσαι is quoted with the verbs in § 228; whereas I held the fact that the form does not occur, according to Krüger, before Menander's time, to be a sufficient reason for the

exclusion of ἔκτακα, the later representative of ἔκτονα. On the other hand, in the formation of comparatives (§ 197) κλεπτίστερος stands among others as a characteristic example of an irregular formation although the form is first found in Suidas in the proverb Νεοκλείδου κλεπτίστερος. But since the proverb owes its origin to the Neocleides satirized in Aristoph. Plut. 655, the form is proved to be good Attic. It was unnecessary to mention the superlative which also occurs; and I only quote this to shew that I have not been so inattentive and thoughtless as the remarks of some of my critics would seem to imply. On the other hand, I make no claim to absolute consistency in this respect, and such in my opinion is not required in a school-grammar. It was not my purpose to be exhaustive within the compass allowed, still less to guide the student to the formation of all the possible forms of every noun or verb; but to arrange neatly and accurately what is required for the understanding of the Greek authors read at school. The writing of Greek is obviously of secondary importance in instruction, and I had no intention of aiding the pupil in this respect. And even if the teacher has to add something here and there, as the reading becomes more extensive, the harm is not great.

---





## PART I.—ACCIDENCE.

### CHAP. I.—OF THE GREEK ALPHABET.

THE separation of this first chapter which treats of the alphabet, from the second, which treats of the sounds, rests on the strict but sometimes neglected distinction between letters as such, and the sounds of which they are the symbols. This difference, in itself so simple, must certainly be impressed upon the pupil. The ancient grammarians knew nothing of it; for instance, they divided the vowels into long, short, and intermediate, and in this way obtained seven vowels in Greek, ε, ο, η, ω, α, ι, υ; whereas, as a fact, there are no more vowels in Greek than in Latin, viz. five, a, o, e, i, u—or if a difference is made between long and short, there are ten,  $\check{\alpha}$ ,  $\bar{\alpha}$ , ο, ω, ε, η,  $\check{\iota}$ ,  $\bar{\iota}$ ,  $\check{\upsilon}$ ,  $\bar{\upsilon}$ . The fact that in two cases only, there is a separate symbol for the long and short sound, is naturally of importance for the writing only, not for the sound. Nevertheless down to the latest times, the greatest confusion has been caused even by clever and learned men, because they have allowed themselves to be misled by the old method of writing, in which E, as is well known, represents both the long and short vowel, into the idea that in certain cases the long vowel could arise *out* of the short one. Thus from the old method of writing HOMEPOΣ the conclusion has been drawn that the middle syllable of the word was once short. With equal reason we might argue that every Latin *e* must

have been originally short, because in Greek the symbol E continued to be used for the short vowel only. The distinction between long and short vowels is a fact of great antiquity in the Indo-germanic languages; but the most of them never carried it so far as to use any different symbols at all for the long and short vowels, and the Greeks only in the case of ε and ο.

With regard to the accent also, it is important to distinguish between the sign, the need of which was first felt in Alexandrian times, and the tone signified, in order to eradicate the notion, which a pupil is very apt to entertain, that accentuation itself, and not merely the marks of it, is a vexatious, and quite unnecessary addition to the Greek language.

#### § 4.

The pronunciation of *t* as *z* in Latin, before unaccentuated *i*, is here only quoted as a practice now current, without in the least intending to point it out as established and recommended (ep. Corssen, *Ueber Aussprache, Vocalismus und Betonung der Lat. Sprache*, I, 69).

#### § 5.

Of the many errors current in regard to the pronunciation of Greek none is more totally at variance with the phonetic system of the language than the rendering of ζ by the hard combination *ts*, which is common in the greatest part of Germany. Even in the middle of a word this combination was carefully avoided by the Greeks, as e. g. in ἀνύ-σω for ἀνυτ-σω, in Κρη-σί for Κρητ-σι; and at the beginning of a word it would without doubt be more intolerable still. According to all that we learn from the grammarians,

the sound ζ is rather to be considered one of the very softest; it contained that weak sibilant which is found in German at the beginning of words, before vowels, e. g. *sein, soll*; and which can be just as easily distinguished from the similarly written sound in *ist*, as the French soft *s* in *maison*, from the hard *s* in *son*. Being used to denote the weak sibilant exclusively in French and several Slavonic languages, this letter *z* is now frequently adopted in several works on the science of language as the common symbol of the weak sibilant. In Greek this weak sibilant has in most cases arisen out of the palatal spirant Jod. If, for instance, we compare the Greek Ζεύ-ζ with the Sanskrit name of the sky-god *Djâu-s*, this *d* meets us just as plainly as in δία, which through an intermediate *dja*, passes into Eolic ζά, i. e. *dza*. ζ therefore, which is shown by prosody to be a double consonant, must certainly be pronounced as *dz*, i. e. *d* with soft *s*. When in the Eolic dialect we find σδ in the place of ζ, the change is due to metathesis of the two elements. In this way may be explained the modern Greek pronunciation which has allowed the *d* to drop out, and preserved the weak *s* only. For the origin of ζ, see further *Grundzüge der Griech. Etymologie*, II, p. 187 sq.

## § 7.

The lisping pronunciation of ϑ like the English *th*, usual in modern Greek, has the advantage of marking the distinction between ϑ and τ more sharply, but is at variance with the nature of the old Greek ϑ, which is proved (*Grundzüge*, II, 10 sq.) to be a true aspirate—i. e. a sound compounded of *t* and *h*, chiefly by the easy change which takes place in many instances from *t* to *th* (ἀνϑ' οὐ = ἀντι' οὐ, τῆσεια for

ἑξῆς); by the old method of writing in Latin (*tesaurus* = ἑσαυρός); and by the evidence of Dionysius of Halicarnassus, *de compos. verbi*, c. XIV, who speaks of a προσθήκη τοῦ πνεύματος. In German we may perhaps express χ and φ by *ch* and *f*, although they were certainly pronounced as *kh* and *ph*, to escape imposing upon ourselves too much that is foreign; but in the case of ζ it is not advisable to accustom ourselves to a pronunciation which is foreign and also demonstrably of recent origin.

### § 8.

I have treated the pronunciation of vowels and diphthongs at length in *Zeitschrift für d. ö. Gymnas.* 1852. p. 1 sq. This difficult question is often placed in an entirely false light by restricting it to the alternatives of modern Greek pronunciation on the one hand, and the Erasmian pronunciation with its numerous errors and corruptions on the other. It is better to put the question thus—How early do we find traces of the modern Greek method of pronunciation? At the same time, we must be careful not to take all the sounds together, but to examine each separately. The modern Greeks have, it may almost be said, entirely reversed the quantity of the vowels, and, to a certain extent, of the diphthongs also. To follow them in pronouncing ἔχσι like *êchi* would render useless every attempt to make the ancient verses tolerable to the ear; and any one, who like them, pronounces εὔ as *ev*, can form no intelligible conception of a verse like Od. v. 19 φέρον δ' εὐήγορα χαλκόν, nor can he understand why forms like πεπαίδευνται were possible, while others like τετυπνται were avoided. With regard to the diphthongs we have a fixed *terminus a quo* in opposition to the *terminus ad quem* of modern Greek. As a rule,

the history of these sounds begins with the distinct pronunciation of both the elements: in Greek, as in many other languages, it ends with compressing numerous double sounds into single ones. That the real diphthongal pronunciation of  $\alpha\iota$ ,  $\omicron\iota$ ,  $\epsilon\iota$ , was the oldest, is the more certain, because in Greek itself we find each of these double sounds proceeding from the amalgamation of the two elements—e. g. in  $\pi\alpha\acute{\iota}\varsigma$  compared with Homeric  $\pi\acute{\alpha}\iota\varsigma$ ,  $\omicron\acute{\iota}\varsigma$  from Homeric  $\omicron\acute{\iota}\varsigma$ ,  $\tau\acute{\epsilon}\rho\epsilon\iota\nu\alpha$  from  $\tau\acute{\epsilon}\rho\epsilon\nu\alpha$ . Equally certain is it that even at a very early period the diphthongal pronunciation began to be lost. The only question is, how early did this take place? Was it so early that the diphthongal pronunciation was quite unknown in the works of the best period, or, on the other hand, so late that in using the monophthongal pronunciation we introduce an element of corruption into a period in which it had no place? Since there are good reasons for selecting one particular period, (which can hardly be any other than the Attic), and since it would be very ridiculous in practice to have a separate Homeric and Attic pronunciation, the Attic age must necessarily be our standard. Within this period, which in round numbers reaches from 500 B. C. to 300 B. C., the year 400 B. C. may fairly be chosen as a fixed point, not merely because it is half way between the two limits, but because the new alphabet, made public in 401 B. C., offers at least some footing in regard to the sound of the letters. In many languages, it is true, letters are retained from an old alphabet which in no way correspond to the existing sounds. But if an innovation in orthography becomes current, it is *a priori* probable that it is on the whole, in close connection with the existing language. It is very improbable that the EI of the older alphabet began to be divided into EI and HI by public edict at a time when the distinction between

the pronunciation of the two sounds was already obliterated, or that the new H would have been introduced if the I which had already been long in existence could have supplied its place. On the contrary, we may naturally suppose that the sound represented by H was at that time such that it required a separate symbol; and that on the whole, the new alphabet has handed down to us a picture of the language, as it was spoken in Attica at the time when that alphabet was made public. Many difficulties, it is true, still remain. In many cases we cannot exactly prove how early the older pronunciation began to be laid aside. It is certain that  $\alpha$  and  $\epsilon$  were the first to change; and that as early as the Alexandrian period, they were pronounced in some districts as  $\bar{a}$  and  $i$ . But it can hardly be proved that this corruption began as early as the Attic period. Perhaps without being too bold, we may connect it with the violent changes which the Greek world underwent after Alexander. The mutual confusion of the different Greek races, the supremacy of the semi-barbarian Macedonians, the manifold contact with non-Greek, and especially oriental nations, could not be without an influence on the sound of the language. There is nothing whatever to prove that the corruption existed earlier, and as it is an advantage, from a practical point of view, to draw distinctions wherever sufficient data for them are to be found, the rule laid down in § 8 with regard to the pronunciation of diphthongs—that both elements should receive their proper value, as far as possible—may in general be recommended with certainty.\*

\* If any one considers this impossible, I advise him to request a Bohemian schoolmaster to pronounce the diphthongs. There, and as I believe in Austria generally—where owing to the intersection of different nations and stocks, the vocal organs

αι, therefore, is not to be confounded with η. G. Hermann, *de emendanda ratione grammaticae Graecae*, p. 51 recommends a pronunciation midway between *a* and *e*, sharper than η. His advice has not been followed in Germany, but η and αι, e. g. in μνήμων and δαίμων are still pronounced the same. In any case, those who render αι by *ä* must also render ει by *i*, for there is no probability whatever, that corruption set in earlier in the one case than in the other. It is useless to appeal to the Latin transcription in support of this pronunciation, because it is certain that *ae*, the Latin representative of the Greek αι, which was originally written, and without any doubt, pronounced as a diphthong—was carefully distinguished from *e* by educated Romans, even down to Varro's time (Corssen, *Aussprache des Lat.*, I, 194).

The monophthongal pronunciation of αι has at least the authority of the later Greeks from Alexandrian times, and of many scholars; but the ordinary pronunciation of ει as a broad German *ei* is quite absurd and utterly baseless. In German, *ei* is in sound indistinguishable from *ai*, *weiser* for instance rhymes with *Kaiser* (cp. Rumpelt, *Deutsche Grammatik*, I, p. 36), and, therefore, it evidently contains the elements *a* and *i*. But in regard to the Greek ει there is not the slightest probability, either from the origin of the diphthong, which arises out of ε or ι; or from the transliteration of the Latins who sometimes used *e*, sometimes *i*; or from the sharpening into *i* which began to be common from 300 to 200 B. C., that the α sound was ever heard; or that ει and αι had the same sound, or that ει was pronounced as αι while αι became *ä*. We may maintain with the greatest certainty that *ainae* or *ainä* never re-

are more pliable, this rule is fully carried out, whereas in other provinces of German civilization the greatest mistakes have crept in.

presented the sound of the Greek εἶναι. G. Hermann saw this: *de emend. rat.*, p. 53, he says: ‘*Diphthongum ει male pronunciari plena voce ut Germanicum ei aut Brittanorum i longum, vel Latina lingua docere potest, quae istam diphthongum nunc in e nunc in i mutat. . . . Ex quibus merito colligi videtur, diphthongi ει sonum fuisse medium inter ε et ι, eodem modo ut in quibusdam Germaniae regionibus ei pronunciatur.*’\*

If there is little reason to follow the modern Greeks in the pronunciation of αι and ει, there is obviously even less reason still to follow them in pronouncing οι as *i*. Nothing is more certain than that οι became sharpened into *i* far later than ει or even η. Liscovius in his tract on Greek pronunciation (Leipsic 1825) which contains much that is still useful, refers p. 140 to the various orthographical rules which have come down to us from the old grammarians. He mentions the *Erotemata* of Basilius Magnus p. 594 (4th cent. A. C.), where among other rules the following occurs πᾶσα λέξις ἀπὸ τῆς κ̄υ συλλαβῆς ἀρχομένη διὰ τοῦ ῡ φιλοῦ γράφεται πλὴν τοῦ κοῖλον. The rule would be false if κ̄υ were pronounced like κ̄ι, because in that case exceptions like κίσαρις, κίς, κισσός, κιχάνω, κίων and many others ought to have been quoted. Similarly in the *Epimerismata* which have come down to us under the name of Herodian, and in the *Etymologists*, e. g. *Etymologicum Magnum*, p. 289. 11. τὰ εἰς ῡξ ἅπαντα διὰ τοῦ ῡ φιλοῦ γράφεται πλὴν τοῦ προῖξ. This case is especially instructive on account of the great number of words in εἰξ. R. J. A. Schmidt has collected a great number of such facts in his

\* In Swabia, on the lower Rhine, e. g. in the word *Rhein*, and in the North West of Moravia, and probably in many other districts of Germany also, a real diphthong *ei* occurs, clearly distinguished from *ai*, in such a manner that *e* and *i* are distinctly perceived. It is no very difficult experiment to accustom the young pupil to this sound.



*Beiträge zur Geschichte der Grammatik*, p. 73 sq., and deduces from them an explanation—undoubtedly correct—of the terms ε ψιλόν and υ ψιλόν, i. e. that ψιλόν here means ‘bare’ in opposition to the diphthongal method of writing αι and οι. For this reason also, these terms first arose at a time when ε (hitherto named ε̄) and υ (hitherto ῡ) were no longer distinct in pronunciation from αι and οι. Schmidt rightly refers the alphabetical arrangement in Suidas to the same principle. Isolated instances of a similar arrangement are found also in the *Etym. Magn.* δοῖδουξ for instance stands after δρύφακτος, and then, after a number of words beginning with δοι, follows δύο. Although rules and usages of this kind were transferred from older collections into these later ones, it is not likely that they were borrowed without any alteration, unless at the time when the *Etym. Magn.* was compiled, i. e. as is commonly supposed in the 11th cent. οι was regarded as phonetically identical with υ, but as distinct from ι, ει, η, which at that time were one and the same sound.

Such being the state of the case, two results follow.

- (1) Those who pronounce υ as ι follow a system of pronunciation which certainly did not exist in the 4th, and probably not in the 11th cent. A. D.
- (2) That it is a great mistake to conclude from the Latin transliteration of οι by oe, that οι had the sound of a German ö, as K. W. Krüger among others maintains § 44, A, 1. οι in the 4th cent. A. D. was pronounced as υ, the latter, therefore, according to this theory must also have been pronounced as ö which—in spite of certain mutual changes between the sounds—no one will maintain, and which is the more inconceivable because Quintilian XII, 10, 27 expressly says that the υ sound was wanting in Latin. The Latin oe, the identity of which with

the German *ö* is by no means certain, like *ae*, only represents the Greek *αι*, because it is the successor of the older diphthong with *ι*. When *Oinomavos* was written (Mommson, *Corp. Inscr.* No. 60), both sounds of the diphthong were certainly pronounced. And if *oe* had been like German *ö*, it could hardly have given rise to *û* (*oetier* = *ûti*, *poena* = *pûnio*).

The history of the Greek *αι* is, therefore, as follows:—At the time of the general corruption of the diphthongs it passed first into *ü*, and then by a much later change into *i*.—All these deteriorations of diphthongs meet us first in the Bœotian dialect, which even in classical times replaced *αι* with *η*, *ει* with *ι*, and *οι* with *υ*: *ὀφειλετη*, *ἴμι*, *τῦς* (Ahrens, *Æol.* 191). Besides, even in modern Greek acute observers find delicate distinctions between the several *ι*-sounds, and quite unmistakable remains of older sounds in several words (Thiersch, *Griech. Gram.*, 4. Aufl., § 7, Anm.; E. Curtius, *Gött. Anz.*, *Nachr.* 1857, No. 22), a further objection to the Itacistic method of pronunciation which reduces all to one level.

As distinguished from *αι*, which in sound was not far removed from the English *oi*, *εῦ* must be pronounced so that the sharper *ε* may be heard before the *υ*. This is the regular pronunciation of the German *eu* in Mecklenburgh, whereas the common mode of pronouncing this diphthong identifies it with *oi* or even *ei* (*ai*). The Bacchic exclamation *εῦοι* may serve as a warning against the confusion of *ει* and *οι*; *αἰεῖ* and *σεύει* against the confusion of *αι* and *ει*, *εῦ* and *ει*.

Two main proofs may be cited of the strict monophthongal pronunciation of *ου*. (1) In the Bœotian dialect *ου* represents even the short U-sound, e. g. *κούνης*. (2) The Latins never made the attempt to write this obviously merely graphical diphthong with two letters, although it would have been very easy for

them, having in earlier times the diphthong *ou*, to do so. It is true that *ou* in certain cases corresponds etymologically to a diphthong, e. g.  $\beta\omicron\tilde{\upsilon}-\zeta$  = Sanskrit *gâu-s*, yet the sound must have been simple at a very early period; and only when the letter  $\Upsilon$  became fixed for  $\tilde{u}$ , were the Greeks, like the French in modern times, compelled to denote the simple vowel by combining the symbols of the sounds which to some extent denote the limits between which the vowel in question lay. '*Inopia fecerunt*' says even Nigidius Figulus in Aul. Gellius, *N. Att.* XIX, 14.

That the  $\iota$  subscriptum had ceased to be sounded as early as Strabo's time (contemp. with Augustus), is clear from XIV, p. 648. Inscriptions belonging to a period even earlier present considerable variation in writing or omitting it, though it may have been sounded in the best period. But it would be difficult to express it with our northern organs of speech.

---

## CHAP. II.—OF THE SOUNDS.

### § 25.

THE vowels are divided into two classes, which it is of importance to distinguish. Those in the first class, I call hard, those in the second, soft vowels. The choice of these technical terms may be called in question; indeed, there are perhaps no grammatical terms against which some objection cannot be made from one side or another. Nevertheless distinctive terms are needed both in practice and in science, clearly to mark out essential facts; and it seems to me that Comparative Grammar, especially in her latest representatives, has too carefully avoided setting new expressions in circulation, from the fear that they might in some respects be open to objection. The value of terms is obviously underrated in the science of language. In this respect J. Grimm was far more fertile. How strikingly does the single term *Lautverschiebung* mark out a whole series of facts in the history of language. For a school-grammar accurately chosen terms are indispensable.

The vowels which I call 'hard' have all arisen out of an original *a*, which is still to be found in Sanskrit. Hence in Greek also very frequent interchanges take place among these vowels, as a glance at the dialects will show. But besides these, such cases also as the following are especially to be noticed, φρήν (stem φρεν), εὔφρων (stem εὔφρον), εὔφραίνω (i. e. εὔφρανω), λέων (λεοντ), λέαινα (i. e. λεαν[τ]ια), ποιμήν (stem ποιμεν), ποιμαίνω (i. e. ποιμανω);

ἄμα also stands by ὄμοῦ, while the E sound is in this case shown in the Latin *sem-el*, old Lat. *semol* (*simul*). (*Grundzüge*, I, p. 286.) Hence we may explain οἴκα-δε from stem οἴκο, verbs in -ω from stems in α, e. g. κορυφό-ω and *v. v.* Patronymica in -ιαδη-ς from stems in ιο, e. g. Γαλ-ῶνβιάδη-ς, derivative adjectives in -ιακό-ς, e. g. Πελοποννησια-κό-ς, also from stems in -ιο. Thus even without the aid of Sanskrit the original identity of these vowels can be made clear. As they all go back to *a*, we might call them A-sounds; but such a term would be, at least for schools, likely to mislead, and we use the expression A-sound in a narrower sense to denote short and long *a* in their common difference from E and O. Besides, in this case there would be no common homogeneous name to denote the second class ι and υ.\* ‘Hard’ sounds are those which cannot easily adapt themselves to others; ‘soft’ those which are pliant and flexible. Thus the hardness of the first class of sounds is shown in the fact, that though harmonizing with following soft vowels, e. g. in the diphthongs (§ 26), they cannot be combined with each other; but undergo changes of various kinds (§ 36), while the soft vowels of the second class remain unchanged both before and after hard vowels (§ 35). There is another indication of their soft nature, which lies beyond the compass of my grammar; ι and υ pass into the semi-vowels Jod and Vau, and in other cases develop these spirants, throwing off as it were a portion of their natural softness (ι = ιj — υ = υF.) cp. *Grund-*

\* Benary (*Röm. Lautlehre* p. 4) names the vowels of the first class *starr* (*fixed*) and those of the second *flüssig* (*mobile*). But since we connect the idea of immutability with the word *starr*, and the vowels α, ε, ο certainly undergo numerous changes, the expressions do not seem to me very happily chosen.

*züge*, II, 145 and 208. The effect also of  $\iota$ , and more rarely of  $\upsilon$ , on a preceding  $\tau$ , which by direct contact with these vowels becomes softened to  $\sigma$  in certain cases (e. g. Ion.  $\varphi\eta\text{-}\sigma\acute{\iota}$  for Dor.  $\varphi\alpha\text{-}\tau\acute{\iota}$  (§ 60)  $\varphi\bar{\alpha}\text{-}\sigma\acute{\iota}$ , i. e.  $\varphi\alpha\text{-}\upsilon\sigma\acute{\iota}$  for  $\varphi\alpha\nu\text{-}\tau\acute{\iota}$ ,  $\sigma\acute{\upsilon}$  for older  $\tau\acute{\upsilon}$ ) is owing to the soft nature of these vowels, from which a part, so to speak, is separated off and expended in modifying the preceding dental. Taking a wider view, it is to this head that the phenomena belong, to which Schleicher gives the name *Zetacismus*, the most essential of which are mentioned in § 55—58, and those which I call *Dentalismus* (*Grundzüge* II, 71 sq.). For these reasons the expressions ‘hard’ and ‘soft’ seem to me quite appropriate.

It was impossible in the grammar to give any further explanation of the dialectical phenomena mentioned in § 24. D., e. g.  $\xi\epsilon\tilde{\iota}\nu\omicron\varsigma$ ,  $\mu\omicron\tilde{\upsilon}\nu\omicron\varsigma$  for  $\xi\acute{\epsilon}\nu\omicron\varsigma$ ,  $\mu\acute{\omicron}\nu\omicron\varsigma$ . Many of them no doubt are not without a deeper reason. Thus the lengthening of  $\epsilon$  to  $\epsilon\iota$ , and  $\omicron$  to  $\omicron\upsilon$  is due to the rejection and transposition of consonants, e. g. in the Homeric  $\omicron\tilde{\nu}\nu\omicron\mu\alpha$ , which stands for  $\acute{\omicron}\text{-}\gamma\nu\omicron\text{-}\mu\alpha$  cp. old Latin *gnô-men* (rt. *gnô* = Greek  $\gamma\nu\omega$ ). The short middle syllable may be compared with Latin *nô-ta*. Nevertheless philologists have as yet been by no means successful in discovering a definite cause for the lengthening in all cases; and, therefore, in a school-grammar, it is indispensably necessary merely to point out the facts as such.

### § 30 sq.

In the division of the consonants I have attempted, so far as possible, to reconcile the current expressions with those brought into use by the new enquiries set on foot from a physiological point of view (cp.

especially Brücke, *Grundzüge der Physiologie und Systematik der Sprachlaute*, Vienna 1856, and Lepsius, *Das allgemeine linguistische Alphabet*). What is here called the organ, according to the usual terminology, has received from physiologists the more accurate designation 'region of articulation'. Hence it follows *vi termini* that we cannot in Greek speak of linguals, because the tongue takes as essential a part in the pronunciation of a  $\chi$ , as in that of a  $\tau$ . But the expression 'dental' as applied to  $\tau$ ,  $\delta$ ,  $\theta$ , is thoroughly justified, the tongue being pressed against the upper row of teeth in pronouncing them. In the earlier editions of the grammar  $\lambda$  and  $\rho$  were placed among the dental consonants. But the objection has been made, and not without reason, that  $\lambda$  has no particular place of articulation, but is really a pure lingual;  $\rho$  on the other hand, may certainly be pronounced by the vibration of the tip of the tongue against the upper row of teeth; but it is not necessary so to pronounce it. In a great part of Germany, for instance, this sound is produced in the back part of the mouth by vibration of the uvula. Since we cannot decide which pronunciation was used in the case of the Greek  $\rho$ , I have exempted  $\lambda$  and  $\rho$  from the organic division of consonants.

In the note to § 31\* reference is made to the designation of mutes as 'momentary' sounds, and semi-vowels as 'continuous' sounds, which is usual among physiologists. In order not to multiply expressions, other terms also, in some respects still more striking, have been passed over. Among these is the term 'explosive sound', equivalent to mute, an expression denoting in the clearest manner the

\* § 31. Obs. 'The mute consonants are also called momentary, because they are produced in a moment: the sonant, are called continuous sounds because we can continue to pronounce them for some time.' This note is omitted in the Eng. Trans. TR.

essential characteristic of these sounds, which are produced by the sudden opening of a closure formed in some particular region of the mouth.

### § 34. D.

The aversion of the Greek language towards spirants—as I, with other grammarians, term the sounds *j*, *s*, *v*—is a very important fact, by reference to which numerous changes in Greek, and more especially distinctions between Greek and Latin, can be explained. Of these three homogeneous sounds, *σ* is frequently dropped before vowels (cp. § 60 b, § 61 b). At the beginning of a word it passes for the most part into Spiritus asper, but in the middle, apparently through the medium of a Spiritus asper, it vanishes altogether. The labial spirant *F*, in regard to which the absurd notion that it could be prefixed to, or inserted in a word at will, must once for all be abandoned, was preserved to a considerable extent in Æolic and Doric from a very early period, especially at the beginning of words; of its existence in the Homeric poems, in the words quoted in the grammar, there can be no doubt.—The third spirant Jod, produced by breathing over the palate, has not come down to us in any Greek dialect, but the existence of the sound at one time as inferred from the comparison of kindred languages, is one of the most important facts in the history of the language, by which a number of apparently quite different processes receive a very simple explanation (see further *Grundzüge*, II, p. 176 sq.).

With regard to the digamma in Homer (cp. on this subject the extremely careful work of Hoffmann, *Quaestiones Homericae*, Clausthal 1842), my principle was to give those words only as beginning with the digamma, in which the existence of the



sound is proved, not merely by the criteria of the Homeric verse, which by themselves are not in all cases sufficient, but also by the evidence of other dialects and kindred languages. For this reason, the corresponding words in Latin are given wherever the coincidence is striking. Hence many words will not be found here, which are given with the digamma in other works, e. g. Bekker's 2nd edition of Homer (Bonn 1858. 2 vols.). In school instruction the digamma can only be noticed so far as it explains the anomalies of the Homeric verse which are mentioned in the grammar, and much apparent irregularity in the inflection and formation of words. The doctrine of the augment more especially comes into consideration here, the acquaintance with which in § 236, 237, or the repetition of it in the course of practical instruction, perhaps first gives an opportunity of referring to § 34. D., and so preparing the way for a knowledge of the Homeric dialect. Another opportunity is given in § 275, 2; and also in many verbs belonging to the two leading conjugations, especially in those of the 8th or mixed class (§ 327), and in the composition of words (§ 354, 360. Obs.). Everywhere it is very important for the teacher to bear in mind that besides F, the other two spirants could be dropped, in obedience to the laws of sound (e. g. εἶχ-ο-ν = εἶ-(σ)εχ-ο-ν). The cause of these phenomena is, therefore, by no means to be sought in the digamma only. Indeed, in the Homeric dialect a short syllable is so frequently made long before ὦς (e. g. ἄεδος ὦς), that we should be justified in assuming the existence of a digamma, did not the kindred languages point rather to an old Jod (*Grundzüge*, II, 177), and make it probable that in this very common word the effects of that spirant, and not of the digamma have been preserved.

Of  $\mathcal{F}$  in the Æolic and Doric dialect the fullest account is given in the admirable works of Ahrens, *de dialecto Æolica* (Gött. 1839), *de dial. Dor.* 1843. On  $\epsilon$  as evidence for  $\mathcal{F}$  ( $\epsilon\epsilon\lambda\kappa\sigma\sigma$ ) cp. *Grundzüge*, II, 152sq.

---

CHAP. III.—OF THE COMBINATIONS AND CHANGES  
OF SOUNDS.

§ 40.

THE most careful explanation of the vowel-orders is given in Schleicher's *Compendium*, 48 sq.—For school instruction it seemed sufficient to distinguish between the two most essential kinds of lengthening, which are: (1) Organic, the strengthening of a vowel in subservience to aims present to the genius of language and consequent lengthening of a syllable causing it to be pronounced with greater force. (2) Compensatory, which arises in consequence of the loss of a sound, and is due to the desire to compensate the loss of consonant-sound by increasing the amount of vowel-sound.

Organic lengthening can be made clear in detail only by the aid of the kindred languages. It is due to the fact that the vowels were originally only three in number: *a*, *i*, *u*. Of these, *a* was extended by reduplication and remained a simple sound,  $a+a = \hat{a}$ ,  $\hat{a}+a = \hat{\hat{a}}$ , *i* and *u* became diphthongs, *a* short, and then *a* long, being prefixed—*i*, *ūi*, *ūi*—*u*, *ūu*, *ūu*. These two stages of phonetic extension, known to Sanskrit grammarians by the names *Guna* (i. e. power) and *Vṛddhi* (i. e. increase), are in Greek confounded with other changes of vowels, which appear to be of later origin. The hard vowels—*α*, *ε*, *ο*—change into *η* (Dor. *ᾱ*) and *ω* not merely in forms in which the kindred languages display a similar lengthening, e. g. in Perf. Act., *κῶαγ κῆ-κῶᾱγ-α*, *λᾶᾶ λῆ-λῆᾶ-α* (Dor.

λέ-λαῖ-α), ἰδ ὄδ-ωδ-α, but the change also takes place along with the addition of elements used for the formation of stems, e. g. in the Future, the Perfect stem, the weak passive stem, and in numerous noun-forms, e. g. τετίμη-κα, ἐποίη-σθη-ν, ποίη-σι-ς, δικαίω-μα, σοφώ-τερο-ς, where the kindred languages have no corresponding change.

The latter mode of strengthening sounds, which has as yet received but little attention from scientific grammar, is far more important in a school-grammar than the other, because it occurs more frequently. It is one of the cases in which the special grammar of a language must take its own course. The disturbance which has taken place in the original relation, is displayed in Greek most conspicuously in the fact that not only are the hard vowels lengthened far more frequently than in earlier periods of the Indo-germanic language; but also the soft vowels ι and υ, instead of becoming diphthongs according to the old usage, are simply lengthened as single vowels, and this occurs in the same places, in the same forms, which in the kindred languages, especially in Sanskrit, have the diphthong. The Greek 1st per. pl. δείκ-νυ-μεν corresponds in formation to the Sanskrit *âp-nu-mas*; the first sing. δείκ-νῦ-μι to Sanskrit *âp-nô-mi* (*âp-nau-mi*). From the root πλυ, πλεν-σοῦμαι is formed regularly by diphthongal extension; and may be compared with the Sanskrit active form of similar meaning, *plô-shjâ-mi*; from the root φν, on the other hand, we have φῦ-σω (cp. Sanskrit *bhav-ishjâ-mi*). In this case the Zend future *bû-sjeiti* stands by the Greek φῦ-σει. Schleicher, *Comp.*, p. 619. Bopp, *Vergl. Gram.*, II, p. 553. By these facts my explanation is sufficiently justified. In a school, certain subtler changes of sound can be passed over without danger of superficiality. Even the relation of ο to ε, and the corresponding relation of οι to ει

(c. g. *τρόπος*-ς—*τρέπω*, *οἶδα*—*εἰδέειν*), which may be considered as a slighter form of organic extension, I have preferred not to point out as such, because a doubt might arise in the mind of an enquiring thoughtful student concerning the relation of the vowels in *ἔτραπον*, *τρέπω* and *τρόπος*, a doubt which for him, and to some extent even for us also, must remain unsolved. Indeed, it has been my object generally in dealing with the sounds to call attention to none but the most essential of the laws and tendencies which govern language.

## § 42.

The principle of compensatory lengthening was first brought into notice so far as I know by H. L. Ahrens, *Ueber die Conjugation auf μ*. (Nordhausen 1838. 4. p. 34), although of course the fact that vowels were lengthened in consequence of the rejection of consonants had been observed previously. This principle is one of very great usefulness in a school-grammar. In Müller and Lattmann it is thus very concisely defined.—‘The lost position-length is replaced by a natural length.’ The intention of language is in some respects most clearly shown in *ἀλλήλων*-ν, the origin of which from *ἄλλ-αλλο* (*alius*, *alium*) is beyond a doubt. The exact repetition of the sound was avoided; but *ἄλλο* was not replaced by *ἄλο*, but by Doric *ἄλο*, Ionic *ἦλο* (cp. *ἔψηλα* = Æolic *ἔψαλλα*).

## § 46.

‘Before mute dentals, mute dentals in order to become audible pass into the sonant σ—(Dissimilation).’ Although here, as elsewhere, I attribute an intention to language, I need hardly remark that I

do not mean a conscious purpose. Anything of that kind must be altogether excluded from the spontaneous life of language, of which it is just in the changes of sound that we have the most direct revelation. Obviously, we have here only to deal with an instinctive adaptation of means to ends, an unconsciously pursued tendency of the genius of language. In Greek this tendency aims with marvellous energy at giving full value to each significant element. This peculiarity may be called the intellectual character of the Greek language. Thus, when the proximity of other dental sounds made the preceding dental of the stem intolerable in a pure state, e. g. in ᾄδ-τέον, the tongue was placed as before against the upper row of teeth in the position necessary for the pronunciation of the δ, but instead of the firm closure required in producing an explosive sound, a compression only was formed, and in this way the dental sibilant was produced instead of the pure dental. Thus language attains a double object; the pronunciation is made easier, and the dental element retained, though in another form: cp. Latin *es-t* = *ed-t* for *ed-i-t*; *claus-trum* from *claud-trum*. In *lae-su-s* = *laed-tu-s*, the corruption has gone further, in which case nevertheless we may with probability assume an older form *laes-tu-s*, which through later assimilation became *laes-su-s*; *lae-su-s*.

## § 47.

‘Before  $\mu$  a guttural becomes  $\gamma$ , a dental  $\sigma$ , a labial  $\mu$ .’ Three changes are here classed together which do not exactly stand on the same level, but which in a certain sense may all be regarded as assimilation. The principle is marked most clearly in the change of a labial before  $\mu$ , for in this case

the preceding sound becomes, not merely similar to, but entirely identical with  $\mu$ ,  $\delta\pi\text{-}\mu\alpha$ ,  $\delta\mu\text{-}\mu\alpha$  (in Æolic we find the reverse change  $\delta\pi\text{-}\pi\alpha$ ). But even the change of a dental into  $\sigma$  can be regarded as assimilation in so far as the continuous sound (semi-vowel)  $\sigma$  is nearer to the continuous sound  $\mu$ , than it is to a dental explosive sound. Lastly, it is clear that among the guttural explosive sounds the weak  $\gamma$  is the most closely connected with  $\mu$ , and, therefore, represents the other gutturals before that letter. The numerous exceptions to the two latter changes in the formation of words, do not allow us to consider the whole as a law, but only as a tendency of language. The analogy of the other person-terminations may have had an influence in making this tendency more widely-spread in the inflection of verbs, e. g.  $\iota\sigma\text{-}\mu\epsilon\nu$  like  $\iota\sigma\text{-}\tau\epsilon$ ,  $\iota\sigma\alpha\sigma\iota$ ;  $\pi\acute{\epsilon}\text{-}\pi\epsilon\iota\sigma\text{-}\mu\alpha\iota$  like  $\pi\acute{\epsilon}\pi\epsilon\iota\sigma\alpha\iota$ ,  $\pi\acute{\epsilon}\pi\epsilon\iota\sigma\tau\alpha\iota$ ,  $\pi\acute{\epsilon}\pi\epsilon\iota\sigma\tau\epsilon$ .

## § 48.

‘Before  $\sigma$  as a hard consonant  $\gamma$  and  $\chi$  become  $\kappa$ , and  $\beta$  becomes  $\pi$ ,—Assimilation:  $\kappa\sigma$  is then written  $\xi$  and  $\pi\sigma$ ,  $\psi$ .’ Here again it is important to insist on the distinction between sound and the symbols of sound. The want of such a distinction has given rise to the false notion that  $\xi$  and  $\psi$  are triple sounds, according as the one =  $\kappa\sigma$ ,  $\gamma\sigma$ ,  $\chi\sigma$ , and the other =  $\pi\sigma$ ,  $\beta\sigma$ ,  $\varphi\sigma$ . The absurdity of such a notion is evident, and it is worth while, both in Greek and Latin, to guide the pupil into the right path.

## § 49.

The connection between the first and second divisions of this section is sufficiently clear. As in  $\tau\acute{\epsilon}\iota\chi\epsilon\text{-}\sigma\iota$ , so in  $\pi\omicron\text{-}\sigma\acute{\iota}$  a dental sound has disappeared.

There can be no doubt, at least in the case of the dental mutes, that the history of the change was as follows. First, the dental became assimilated to the sibilant. This is sufficiently proved by Homeric forms like  $\pi\sigma\sigma\acute{\iota}$ . Later on came the desire to drop one of two consecutive sigmas. In this way  $\pi\sigma\acute{\iota}$  arose, which indeed as well as  $\pi\sigma\sigma\acute{\iota}$  is found in Homer. The rejection of one of two sigmas is a proceeding which explains numerous forms, e. g. Attic  $\tau\acute{o}\sigma\sigma\sigma\text{-}\zeta$  compared with Homeric  $\tau\acute{o}\sigma\sigma\sigma\text{-}\zeta$ , i. e.  $\tau\sigma\text{-}\tau\iota\text{-}\sigma\text{-}\zeta$  (cp. Latin *tot*, for *toti*, *totidem*),  $\acute{\epsilon}\sigma\sigma\mu\alpha\iota$  compared with Homeric  $\acute{\epsilon}\sigma\text{-}\sigma\sigma\text{-}\mu\alpha\iota$ ,  $\beta\acute{\epsilon}\lambda\epsilon\text{-}\sigma\iota$  with  $\beta\acute{\epsilon}\lambda\epsilon\sigma\text{-}\sigma\iota$  and the termination  $\sigma\iota(\nu)$  in dative plural generally as compared with the original  $\text{-}\sigma\sigma\iota(\nu)$ , apparently derived from  $\sigma\text{F}\iota(\nu)$ . It is important also to point out to the pupil (cp. § 62. D.) that the double consonants which are found in the dialects beside simple ones, belong as a rule to the older forms, and not *vice versá*.

### § 51.—OBS. 2 AND DIALECTS.

The insertion of auxiliary consonants is in Greek confined to a few cases, and can be explained by reference to the precisely parallel phenomena of the Romance languages, e. g. French *cen-d-re* = Lat. *cin-e-rem*, *Vendredi* = *Veneris dies*, *chambre* = *camera*, *com-b-le* = *cumulus* (Diez, *Grammatik der roman. Sprachen*. I. 201, 206). Still nearer is the German *Fähn-d-rich*, and provincial *Hein-d-rich*, *Hen-d-rich*.

### § 55—58.

In inserting these changes of sound in a practical school-grammar, I have the support of Ahrens. There is, however, this difference between us, that he in p. 182 sq. of his *Formenlehre* quotes other changes besides those which I have mentioned—as e. g. those



from  $\pi\iota$ ,  $\beta\iota$ , and  $\varphi\iota$  into  $\pi\tau$ , by which the third, or T-class of verbs, would be made a subdivision of the fourth or I-class—changes which I cannot regard as established. In *Grundz.*, II, 231 sq. I have given the reasons for my view at length. Müller and Lattmann also in the *Formenlehre* which I have quoted, assign a place to these phenomena, confining themselves however to what is certain. As a fact, I regard this innovation as one of the most important, because in this way, a number of phenomena of language, in appearance very diverse, are brought back to one principle, which is easily intelligible, even to a pupil. Chief among the classes of such phenomena are the following three: (1) the formation of comparatives, (2) the formation of feminine adjectives and proper names, and (3) the formation of present-stems in verbs of the I-class. When these have become familiar to the pupil, the teacher may avail himself of a repetition of §§ 55—58, to combine them all together, and thus impart an insight into the connection of all these phenomena.

All the changes here pointed out are due to the operation of the old consonant Jod, which, we have seen, was not unknown in the oldest times to the Greeks. But since this spirant frequently passes into its kindred vowel in the very changes under consideration (e. g. in  $\tau\acute{\epsilon}\lambda\omega$  for  $\tau\epsilon\nu\text{-}j\omega$ ), and elsewhere also, in similar formations, appears as  $\iota$ ;  $\acute{\eta}\delta\text{-}\acute{\iota}\omega$ ,  $\acute{\iota}\delta\text{-}\acute{\iota}\omega$  (Sanskrit *sviḍ-ja-mi*, *Grundz.*, I, 207),  $\pi\omicron\acute{\upsilon}\eta\tau\epsilon\text{-}\alpha$ ; and since in any case, the most frequent changes, and the closest relationship between Jod and Iota must be assumed as existing in that ancient period, I have thought myself entitled to give a full account of its operation without introducing a letter unknown to the Greek alphabet, which however the grammars mentioned above have inserted without scruple; but

I believe that it ought to be our object to introduce as little as possible that is strange into a grammar.

On the several changes here mentioned the following remarks may be made. (1) The transposition of  $\iota$  into the preceding syllable hardly needs any particular explanation, metathesis being one of the most common phenomena in language. Those who question the fact, may be referred to Æolic forms like  $\mu\acute{\epsilon}\lambda\alpha\nu\text{-}\nu\alpha$ ,  $\chi\acute{\epsilon}\rho\text{-}\rho\omega\nu$ , the origin of which by assimilation from  $\mu\acute{\epsilon}\lambda\alpha\nu\text{-}\jmath\alpha$ ,  $\chi\epsilon\rho\text{-}\jmath\omega\nu$  is self-evident. In several of the forms which belong to this head the Jod of the second syllable has further asserted its power in two ways; (1) it combined with the preceding consonant into one of the usual groups, and (2) also entered as  $\iota$  into the preceding syllable; e. g. in  $\kappa\rho\acute{\epsilon}\iota\sigma\sigma\omega\nu = \kappa\rho\epsilon\tau\text{-}\jmath\omega\nu$ ,  $\mu\acute{\epsilon}\iota\zeta\omega\nu = \mu\epsilon\jmath\gamma\text{-}\jmath\omega\nu$ , see § 198 Obs. Here also belong  $\Sigma\acute{\alpha}\sigma\sigma\omega\nu = \tau\alpha\chi\text{-}\jmath\omega\nu$ , and  $\mu\acute{\alpha}\lambda\lambda\omega\nu = \mu\alpha\lambda\text{-}\jmath\omega\nu$ , in which the  $\iota$  has only lengthened the stem-syllable and has not combined with it into a diphthong. A similar effect is produced by the J-sound on a preceding vowel in the verbs  $\kappa\rho\acute{\iota}\nu\omega$  and  $\sigma\acute{\upsilon}\rho\omega$  (§ 253). The Æolic forms  $\kappa\rho\acute{\iota}\nu\omega$ ,  $\sigma\acute{\upsilon}\rho\omega$  are proofs that this explanation is correct.

(2) The most convincing proofs of this change are those given in the text.—Latin *alius* compared with Greek  $\acute{\alpha}\lambda\lambda\omicron\varsigma$ , *sal-io* with  $\acute{\alpha}\lambda\lambda\omicron\mu\alpha$ . Somewhat similar is Old High German *stellan* for *steljan*.

(3) and (4) These changes of dentals and gutturals with Jod, are discussed elsewhere in full, *Grundzüge*, II, 233 sq. The most important results of the enquiry, which bring the theory of spirants into a consistent whole for the first time, are the following:— $\sigma\sigma$ —in New Attic and Bœotian  $\tau\tau$ —arises only out of a *hard* mute or aspirate ( $\tau$ ,  $\Sigma$ ,  $\kappa$ ,  $\chi$ );  $\zeta$ —in Bœotian in the middle of a word,  $\delta\delta$ —arises only out of a soft mute ( $\delta$ ,  $\gamma$ ). Where the first group

appears to rise out of  $\gamma$ , e. g. in  $\varphi\rho\acute{\alpha}\sigma\sigma\omega$  (stem  $\varphi\rho\alpha\gamma$ ),  $\gamma$  is the representative of an older  $\chi$ , compare Latin *fare-io* =  $\varphi\rho\acute{\alpha}\sigma\sigma\omega$ . I could make no use of this discovery in the text of the grammar, because the change from  $\chi$  to  $\gamma$  cannot be made clear to the pupil in every ease. The statement, therefore, is allowed to remain for the present, that  $\sigma\sigma$  arises out of  $\gamma$ . Further, the assumption that  $\sigma\sigma$  sometimes arises out of  $\delta j$  is quite without foundation. The comparative  $\beta\rho\acute{\alpha}\sigma\sigma\omega\nu$ , which is only found in Iliad K. 226, belongs to  $\beta\rho\alpha\chi\acute{\upsilon}\zeta$ , not to  $\beta\rho\alpha\delta\acute{\upsilon}\zeta$ , and, therefore, has arisen out of  $\beta\rho\alpha\chi-j\omega\nu$  (cp. § 198. D).

$\sigma\sigma$  arises out of  $\tau j$  in the following manner. The Jod of  $\lambda\tau-j\sigma-\mu\alpha\iota$ , for instance, was changed into a sibilant, originally soft, but afterwards hardened— $\lambda\tau-\sigma\sigma-\mu\alpha\iota$ . From this group arose (1)  $\sigma\sigma$  by retrogressive assimilation (i. e. assimilation working backwards from the end of the word), and (2)  $\tau\tau$  by progressive assimilation.  $\tau j$  has gone through the same changes, with the additional loss of the aspirate.

In the same way  $\zeta$  is explained, the sound of which is, as we have seen,  $dz$ .  $\varepsilon\delta-j\sigma-\mu\alpha\iota$  became  $\varepsilon\delta-z\sigma-\mu\alpha\iota$ , that is  $\varepsilon\zeta\sigma\mu\alpha\iota$ . In this case no further change took place.

At a period long anterior to the formation of existing groups of sound, the gutturals, under the influence of a following Jod, became thrust forward into the fore-part of the mouth. Thus  $\acute{\eta}\chi-j\omega\nu$  passed by different steps into  $\acute{\eta}\tau-j\omega\nu$ ,  $\delta\lambda\iota\gamma-j\omega\nu$  into  $\delta\lambda\iota\delta-j\omega\nu$ . The manifold changes between  $c$  and  $t$  in unaccentuated syllables in Latin—e. g. *patri-ciu-s* and *patri-tiu-s*, *condi-cio* and *condi-tio*, rest on the same principle (see Corssen, *Aussprache*. I. 28), as also the change of the Latin  $c$  into the French sibilant, *facies face*. Out of the hypothetical forms  $\acute{\eta}\tau-j\omega\nu$  and  $\delta\lambda\iota\delta-j\omega\nu$  arose  $\acute{\eta}\sigma\sigma\omega\nu$  ( $\acute{\eta}\tau\tau\omega\nu$ ) and  $\delta\lambda\acute{\iota}\zeta\omega\nu$ , exactly in the same way as  $\lambda\acute{\iota}\sigma\sigma\omega\mu\alpha\iota$  ( $\lambda\acute{\iota}\tau\tau\omega\mu\alpha\iota$ ) and  $\varepsilon\zeta\sigma\mu\alpha\iota$  out of

λιτ-ιο-μαι and ἐδ-ιο-μαι. The breathing of  $\chi$  like that of  $\zeta$  is lost in the process of change.

In countries where Slavonian languages have come into contact with German, all these phenomena can easily be made intelligible, because a great number of the changes of sound peculiar to Slavonic, are due to the influence of Jod on preceding consonants. Whether it would be advisable in other places to trace out to the pupil in detail these developments of sound according to the indications here given, is doubtful, not because such a course would be beyond his comprehension—for this whole theory is very simple, and quickly mastered, if studied with attention—but because it would occupy too much time, and lead too far away from Greek, as a historical language. Nevertheless, it is to be wished that the teacher, even if, with his pupil, he confines himself to those facts of the history of sound which I have here pointed out, should obtain for himself an idea of the basis on which the whole rests.

### § 62.

After what has been said, I need not show in detail that the double consonants mentioned in this section preserve as a rule the older forms of the language, and have arisen out of assimilation. In nearly all the roots beginning with  $\rho$  more especially, the earlier existence of a consonant before  $\rho$  can be proved; ἄρρηκτο-ς is the assimilated form of ἄ-Φρηκτος (*Grundz.*, II. 119), περίρρυτο-ς of περι-σφυ-τος (I. 318). In the same way the double  $\rho$  after the augment (§ 234) can be explained.

Thus too the first  $\mu$  in φιλομμειδής is proved to be a representative of  $\sigma$ ; by the fact that the root *smi* (*Grundz.*, I, 293) means in Sanskrit also 'to smile.' μέσσος (Ionic and Æolic) corresponds to Sanskrit

*madhja-s* and Latin *medius* (I. 297). But in other cases the attempt to explain the double consonant is a failure, e. g. in ἔϋννητο-ς, in which, with all the help of the kindred languages, we can get no further than the root νε (I. 280). In λαβεῖν also we cannot prove the existence of an older sound before λ (II. 109). A Greek school-grammar, therefore, must be content with pointing out the fact that the Homeric dialect has often a double consonant in the place of a single one. This fact is to be taken together with the lengthening of short syllables at the end of a word, mentioned in § 77. D. The lengthening of the final short vowel of a preceding word, like the doubling of the consonant in the middle of a word, is in many cases due to the influence of a consonant no longer in existence—e. g. in δῆν, which as the form δοάν in Alcman proves, has arisen out of διϕάν, διϕην, and is akin to the Latin *diu*, signifying literally—‘a day long’. *Grundz.*, II., 145. The close ὄρεα νεφέεντα II. Ξ. 227, is to be explained by the older σν which is retained in this stem in the Gothic *snaiw-s*—‘snow’, and the Lithuanian *snig-ti* (‘to snow’). In both these word-stems, and in many others, the first consonant was still, at the time of the origin of the Homeric poems, a fuller sound. The influence of this sound was in some cases, e. g. in the middle of a word, indicated by the doubling of a consonant; sometimes, e. g. at the contact of two words, by the lengthening of the final syllable of the preceding word. But there is no doubt that the second of these phenomena occurs before word-stems, which in all probability never at any time began with two consecutive consonants, e. g. before μέγα-ς (I. 292), in which from the comparison of Latin *magnus*, Gothic *mik-ils*, it is impossible to suppose that an initial consonant has been dropped; and which nevertheless in numerous lines like εἶδος τε μέγεδος τε

(II. B. 58), and even *Αἴας δ' ὁ μέγας αἰέν* (II. 358) is preceded by most remarkable lengthenings. Such facts are not to be removed by bold alterations of the text, but must be fully recognized. So long as we confine our enquiries to isolated forms and sounds, we can obtain no correct idea of them; they become intelligible only when we possess a proper insight into the peculiar character of the Homeric dialect as a whole. The further our researches penetrate, the more certain does the inference become, that this dialect is the production of a conventional minstrel-usage which preserved a number of very old forms, and sounds regarded as in process of extinction; but at the same time availed itself of many formations of a later date, and evidently in contemporary use. For this reason the dialect preserved that character of variety, that luxuriance of forms, and elasticity of rule, which, though almost unconceivable in a language actually spoken, offered immense advantages to the minstrel in the construction of his verse. At the time when this dialect of the epic minstrel-schools—if we may use the expression—became fixed, much was taken for licence which was really archaism, and nothing was easier than that confusion should arise, and the province of Epic licence should thus extend itself by false analogies beyond the limits of archaism. In the idea that *φιλομμειδής* owed the double *μ* simply to an archaic habit of doubling the consonant, forms like *ἔμ.αδε* were ventured upon; and to *ἐπὶ νευροῦ* (cp. *Schnur*, *Rt. snar. Grundz.* I, 279) was added *ὑπὸ νέροος*. At all times these innovations were limited to a certain circle of words by the authority of those who introduced them with the greatest moderation. But the most frequent opportunities for introducing them would naturally be found in words of very common occurrence, e. g. *μέγας*, and its derivatives; just as it can hardly be pure chance

that only the two proper names, which occur most frequently in the *Iliad* and *Odyssey*, waver between a single and double consonant in the middle of the word. Such remarks as these are not in the least intended to dissuade from further enquiry into the subject—for we may always expect to find the oldest forms in Homer—but merely to justify myself in quoting many of the peculiarities of the Homeric dialect simply as facts; and at least to point out the way in which many of the riddles here presented to us may be solved. At the same time what I have said will show sufficiently what view I take of the paths struck out by Ahrens, especially in *Rhein. Mus.* II, 167 sq., and by Hoffmann, *Questiones Homerice*.

CHAP. VI.—DECLENSION OF SUBSTANTIVES AND  
ADJECTIVES.

WITH regard to the position of the separate parts of the accidence, I have not felt myself called upon to differ from that in general use. Several attempts have been made of late, from a scientific point of view, to place the formation of words or stems before inflection, under the impression that the order of origin is in this way more strictly preserved, the relations of the sounds, as elements in all formations of words being taught first, then the formation of stems, last of all the changes which stems undergo when brought into relation with other words, that is inflection. But even in a strictly scientific work this arrangement could not be consistently carried out without separating much that is necessarily connected. Thus the formation of the Participles and Infinitive—which is a part of the formation of words—cannot be explained without entering into the difference of tense-stems, a question of inflection; and the last part of the theory of the formation of words, which treats of composition, presupposes of necessity the declension of nouns. In a school-grammar, at any rate, the far greater importance of inflection is quite a sufficient reason for teaching it before the formation of words. The attempt to put the verb before the noun in the theory of inflection—although frequently attempted owing to the influence of K. F. Becker's system—has for a scientific basis the false assumption that the verb as such,



i. e. as a system of forms, is older than the noun, whereas the modern science of language leads more and more decisively to the conviction that the forms of both noun and verb are of equal antiquity. As a practical matter it is clear that the inflection of nouns can indeed be taught without a knowledge of the verb-forms; but the inflection of verbs cannot be taught before the declension of nouns, on account of the participles. Thus on every side we are forced back to the old method, and in fact not much would be gained for either science or practice in this struggle for priority.

In the whole theory of inflection everything turns on the strong and sharp distinction between stem and termination. On this is based all analysis of forms. Even the pupil can easily be brought to understand that the stem of a noun, to go no further for an instance, which peculiarly and exclusively conveys the meaning, runs through all the cases, while the terminations are added to it to denote the several cases, among which the nom. sing. naturally has a place. Compared with all the earlier methods, the stem-theory has the advantage of far greater simplicity. By the old grammarians the nom. sing. of the noun (like the 1st sing. Pres. Act. of the verb) was regarded as the starting point, the πρώτη θέσις. No attempt was made to explain how the other cases developed themselves out of this. They were contented with the simple fact; Nom. ος, Gen. ου, Dat. ω, &c. The unity of the third, or consonantal declension, as I call it, can never become intelligible on such a method. In ἄρ, for instance, the Gen., as compared with the Nom., gives us an additional -ος, whereas in σῶμα we find an additional -τος. In ἐλπίς the final ς is replaced by -δος, in κόρυς by -δος. To avoid complete confusion, the expedient was invented of learning the genitive as well as the nominative of

this declension. Thus in reality the first step was already taken towards the stem-theory; for the genitive was of course selected merely because in it the element which remains the same through all the cases—which is no other than the stem—stands out in greater prominence. To speak accurately, therefore, it was only in the two first declensions that the old grammarians derived all the cases from the nominative sing.; in the third they derived them from the gen. sing., beside which the nom. remained as a simple fact which was not explained further. The genitive here owes its prominence, not to any peculiarity of its own, but merely to the circumstance—quite accidental in the analysis of forms—that it stands second in the arrangement of cases on the old method. But leaving the arbitrary nature of this position out of the question, the old theory attains to no insight into the formation of cases. It remains content with simple changes—for nom. -ος, gen. -ου; gen. -ος, dat. -ι, acc. -α, &c.; but the stem-theory gains a clearness of quite another kind by the simple fact that the case-termination is distinctly named as such and taught in combination with that which is the really unchangeable element. Besides—and this is an advantage of a most essential character—the nominative also on this theory no longer occupies an exceptional position, but is developed like the other cases from the single base common to all. There is another way also in which their perverse treatment of inflection revenged itself upon the old philologists. So long as one case or verb-form was derived from another at will by assuming a change of sound (τροπή) or addition (πλεονασμός), &c., no one hesitated to follow a similar plan with regard to the formation of words. A rational phonology was quite impossible; and thus, there was no firm foundation for etymology, as an enquiry into words;

but in the place of it a soil was secured in which all sorts of caprices and eccentricities sprang up in great luxuriance.

Nevertheless since Buttman's time (*Ausf. Gr.* I, p. 159 Anm.) a certain regard has been paid to the stems in the so-called third declension. In this respect, it is true, Buttman himself was very uncertain; for he was inclined to leave the 'genetic method' to the oral instruction of 'thoughtful teachers.' Matthiä (I, 199) opposes even this 'hypothesis,' and wishes the well-known apophthegm of Quintilian—*inter virtutes grammatici habebitur aliqua nescire*—to be applied even to the question:—'what is the reason that the Greeks form the words of the third declension in such various ways.' Only, in this case we ought to read *omnia* instead of *aliqua*! Here as elsewhere Thiersch takes a far more certain and intelligent course. But even K. L. Struve, to whom Latin Grammar is indebted for essential corrections, in his Greek Grammar p. 27 (Riga and Dorpat 1823, 2. Aufl.), allows the Genitive to arise *out* of the Nominative by various rejections and insertions. Kühner, following the lead of Reimmnitz, whose treatise (*System der Griech. Declination.* Potsdam 1831) was written under the influence of Comparative Grammar, was the first to make the stem-theory dominant in the third declension. Since that time, a return to the old confusion in all its fulness has been impossible. To a certain extent every author of a school-grammar, even against his inclination, must yield to our new insight. But even to the most recent times the stems in ζ, e. g. γενεζ (Nom. γένος) are ignored by Rost and Krüger; though it is just as easy to conceive that γένε-ος has arisen out of γενεσ-ος as that ἐ-γέν-εο has arisen out of ἐ-γεν-ε-σο, and is quite absurd to regard the ζ in γένος as a sign of the Nom., since on the contrary that sign as a rule belongs only

to the personal genders. Still the insight into the essential laws of language, the possibility of recognizing the regularity of the forms of language is in the eyes of many teachers far too small a thing for them to move out of the old track on that account more than is absolutely necessary. Any one who wished to write a book on the sluggishness of the human mind would find ample materials in the history of our school-grammars, though numbers come year after year into the market.

Among the consequences resulting from this stolid acquiescence in traditional doctrines may be reckoned the inconsistency of treating the first two declensions as entirely different from the third. If we reduce παντ-ός to a stem παντ-, we must also reduce Μουσάων to a stem Μουσα, λόγον to a stem λογο-. Such a comprehensive treatment of the stems has been shrunk from merely because in the case of the A- and O-stems there was no such pressing necessity for it in practice. For the teacher can certainly allow the paradigm λόγ-ος, Gen. λόγ-ου to be recited after the old fashion without any practical difficulty. But such a course is not without some attendant evils; it destroys the insight into the unity of declension as a whole. And it might perhaps occur to a clever pupil that as ν only is the termination of the accusative case in πόλι-ν, αν and ον can scarcely be considered as such in χώραν and λόγον; that as Ξηρ-ών has the termination -ων in the Gen. Pl., this, and nothing more, is the termination in the Homeric Μουσάων; and that, in general, if the stem is to be considered the unchangeable part of a word, the vowels α and ο, when they run through the whole declension with few changes, can on any rational method only be regarded as part of the stem. From a scientific point of view there is not the slightest doubt that these vowels form part of the stem; and, therefore,

it is quite inconceivable why the truth should not be taught even in school. In this way only is unity introduced into great diversity; whereas the apparent stems *Μουσ*, *λογ* which still adorn more than one grammar, have neither a basis in science, nor meaning in practice.

The consistent carrying out of the stem-theory is sometimes opposed on the ground that it has to deal with pure abstractions, whereas it is the real Greek language as it existed in time past in the mouth of the nation which has to be impressed upon the pupil, and not a system of phantom-forms, which never had any existence at all. This seems a serious objection. But where is the Greek grammar which does not take refuge in forms, the existence of which can no longer be proved from actual usage? Were the endings *-μι*, *-σι*, *-τι*, or those false stems *λογ*, *τιμ*, *γενε* ever uttered as separate words? Or did any Greek author ever use *ΛΑΒΩ*? Yet for the last hundred years no grammarian has appeared without such abstractions. And if in regard to such verbal themes the attempt is made to guard against confusion of the real and hypothetical by the use of large letters, we may avail ourselves of a similar expedient in regard to our stems. Besides, where do we find *λεοντ-σι* written, from which every one very properly derives *λέου-σι*? In a word, we are not dealing with an absolute innovation, but only with the consistent carrying out of a principle universally recognized as correct; indeed, in many cases the real question is merely whether we are to introduce hypothetical forms the existence of which can be proved by the severest method of linguistic enquiry; or forms like *λογ*, *τιμ*, *γενε*, which can be proved never to have had any existence at all. It is noticeable that the opponents of innovation are the chief supporters of the latter forms.

Besides, the stems are by no means mere abstractions. There was a period in the life of language—a very early one, it is true, and long antecedent to the existence of Greek as a separate language, because antecedent to the formation of the inflection common to all the Indo-Germanic languages—in which in all probability those forms which we now call roots and stems were actual words, although for the most part they had not as yet received the phonetic form peculiar to Greek. There is also no doubt that a stock of stems, in the first instance comparatively small, was increased by the addition of a number of other stems formed at a later period by analogy. But even apart from this, so to speak, antenatal existence of stems, they have preserved at all times a truly real existence in so far as they live in the completed forms of inflection. They exist, though not independently and separately, and have as much claim to be recognized by science as cells in plants, or, one may say as letters, which with very few exceptions, are not used separately in actual speech. The noun-stems prove their reality especially in the derivative formations—e. g. in δίκαι-ιο-ς, δικαιο-σύνη, νεότη(τ)-ς, παιδ-ίο-ν, εὐμενέσ-τερο-ς, and in composition, e. g. λογο-γράφο-ς, νεο-τόκος, σακέσ-παλο-ς. In many cases also the pure stem appears in the vocative—Σώκρατες, δαῖμον, νύμφα; and even the pupil can draw the inference that the vocative is the noun in itself apart from any grammatical relation, and, therefore, without any case-termination. Here we see plainly enough that language is an organic whole, in which all the parts fit into each other. Without a correct knowledge of stems no rational theory of sounds or of the formation of words is possible, and even syntax cannot be fixed upon any firm basis by any other method.

By a proper application of the noun-stems it is not

difficult to bring to view the essential unity of Greek declension. But it is self-evident that in practical instruction the multiplicity of forms must be first impressed on the memory; and the unity which underlies all that multiplicity—to the knowledge of which § 173 introduces us—can only be enforced as an advanced stage of instruction. We must not be led by the proof of unity to pay too little attention to the variety which nevertheless exists. The science of language in its latest phases carries the aversion to classification to an excessive degree. More concerned to trace out the several forms through all their changes than to pay attention to the combination of all forms under a whole, or the grouping of them round a stem, it displays a certain indifference to divisions of every kind, an indifference which in some of our youngest students has reached a complete contempt of so-called declensions. Even on severely scientific grounds—especially where we have to deal with a particular language—we cannot leave out of sight the unity, and the analogies which have grown up between the separate forms of the same stem. The instinct of language perceived these very clearly; thus many anomalies, especially Heteroklisis, are owing exclusively to the fact that the instinct of language extends these analogies too far. For instance, owing to the large number of proper names in  $-\acute{\eta}\text{-}\varsigma$  nom. sing. which are formed upon stems in A, others like  $\Sigma\omega\kappa\rho\acute{\alpha}\tau\eta\varsigma$ ,  $\Delta\eta\mu\omicron\sigma\delta\acute{\epsilon}\nu\eta\varsigma$ , which were originally sigma-stems, are treated as similar. Such cases cannot be explained by mere relations of sound or by the formation of stems; they are made intelligible only by classification. The old grammarians preferred to give the name of analogy to inflection. The analogies between similar and similarly treated words floated before the instinct of language, while yet purely natural, and were also

the first to present themselves with clearness when that instinct became conscious, and was awaking into a science. Without a due regard to this element even science herself would be lost in the vague and indefinite; she cannot on her part exist without a certain system. That in the practical course of instruction, proper to a school, we ought certainly to divide the declensions, to distinguish and arrange the divisions, needs no further confirmation.

The difference of the declensions is owing chiefly—though by no means exclusively, since in some cases, e. g. Gen. sing., two terminations are certainly in use—to the final letter of the stem. As this can be either a vowel or a consonant, we have a primary division into vowel and consonant declensions. This division is not however perfectly accurate. Only the stems ending in hard vowels follow the first main declension; and as  $\alpha$  and  $o$  were originally one sound, this is in reality simply an A-declension. The soft vowels  $\iota$  and  $υ$ , on the other hand, no less than the diphthongal stems which are very closely connected with them, belong to the second or consonant declension. For this reason objections have been made to my dichotomy as illogical and misleading. The note to § 135 is intended to give the pupil a hint on the matter which at first sight is certainly not quite clear. The intelligent teacher will find no difficulty in pointing out the fact that here, as often, the terminology is given *a potiori*; and that the consonant stems not only form by far the largest part of the second main declension, but give the type for the rest. But from a scientific point of view the matter may be explained more clearly. It is here that the division of the vowels into hard and soft mentioned above (p. 28) becomes of importance. At the end of the diphthongs, the soft vowels pass into the corresponding spirant—thus  $\nu\alpha\nu\text{-}\acute{o}\zeta$  becomes  $\nu\alpha\mathcal{F}\text{-}\acute{o}\zeta$ ; but when



they stand alone, they develop a spirant after them, which adapts itself to the rules of the consonant declension. Thus in Sanskrit from the stem *bhû* (Nom. *bhûs*, Earth) we have the Gen. *bhu-v-as* (cp. *plu-v-ia* from the root *plu + ia*). By analogy we should expect in Greek *σν-φ-ός*, from which *σν-ός* afterwards arose. In other stems in *υ* and still more in those in *ι* the formation is very variable. With some, e. g. stem *χι*, Nom. *χι-ς* we must suppose a Gen. *χι-γ-ος*, in which the spirant developed out of *ι* corresponds exactly to the *φ* in the case previously mentioned. But in other stems *δ* takes the place of Jod, *ἐρι*, *ἔρι-δ-ος*. But that this *δ* must be regarded as a sound arising out of Jod in accordance with certain distinct analogies, I believe has been proved in *Grundzüge II*, 207 sq. Other stems again in *ι* and *υ* undergo extension. The *ε* arising out of *ι* passes before vowels into *εj*, e. g. *πολεj-ος*; so that when the Jod is dropped the *ε* alone remains as the representative of the final letter of the stem. In a similar manner *υ* lengthened to *ευ* becomes *εφ* and then *ε*, *ἄσπεφ-ος*, *ἄσπεος*. In this way, therefore, all these vowel-stems become in certain case-forms consonantal, and justify us in classifying them in that declension. On the other hand, in the formation of the acc. sing. of Masc. and Fem., the true vowel-nature of the stems declares itself, *πόλι-ν*, *πολύ-ν*; and the voc. sing. also, where it exists as a separate form, contains the pure vowel stem. The double nature of these stems, therefore, is now clear. The only group not as yet completely explained is the stems in *ο* and *ω*. In the grammar (§ 135 Obs.) I could only introduce the remark that these stems have apparently lost a consonant, but which the consonant in question is, it is certainly by no means easy to decide. Only the two words *ἦός* and *αἰδώς* leave no doubt on the subject. They are distinguished from the other

feminines by the termination  $\zeta$  in the nominative. ἠώς, Æolic αὔωζ, as the comparison of the kindred language proves (*Grundzüge* I, 368), goes back to a stem *ausos*, common to Greeks and Italians; in Latin this stem was lengthened by the addition of an *a* (*ausōs-a*, later *aurōra*), just as the Indian word of the same meaning *ushas* (for *us-as*) has the form *ushās-â* existing side by side with it. Hence very little doubt is left that in the case of αἰδώς too we must regard αἶδος as the stem; both these words, therefore, properly belong to the sigma stems. It is merely because they are the only two words of their kind, and are declined throughout as O-stems without regard to the nom., that they have retained their place in the grammar among the latter. The masculines in  $\omega$  (nom.  $\omega\zeta$ ), on the other hand, point to another origin. πάτρω-ζ corresponds to the Latin *patruu-s*; and though there is no *matruu-s* existing by the side of μήτρω-ζ, the derivative *matruēlis* shews that this form must once have been in existence. These forms, therefore, appear to have lost an *F*. From a common form *patrovo-s*, the Greeks by dropping the *o* obtained πατροF-ζ, πάτρως (cp. πλώ-ω = πλωF-ω by the side of πλέ-ω = πλεF-ω, *Grundzüge* II, 152). The feminines which have -ω in the nom. I formerly connected with stems in  $\nu$ ; and there are certainly many points of contact between the two. The same connection—somewhat differently carried out, has of late been adopted by Leo Meyer, *Ueber die Flexion der Adjectiva im Deutschen* (Berlin 1867, S. 57). But the rejection of  $\nu$  in this case remains a very doubtful assumption, and seems indeed to have been set aside with justice by Ahrens in a more complete analysis, Kuhn's *Zeitschrift* III, 81 sq., upon which we here at once enter. It is very remarkable that the nominatives of these stems, in inscriptions, and according to the evidence of

grammarians, had secondary forms in  $-\omega$ ,  $\Delta\eta\tau\omega$ ,  $\Sigma\alpha\pi\omega$ . Without question this form is the oldest, and at the first glance we see that  $\Sigma\alpha\pi\omega$  is the regular nominative to voc.  $\Sigma\alpha\pi\omega\iota$ , to which it bears exactly the same relation as  $\delta\alpha\iota\mu\omega$  to  $\delta\alpha\iota\mu\omega\iota$ . Ahrens is, therefore, quite correct in assuming  $\omega$  as the primary ending of these stems. This ending is shown most plainly in the vocative, but it also appears in the Doric accusative in  $\omega\iota$  of which we have a genuine instance in  $\tau\acute{\alpha}\nu \Delta\alpha\tau\omega\iota$  on the Cretan inscription of Dreros. (K. F. Hermann, *Gött. Anz.* 1855, *Nachr.* p. 101 sq.). Only we shall now have to go a step further. The Ionic form of the acc. in  $\omega\iota$  which is found not only in the best MSS. of Herodotus ( $\text{Ἰοῦ}\iota$ ,  $\text{Βουτοῦ}\iota$ ,  $\text{Τιμοῦ}\iota$ ), but also on Inscript. ( $\text{Ἀρτεμοῦ}\iota$ ,  $\text{Δημοῦ}\iota$ ,  $\text{Μητροῦ}\iota$ ) certainly cannot be derived from stems in  $\omega$ , or indeed from stems in  $\nu$ . Now we found that the Masc. in  $-\omega$  sprang from  $-\omega\mathcal{F}$ : it will not, therefore, be too rash to refer the feminines in  $-\omega$  to  $\omega\mathcal{F}$ . Greek  $\iota$ , corresponding to Sanskrit  $\acute{i}$ , is an old suffix for the feminine. The form  $\omega\mathcal{F}\iota$ , therefore, as the feminine of  $-\omega\mathcal{F}$  or  $-\omega\mathcal{F}\omega$ , need not appear strange to us, and as a fact, feminines of this kind are found existing by the side of the very rare nominatives in  $-\omega$ , in three instances—though all are proper names— $\text{Πατρῶ}$ ,  $\text{Μητρῶ}$ ,  $\text{Ἡρῶ}$ . I have, therefore, no doubt that the supposed connexion really existed, though I cannot here go on to establish it in greater detail from the formation of words in Greek and Latin. The result, with which we are here concerned, would, therefore, be that the fem. stems in  $\omega$ , the mutilated form of an older  $\omega\mathcal{F}\iota$ , have the same right as the I-stem to be included in the consonant declension. The actual  $\mathcal{F}$  is retained only in those Ionic Accusatives. By the loss of  $\mathcal{F}$ ,  $\omega\mathcal{F}\iota$  became  $-\omega\iota$ . This stem appears in the Voc. and in the Accusatives quoted, of which  $\Delta\alpha\tau\omega\iota-\nu$ , for instance

is related to the stem  $\Lambda\alpha\tau\omega$  (from  $\Lambda\alpha\tau\omega\mathcal{F}\iota$ ) in exactly the same manner as  $\sigma\bar{\iota}-\nu$  to the stem  $\sigma\bar{\iota}$  (as  $\acute{\sigma}\mathcal{F}\iota$  = Lat. *ovi*, Nom. *ovis*). Between two vowels the  $\iota$ , like  $\upsilon$ , passed in the diphthong-stems primarily into the corresponding spirant, until at length it also became utterly lost. In these, as in other similar changes, we must assume that they did not all take place at once, but gradually, one after the other.

To these remarks on the general classification of the declensions may be added a few on the further division of the same. In these we return at once to the vowel declension. This was, as we have said, originally but one declension. The relation is preserved in Sanskrit. There the A is short in Masc. and Neut., and long in Fem., so that in Nom. sing. the ending,  $a-s$ ,  $\acute{a}$ ,  $a-m$  corresponds to the Greek  $\sigma-\zeta$ ,  $\alpha$  ( $\eta$ ),  $\sigma\nu$ , and Latin  $u-s$ ,  $a$ ,  $u-m$ . The use of  $a$  for the long vowel, and  $\sigma$  for the short one is evidently anterior to the existence of Greek as a separate language. Latin has a full share in this division of the vowels, the only difference being, that in the latter language the  $\sigma$  has in certain cases, and at first by slow degrees, been supplanted by  $u$ . Hence it has a more varied appearance: yet old Latin forms, like *equo-s*, *dono-m*, are exactly similar to the Greek. There is another peculiarity common to Greek and Latin as distinguished from all the other kindred languages. It is a very general rule that A belongs to the feminine gender; but in Latin and Greek we find a number of masculines ending in this vowel. No definite reasons have yet been discovered for change of sound in these words. The assumption of A- and O-declensions is, therefore, equally necessary in both languages. We put the A-declension first for two reasons:—1. because the A-sound is the older, and 2. in order to abide by custom.—The change from the meaningless designation by

numbers, to a terminology based on the characteristic sound, needs no defence.

§ 112.

All the stems of the A-declension are here said to end in  $\alpha$ . Ahrens, *Formenl.* p. 11 and 12, and Müller-Lattmann also assume stems in  $\eta$ . But even those very stems which like  $\tau\mu\acute{\eta}$ ,  $\delta\iota\alpha\acute{\eta}$ , in the Ionic dialect present the  $\eta$  to a greater extent than any others, confine it to the singular number, and  $\eta$  in the dual and plural is unknown to the Attic dialect. It is true that the Ionic admits  $\eta$  in Dat. plural:  $\text{Μοῦσα, Μούσῃσι}$ , no less than  $\text{μάχη, μάχησι}$ .  $\eta$ , therefore, cannot possibly be regarded as the final letter of the stem. A stem  $\tau\mu\eta$  would never give us  $\tau\mu\acute{\alpha}\iota$ ,  $\tau\mu\acute{\alpha}\text{-}\omega\upsilon$ ,  $\tau\mu\acute{\alpha}\text{-}\varsigma$ , but conversely  $\tau\mu\acute{\eta}$ ,  $\tau\mu\acute{\eta}\varsigma$  could certainly be produced from  $\tau\mu\alpha$ . The assumed stem  $\tau\mu\eta$ , therefore is found insufficient, when we ask whether all the forms can be derived from it with the assistance of the laws of sound—which is the only proof that we have chosen the stem correctly. The Masculines also, with their vocatives and old nominatives in  $\alpha$  (*ἑπρότα*) shew clearly that the change of the original  $\alpha$  to  $\eta$  is a mere affection of the vowel occurring here and there according to no fixed rule. It cannot, therefore, be regarded as forming part of the stem which has already been defined as the *unchangeable* element in words.

§ 114.

The coincidence between Latin and Greek is here most striking, except indeed in the two cases gen. sing. and plur. But with regard to the gen. sing.,

forms like *pater familiās* may be quoted to advanced pupils, from which it follows that in the formation of this case also there was originally no difference between these two most clearly connected languages. On the contrary we must assume, and there is further support for the assumption, that the ending *-ajās*, still retained in Sanskrit, formed the common starting point for Greek and Latin. From this *-ajās*, by weakening the syllable *jās*, arose the Latin *-āis* (also *-aes*), which, on the one hand, became worn down to *ai* (*terrai*) and further to *ai*, *ae*; and on the other, was contracted into *ās* (*familiās*). But the Greeks allowed the *j* to drop out, and contracted  $\alpha\text{-}\alpha\zeta$  to  $\bar{\alpha}\zeta$ . To the gen. pl. in its contracted form the Latin poetical forms in *-um*, e. g. *calicolum*, correspond exactly. For *drachnum Æneadum* are imitations of Greek forms. No form from the Latin is here compared with the dat. pl., because the fuller Greek form in *-σσι* is proved to be really a Locative and quite distinct from the Latin Dat. and Abl. Plur., which in the consonantal declension preserve the proper termination *-bus* (Sanskrit *bhjas*). Such at least is the decision of Bopp and Schleicher, *Vergl. Gram.* I, 485; *Compendium* 476, in opposition to Leo Meyer, *Declination*, p. 99.

#### § 125 sq.

The identity of the Greek and Latin O-declension scarcely needs to be especially pointed out. But the use of the Accusative termination in this declension for the nom. of the neuter—a use found in Sanskrit also—is very remarkable. Language utterly refuses the characteristic formation of the nominative to the neuter gender. Here in its place is added the termination of the Acc., evidently because the neuter, even where it assumes the position of the subject

in a sentence, carries with it a notion of dependence, distinct from the self-sufficiency of the masculine.—The  $\alpha$  of the neuter plural, like the  $\varepsilon$  of the vocative, is obviously not to be regarded as a peculiar termination, but as the final letter of the stem, which in this case was lengthened, the Greek and Latin  $\bar{a}$  having here arisen out of  $\bar{a}$ . In the vocative, on the other hand, the  $\circ$ -sound is represented by the weaker  $\varepsilon$ , the sound which after  $\alpha$  stands in the nearest relation to  $\circ$ . In my grammar I use the word ‘termination’ to express the elements which are added to the stem with a change of meaning:  $\alpha$ , therefore, is not called a ‘termination’, but merely an ‘ending\*’, which general term I adopt to express any sound or group of sounds whatever at the close of a word.  $\delta\acute{\omega}\zeta\alpha$ , therefore, ends in  $\alpha$ , but has no termination;  $\delta\acute{\omega}\rho\circ\upsilon$  has the ending  $\circ\upsilon$ , but the termination added to the stem  $\delta\acute{\omega}\rho\circ$  is the  $\circ$  arising out of  $-\omega$ . In the vowel declension, in which the stems and terminations have coalesced in various ways, this distinction is essential, and must certainly be observed by the teacher. Even the pupil cannot mistake the two ideas without danger of error and confusion. Into such confusion the older grammars are constantly falling.

In the O-declension, and to a certain extent, it is true, in the A-declension also, the separation of stem and termination is not marked in the type throughout all the cases. In  $\acute{\alpha}\nu\theta\rho\omega\pi\circ-\varsigma$ ,  $\acute{\alpha}\nu\theta\rho\omega\pi\circ-\upsilon$  the division is clear and simple, and the two parts are separated by a hyphen. But to mark off the  $\upsilon$  in the genitive  $\acute{\alpha}\nu\theta\rho\acute{\omega}\pi\circ-\upsilon$  is somewhat doubtful, because  $\upsilon$  alone cannot possibly be regarded as the termination. Similar difficulties present themselves in other cases, the separation, therefore, is omitted.

\* This distinction is not strictly preserved in the translation of the Grammar. TR.

## § 128.

In the Attic dialect I have assumed -ο only as the termination of the genitive singular, because here every trace of another element before the -ο is lost. But the observation on the Homeric forms in -οιο makes it sufficiently clear that -ο has arisen out of ω, no doubt through the medium of γο. The chasm also between the Homeric θεο-ιο and the form θεοῦ, which was also in use in Homer's time, is filled up, if in accordance with the indications of the Homeric verse we allow certain genitives in -οο. Even Buttmann, *Ausf. Gr.* I, 299, suspected that the form ὄου which is contrary to all analogy and occurs but twice (Il. B. 325, Od. α. 70), both times before a double consonant, ought to be written ὄο (ὄο κράτος, ὄο κλέος). Ahrens went further, inasmuch as he proposed, *Rhein. Mus.* II, 161 and *Formenl.* p. 15, to remove the irregular lengthening in Od. α. 36, by reading

δῶρα παρ' Αἰόλοο μεγαλήτορος

and naturally also α. 60

Αἰόλοο κλυτὰ δώματα

and similarly elsewhere. This sounds very probable. But Leo Meyer p. 27 goes further and gives forms in -οο as Homeric, not only in cases where the contracted form causes a difficulty in prosody, but even in Spondaic verses—e. g. δῆμοο φῆμις (Od. ξ 239)—though the Homeric dialect certainly did allow such verses under certain conditions; and even maintains that this older form ought to be restored in every instance where it is not excluded by the metre. This is mere extravagance due to ignorance of the language of Homer, which, as we have already seen, everywhere exhibits older and later forms side by side. In many of these very verses the ear absolutely requires the later form. In the grammar even



those forms which have been assumed with great probability have not been mentioned, because it is my invariable rule to pay attention to such forms only as really occur in current texts; and in no case to enter the field of conjecture..

In order to leave no room for the erroneous notion that the epic Genitive and Dative Du. in *-ουν* owe their fuller form to a simple lengthening, it may be mentioned that those cases have lost a consonant before the *ι*. The complete termination, as is shown by the comparison of the Sanskrit *vrka-bhjam*—‘to the two wolves’, was *-φιν*. From *λυκοφιν* arose on the one hand *λυκο-ῖν*, *λύκοιν*, by dropping the *φ*; and on the other, *λυκοι-φιν*, *λύκοι-ιν*, by the addition of *ι* to the stem-vowel, exactly as in Dat. Plur. *λύκοι-σι*. Cp. Bopp, *Vergl. Gram.*, 437; Schleicher, *Compend.*, 479 for further information on the dropping of the *φ* and insertion of *iota*. The supposed form *λυκοφιν* stands in exactly the same relation to *λυκοιφιν* as the Locative forms *Πλαταιᾶσι*, *Ἀθήησι* (§ 179) to the ordinary datives in the Ionic form *Πλαταιαῖσι*, *Ἀθηναῖσι*.

### § 133.

The peculiar accentuation of the Attic declension is evidently owing to the fact that these stems originally ended in *-ᾰο*. From that time, in spite of the change of quantity, the acute continued frequently to be placed on the propenult: *Μενέ-λαο-ς*, *Μενέλεω-ς*, *ἀνώγα(ι)ο-ν*, *ἀνώγεω-ν*. For the same reason the same peculiarity is found in the form of the Gen. Sing. which is also called Attic, e. g. *πόλεω-ς*, with which compare Homeric *πόληρος*.

## § 134.

The original termination of the Acc. Pl. -νς can be deduced from the Greek dialects even without the assistance of the kindred languages. It is found in inscriptions in the Cretan form πρειγευτά-νς (Ahrens Dor. 106) = πρεσβευτάς, and apparently also in the Argive τόνς = τούς. Only by assuming such a termination can we explain the forms of all the other dialects. The Æolians of Lesbos replaced the lost ν here, as elsewhere, by ι, τάλς, τοίς; some of the Dorians by lengthening the vowel, τάς, τώς; others not at all—τᾶς, τός, where the shortness of the vowel is the characteristic. The Ionians and Attics adopted the compensatory lengthening usual with them, τάς, τούς. The Latin *ās*, *ōs* resemble most the Doric forms first mentioned. The old case-termination occurs in the most complete form in Gothic *vulfa-ns*, *fiska-ns*; but traces are to be seen in almost all the other families of the Indogermanic stock. (Bopp, *Vergl. Gr.*, I, 465 sq. Schleicher, *Comp.*, 441.)

## § 147.

The formation of the Nom. Sing. out of the stem is an important element in the consonantal declension to which the teacher must again and again return. Agreeably to the general principle of my arrangement this formation is mentioned separately in each division; but the teacher will not find it difficult here, as elsewhere, to give a connected view of what has been previously learned separately. The two formations of the Nom. Sing. are distributed among the different kinds of stems belonging to this declension in the following manner: the Nom. Sing.

invariably ends in sigma in guttural and labial stems, stems in δ and ϑ, in the single stem in λ, ἄλ, stems in weak vowels and diphthongs. Stems in ρ and ζ never have sigma in the Nom. Sing. Stems in τ—especially ντ—, in υ and ο, vary between the two formations. From this synopsis it is clear that the formation in sigma is the typical one, and predominant by far. The intention of language was everywhere the same, viz. to add the sibilant to the stem. Only in cases where the addition gives rise to too hard a combination of sounds this intention gives way to euphony. Even then, language was intent upon distinguishing the Nom. from the stem. The lengthening which takes place in the formation without sigma, e. g. from πατερ to πατήρ, from δαίμων to δαίμων, is manifestly due to the desire for compensation. Comparative grammarians, therefore, among whom Schleicher is most consistent, *Comp.*, p. 427, very properly assume as the original forms, πατερ-ς, δαίμων-ς, σαφες-ς. But for Greek grammar, and especially for Greek school-grammar, the two methods of forming the Nominative, ποιμήν from stem ποιμεν, and εἶ-ς from stem ἐν, must be carefully distinguished. In cases in which the addition of the sigma causes difficulties, there are evidently before us two periods in the history of language, which must be chronologically distinguished; and this is, so far as I know, a point of view which has hitherto been unnoticed.

At a very early period in the life of language the combinations *rs*, *ss*, *ts* were felt to be distasteful. They are avoided even in Sanskrit, and hence it is probable that at a time anterior to the separate existence of Greek the older termination *-ars* became *-âr*, *-ass* became *-âs*, *-ats* became *-ât*, while in the other case-forms the short vowel remained unaltered. From this ancient condition of language—for which we have evidence in Sanskrit *pitâ* (instead of *pitâr* = πατήρ)

compared with Latin *pater*, Sanskrit *durmanās* = Greek *δυσμενής*—the Greek borrowed the long vowel in *πατήρ*, *σαφής*, *λελυκώς* for *λελυκωτ*. In the same way the combination *ns* began at a very early period to be objectionable, and, therefore, the sibilant was dropped in many cases, especially when the stem ended in *-n* only. Thus *ans* became *ân* and the Greek *ονς*, *ων*, e. g. in *τέκτων* = Sanskrit *takshâ* (for *takshân*) from the stem *τεκτων*. The antiquity of such formations is proved by the Latin *ō* in *homō* for *homōn*, stem *homon*.

On the other hand, other combinations of sounds were retained much longer, especially *ns*, when a *t* had fallen out after the *n*: for it is a comprehensive law in language that hard combinations of sound are more tolerable when they have arisen out of still harder combinations. Even from a due regard to clearness of meaning language imposes certain limits on the changes of sound. Thus Latin *ars* for *art-s*, *Mars* for *Mart-s* remained unaltered, while *paters* was intolerable, and for the same reason we have *dens*, but not *homens*, *ordens*, or *homon-s*, *ordon-s*. For the same reason forms like *τιθέν-ς* were long retained on Greek ground; they are indeed to some extent actually vouched for as Argive (Ahrens *Dor.* 105). From this, at a proportionately recent date, came *τιθεί-ς* by the usual compensatory lengthening, from *έδοντ-ς*, *όδούς*. It cannot certainly be denied that language was inconsistent. In the formation of participles especially, we must assume an early variation, by which, in the conjugation with the connecting vowel, the lengthening of the stem-vowel replaced the sigma—apparently in accordance with old tendencies—*φέρων* being intelligible only as the residuum of an older *φερωντ*, which is related to *φερонт* as *λελυκωτ* to *λελυκωτ*. In the conjugation without the connecting vowel, on the other hand, the form with the sigma remained,

τιδεντ-ς from which later τιδείς. A similar variation may be found in the *n*-stems, cp. τέρην with εἶ-ς.

§ 148. OBS.

The reference to § 85 is intended to show that the accentuation of ἄγαμνον harmonizes with the general accentuation of compound words, as also that of Σώκρατες, Δημόσδενες, § 165. Accurately speaking, therefore, the accent cannot be said to be thrown back. As in the Vocative we find the pure stem we must look to this case also for the natural stem-accent. The intention of language which aimed at accenting the first element in compound words can only be carried out in the Vocative. In the Nom. it is frustrated by the length of the final syllable. This becomes still more clear from the comparison of forms like Ἴᾰσον, Ἀρετᾰῶν, in which as being simple there is no such intention on the part of language. There are, it is true, exceptions like the stems in -ηγορ, e. g. Ἐλπῆγορ and others. It is not the object of a school-grammar to point out individual cases of this kind, and therefore the rule is so framed that the attention of the pupil is merely awakened to the varieties of accentuation which occur. The attempt to start in every case from the stem-form in explaining accentuation, though scientifically correct, presents great difficulties in practice. I believe I have done right in limiting the accent, which in a true sense gives life to the word, to really living forms.

§ 149.

The difference between χαρίε-σι and τιδείσι is explained by the fact that the adjectives from an early period had forms in -ετ, i. e. in -φετ existing side

by side with the stems in  $-\epsilon\tau$ , originally  $-\mathcal{F}\epsilon\tau$ . For the same reason the feminine of  $\chiαρίεις$  is  $\chiαρί-εσσα$  (cp. § 187), that is  $\chiαρι-\mathcal{F}\epsilon\tau-ια$ , in distinction from  $\tauιδείσα$  i. e.  $\tauιδεντ-ια$ . In a similar manner the corresponding adjectives in Sanskrit vary between the 'strong' form  $-vant$  and the 'weak' form  $-vat$  (cp. Ebel in the *Zeitschr. für vergl. Sprachforschung*, I, 298).

### § 154.

Accusatives Plural in  $-\epsilonις$  like  $\piόλεις$  and  $\gammaλυκείς$  are noticeable. The anomalous contraction from  $-\epsilonας$  is probably owing to the analogy of the Nom. Plur. The same holds good of the rarer formation of the same case in stems in  $-\epsilonυ$  (§ 161. Obs.).

### § 156.

For practical reasons, and for the sake of brevity, stems in  $\tau$  and  $\mathfrak{S}$  are classified with those in  $\delta$ , in spite of the considerable differences between them. The  $\delta$  in stems like  $\acute{\epsilon}ριδ$ ,  $\acute{\epsilon}λπιδ$ , has,—as I have briefly mentioned already p. 57—and elsewhere shown in detail (*Grundz.*, II, 207)—arisen out of Jod, and, therefore, never occurs except before vowels. The true stem, from a scientific point of view, is here  $\acute{\epsilon}ρι$ ,  $\acute{\epsilon}λπι$ , and there is no reason whatever to assume a Nom.  $\acute{\epsilon}ριδς$ ,  $\acute{\epsilon}λπιδς$ . On the other hand, in  $\chiάρι-ς$  and  $\kappaόρυ-ς$ , we must assume real stems  $\chiαριτ$  and  $\kappaορυ\mathfrak{S}$ , and the formation of the Acc.  $\chiάρι-ν$ ,  $\kappaορυ-ν$  is due to Heteroklisis (§ 174).

### § 160.

The formation of the Acc. Pl. in diphthong-stems, with the exception of those in  $\epsilonυ$ , is worthy of observation. The difference between  $\gamma\rho\tilde{\alpha}-ες$ , i. e.  $\gamma\rho\alpha\mathcal{F}-ες$ ,

βό-εϛ, i. e. βοF-εϛ, and the Acc. γραῦ-ϛ, βοῦ-ϛ, οἰ-ϛ, is explained by the fact that the termination of the Nom. Pl. is -εϛ, but that of the Acc. -νϛ. This νϛ could be added to those stems without any difficulty —βου-νϛ, γραυ-νϛ; and afterwards the ν disappeared. There was no reason to insert the auxiliary vowel α. In the same manner σῦ-ϛ is not contracted from σύ-αϛ, or the Herodotean πόλι-ϛ from πόλι-αϛ, but both are formed in the oldest and simplest manner. These Acc. Pl. stand to those in -αϛ in exactly the same relation as Acc. Sing. in -ν (βοῦ-ν, πόλι-ν) to those in -α.

## § 161.

The special peculiarities of the stems in -εῦ are most simply explained if we start from the Homeric forms. These present, for the most part, a long vowel in those cases in which the υ, or rather its representative F, is dropped. Forms like βασιλῆ-οϛ, βασιλῆ-α are apparently to be explained by the fact that the lengthening of the vowel here compensates the loss of the consonant, and, therefore, βασιλεF-οϛ, βασιλεF-α, not βασιληF-οϛ, βασιληF-α, were the original forms. From the Homeric forms arose βασιλέ-ωϛ, βασιλέ-α, by metathesis of the quantity; but the long vowel is not preserved consistently throughout, for the ι of the Dative is always, and the α of the Acc. Sing. and Plur. frequently, shortened. In Nom. Plur. the old Attic forms in -ῆϛ are apparently derived from forms in -ηεϛ. The effect of a lost digamma in lengthening the adjacent vowel was first pointed out by Ebel, *Zeitschr. für vergl. Sprachf.*, IV, 171. We shall recur to this phenomenon in discussing the augment.

## § 164 sq.

An objection has been made to the expression 'elided stems', because elision is the term elsewhere given in the grammar to the rejection of one vowel before another. By the addition 'which reject the final consonant in certain forms' I have guarded against any mistake, and a better, and at the same time shorter, term is not yet current. A closer examination will show that the three principal divisions of the consonant declension have been so arranged, that in the first division, the final consonant is always retained; in the second it emerges out of the vowel in certain forms; in the third, on the other hand, it frequently disappears before vowels.

In the third principal division the sigma-stems occupy the first place, owing to their frequency, and because in them the characteristic mark of this division is shown most clearly. The discovery that the sigma in γένος, εὐγενής, belongs to the stem, has already (p. 51) been mentioned as peculiarly fruitful in results, because by it alone we can gain a correct insight into the formation of the Vocative (Σώκρατες), the Nom. Acc. Voc. Neut. (εὐγενές), the Comparative (εὐγενέστερος), and finally such compounds as ἐπεσβόλο-ς, σακκισφόρο-ς, in which the older grammarians were always compelled by their stupid and foolish method to assume the addition of sigma—an addition entirely without cause. The omission of sigma before vowels is vindicated in § 61 b, and before a second sigma in the Dative Plural, in § 49. Nevertheless, a knowledge of Sanskrit was required to extend this correct view more widely. But when Bopp had shown that μένος is exactly synonymous with Sanskrit *manas*; that the Genitive of the latter is *manas-as*; the Loc. *manas-i*, the Gen. Plur. *manas-ām*,



the Loc. Plur. *manas-su*, it became clear that the corresponding forms in Greek were at one time *μενεσ-ος, μενεσ-ι, μενεσ-ων, μενεσ-σι*; in fact we find forms like *βέλεσ-σι* actually existing in Homer by the side of *βέλε-εσσι*, which naturally arose out of *βελεσ-εσσι*. When the proper path had thus been pointed out, the true relation of the Greek to the Latin words of similar formation also became apparent. It was seen that the *r* in *gener-is* arose out of *s*; that, therefore, the old Lat. *genes-is* (cp. *foedes-is* in Varro L.L. VII, § 27)—according to all analogy for a still older *genes-us, genes-os*,—was exactly similar to the oldest Greek form. Even in the change of vowels the two languages exactly correspond. The Nom. only has the deeper vowel; all the other cases present the clearer one. Hence we might be inclined to assume the Nominative form (*γένος*) as the stem, and to regard the forms with *ε* (*γενεζ*) as weakened from this. But our principle is to denote the unchangeable element as the stem, and, therefore, it was advisable to start from the form with *ε*; at the same time the kindred adjectives *εὖ-γενεζ, δυσ-γενεζ*, with their unchangeable *ε* (cp. Lat. *de-gener*) are most simply explained from this form.

### § 168.

The stems with moveable *τ*, few in number, are best explained on the hypothesis that language has here been led by the similarity of sound in the Nom. case to waver between two stems, one short and the other lengthened by the addition of *τ*. Accurately speaking there has here been no rejection of *τ*, which would be without a parallel in the constant use of this consonant in inflection and the formation of words. But there were two stems, e. g. *κεραζ* and *κερατ*, standing side by side; and each having

the same sound in the Nominative. From each, cases were formed which continued to remain in use side by side. Similar double formations, of which the longer are characterized by  $\tau$ , occur frequently among the anomalies. Cp. γόνυ, δόρυ, κάρη and ἔρωσ as correlative of γέλως.

### § 169.

The same holds good of the stems with moveable  $\nu$ . The rejection of  $\nu$  as a phonetic process cannot be vindicated. This class contains scarcely any other than the comparative stems, in which the  $-ιον$ , as the corresponding form in Sanskrit shows, has arisen out of  $-ians$  or  $-jans$  (Sanskrit  $-ījans$ , e. g. *svād-ījans* = ἡδ-ιον), see Bopp, *Vergl. Gram.*, II, 36; Schleicher, *Comp.*, 384. Of the two consonants  $\nu$  and  $\sigma$ , the latter has, as a rule, disappeared, perhaps through the medium of  $\nu\nu$  as in Æolic  $\mu\tilde{\eta}\nu\nu\omicron\varsigma$  = Attic  $\mu\eta\nu\acute{\omicron}\varsigma$  for  $\mu\eta\nu\sigma\omicron\varsigma$  (cp. Latin *mensis*). The Latin, on the other hand, has thrust out the nasal, and retained the  $s$ ; *suā(d)v-ios*. The older language (Varro L. L. VII, 27 *meliose*m) carried the  $s$  throughout all the cases; but at a later period it passed into  $r$  between two vowels, and at length remained only in Nom. Acc. Sing. of the Neuter; *suavius* (for *suavios*). But in the long  $\bar{o}$  of *suāvīōris*, at least the effect of the nasal also is still felt. I have no doubt, therefore, that for the Græco-Italic period of the language we must assume the stem *suādv-ions*. And it appears probable to me that even in Greek certain case-forms with  $\sigma$  as  $(\sigma)F\bar{\alpha}\delta-ιον\sigma-\alpha-\nu$  = *suādv-ions-em* remained current, which afterwards lost their  $\nu$ :  $(\sigma)F\bar{\alpha}\delta\iota\sigma\alpha$ , and became regarded as analogous to the sigma-stems. Such forms—at a somewhat later period of the language—naturally rejected  $\sigma$ :  $F\bar{\alpha}\delta\iota\alpha$ ,  $F\bar{\alpha}\delta\acute{\iota}\omega$  (ἡδῖω), exactly as  $\alpha\acute{\iota}\delta\omicron\sigma-\alpha$ ,  $\alpha\acute{\iota}\delta\omicron-\alpha$ ,  $\alpha\acute{\iota}\delta\tilde{\omega}$ . Ebel, *Zeitschrift*, I, 300

quotes this view as Benary's. He himself is in doubt about it on account of the three forms Ἀπέλλω, Ποσειδῶ, and Homeric κωκεῖω, for which this explanation does not hold good. But in fact the origin of these three words is unknown, and every attempt at explanation must be given up. In a school-grammar therefore the old doctrine of the rejection of ν must be retained, especially as the origin of the comparative suffix cannot well be explained without reference to Sanskrit.

§ 176.

'Several neuter stems in αρτ, as φρεαρτ reject τ in Nom. Acc. and Voc. Sing. and ρ in other cases'.

That this explanation is correct is shown especially by the Sanskrit *jakṛt*, i. e. *jakart* (cp. Latin *jecur*)—synonymous with the Greek ἥπαρ—in which both consonants stand side by side, *Grundzüge*, II, p. 48. A parallel to the rejection of ρ will be found in the Homeric ποτί by the side of προτί (Cret. πορτί). In the stems σκαρτ and ὕδαρτ the vowel in Nom. Acc. Sing. is deepened and lengthened; σκῶρ, ὕδωρ.

§ 177.

Those words are to be regarded as anomalous, the inflection of which cannot be derived from any single stem with the help of the laws of sound. But on taking a closer view of the relation which exists between the various stems which are united to make one word, we find that here, again certain analogies come to the surface. Some of the most extensive of these are mentioned in §§ 174, 175. In § 177, on the other hand, several anomalies are quoted in alphabetical order; the main reason being that in each of these, there is something deserving

particular notice. Many of the words here introduced can obviously be classed among the analogies already pointed out. Thus the irregularity of Ἄρης evidently rests on the same principle as that of Σωκράτης, with an additional irregularity in the quantity of the vowel; Homeric Ἄρη-ος, Attic Ἄρειος beside Ἄρειος.—The words γόνυ and δόρυ, which are exactly similar, together with No. 22 κάρα and their secondary forms in τ, are analogous to those mentioned in § 175; No. 20 ἔρωξ is analogous to those in § 169. D. But in the first mentioned, the metathesis of the final υ into the preceding syllable is peculiar; Hom. γοῦν-α, i. e. γονυ-α, cp. Lat. *genu-a*, δοῦρα = δορυ-α are parallels to the metathesis of ι in μείζων from μεγ-ιων.—No. 17 υλό-ς and 19 Ἄδ-η-ς with their complementary stems of shorter and longer form have a precedent in ἄλλχ by the side of ἀλκή, ὕσμιν and ὕσμίνη (§ 175. D). The stem ὄσσο (No. 25) stands to the Homeric stem ὄσσ, in ὄσσε, exactly as ἐρήρο-ς to Plur. ἐρήρη-ες, as δάκρυ-ο-ν to δάκρυ. Further enquiry shows that ὄσσε has arisen out of ὄκι-ε, consequently that the stem in ὄκι (*Grundzüge*, II, 51) which is retained to this day in the Bohemian Dual *oči* (pronounce *otschi*), and the stem in its original form in the Lithuanian *aki-s*.—The rejection of ρ in μάρτυ-ς is similar to that in φρέαρ, ἦπαρ. The mobility of ϑ in the stem ἔρυνϑ is like that in κορυϑ (§ 156).

The remaining anomalies, which are not numerous, can be explained in part by very simple changes of sound. In ἀνήρ the irregularity rests on the same syncope as in the stems discussed in § 153; only in this case we have the insertion of a δ as an auxiliary consonant (§ 51. Obs. 2). The stem ἄρν is only so far anomalous as it is without a nominative. The α in Dat. Plur. ἄρν-ά-σι is obviously the same as in πατρ-ά-σι, ἀνδρ-ά-σι, υί-ά-σι.—The same vowel is inserted in λα̃-α-ς to facilitate the formation of the

Nom. and Acc. Sing. The stem was originally  $\lambda\bar{\alpha}F$ , from which  $\lambda\epsilon\upsilon\text{-}\epsilon\iota\nu$  (*Grundz.*, II, 130).— $\nu\alpha\tilde{\upsilon}\text{-}\zeta$  is so far anomalous that the diphthong undergoes various changes, but these all take place in a manner strictly in accordance with the phonetic inclinations of the language.

The anomaly of  $\omicron\tilde{\zeta}$  is of a similar kind. The full stem is found in the Ionic  $\omicron\tilde{\alpha}\tau\text{-}\alpha$ .  $\omicron\tilde{\alpha}\tau$  became weakened to  $\omicron F\alpha\tau$ ; the digamma was rejected, and  $\omicron\alpha\tau$  became contracted into  $\omicron\tau$ . This contracted form was used throughout in the Doric dialect, and the word was therefore quite regular. In Homeric and Attic, on the other hand, the Nom. was certainly retained for a longer time in the diphthongal form  $\omicron\tilde{\alpha}\zeta$ , from which, by contraction, arose  $\omicron\tilde{\zeta}$ . See further *Grundz.*, I, 370. On the Homeric forms of this word a remark may here be made. In Homer the following forms occur; Acc. Sing.  $\omicron\tilde{\zeta}$ , Gen.  $\omicron\tilde{\alpha}\tau\omicron\zeta$ , the Nom. Acc. Plur.  $\omicron\tilde{\alpha}\tau\alpha$ , Dat.  $\omicron\tilde{\alpha}\sigma\iota\nu$ . But singularly enough by the side of these forms which occur so often as to be beyond doubt, we find in one single passage the Attic form  $\omicron\tilde{\sigma}\iota\nu$ , at the close of the narrative about the Sirens. *Od.*  $\mu$ . 200.

$\omicron\nu$  σφιν ἐπ' ὠσίν ἄλειψ' (viz. κηρόν).

In this passage Eustathius, it is true (p. 1707, 39), gives the variant  $\pi\tilde{\alpha}\sigma\iota\nu$  instead of ἐπ' ὠσίν, but this will hardly satisfy anybody. If however we compare the corresponding account given in verse 177

$\epsilon\tilde{\zeta}\epsilon\lambda\eta\zeta$  δ' ἐτάροισιν ἐπ' οὔατα  $\pi\tilde{\alpha}\sigma\iota\nu$  ἄλειψα

and 47

ἐπὶ δ' οὔατ' ἀλειψαί εταίρων

It becomes very probable that the original form of line 200 was

$\tilde{\omega}$  σφιν ἐπ' οὔατ' ἄλειψ'.

So too in *Iliad*  $\Psi$ . 264, 153 we ought to read  $\omicron\alpha\tau\acute{\omicron}\epsilon\nu\tau\alpha$  instead of  $\acute{\omicron}\tau\acute{\omicron}\epsilon\nu\tau\alpha$  with the more confidence as the  $\omega$  in the second place is very extra-

ordinary, as Buttman perceived *Ausf. Gr.*, II, 451. Lastly we read in *Iliad* Δ. 109

Ἄντιφον αὖ παρὰ οὓς ἔλασε ξίφει

where Bekker has now adopted Heyne's conjecture αὖτε παρ' οὓς to remove the intolerable hiatus. Perhaps the pronunciation was at one time παρ' ὄας. The lengthening of the final syllable in the main cæsura is not at all remarkable. If this conjecture be true, we should have the required transitional form in this passage.

On the irregularity of the word Ζεύ-ς, which is explained by the comparison of the kindred languages we may here refer to *Grundz.*, II, 187 sq.; for γυνή to II, 207, 247. With regard to the first word it can be made intelligible even to the pupil that Ζεύ-ς stands for Διευ-ς (cp. § 58) and is thus not far removed from the stem ΔιF in Δι(F)-ός, &c.

### § 179.

The Locative was originally common to all the Indogermanic languages. It is retained in Latin in the names of towns (*Romae, Corinthi*) and in a few appellatives in common use (*domi, belli, ruri*); but we required the aid of Sanskrit in order to recognize it as a separate case, distinct from Gen. and Dat., and to a certain extent from the Abl. It has left but few traces in Greek; οἴχοι is the most common instance. Æschylus has also πέδοι (*Prom.* 615, 272); the Æolians μέσσοι. The Pronominal adverbs ποῖ, οἶ, are other examples of this case, which is more common in proper names, being frequently found in combination with a preposition, like the other cases, e. g. ἐν Πριανσοῖ on a Cretan inscription (C. I. 2556), and in Simonides (*Frag.* 209 Schneid.) ἐν Ἰσθμοῖ. χαμαί = *humi*, which has been introduced into the text of the grammar, is the only example

belonging to the A-declension. It is formed from a stem which is now found only in *χαμά-δεις*, *χαμᾶ-ζες*, *χαμά-ῥεν*, and with a change of vowel, in *χαμό-ῥεν*.

§ 178. D.

The Homeric forms in *φι(ν)* belong to an extensive class of case-formations in which the characteristic element was, in its original form, the syllable *bhi*. In Sanskrit we find the suffix of the Instrumental Plur. *-bhi-s*, the Dat. Abl. Plur. *-bhjas* (= Lat. *bus*), the Dat. Instr. Dual *-bhjâm*, belonging to this class. Connected with it is the termination *-bi*, in Latin *si-bi*, *ti-bi*, *u-bi*. These various applications of this suffix, which in Sanskrit becomes specified by additional elements (on which cp. Bopp, *Vergl. Gram.*, I, 420 sq.), form the reason why the Greek termination is not limited to one case, but corresponds sometimes to the Dat. in the sense of the means or accompanying notion (*ῥεόφιν βίη-φι*), sometimes to the Locative (*ῥύρη-φι*, *παρὰ ναῦφιν*), sometimes to the Genitive, especially in combination with various prepositions (*ἀπὸ πασσαλόφι*, *διὰ στήῤεσφιν*). A complete enumeration of all the Homeric forms is given by Leo Meyer (*Gedrängte Vergl. der Griech. und Lat. Decl.* Berlin 1862, p. 54 sq.) who however is wrong in maintaining that these formations denote the relations of the Genitive case only so far as the Genitive is the representative of the Ablative-Combinations like *τιτυσκόμενος κεφαλήφιν*, II. Δ. 350, *κεφαλήφιν ἐπεὶ λάβεν* II. 762, can only be regarded according to Greek usage as real Genitives, which have nothing in common with the Ablative *διὰ στήῤεσφιν* and the like are also to be regarded in the same light.

---

CHAP. VII.—OTHER INFLECTIONS OF THE ADJECTIVE.

THIS whole chapter properly belongs to the formation of words, and occupies a position here solely on account of its great practical importance.

§ 187.

The observation on this paragraph contains in brief the result of my more detailed discussion of these formations in *Grundz.*, II, 234.\* In my earlier editions I assumed that the hypothetical form  $\pi\alpha\nu\tau\text{-}\iota\alpha$  passed first into  $\pi\alpha\nu\sigma\text{-}\iota\alpha$ , and then into  $\pi\alpha\nu\sigma\text{-}\alpha$ ,  $\pi\tilde{\alpha}\sigma\alpha$ . Further enquiry has led me to the conclusion that this was not the path which language followed. The  $\sigma$  is found in all Greek dialects in this place, but in the Dor. dialect  $\tau$  before  $\iota$  does not become  $\sigma$  (cp.  $\varphi\alpha\text{-}\tau\acute{\iota}$ ,  $\varphi\alpha\nu\text{-}\tau\acute{\iota}$ ); consequently the  $\sigma$  cannot be due to the influence of the  $\iota$ , but has more probably arisen out of Jod; and from  $\pi\alpha\nu\tau\text{-}\sigma\alpha$  came the usual form  $\pi\tilde{\alpha}\sigma\alpha$ .

§ 188.

Without the aid of Sanskrit, it would be difficult to understand how the fem. in  $\text{-}\iota\alpha$  is connected

\* In the English Translation of the Grammar the earlier view is given. In the last (9th) edition of the original the Obs. is as follows. 'The form of the Feminine is explained thus.—The  $\iota$  (cp. § 57) passes into  $\sigma$ . Before this  $\sigma$ ,  $\nu\tau$  is dropped with compensatory lengthening;  $\pi\alpha\nu\tau\text{-}\iota\alpha$ ,  $\pi\alpha\nu\tau\text{-}\sigma\alpha$ ,  $\pi\tilde{\alpha}\text{-}\sigma\alpha$ ;  $\lambda\upsilon\omicron\nu\tau\text{-}\iota\alpha$ ,  $\lambda\upsilon\omicron\nu\tau\text{-}\sigma\alpha$ ,  $\lambda\acute{\upsilon}\omicron\upsilon\text{-}\sigma\alpha$ . TR.



with the corresponding masc. stem in -οτ. The Sanskrit perfect participle has the suffix -vat, with an alternative form -vas, e. g. *vid-vat* = εἰδ-οτ; the fem. -ushî, i. e. *usî*, e. g. *vid-ushî*, for an older *vid-usî*. From this it is clear that the Greek form in -οτ goes back to -Φοτ; an origin which suits admirably the numerous Homeric forms which like τεῖνονη-ώς, τεπειη-ώς, have a long vowel before this suffix. As the Greek feminine termination -ια corresponds to the Indian î, we should have expected at first to have -Φοτ-ια. But the weaker form in -vas appears to have existed beside the form -vat at an early period. And this form also underwent a further weakening, which in Sanskrit is common enough, but is rare in Greek; *us*, Greek υς took the place of -vas, Greek Φος, just as, for instance, the shorter stem κων took the place of κων, and as the Greek ὑπ-νό-ς corresponds to the Sanskrit *svap-na-s* (of the same meaning), for which we have also evidence in Latin *sop-io*, *som-nu-s* for *sop-nu-s*. Thus arose υσ-ια and with the usual rejection of σ between two vowels -υα. Cp. p. 10 and 11.

## § 191.

The stem πολλο is connected with πολυ through the form πολλφο. The difference, therefore, consists merely in the addition of a hard vowel in order to make the declension both in case and gender more easy. The Homeric πουλύ-ς, πουλύ, is due to the attraction of the vowel into the preceding syllable, cp. εἰνί by the side of ἐνί (*Grundzüge*, II, 249). This process has been already touched upon, and it was shown to be of great importance for understanding the Comparatives (p. 42).

## § 198. D.

On βράσσω cp. *Grundz.*, II, 239. This form only occurs in Il. K. 226 and in deriving it from βραχύς, and not, as is usual, from βραδύς, we are merely following the old tradition which can be shown to have existed among the Greeks themselves, as the Scholion of Aristonicus on this passage proves. βραχίων, the hypothetical form for βράσσω, is quoted by Hesychius, and βράχιστος is used several times by Sophocles. The reasons why we cannot allow σσ to arise from δj have been already mentioned (p. 43).

## § 199.

In my first edition ἀμείνων was compared with the Latin *amemus*; a comparison which is by no means improbable. But there are some difficulties in the way, chief among which is the fact, that on this hypothesis, this word would be the only representative in Greek of the Root *am*, *am-or*, *ama-re*, so common in Latin. The comparison, therefore, does not seem to have attained such a degree of certainty as to admit of its introduction into a school-grammar.

The stem ἀρεξ, which we most naturally assume for ἀρείων, and with which ἄριστος also is connected, is without doubt related to ἀρετή, but also to ἀρέσκω, and belongs to the root ἀρ- (to join or fit), *Grundz.*, I, 304.

In the stem χερ- of χείρων, χείριστο the fundamental idea is in all probability that of inferiority (*Grundz.*, II, 167).

The stem ἦχυ is assumed for ἦσσω according to the analogy of ἦδυ, ταχυ, βραχυ and others. The final vowel may, it is true, have been perhaps somewhat

different. The kindred languages do not offer any analogous word, from which to draw a certain conclusion as to meaning and form.

For μείων no stem has been given, because none can be obtained without somewhat complicated combinations. In another place (*Grundz.*, I, 299) I have attempted (following J. Grimm) to show that μινυ (cp. μινύσσω, μίνυνσα) is the stem from which μνε-ίων arose in the same manner as πλε-ίων from πολυ. Finally the initial μν became shortened to μ. μικρό-ς, of which the fuller form is σμικρό-ς, is certainly not connected etymologically with this word.

More intelligible even to the pupil is the stem ἐλαχyu, which is preserved in the fem. ἐλαχεῖα, in Hymn. in Apoll. Pyth. 19, and in the compound ἐλαχυ-πτέρυξ in Pindar. In Od. ι. 116, κ. 509 Bekker now rightly reads νῆσος ἔπειτ' ἐλάχεια with Zenodotus, instead of the usual λαχεῖα. It is certain that the explanation of this word by εὐγειος mentioned in the scholiasts and based on the derivation from λαχαίνειν (to dig), is absurd, for in ι. 122 we have

οὐτ' ἄρα ποίμνησιν καταίσχεται οὐτ' ἀρότοισιν.

Most modern interpreters have followed Nitzsch, who 'struck out a dark path' to another explanation, by which, with the aid of a very doubtful etymology, he arrived at the meaning 'rough'.

The comparative πλε-ίων is due to a hypothetical form πολεF-ίων, from stem πολυ, extended to πολευ. From this arose by syncope πλεF-ίων, later πλέ-ίων.

The peculiar variation of the quantity and of the consonants in καλό-ς is explained by the origin from *kalja-s*, which in Sanskrit means 'sound, whole', and corresponds etymologically to German *heil* (*Grundz.*, II, 110). Hence καλλ-ίων, τὸ κάλλος, and Doric even καλλά = καλῶς.

The shorter stem, from which ῥάων, ῥᾶστος arose, is seen most clearly in ῥά-δυμο-ς, in Homeric ῥέα,

ῥεῖα, while ῥά-διο-ς, Homeric ῥη-ί-διο-ς, is a further adjectival derivative from it.

### § 200.

The positive of ὕστερος can only be quoted from Sanskrit in the preposition *ut*, or as it appears to be more correctly written *ud*, from which are formed *ut-tara-s* 'the higher, later', *ut-tama-s* 'the highest, latest'. A suggestion on a Greek residuum of this positive is given in *Grundz.*, I, 194.

ἔσχατο-ς is evidently connected with the prep. ἐξ, in the sense of *extremus*.

### § 203 AND 204. DIALECTS.

The Homeric ἐπασσύτεροι is apparently to be compared with ἀσσότερω. It is a comparative formed from a comparative (cp. πρώτιστος). υ stands for ο after Æolic fashion as in πρύ-τανι-ς from the prep. πρό, and Homeric ἄμυ-δις (cp. ἄμα) ἄλλυ-δις (cp. ἄλλο-σε).

---

CHAP. VIII.—INFLECTION OF PRONOUNS.

§ 205.

THE stem of the third personal pronoun had originally only the meaning 'self', and, therefore, even from the very beginning, and not only in consequence of misusage, could it be applied to the first and second persons to express the reflexive reference of these to the subject. This fact has been proved to demonstration by comparative grammar. The Slavonian languages are of especial importance in this respect, because to this day they use the corresponding reflexive pronoun for all three persons (cp. Miklosich, *Ueber den reflexiven Gebrauch des Pronomens*  $\sigma\tilde{\upsilon}$ , *Sitzungsberichte der Wiener Ak.*, 1). But in German dialects also the same phenomenon occurs (Grimm, *Deutsche Gram.*, IV, 319); and the origin of the *r* in the passive voice of the Italian languages from *se* rests on the same ground (cp. Schömann, *Redetheile*, 109). Hence in Greek  $\mathcal{F}\acute{\iota}$ - $\delta\iota\omicron$ - $\zeta$  later  $\check{\iota}$ - $\delta\iota\omicron$ - $\zeta$  belongs to the stem  $\mathcal{F}\varepsilon$  for older  $\sigma\mathcal{F}\varepsilon$ . Hence also the use of  $\acute{\epsilon}\alpha\upsilon\tau\omicron\tilde{\upsilon}$  compounded with  $\varepsilon$ , and the derivative  $\acute{\epsilon}\acute{\omicron}$ - $\zeta$ ,  $\acute{\omicron}$ - $\zeta$  for the first and second person (§ 471. c). The want of insight into language on the part of the editors of the old texts can occasionally be recognized in the attempt to remove these usages by conjectures which are at once superfluous and groundless.

The Æolic forms in Homer  $\acute{\alpha}\mu\mu\epsilon\varsigma$ ,  $\acute{\upsilon}\mu\mu\epsilon\varsigma$ , &c., have had to contend with a somewhat similar prejudice. To a certain extent they are allowed to count merely

as metrical helps which would be only introduced in place of the common forms, where they fitted better into the verse. But the Æolisms in Homer are by no means few and not at all restricted to forms which are convenient to the metre (cp. ἐπασσύπεροι p. 84).

### § 212 sq.

In all except the personal pronouns the characteristic of the declension lies only in the formation of the neuter singular, in which we find the pure stem, and not as in the Adjectives of the O-declension, an additional *ν* in Nom. and Acc. case. But originally, this gender also had a termination viz. *τ*, corresponding to the *d* in Latin, *i-d*, *illu-d*, *quo-d*, so that ἄλλο is exactly identical with *aliu-d*. For according to § 67 the dental consonant could not be retained in Greek.

### § 213.

It is pure accident that a few forms of the relative pronoun with initial Spiritus asper are identical in sound with some forms of the demonstrative pronoun (the Article of the later Greek). The relative stem originally began with Jod. ὄ-ς, ῥῆ, ὄ, correspond to the Sanskrit *ja-s*, *jà*, *ja-t*, whereas the article ὁ arose out of *sa*, *Grundz.*, I, 363. Nevertheless even this stem must in the first instance have had a demonstrative meaning, a residuum of which still remains in the Attic usage καὶ ὄς ἔφη, and in the demonstrative use of the adverb ὄς, which is formed from this stem. In the relative use of the forms with initial τ, τοῦ, τῶ, in the Ionic dialect we see more plainly still that the separation of the relative from the demonstrative was gradual in Greek. The

fact, therefore, is certain—and it is exceedingly important for syntax, and more especially for the explanation of compound sentences—that the Greek language arrived at its relative pronoun, the most complete means for combining sentences, by starting from two pronoun-stems different in origin, but both demonstrative.

The form ὅου as has been already mentioned p. 64, is in all probability merely an incorrect mode of writing for ὅο. More remarkable is the quite singular fem. ἔτης, II. II. 208. Perhaps the old *j* has been retained here under the form *ε*. Other instances of a like nature are collected in *Grundz.*, II, 180 sq.

### § 214.

To the same change, i. e. of *j* to *ε*, are due the Ionic forms of pronoun-stem *τι*; τέω, τέοισιν, as is shown most clearly by the corresponding Æolic forms τιώ, τίοισιν (Ahrens, *Æol.*, 127). By the addition of a vowel, the stem *τ*, like the stem πολυ, passed into the O-declension. *τι-ο* became afterwards *τε-ο*. Finally the vowel was entirely lost by contraction. Thus we may explain the Attic forms τοῦ, τῶ, which again are only accidentally the same in sound with the corresponding cases of the article. On the origin of the stem *τι* and its identity with the Latin *qui* (cp. *Grundz.*, II, 75).

## CHAP. X—XII.—THE INFLECTION OF THE VERB.

THE following table, taken with some additions from the English edition of the grammar, will give a convenient synopsis of the arrangement of the verb which is discussed in the following pages. The §§ are those of the Grammar.

### INFLECTION OF THE VERBS.

List of Paradigms. § 225—230.

Εἶμι. Table I.

Synopsis of λύω (exhibiting the meaning of the tenses). Table II.

### VERBS IN Ω.

#### A. Vowel-stems.

1. Uncontracted λύω. Table III.
2. Contracted τιμάω, φιλέω, δουλόω. Table IV.

#### B. Consonant stems.

1. Guttural stems πλέκω, φεύγω, τάσσω. Table V.
2. Dental stems ψεύδομαι, πείθω, κομίζω. Table VI.
3. Labial stems πέμπω, λείπω, καλύπτω. Table VII.
4. Liquid stems δέρω, ἀγγέλλω, σπείρω. Table VIII.

### VERBS IN ΜΙ.

First class τίθημι, δίδωμι, ἵστημι. Table IX.  
Second class δείκνυμι. Table X.



Chap. X. First principal conjugation or Verbs in  $\omega$ .

## I. The Present-stem.

A. Inflection of the Present-stem. § 231—233.

B. The Augment. § 234—242.

C. Contracted Verbs. § 243—244.

D. Distinction of the Present-stem from the Verb-stem. § 245—253.

II. The Strong Aorist-stem. § 254—257.

III. The Future-stem. § 258—266.

IV. The Weak Aorist-stem. § 267—272.

V. The Perfect-stem. § 272.

1. Perfect Active. § 276—282.

2. Pluperfect-Active. § 283.

3. Perfect, Middle and Passive. § 284—289.

4. Pluperfect, Middle and Passive. § 290—291.

VI. Forms of the Strong Passive-stem. § 292—295.

VII. Forms of the Weak Passive-stem. § 296—299.

Verbal Adjectives. § 300.

Verbs which have their stem-vowel short. § 301.

Chap. XI. Second Principal Conjugation or Verbs in  $\mu\iota$ .

I. First class. § 302—317.

II. Second class (with  $\nu$ ). § 318—319.

## Chap. XII. Irregular Verbs of the First Conjugation. § 320—327.

Obs.—The verbs in  $\omega$  are divided into eight classes, four of which are contained in chap. X, and four in chap. XII.

They are as follows:—

I. The Present-stem is like the Verb-stem,  $\lambda\acute{\upsilon}\text{-}\omega$ ,  $\tau\acute{\iota}\text{-}\omega$ ,  $\acute{\alpha}\gamma\text{-}\omega$ ,  $\tau\iota\mu\acute{\alpha}\text{-}\omega$ , &c.

II. The stem-vowel is lengthened in the Present-stem,  $\varphi\epsilon\acute{\upsilon}\gamma\text{-}\omega$ ,  $\lambda\epsilon\acute{\iota}\pi\text{-}\omega$ ,  $\tau\acute{\eta}\kappa\text{-}\omega$ , &c.

- III. The Present-stem affixes  $\tau$  to the Verb-stem, τύπτ-ω, βλάπτ-ω, βάπτ-ω.
- IV. The Present-stem adds  $\iota$  to the Verb-stem,  $\kappa$ ,  $\gamma$ ,  $\chi$  with  $\iota$  form  $\sigma\sigma$  (New Attic  $\tau\tau$ ), πράσσω, τάσσω, ταράσσω.  
 $\delta$  and more rarely  $\gamma$  with  $\iota$  form  $\zeta$ , ἔζομαι, κράζω.  
 $\lambda$  with  $\iota$  forms  $\lambda\lambda$ , βάλλω.  
 $\nu$  and  $\rho$  throw the  $\iota$  into the preceding syllable, τείνω, φθείρω.
- V. Nasal class.  
 The Verb-stem is strengthened by the addition of  $\nu$  or a syllable containing  $\nu$  ( $\alpha\nu$ ,  $\nu\epsilon$ ) to the Present-stem, τίν-ω, ἄμαρτ-άν-ω, κυ-νέ-ω.
- VI. Inchoative verbs.  
 The Present-stem adds  $\sigma\kappa$  to the Verb-stem, γηράσκω, γιγνώσκω, εὐρίσκω.
- VII. E-class.  
 A short stem alternates with one enlarged by  $\epsilon$ .
- I.  $\epsilon$  in the Present, γαμ-έ-ω.  
 II. the  $\epsilon$  forms the tenses except the present, e. g. βόσκω, βοσκήσω.
- VIII. The Mixed class.  
 Several essentially different stems unite to form one verb.

---

The inflection of verbs is the most difficult part of accidence, but it is also that which science has done the most to elucidate. How we may best succeed in presenting a synopsis of the extraordinary abundance of forms, is a question worth consideration in the interests of science no less than in those of education. The older grammarians, it is true, cared

little about the matter, and went to work in a purely mechanical fashion, trusting almost entirely to the learner's powers of memory. But this is just a point on which scientific enquiry has every reason to put herself in harmony with the requirements of practice, if her results are to become fruitful and generally accessible; and, on the other hand, practice also may certainly be expected to have some interest in the attempt to apply the most important results of enquiry to a division of the subject matter, and thus to put order and law in the place of a formless chaos. For this reason a few remarks on my arrangement of the verb will be in place here, and they will be the less superfluous because this arrangement differs essentially from that found in most grammars.

A verb-form is chiefly distinguished from a noun-form by the greater number of different elements combined in it. In a case-form we have to deal with but one invariable and one variable element,  $\piαιδ-ός$ ; or at the most a vowel is inserted to connect the two,  $\piαιδ-ε-σι$ . But verb-forms of such a simple character as  $\tilde{\iota}-μεν$ ,  $\acute{\alpha}\gamma-ο-μεν$  are few in number. In  $\tilde{\iota}-ω-μεν$ ,  $\acute{\alpha}\gamma-οι-τε$  we have already an additional element denoting the mood; in  $\acute{\alpha}\gamma-άγ-οι-τε$  a further addition of temporal signification; and a still further addition in  $\tilde{\eta}\eta-αγ-ο-ν$ , that is, the augment, which, though also of temporal signification, is added for a different purpose. In explaining the forms of the verb, therefore, the grammarian cannot attain his object by beginning with one invariable element, that is, one stem only. Such a process would lead us to create a number of widely different moveable elements for each individual form; and also to ignore the relative stability of certain parts in comparison with others more mobile, the smaller unities and groups existing within the great whole.  $\acute{\alpha}\gammaαγ$  has a certain relative stability in comparison with the

individual forms ἀγάγ-ω-μεν, ἀγάγ-οι-μεν, ἀγαγ-εῖν, ἀγαγ-έσθαι, and the same is the case with ἄξι as compared with ἄξιμεν, ἄξιμι, ἄξις, ἄξιςθαι. Hence to prevent entire dismemberment, it is necessary to assume several fixed points, i. e. several stems, in the verb. Practical grammarians indeed have long since felt a similar need. Hence for the Latin verbs a happy instinct established four leading forms which together make up the so-called *conjugatum*, or *a verbo*. Had these four forms been consistently retained and not mutually confused when carried out into detail in the paradigms, the Latin verb would as a fact have attained a certain degree of classification. Greek grammarians sought to accomplish a similar object by impressing on the memory the future as well as the present tense of the verb, and then developing from the former the remaining tenses with the exception of the *tempora secunda* which could not be brought into this scheme—a scheme utterly wanting in science like all the older grammar. Even a school boy, were he to think of the matter, would find it difficult to conceive how an Aorist or Perfect could be derived from a Future tense. But even this plan shews more practical sense than that other, which still meets with much attention, where the explanation of the verb begins with mere abstract rules about stem, characteristic, augment, &c., the whole crowd of forms being afterwards added in alphabetical order, the most wretched expedient of all. If I am not mistaken, this is a subject where the proverb *divide et impera* is applicable; and indeed we can apply it the more confidently as language herself leads the way.

Thus of the many different elements which are united in the structure of the verb, some are easily detached, and have, therefore, a more general char-

acter, while in others the union is more close, and thus they become of a more special nature. Most easily detached are the person-terminations, for they can be joined to the most widely different stems, to all the temporal and modal elements throughout the active and middle voices. With these are to be classed the terminations of the participles and infinitives, which though nouns by origin, are in Greek—and this is one of the most decisive advantages which the language has over her sisters—used in the most different tenses. The same holds good of the signs of mood which also recur again and again, and lastly of the augment, so far as it is common to three preterites of entirely distinct meaning. All these elements have nothing of the nature of a stem about them; they are added in much the same manner as the case-terminations, and constitute the inflection of verbs in the narrower sense.

But with the second class the case is far otherwise. In combination with these different elements we find others also differing widely among themselves, which as being comparatively stable in contrast to the extreme mobility of the others, may be named stems. For, as we have already pointed out, *λυσα* is as much an invariable stem in *ἔ-λυσα*, *λύσα-ι-μεν*, *λύσα-ς*, *λύσα-σθαι*, as *δικα* in *δίκα-ι*, *δίκα-ς*, *δίκα-ις*; and so *λελυ* in *λέλυκ-α*, *λέλυ-μαι*, *ἔ-λέλυ-το*. To state the case briefly, it may be said that in the noun, formation—that is, formation of the word, or more correctly of the stem—and inflection in the narrower sense are distinct; but in the verb they combine, and encroach each upon the other. He alone is completely master of the verb-forms who from the verb-stem common to all can first form all the special stems, and secondly can inflect the stems when correctly formed. To these special-stems as distinguished from the stem common to the whole verb—the verb-stem—

I give the name tense-stems; for thus I do not break with the old method which connects the moods, participle, infinitive, &c., with particular tenses. Ahrens, with the same object in view, uses the word 'systems', Müller and Lattmann the expression 'groups of forms'. As regards the arrangement of the verb, we have here to answer the general question concerning the relative position of formation and inflection. Theoretically we may defend the arrangement which begins with formation, just as in many scientific works the formation of stems precedes the inflection of nouns. But even from a scientific point of view such a course is objectionable, for the history of language was certainly not that here indicated. The verb arises essentially out of a synthesis of predicate and subject: the germ of it being the *verbum finitum* which from a very moderate beginning has gradually developed into a great variety of forms. Hence even in a severely scientific examination of the verb it would scarcely be advisable to begin with the formation of tense-stems which are in themselves imaginary, and in practice such a course is even less to be recommended. No one would readily give his approval to a plan in which the pupil is first taught to form uninflected stems, and afterwards to inflect them. Nor on the other hand, would it be well to give the priority in our arrangement to inflection in its widest extent, that is, as carried through all the tense-stems; for the result of such an arrangement would be, that the pupil would understand how to inflect λύω, λύεις, λύει, λέλυκα, λέλυκας, ἔλυσάμην, without having gained any conception of the manner in which these different stems are connected together in one verb. The proper course seems to me to lie midway between the two extremes; inflection and formation are best treated separately in each of the different tense-stems,

and thus the verb is broken up into natural groups which follow each other in a manner adapted to practical needs. This division into groups constitutes the peculiarity of my arrangement. The danger lest in this manner the verb should be entirely dismembered has been most carefully provided against. First of all a preliminary synopsis is given of the whole scheme (§ 225—230); then the verb-stem is retained as an integral in the formation of each tense-stem; and the same paradigm is carried throughout so far as possible; finally, another synopsis is added, based upon an arrangement of the stems according to the final syllable. This synopsis, it may be remarked, cannot possibly cross with the other, but will rather supplement the preceding explanation for practical purposes, in the same manner as the synopsis of the consonant-declension given in § 172 supplements the preceding explanation.

In the division of the verb according to tense-stems I have purposely departed from the usual arrangement; but in some other parts I have, on the contrary, adhered to it, viz. in the retention of the two leading conjugations. Strictly speaking, it is true, the distinction between verbs in  $-\omega$  and those in  $-\mu\iota$  does not run through the whole verb, but is felt only in the present, the strong aorist, and, though to a limited extent, in the perfect. It might, therefore, have been discussed in each of these tense-stems. But the number of these verbs in  $-\mu\iota$  is small, and they present many special peculiarities which make a more complete enumeration of the forms used in each necessary. Hence our view of the whole subject would be greatly obstructed by intruding them among the other verbs. More especially the pupil would be delayed too long with the formation of the present stem, already sufficiently perplexing. For this reason I thought it better to

gather the verbs in  $-\mu$  into a separate conjugation. With this concession to traditional usage, which all school masters will find, I hope, acceptable, is connected another. A large number of verbs with presents formed after the first leading conjugation have aorists and perfects after the second. Forms like ἔβην, ἔγνων, πῖσι, τεθνάσκει, can only be understood and properly inflected when the pupil has been taught to combine the person-termination and stem without a connecting vowel, as in ἔστην, &c. The large number of verbs in  $-\omega$ , therefore, must be divided into two parts, of which the first, as the simpler, took the lead, but the second, as containing more complicated phenomena, were placed after the verbs in  $-\mu$ . Hence the four classes as given in § 247—253, the remaining four not being added till § 320 sq. In calling the latter irregular I do not mean that they stand outside all rule, in which sense the word could not be applied even to the anomalies of declension. I only call attention to the fact that in these the rule is not simple. Besides the irregularity upon which the classification is based, we find as a fact various peculiarities of less importance, additional forms of several kinds, &c., in most of the verbs belonging to these classes. This is a sufficient reason for terming such verbs irregular, although, in the most accurate sense, the word can be applied only to the eighth or mixed class.

But this classification, as a whole, needs explaining. The first leading conjugation must of necessity be subdivided. An alphabetical list of irregular verbs is a most wretched resource, which unfortunately has not yet vanished from our common grammars, although few are utterly without an attempt to arrange the irregularities. But what classification shall we make? What principle shall we go upon? It is easy, and appears logically consistent, to classify the verb-stems



on the same principle as the noun-stems; i. e. according to the final sound. The old division into *verba pura*, *liquida*, &c., rests on this principle. But no sooner do we compare the two kinds of stems than we perceive the difference between them. Noun-stems with the same final sound are for the most part similarly declined, e. g. *φυλακ*, *κηρυκ*, *πατερ*, *ῥητορ*, *λογο*, *νομο*: but with verbs the case is different. *λυ* and *πλυ* are stems ending in the same vowel, but the formation of the tense-stems is widely different: *λύ-ω*, *πλέ-ω*, *λύ-σω*, *πλευ-σοῦμαι*, *ἄγ*, *πραγ*, *Ἔαγ*, all end in *γ*; but *ἄγω*, *πράσσω*, *ἄγνυμι*, are quite distinct: so too *λιπ* and *τυπ*; but in the present we have *λείπω*, *τύπτω*. The synopsis given in p. 103sq. of the grammar brings this variety before us, at least in part. In short, for the formation of tense-stems with characteristic consonants, especially the stems of the future, weak aorist, and perfect, the difference in the final sound of the stem is of real importance and must not be left out of sight. But in explaining the verb the essential point is the unity of each individual verb, and this rests on the relation of the various tense-stems to each other. The pupil must be taught from a given present—e. g. *πράσσω*—to form a tense not belonging to the present stem; and, by a reverse method, to find the present of a given form not belonging to the present stem: e. g. *λιπέϊν*. He must perceive how such apparently diverse forms can be reconciled, and this knowledge is the hinge on which turns our insight into the structure of the verb. If we arrange the forms of a verb according to the tense-stems, we ought as a natural consequence to make the relation of the verb-stem to the tense-stem the principle of classification. Now all the tense-stems with the exception of the present can be derived from the verb-stem in a very simple manner; e. g. *ἄξω* is formed from *ἄγ* as *πράξω* from

πραγ, ἐ-άγη-ν from φαγ, as ἐ-γράφη-ν from the Rt. γραφ. For this reason the corresponding tenses in Sanskrit are called 'general', that is, tenses formed in essentially the same manner in every verb. But the present stem is of a very different character. The forms which correspond to it in Sanskrit are called 'special-tenses' because developed in various ways. The important position of the present tense, and its relation to the other tenses in the whole system of the verb was correctly seen even as early as Buttmann. In § 112 of his larger grammar he says: 'By far the greater part of the anomalies of the Greek verbs are due to the union of forms which pre-suppose different themes; especially in such a manner, that several derivative tenses, treated in the regular way, pre-suppose a different present than that in use.' Hence Buttmann regarded the irregularities as proceeding from 'a change of stem', or 'double theme,' and classified them accordingly; and in a similar sense Krüger distinguishes the 'tenses formed from the pure stem', or 'thematic' tenses, from the present and imperfect; that is, from the forms of the present stem. What the glance of acute scholars had discovered in the Greek language alone is only set in a still clearer light by Comparative grammar. It was at once seen that the structure of the Greek verb is based essentially on the same distinction between two large groups of forms as that in Sanskrit, though in detail, it is true, i. e. in the manner of distinguishing the present stem from the pure verb-stem, great differences occur. That arrangement only can be correct which brings this general principle into force, and at the same time is suited to the individual peculiarities of the Greek language. In this manner only can the analogous phenomena be arranged together, and a real insight gained into the structure of the verb. For syntax also such

an insight is of essential importance. The various distinctions between the present stem and verb-stem, now brought into prominence by the classification of the verbs, are of great use in syntax, especially in pointing out the difference between the aoristic action, e. g. φηγεῖν, and the durative, e. g. φεύγειν. And the correct distinction between the tense-stem and additions which, like the augment, are made to particular forms only, preserves us from grave errors in syntax.

To these general remarks on the tense-stems and the division into classes may be added a few on the arrangement followed in regard to both. First, of the tense-stems. The arrangement introduced into the grammar is based mainly on practical considerations. From a purely scientific point of view something might be said in favour of beginning with the strong aorist stem, as that tense-stem which in most cases, if not always, is identical with the verb-stem. But the objection at once arises, that the strong aorist is found in a proportionately small number of verbs; and further, when we come to unite inflection with formation, we find that the former can be developed but imperfectly in these stems because no primary tense is derived from them. On the other hand, the present stem forms a desirable starting point in every respect. In practice the present is universally regarded as the *datum*. Present stems also of the first class like λυ, φυ, ἄγ are identical with the verb-stem, and, as this class is very extensive, form in fact the simplest basis in a great number of verbs. Moreover, in the present stem the best opportunity is offered for acquiring a familiarity with inflection, not only because in this stem all the moods, together with the infinitive, participle, and preterite, are carried through the Active and Middle—which latter is also used for the Passive; but also

because an almost unlimited choice of examples is offered for practice. For in the inflection of the present stem *every verb is regular*. The pupil can, therefore, be taught, by means of a good exercise book, to use the forms of ἔχω, μανθάνω, πράσσω, πάσχω, γιγνώσκω, and other verbs in the present-stem no less than λύω, ἄγω, &c. To me it seems a great advantage that this important element in the structure of the verb should first be accurately committed to memory in all its essential parts. With the augment also and its use an almost complete familiarity may thus be acquired, for observations on those forms which by accident occur only in the aorist (§ 236), can easily be added afterwards. Further, the contracted verbs are included in the present stem, for it is in the forms of this stem only that the characteristic contraction is found; this too it is important to bring clearly before the pupil. The usual method of separating the contracted verbs from the so-called regular verbs is not merely contradictory but impracticable, inasmuch as the *futurum secundum* in the so-called liquid verbs, and the Doric and Attic futures necessarily pre-suppose a knowledge of contraction.

When the inflection of the present stem is thoroughly familiar to the pupil, the distinction between the present stem and verb-stem discussed in § 245 sq. may be mentioned. Even for instruction it will be more expedient if a familiarity is *previously* acquired with a strong aorist like ἔ-λιπ-ο-ν and all its forms, and the difference between the stem thus brought forward, which is also the pure verb-stem, and the present stem, firmly based on a number of actual forms impressed upon the memory. The question of the mutual relation of these stems, thus forcing itself upon our notice, receives a satisfactory answer in the paragraphs referred to, at least with regard to

a considerable number of verbs. At the same time, the cardinal point in the whole explanation of the verb—the distinction between the pure verb-stem and the present stem, and the notion of the verb-stem as a whole,—is put in the clearest light. The strong aorist stem also is fitted to follow upon the present stem, inasmuch as the inflection in both is identical, and the pupil can at once, therefore, give all his attention to the formation. The unity of the verb-stem being now clear, and the necessary foundation laid for the further explanation of the verb, the question arises what tense-stem must follow next?

In a severely scientific treatment of the subject we might feel inclined to take the perfect stem after the strong aorist stem, both being formed simply and without composition. But inflection and formation present too many difficulties to make this plan advisable in practice. The third stem, therefore, is the future, which again in inflection is identical with the present. But the formation offers an opportunity of turning the preceding explanation of the pure verb-stem to account in regard to such verbs as have no strong aorist, e. g. most of those in the fourth class. Here we see that our care in distinguishing  $\pi\rho\alpha\gamma$  from  $\pi\rho\alpha\sigma\sigma$ ,  $\kappa\rho\alpha\gamma$  from  $\kappa\rho\alpha\zeta$ ,  $\tau\epsilon\rho$  from  $\tau\epsilon\iota\rho$ ,  $\phi\alpha\nu$  from  $\phi\alpha\iota\nu$ , was by no means superfluous. In regard to many verbs of the third class also the knowledge of the verb-stem can here be made available. At the same time, the changes which take place owing to the combination of the verb-stem with sigma can now be explained with the aid of the chapter on sounds. The contracted verbs being already accurately known, the contracted future can present no difficulty.

The sibilant common to both naturally leads from

the future to the weak aorist. In this there is little that is new and peculiar in the formation. In the inflection, on the other hand, owing to the characteristic  $\alpha$  and the peculiar terminations of the Imperative, Infinitive and Participle, much has to be learned.

But just in this very way is preparation made in part for the perfect stem, which has the  $\alpha$  in common with the weak aorist, and is, therefore, placed next as the fifth link in the chain. In this the most important point is the explanation of reduplication, as the distinguishing characteristic of the stem. Throughout the whole arrangement care has been taken to prevent any confusion between the augment and reduplication. The distinction between these elements is to be strongly marked, not merely because science regards them as entirely distinct, the augment being the sign of a past, the reduplication of a completed action; but also on practical grounds, in order to guard against the misapprehension that either of them excludes the other—for in the pluperfect both are found together—or that the augment can be prefixed to any other than a preterite tense—that is, a tense in the Indicative mood. Even for syntax this strict distinction is of importance inasmuch as it thus becomes self evident that the idea of past time belongs in the first instance to augmented forms only, whereas the idea of completion, conveyed in reduplication, runs through all the forms of the perfect. Owing to the very different manner in which the perfect stem is combined with the person-terminations in the active—where a connecting vowel is most frequently found—and in the middle—where such a vowel never occurs—the two voices are more widely separated in this stem; and in the active voice also two modes of formation,

the strong and the weak, must be distinguished. But the reduplication which is common to all serves as a link to connect these forms.

The two passive stems bring up the rear. The priority is given to that which, as uniting more closely than the other with the root, we call the strong stem. In it the inflection of both the passive stems can be learned, and preparation made for the study of the verbs in  $\mu$ . In the weak passive stem the combination of the verb-stem with the characteristic syllable  $\text{Ze}$ , that is the formation, is the important point.

In this manner I believe my arrangement of the tense-stems is sufficiently justified. Committed to memory by the pupil in the separate forms, one after the other, they must afterwards be combined, and the unity of the verb brought into prominence, when using the synopsis p. 103, in the constant repetitions which on other grounds will be necessary. With this division is connected an innovation in the terminology which has met with some opposition. I refer to the expressions 'strong' and 'weak' as used to denote the tenses commonly known as *secunda* and *prima*. We have seen good reason to place the *tempora secunda* before the *tempora prima* in our arrangement of the verb. Could we then continue to use these terms? Ought we to confuse the pupil by teaching him that one is two and two is one? The numerical designation of these tenses is moreover objectionable for another reason. It leads us wrongly to expect both formations in every verb, whereas the rule is quite the reverse, one form *or* the other, not both together, being found. A change in the terminology was, therefore, in my opinion unavoidable in this case. At the same time a comprehensive expression is given embracing the whole of the so-called *tempora secunda* and *prima*. For this reason, the

distinction which from a scientific point of view at first presents itself for the Active, and Middle aorist—the distinction I mean between simple and compound—is not applicable throughout. For the perfect, which I call ‘weak’, cannot be proved to be a compound tense; still less can the Passive aorist, which I call ‘strong,’ be proved to be a simple tense. The expressions ‘old’ and ‘new’ also would be unsuitable, especially for the Passive aorists. I am well aware that the expressions ‘strong’ and ‘weak’ seem also objectionable at first sight. But they have at least the advantage of brevity; they are used in German grammars, although not quite in the same sense, and are easily intelligible. That those forms are called ‘strong’ which spring as it were from the internal force of the root, and those ‘weak’ which are formed by the addition of syllables externally, can easily be made intelligible to the pupil: and at the same time it is very easy to compare the double formation of perfects in German or English (*nehme* ‘take’, *nahm* ‘took’, like *τρέπω*, *ἔτραπον*, *hege* ‘cherish’, *hegte* ‘cherished’, like *λέγω*, *ἔλεξα*). To this may be added the somewhat extensive parallelism between Greek and German with regard to the intransitive and transitive meaning of the verbs quoted in § 329, *sank* and *senkte* like *ἔδυν*, *ἔδυσα*, *trank* and *tränkte* like *ἔπιον*, *ἔπισα*, *losch* and *löschte* like *ἔσβην*, *ἔσβεσα*. Thus, as yet, I know no expression which offers so many advantages with so few deductions as this, and, therefore, I retain it till some one coins a better. In necessary innovations it is often of more importance that men agree, than upon what they agree.

I have still a few words to say on the arrangement of the classes of verbs. The first and last class are to a certain degree necessary consequences of my principle of division, for which reasons have been given. They are the extreme opposites. In the



first class there is no distinction between the verb-stem and present stem; in the last the distinction is so great that two essentially different stems, and often a third, are united to make one verb. In the division of the other classes my plan has been to proceed from the lesser changes of the verb-stem to the greater. Thus in the lengthened class (2) the two stems are distinguished simply by the weight of the vowels; in the T-class (3) and the I-class (4) one sound only is added in each case; but the additional I gives rise to more or less striking changes of the stem. In the fifth class the nasal is extended to the syllables  $\alpha\nu$  and  $\nu\epsilon$ ; the sixth class has the important addition  $\sigma\alpha$ , and the inchoative idea often connected with it shows that this addition was not made without a purpose. It also gains further importance from the reduplication frequently found with it. The seventh or E-class might appear at first sight very simple, and fitted to have a place among the first classes. But inasmuch as this  $\epsilon$  is sometimes found in the present stem, sometimes in the verb-stem, and serves to connect the most various formations of tenses, we find in it a somewhat complicated anomaly, which forms the proper stepping-stone to the eighth or mixed class, as that in which alone, to be accurate, we can use the word anomalous in the full sense.

## § 226.

Of the origin of the person-terminations, and many other questions respecting the structure of the verb, a detailed account will be found in my '*Bildung der Tempora und Modi im Griechischen und Lateinischen*' (Berlin 1846), with which may be compared Bopp's later explanation, *Vergl. Gramm.*, II, 2nd ed., and Schleicher's *Compendium*.

The auxiliary vowel which appears in the termination  $-\alpha\tau\alpha\iota$ ,  $-\alpha\tau\omicron$  ought certainly to be distinguished from the connecting vowel mentioned in § 230. The latter occurs regularly and passes throughout the whole inflection of the verb; the former is added only in the individual forms—just as in Acc. Sing. and Pl. of the consonant-declension—in order to make them easier of pronunciation. Schleicher p. 25 assumes  $-\alpha\nu\tau\iota$ ,  $-\alpha\nu\tau$  as the termination of the 3rd Pl. in the Active,  $-\alpha\nu\tau\alpha\iota$ ,  $-\alpha\nu\tau\omicron$  in the Middle, so that in his view the  $\alpha$  is an integral part of the person-termination. Such a view has much to recommend it; but it is also open to considerable objections which can only be examined in a discussion on the general structure of the verb in the Indogermanic family. I adhere to the explanation here given, because it appears to me impossible to separate the  $\alpha$  in the 3rd Pl. Med.  $-\alpha\tau\alpha\iota$ ,  $\alpha\tau\omicron$  and Act.  $-\alpha\sigma\iota$ , e. g.  $\check{\epsilon}\text{-}\alpha\text{-}\sigma\iota$  for  $\acute{\epsilon}\sigma\text{-}\alpha\text{-}\nu\tau\iota$  (*(e)sunt*) from that which appears in 1st Sing. Act., e. g. in  $\check{\eta}\text{-}\alpha$  i. e.  $\acute{\eta}\sigma\text{-}\alpha\text{-}(\nu)$  = Latin *er-a-m*, Sanskrit *âs-a-m*.

It is important to bear in mind continually, and as soon as possible to impress even upon the pupil, the fact that the similarity between the 3rd Pl. and 1st Sing. so often observed in the historical tenses, e. g.  $\check{\epsilon}\text{-}\lambda\nu\text{-}\omicron\text{-}\nu$ , is due to a subsequent corruption of the sounds. In the first instance the latter form was  $\check{\epsilon}\text{-}\lambda\nu\text{-}\omicron\text{-}\mu$ , cp. Lat. *er-a-m*, and also *inqua-m*, *(e)s-um*. This change of  $m$  into  $n$  can in this case be illustrated in a common New High German form: *ich bin* = O.H.G. *bi-m*. On the other hand, the complete form of the termination of the 3rd Pl. in the historical tenses was  $-\nu\tau$ . A glance at the Latin forms will convince us of this, without having recourse to more distant languages. Lat. *er-a-nt* stands for *es-a-nt*, which corresponds to the Ionic  $\check{\epsilon}\sigma\text{-}\alpha\text{-}\nu$ , but has preserved the  $-nt$  without mutilation. Even the Greeks themselves in the Doric

dialect still distinguished the two forms by the accent. The 1st Sing. was ἔ-λυ-ο-ν, the 3rd Plur. ἐ-λύ-ο-ν (Ahrens, *Dor.* 28), the difference being due to the fact that the full form of the latter was ἐ-λυ-ο-ντ. The last syllable in the 3rd Pl., being long by position, drew the accent on the penultimate; but in the 1st Sing. the general law of accentuation in the verb forms took its course, and the accent was placed on the preceding syllable.

### § 228.

The comparison of the Greek conjunctive with the Latin conjunctive forms characterized by long *a* is established by me in *Tempora und Modi*, p. 264 sq., in agreement with Pott, but in opposition to Bopp and other scholars. Schleicher takes my view, p. 542.

The element peculiar to the optative, which in most cases is simply an Iota, is also found in a fuller form in the syllable ιε (e. g. λύ-οιε-ν) and ιη (e. g. in δε-ιη-ν). This fuller form is apparently the original one. It points back to a pre-Greek syllable *jà* or *ja*, and ι must be regarded as the shortened form of this syllable. In aorist forms of the optative like λύ-σε-ια, λύ-σε-ια-ν (§ 268) the old α has been retained without alteration, and the α in Ionic μαχοία-το can be regarded in the same light (§ 233. D. 6).

### § 230.

I agree with earlier grammarians, especially Buttmann, in regarding the presence or absence of the connecting vowel as the basis of the thorough distinction between the two main conjugations—a distinction which appears in exactly the same manner in Sanskrit as in Greek. Even those who are averse to the term 'connecting vowel', and oppose the notion as a matter of science, will allow this view to have a place in a school grammar.

What I have to advance in support of it will be found in *Tempora und Modi*, p. 39, where also the difficulties which stand in the way of the different views maintained by Bopp, Pott, and others are discussed. The vowel in question, which in Greek varies between ε, ο, and ω, and in Sanskrit between *a* and *â*, is regarded by Schleicher (p. 574) as a component part of the present stem, so that, for example λυο, λυε, φερο, φερε, and the Sanskrit equivalent to the latter, *bhara*, are assumed as present stems. Against this I think it may be said that we find the same vowel in other stems beside the present, e. g. to take the plainest instance, in the strong aorist stem; and, therefore, in λιπο, λιπε, no less than λειπο, λειπε. The consequence is that the vowel is not a radical element characteristic of the meaning of the present stem, and, therefore, cannot be properly regarded as a component part of this tense-stem, whereas everything leads to the supposition that this vowel, whatever its origin may be, is an element belonging to the inflection of the verb as a whole, with the exception of the second principal conjugation. The assumption that this vowel at least in a great portion of the forms now in question owes its origin to the desire for ease in pronunciation, becomes less strange than it appears from a specifically Greek point of view, when we go back to the origin of many of the forms. The vowel vindicates its claim to be called a connecting vowel most naturally in stems ending in a consonant. It is obvious that the pronunciation of λέγ-ο-μεν, πιδ-ε-σιδε, πειδ-ό-μεδα, is rendered easier by the insertion of a connecting vowel, indeed without such a medium some of these forms could hardly be pronounced at all, e. g. λεγ-μεν, πιδ-σιδε, πειδ-μεδα; and I cannot see what absurdity there is in attributing to language in this case as in πατερ-α-ν,

πατερ-α-υς, the power of introducing a vowel to unite the stem and termination, especially as the principle of euphony here coincides with the effort to attain clearness, an effort which permeates the formation of language to a very great degree. For the direct addition of person-terminations to stems ending in a consonant could not have been carried out consistently without the elision of important consonants. In optative forms also, like λέγ-ο-ιεν, the vowel may certainly be regarded as having this office, for in this mood, as has already been said, the characteristic syllable was originally *ja*. As to the vowel-stems, in many of them, viz. in verbs which have the presents in -αω, -εω, -οω, the connecting-vowel may be explained by the fact that a Jod has been dropped between the vowels which at first sight seem congregated in a most capricious manner, and that there was a time when τιμά-ω was pronounced τιμα-*j*-ω-μι (cp. Sskt. -*a-jāmi*), and the vowels did not come into direct collision. But I do not intend to maintain that the vowels ο and ε throughout the whole inflection of verbs are due to the same origin. In the 4th class of verbs, which corresponds to the same class in Sanskrit, the syllable *jā* or *ja* (Greek *jo*, *io*) may have been the element added to the stem, so that φρικ-*jo*-μεν, for example, would be the proper division of φρίσσομεν; and in the derivative stems just mentioned this explanation also seems to me the more probable. Perhaps even these very classes of verbs, in which language was accustomed to introduce certain vowels before the person-terminations, may have contributed by their numbers to the yet wider use of these vowels. It is not our object to pursue the matter any further in this place. For Greek grammar there is no doubt that the vowel in φρίσσομεν, τιμάομεν, and φέρετε must be regarded as essentially the same. We

require a name for it, and I believe that the name 'connecting vowel' can certainly be completely vindicated.

### § 234, 235.

The augment is in all probability a demonstrative pronoun-stem referring to past time, like the German *da*, *damals* (*Tempora und Modi*, p. 126 sq.; Schleicher, *Compend.*, 567). The original form in Greek as in Sanskrit was  $\acute{\alpha}$ , of which certain traces still remain even in the Greek dialects (Ahrens, *Aeol.*, 229, to which add Hesych,  $\acute{\alpha}\sigma\beta\epsilon\sigma\tau\epsilon\ \delta\iota\acute{\epsilon}\phi\tau\epsilon\iota\tau\epsilon$ ). Before consonants the  $\alpha$  regularly became  $\epsilon$ ; before vowels it took the form of the initial vowel, and combined with it to form one long syllable. Thus we can suppose the Doric  $\acute{\alpha}\gamma\omicron-\nu$  to have arisen out of  $\acute{\alpha}-\alpha\gamma-\omicron-\nu$ , from which, in the Ionic dialect, must come  $\tilde{\eta}\gamma\omicron\nu$ . To the Greek  $\acute{\omega}\rho-\tau\omicron$  corresponds the Sanskrit *âr-ta*, which has arisen from *a-ar-ta* (*Grundz.*, I, 312). This contraction had certainly taken place before *a* became divided into the three sounds *a*, *e*, *o*; and after that the R. *ar* became fixed in Greek as  $\acute{\omega}\rho$ ,  $\acute{\omega}\rho-\tau\omicron$  stood beside  $\acute{\alpha}\rho-\nu\upsilon-\mu\iota$ , as in the earlier period of language *âr-ta* stood beside *ar-nau-mi*. The same was naturally the case with initial  $\epsilon$  also, e. g. in  $\tilde{\eta}\sigma\alpha\nu$  = Sanskrit *âsan* beside  $\acute{\epsilon}\sigma-\tau\acute{\iota}$  = Sanskrit *as-ti*. With initial  $\iota$  and  $\upsilon$  we might certainly expect a diphthong. But it must be observed that primitive verb-stems, beginning with this vowel, are not common. Hence they followed the analogy of the initial hard vowels; and by degrees the feeling grew up in language that the augment was nothing more than a lengthening of the vowel. The mobility of the augment also is common to Greek and Sanskrit. But it would be quite wrong to suppose that the augment is not essential, because it is sometimes dropped in poetry. Language not unfrequently lays aside individual

symbols of meaning, when, by means of them, forms have been coined, so distinctly marked, that the original elements are no longer absolutely necessary.

The doubling of the ρ after the augment is owing to the fact that a consonant has, as a rule, fallen out before it. With the aid of the kindred languages this consonant can often be discovered, e. g. in ἔρρε-ο-ν, i. e. ἐ-σρεF-ο-ν = Sanskrit *a-srav-a-m*, from the root σρϋ = Sanskrit *sru* (*Grundz.*, I, 318); ἔρρεπ-ο-ν, i. e. ἐ-Fρεπ-ο-ν from a Root Fρεπ (*ibid.*, 316), the F of which occurs also in καλα-ῦροψ.

### § 236.

[In the following verbs the augment (ε) becomes ει instead of η].

This apparent irregularity, like that just mentioned, may be explained from the history of language, and reference is made to this fact in the observation on this section. With the exception of ἐάω, the origin of which is still a matter of opinion, it has been proved that all the verbs here quoted originally began with a consonant. ἐΐζω, *suetus* (*Grundz.*, I, 216); ἐλίσσω, *vol-v-o* (I, 325); ἔλκω, Lith. *velka*; ἔπ-ο-μαι, *sequor* (II, 47); ἐργάζομαι, 'work' (I, 150); ἔρπ-ω, *serpo* (I, 230); ἐστιάω ἐστία = *Vesta* (I, 175); ἔχ-ω (I, 161); εἴμηγν (I, 369); εἴλ-ο-ν (II, 135); εἴσα, *sedes* (I, 205).

### § 237.

[Verbs which originally began with a digamma, i. e. with a consonant, have the Syllabic Augment in spite of the initial vowel. ἐορτάζω has the augment in the second vowel: ὄράω and ἀνοίγω have both the syllabic and temporal augments].

These phenomena like those in the preceding section can all be explained by the loss of an initial consonant: ἀνδάνω = σφανδανω, Latin *suavis* (*Grundz.*, I, 195); οὐρέω, Sanskrit *vâri*, 'water' (I, 315); ὠδέω, Sanskrit

*va-vadh-a* (I, 225); ὠνέ-ο-μαι, *vendo* (I, 285). ἐορτάζω stands for ἐφορτάζω (II, 154) with ε prefixed (cp. p. 34). The loss of the consonant was readily compensated. In the first instance, no doubt, the preceding vowel was lengthened (cp. βασιλῆος); hence Homeric ῥ-εἰδ-ῆ = εἰ-Ἔειδ-ῆ (§ 317. 6. D) but afterwards the reverse process took place, and the following vowel was lengthened (cp. βασιλέως); hence ἐήνδαν-ον, ἐωνοχόει, apparently with a double augment, ἐάλω-ν (§ 324. 17), ε-ώρα-ο-ν (Rt. For. *Grundzüge*, I, 312), ἄν-έωγ-ο-ν (II, 90). Ebel has rendered good service towards clearing up these facts in Kuhn's *Zeitschr.*, IV, 170 sq. The irregularities which from the arrangement of the grammar could not be mentioned here, because belonging to the aorist stem or the later verb-classes, can easily be brought into combination with those here pointed out, by means of the references to these paragraphs, which are never omitted.

### § 238.

The position of the augment (and the reduplicated syllable) between the Preposition and Verb-form is proved in Derivation (§ 356) to have a deep foundation in the structure of the language. The Preposition was always felt to retain a certain individuality: the real verb-form follows it. After the pupil has learnt (cp. § 446) the free position of the prepositions in Homer, and how they can be separated from the verbs which they define, a simple reference will show him that the position of the augment rests on the same grounds.

### § 243. D.

[Homer inflects the α stems of contracted verbs in three ways.



1.—The syllables regularly contracted by the Attic writers remain open and unchanged; ἀοιδιά-ει, ναϊετά-ουσι, with Fem. Part. ναϊετάωσα for ναϊετάουσα with a remarkable change of ου to ω.

2.—Contraction takes place; ἀρετᾶ = ἀρετά-ει; πρὸς-ἡύδα = πρὸς ἡύδα-ε. Sometimes αε becomes η, not α.

3.—Extension, instead of contraction, takes place when a vowel of the same kind is inserted before the long one which results from contraction; ὄρᾶω contracted ὄρῶ, extended ὄρόω].

In thus assuming an 'extension' I have adopted the usual method of explanation. For this a few words of excuse are needed. It is one of the rare instances in which I have purposely inserted an explanation into the grammar, though I knew it to be at variance with the true course of the history of language. That forms like ὄρόω, ὄράαζ, did not as a matter of fact arise *out* of the contracted forms ὄρῶ, ὄρᾶζ, but rather stand midway between ὄράω, ὄράειζ, and ὄρῶ, ὄρᾶζ, could escape no one who has an open eye to the history of language; and for many years I have treated these forms in this manner in my lectures. In the main, therefore, I fully agree with the view taken by Leo Meyer in *Zeitschr. f. vergl. Sprachf.*, X, p. 45 sq., and *Vergl. Gramm.*, I, p. 292 sq.

All contraction of dissimilar hard vowels into one long vowel rests on two processes; first, one vowel became assimilated to the other, and secondly, both, when assimilated, became united into one long sound. These two movements, as a rule, took place at different times in the history of language, and the first must necessarily precede the second. Here, as so often, the Homeric language preserves the results of two separate epochs of language side by side, the original form without any change at all, ναϊετάω, the assimilated ὄρόω, and the contracted ὄρώμενος. The assimilation of vowels is by no means merely a preliminary step to contraction; the phenomenon also occurs independently, e. g. in δεδά-

ασῖαι (§ 326 D. 40) = δεδά-ε-σῖαι, in φαάντατος from φαιντατος shortened from φαινότατος; and also in φαάνῃη, for φαένῃη, γόασκον for γόασκον, σόο-ς for σάος cp. σαώτερος; similarly in νηπιάας beside νηπιέη (original form νηπια-ja). In this assimilation we see most plainly the power which one vowel exercises on the other. Even in this preliminary stage the deeper O-sound overpowers the clearer A-sound; but this, on the other hand, overpowers the medium E-sound (§ 37, 38). Hence, in the first case the assimilation is retrogressive, in the second, progressive.

So far all is simple, so simple that such an explanation could be admitted without hesitation into a school grammar. But now we find forms like ὀρώσα, ὀρώσαι, ὀρώωνται, in which the processes mentioned do not suffice; for according to them we should expect ὀρούσα, ὀρούσαι, ὀρούονται. In the two first of these forms Leo Meyer arranges the difficulty in a manner by no means satisfactory, but in regard to the third, and forms like βορώντα, ὀρώων and the like, he assumes without further trouble that they were wrongly written down at the time of the settlement of the Homeric text; and ought, therefore, to be replaced by ὀρόονται, βοόονται, ὀρόοιεν. Such a proceeding, even if it could be justified scientifically, is absolutely inadmissible in a school-grammar, where only the forms really in use can be taught, not those which rest on conjecture. But even from a scientific point of view Meyer's hypothesis is not merely very rash, but totally untenable. It is clear that according to the laws of contraction in Attic-Ionic, ὀρόονται, βοόονται, ὀρόοιεν could never have given rise to any other forms than ὀροῦνται, βοοῦντα, ὀροῖεν. Meyer p. 53 seeks to invalidate this objection by the remark, 'It is a far older and more extensive law that two similar vowels should contract

into the corresponding long one.' But in this case we have to deal with forms which are by no means of great antiquity, but comparatively late, i. e. belonging to a historically demonstrable period in the life of the Greek language. At the time when contraction began to force its way in, a difference must have been felt between the vowels in νόος and those in ἑρόντα, otherwise we should not have νοῦς as the contracted form of the one, and ἑρόντα as the contracted form of the other. Now how rash it is to declare Homeric forms, occurring again and again in the text which has come down to us, to be errors of writing, in order to obtain a uniformity which is really no uniformity at all! The real forms ἑρόνται, βοῶντα, ἑρῶεν, vouch for the existence of the ἑρόνται, βοόωντα, ἑρόωεν, which are found in the text of Homer. But how can we explain the singular ω, by the side of which stands the long α of ἑράας? We must connect it I believe with another lengthening which at first sight seems very strange. From δρά-σι-μι comes δρώ-σι-μι, from μναόμενος μνώμενος, and similarly ὑπνώνοντας from ὑπνόοντας. With the assimilation is here connected a change of quantity of the same varying character as that in βασιλῆος beside βασιλέως, βασιλῆα beside βασιλέα, and in the phenomena presented by the augment which have been discussed already. In that case the lengthened syllable was explained as arising from the desire to compensate for a lost spirant. And so here: -αω, -εω, -οω, have, as has been already mentioned, sprung from a form -ajá-mi. The loss of the j, which in other instances was vocalized, e. g. νεικείω, παλαίω, was compensated by the lengthening, sometimes of the preceding vowel, πεινάων, δρώ-σι-μι; and sometimes of the following vowel, ἑρόντα, ἑρόωσι, and also φάω = φα(F)ός. But in some cases both vowels were lengthened, e. g. δρώωσι, ἡβώωσι; and in others again—

neither, ἀοιδιάουσα. It is not my object in this place to follow up the lengthenings in question any further, otherwise many other dialectical forms would require discussion, especially Doric forms like ἐμετρώμεζ = ἐμετροῦμεν, ἐμιώμενοι = ἐμούμενοι, which Ahrens explains *Dor.*, 210 sq. In these also the long vowel is apparently due to the same cause.

This is in brief my conception of the phenomenon in question, with which may be compared the explanation given by Dietrich in Kuhn's *Zeitschr.*, X, p. 434. Like myself he is opposed to the views of Leo Meyer, and I agree with him in many points, but not in all. In any case this is a matter on which many difficulties remain to be cleared up. I have, therefore, put a check upon my desire to adopt at least some part of our more correct views into the grammar, and have preferred to allow the old doctrine to remain. It has at least the advantage of being very simple and intelligible.

#### § 245 sq.

Throughout the division of the verb-classes attention has been also directed to the formation of nouns, because in them the pure verb-stem is often found in the plainest form, and indeed, is found there only when no strong tenses are formed from it. As the formation of words can seldom be a distinct subject of instruction, it is the more important to point out, as occasions offer, the most striking formations of nouns. In this way not only are a number of words impressed upon the memory; but at the same time the pupil is made to feel that such words are not mere *vocabula* to be found in the dictionary, but essential forms of language, standing in the most intimate relation with the formation of verbs.

## § 248 sq.

The lengthening of the stem-vowel in this class of verbs is the more clearly organic, because the lengthened form denotes the more extended action of the present stem;  $\lambda\acute{\epsilon}\pi\text{-}\epsilon\iota\nu$  as distinguished from  $\lambda\pi\text{-}\epsilon\iota\nu$ . In this case, therefore, phonology, inflection, and syntax unite (§ 484 sq.). Of this formation of the present stem a few relics only remain in Latin, e. g. *dīc-o* Rt. *dīc* (*causī-dīc-u-s*), *fīd-o* (older *feid-o*) Rt. *fīd* (*fīd-ē-s*), *dūc-o* (older *douc-o*) Rt. *dūc* (*dux, dūcis*).

## § 249.

The attempts hitherto made to explain the T in the present stem of this class cannot be considered as successful (see *Grundz.*, II, 243 sq.). But there is no doubt that the formation is exactly parallel with Latin verbs like *plec-t-o*, *nec-t-o*.

## § 250.

The changes of sound brought before us in the formation of this class have been already discussed (p. 42). These verbs may be compared with Latin forms like *fac-i-o*, verb-stem *fac*, *fod-i-o* verb-stem *fod*, *pat-i-or* verb-stem *pat*, the peculiarity of which also consists in the fact that the *i* is confined to the present stem. The corresponding class in Sanskrit is formed by adding the syllable *ja* or *jā* to the verb-stem, e. g. Rt. *kup*, present-stem *kup-ja*, 1st Sing. Praes. *kup-jā-mi* (I fall a-wishing), cp. Latin *cup-i-o*. In the same language we find the root *jā* meaning 'to go', which stands in exactly the same relation to the shorter sound *i* as Greek  $\acute{\iota}\epsilon\text{-}\nu\alpha\iota$  to  $\acute{\iota}\text{-}\mu\epsilon\nu\alpha\iota$ .

Hence with Bopp (*Vergl. Gr.*, II, 357) and other scholars, I consider it quite probable that the present stem of the verbs of this class is due to composition with this root. The original intransitive meaning required by this supposition is still actually demonstrable in many of these verbs in Sanskrit (cp. *Temp. und Modi*, p. 88). In Greek the additional element has become a purely formal instrument of construction which is applied among other usages to distinguish the present stem from the pure verb-stem. But inasmuch as the action expressed by the present stems very often denotes the effort and desire to realise the idea conveyed by the verb-stem, we may still perceive a link between origin and meaning. Compare English phrases like 'to go a-begging!' German *betteln gehen, sitzen gehen*.

#### § 258 sq.

In the future stem the requirements of instruction made it necessary to deviate a little from the discoveries of Comparative grammar, the main drift of which is as follows. In Greek the formation of the future is retained most perfectly in the Doric dialect, Here we find in addition to the  $\sigma$  an Iota which as in the present stem of the fourth class corresponds to a Jod in Sanskrit. Thus a Doric future like  $\delta\omega\sigma\iota\omega$  corresponds to a Sanskrit *dâ-sjâ-mi*. But even the Dorians retained the Iota only before  $\alpha$  and  $\omicron$  (Ahrens, 210); elsewhere it becomes  $\varepsilon$ , e. g.  $\delta\omega\sigma\varepsilon\acute{\iota}\varsigma$ , and then  $\delta\omega\sigma\varepsilon\acute{\iota}\varsigma$  by contraction (*Grundzüge*, II, 181). In this shape the fuller form is known even to Attic as the Doric future (§ 264), e. g.  $\pi\lambda\varepsilon\nu\text{-}\sigma\omicron\upsilon\text{-}\mu\alpha\iota$ . For the most part, it is true, the original spirant Jod was entirely lost, and  $\sigma$  alone remained as the characteristic sound of the future. As, therefore, in the grammar I had to assume stems for the Attic dialect,

the future stem must then be λῦσ. With regard to the origin of this future formation I now adopt the view held by Schleicher (*Compend.*, 616), who sees in it a form compounded with the future of the substantive verb, in preference to the explanation given in my *Tempora und Modi*, p. 317. From the root *as* (Greek ἐς) language developed a present form after the fourth class. This was originally *as-já-mi* and is retained in the Latin *ero* = *es-io*, the middle form of which is the Greek ἔσσομι = ἐσιομαι. As we have already suggested, the additional *já-mi* signified originally 'I go'; the hypothetical ἐσ-ιω, therefore, would mean 'I go to be', from which a future signification could very easily be developed. Compare the French *je vais faire* (provincial English 'I am a-going to do'), the Latin *datum iri* with the rare correlative form in the Active '*datum ire*' = '*daturum esse*'. With this ἐσ-ιω 'I go to be' or 'I shall be' the other verbs must be compounded in order to acquire a future in the same manner as the perfect stem in Latin is compounded with *ero*, e. g. *cecid-ero*, in order to form its proper future, i. e. the *futurum exactum*. In the process of composition the ε of the root has been lost, a phenomenon by no means strange, the same vowel constantly disappearing elsewhere in many languages, e. g. Latin *s-u-mus*, *s-u-nt* for *es-u-mus*, *es-u-nt*. In stems ending in λ, ρ, μ, ν we find an ε in the future: μεν-έ-ω, after which a sigma has undoubtedly dropped out, so that we get μεν-ε-σ-ω for μεν-εσιω. Hence it might be supposed that this ε also belongs to the root ἐς; and that μεν-εσιω stands in the same relation to πρακ-σω as Greek ἐσ-μέν to Latin *s-u-mus*. But in Sanskrit we find a vowel in the same position which can only be regarded as a connecting vowel; e. g. in *tan-i-shjâ-mi*, which corresponds to the Greek τεν-έ-ω (i. e. τεν-ε-σιω); so that the view introduced into

the text of the grammar—that the Greek  $\epsilon$  also is a connecting vowel—is the more natural. According to the laws of euphony in Greek  $\sigma$  between two vowels disappears; hence it is lost in  $\tau\epsilon\nu\text{-}\epsilon\text{-}\sigma\iota\text{-}\omega$ , but retained in  $\pi\rho\alpha\kappa\text{-}\sigma\acute{\iota}\omega$ ,  $\pi\rho\acute{\alpha}\xi\omega$ . The view maintained by some younger scholars that  $\tau\epsilon\nu\text{-}\acute{\epsilon}\text{-}\omega$  is a quite different formation into which this  $\sigma$  never entered, is most easily shown to be false by forms like  $\kappa\acute{\epsilon}\lambda\text{-}\sigma\omega$ ,  $\chi\acute{\upsilon}\rho\text{-}\sigma\omega$ , from which it is clear that even the liquids and nasals did not in the first instance avoid the combination with  $\sigma$ . The distinction between the two formations is purely phonetic, and, therefore, it is quite impossible to apply the terms ‘strong’ and ‘weak’ to the future.

### § 265.

The futures here quoted,  $\acute{\epsilon}\delta\omicron\mu\alpha\iota$ ,  $\pi\acute{\iota}\omicron\mu\alpha\iota$ , are remains of an older formation without  $\sigma$  and, therefore, without composition. Here as in  $\acute{\epsilon}\tilde{\iota}\mu\iota$  (§ 314, Obs.) the present stem serves for the future.

### § 267.

The  $\sigma$  of the weak aorist is usually traced back to the same source as that of the future, i. e. the root  $\acute{\epsilon}\zeta$ . But while the future is compounded with a peculiarly formed present stem of this root, in the weak aorist the verb-stem enters into combination with the pure verb-stem  $\acute{\epsilon}\zeta$ , to which however the immovable vowel  $\alpha$  is appended in order to make the inflection more easy. We find the same addition in the Sanskrit praeterite  $\acute{a}s\text{-}a\text{-}m$ , Greek  $\tilde{\eta}\text{-}\alpha$  for  $\tilde{\eta}\sigma\text{-}\alpha\text{-}\mu$ , Latin  $er\text{-}a\text{-}m$  for  $es\text{-}a\text{-}m$ . The stem  $\lambda\bar{u}\text{-}\sigma\alpha$ , therefore, means literally ‘to be loosing’,  $\acute{\epsilon}\text{-}\lambda\upsilon\text{-}\sigma\alpha$  ‘I was loosing’. Thus the weak aorist stands in the same relation to the strong as the Latin perfect *solutus est* to the



Greek λέλυ-ται. In each we have to deal with an auxiliary verb used for periphrasis, but in the aorist, as in the future, this has become completely amalgamated with the verb-stem. In the stems ending in λ, ρ, μ, ν language struck out a different path in the formation of the aorist, from that followed in the future. No connecting vowel was inserted, but these consonants were allowed to come into direct collision with the objectionable σ which seldom maintained its place in the conflict, but, as a rule, vanished, being either assimilated to the preceding consonant, e. g. Æolic ἔ-τευνα = ἔ-τεν-σα, Homeric ὄφελλα, and this may have been the older process, or dropped without leaving any trace of its existence beyond a compensatory lengthening ἔτεινα, ὄφειλα.—The few non-sigmatic aorists formed from other verb-stems may be explained in the same manner. Language avoided the collision of too many consonants by shortening the original εἰπ-σα, ἴνεγκ-σα to εἶπα, ἦνεγκα.

### § 272.

The perfect stem with its numerous forms requires discussion at somewhat greater length. The peculiar and essential symbol of this stem is the reduplication. There can scarcely be a doubt about the aim which the genius of language had in view in applying this instrument to the formation of the perfect stem after the remarks of Bopp, *Vergl. Gr.*, II, 388, Pott, especially in his latest work '*Doppelung*', p. 205 sq., myself *Temp. und Modi*, p. 174, and others. That stem denotes the completed action. And to signify this language employs the same means or instrument of which she avails herself frequently for the formation of intensive verbs, and generally to denote any strengthening of the idea expressed by a word.

πε-φeyγ as distinguished from φyγ and also from φeyγ, denotes in the liveliest manner the action as brought to completion. For the same reason the syllable of the stem is also strengthened in many other ways in this tense. The Greek language at least in the time of its fullest bloom used the perfect stem exclusively in this, the obviously original sense, and in doing so displays an antiquity superior to all the other members of the Indogermanic family. Hence it is better adapted than any other to represent the original intentions of language in regard to the formation of tenses. But it is true that this, like other advantages of the Greek language, would scarcely have been perceived to be such, did not the kindred languages offer us the material for comparison.

With regard to the form of reduplication it will here be sufficient to refer to the fact that the similarity of sound between the augment and the reduplicated syllable before certain double consonants is purely accidental. The accident however is in harmony with the widespread tendency of language to avoid any undue repetition of the same sound in two consecutive syllables (cp. *Grundzüge*, II, p. 279 sq.).

By reduplication all the forms of the perfect, however widely they may differ in the mode of their formation, are kept together as a whole; and the unity of this whole must not be obscured even in practical instruction. The reduplicated stem is seen in its purest and most naked form in the Middle, where the terminations are added to it immediately without a connecting vowel, λέ-λυ-μαι, πέ-πραγ-μαι. In this case there is one mode of formation only. For the distinction between strong and weak forms which is carried out in the aorist to the complete separation of two entirely distinct stems, comes before us in the perfect stem in the Active voice only;

and even there the strong and weak forms are merely different modes of forming one and the same stem. This must be pointed out to the pupil, and he must be shown that the distinction in this case is to a certain extent secondary.

In the middle the perfect stem follows the conjugation in  $-\mu$  in joining the person-terminations directly to the stem; in the active as a rule it avails itself of a uniting vowel.  $\pi\epsilon\pi\rho\acute{\alpha}\gamma\text{-}\alpha\text{-}\mu\epsilon\nu$  in distinction from  $\pi\acute{\epsilon}\pi\rho\alpha\gamma\text{-}\mu\alpha\iota$ . Forms without a uniting vowel like  $\iota\delta\text{-}\mu\epsilon\nu$ , later  $\iota\sigma\text{-}\mu\epsilon\nu$ ,  $\beta\acute{\epsilon}\beta\alpha\text{-}\mu\epsilon\nu$ ,  $\acute{\epsilon}\sigma\tau\alpha\text{-}\tau\epsilon$  can, therefore, be treated separately in § 317. This is not the place to examine in detail Schleicher's view of the  $\alpha$  in the Perfect (*Compend.*, 554) which in regard to some forms differs from mine. But even from what has been said it will be plain why the  $\alpha$  cannot certainly as in the weak aorist be regarded as part of the stem; and why we cannot assume stems like  $\pi\epsilon\pi\rho\alpha\gamma\alpha$ ,  $\gamma\epsilon\gamma\omicron\nu\alpha$ . It is to be observed moreover that in the aorist the  $\alpha$  passes as the characteristic vowel through the moods and verbal nouns,  $\lambda\acute{\upsilon}\sigma\alpha\text{-}\iota\text{-}\mu\iota$ ,  $\lambda\upsilon\sigma\acute{\alpha}\text{-}\tau\omega$ ,  $\lambda\acute{\upsilon}\sigma\alpha\text{-}\sigma\theta\alpha\iota$ , &c.; but in the perfect this is not the case,  $\pi\epsilon\pi\rho\acute{\alpha}\gamma\text{-}\omicron\text{-}\iota\text{-}\mu\iota$ ,  $\pi\epsilon\pi\rho\alpha\gamma\text{-}\acute{\epsilon}\nu\alpha\iota$ . The vowel, therefore, is moveable, and consequently does not belong to the stem.

Older grammarians distinguish in the Active between the *perfectum secundum* and the *perfectum primum*. Under the first came all those forms which in 1st Sing. join the  $\alpha$  without any further addition to the reduplicated stem  $\gamma\acute{\epsilon}\gamma\omicron\nu\text{-}\alpha$ ,  $\pi\epsilon\pi\rho\acute{\alpha}\gamma\text{-}\alpha$ . Under the latter came two classes of Perfects, those formed with  $\chi$  and those with an aspirate. But if we put the facts clearly before us, we see at once without going back to their origin, that the forms in  $\chi$  can indeed be considered as a separate class, but the aspirated forms cannot. For in the first place, when we attempt to follow the old plan in establishing

the aspirated perfect as a separate formation, we are met by the question: to what class are we to refer the perfects of stems ending in an aspirate? γέγραφα-α is regarded as a *perfectum primum*. It is assumed, therefore, that in this case aspiration was intended, but could not be carried out on account of the aspirate already in existence. In this particular instance the short vowel might be brought forward by which γεγρᾶφα is distinguished from λέληθα. It is said that this short vowel shows that γέγραφα is not analogous to the so-called *perfecta secunda*. But what are we to do with ἀλήλιφ-α, ὀρώρυχ-α? In the Attic reduplication the penultima is *not* lengthened as a rule, ἀκήχο-α, ἐλήλυθ-α. As the aspirate is found also in ἀλείφω, διώρυχ-ος, i. e. quite independently of the perfect-stem, it would be more reasonable in this case to assume a *perfectum secundum*. But further, even Buttman (*Ausf. Gr.*, I, 410) saw that a considerable number of those changes of vowels which were usually regarded as characteristic of the so-called *perfecta secunda* were to be found in connection *with* and *by the side of* aspiration. To be consistent, those who explain γέγραφα as a *primum* because the vowel remains unchanged, must consider πέπομφα, κέκλοφα, τέτροφα, as *secunda* on account of the change. But compared with the stems πεμπ, κλεπ, τρεπ, these *perfecta secunda* have the addition of a breathing; they are aspirated. Hence if we would strictly maintain the old distinction between the *perfecta prima* and *secunda*, we must allow, either that aspiration is no exclusive mark of the *perfectum primum*, or that a change of the vowel is not an exclusive mark of the *secundum*. In the first case there ceases to be any reason for separating the aspirated forms as a distinct mode of formation from the unaspirated; in the second there ceases to be any reason for considering forms like γέγραφα

as different from  $\lambda\acute{\epsilon}\lambda\eta\theta\alpha$ . In both cases we have the indubitable result that a hard and fast line cannot be drawn between the two formations.

This difficulty has been felt; and the attempt made in consequence to support the aspirated forms by uniting them with those in  $\chi$ . Buttmann, p. 408 assumes  $\acute{\alpha}$  as the peculiar ending of this perfect, and he has frequently enough been followed in maintaining that this *spiritus* combined with the preceding guttural and labial mute to form an aspirate, but 'between two vowels and after a liquid it changed into  $\chi$  in order to become audible'. But the science of language knows nothing whatever of such a change of the *spiritus asper* into  $\chi$ . That minimum of a sound which we call the *spiritus asper* appears in Greek almost always as the last residuum of a spirant. It would be against the analogy of the whole history of sound for the strong guttural  $\chi$  to spring from such a mere shadow of a sound. No one who has the least knowledge of the manner in which such questions are treated at the present day would even for a moment agree to a theory which for Buttmann's time was acute, but which, though deserving notice as an effort to introduce unity into variety, is, when examined closely, without any foundation whatever.

Nevertheless the attempt to distinguish the aspirated perfect as a special form has found a new defender among the students of Comparative grammar. No less a person than the venerable founder of this science, F. Bopp, seeks to maintain this distinction, but in a manner in which, as I believe I have already shown, *Temp. und Modi*, p. 191, it is impossible for us to agree. He discusses the perfects with  $\chi$  and the aspirated perfects merely *en passant*, while treating of the aorist (*Vergl. Gr.*, II, 446). The  $\chi$  of the three isolated aorists  $\acute{\epsilon}\text{-}\delta\omega\text{-}\chi\alpha$ ,  $\acute{\epsilon}\text{-}\theta\eta\text{-}\chi\alpha$  and  $\acute{\eta}\text{-}\chi\alpha$  he

compares with the  $\sigma$  of the ordinary Greek aorist, and is of opinion that  $\kappa$  may have arisen out of  $\sigma$ . But there is an entire absence of any sufficient and established analogy for such a change. For it is really no analogy at all that in Ecclesiastical Slavonic the spirant *ch*, rather than *k*, appears as the representative of *s*; and even less, that in certain Lithuanian imperatives, which have no connection with the weak aorist, *k* is used for *s*, especially as this *k* is explained by Schleicher (*Lith. Gr.*, p. 231) in quite a different and far more satisfactory manner. From these manifestly insufficient premisses Bopp goes on to conclude that  $\sigma$  is the source of the  $\kappa$  in the perfect no less than in the aorist, and of the aspiration also. But in regard to the perfect, even he can point to no analogy in the kindred languages to prove the existence of  $\sigma$ . The wide difference between the sounds  $\kappa$  and  $\sigma$ , which very fairly represent the extreme opposites among the Greek consonants, thoroughly justifies us in doubting and even decisively rejecting this explanation. The reputation of such a scholar as F. Bopp is not lessened by the fact that some of his opinions are controverted by those who continue to work in his spirit. It would be superfluous to make this remark had not the authority of our venerable master been used on this very point to protect an assumption which has nothing in itself to support it, and to bring forward as an established fact that explanation of the perfects in which no other recent scholar, so far as I know, agrees with Bopp. The whole tendency of the modern science of language leads us to point out wherever possible a distinct cause for every sound and change of sound. Hence there has been no want of other conjectures on the origin of aspiration in the perfect, which are however no more satisfactory than Bopp's. I may refer

on this point to *Tempora und Modi*, p. 193, and *Grundzüge*, II, 82 sq. In the latter place I have treated this aspiration in combination with the other cases in which a Tenuis or Media becomes an aspirate in Greek, and the result is that we can hardly regard the aspiration of the perfect as anything more than a simple alteration of sound without any definite reason, which can only be explained by a tendency of the Greek language not unknown in other instances also.

In maintaining this view of the aspirated perfect which Pott originated, and has again advocated in his later work '*Doppelung*', p. 257, two circumstances still deserve especial consideration—viz. 1. that the same aspiration is found in 3rd Pl. Med. in -αται and -ατο, quite independently of the Act. Perf. and without any interchange of  $\kappa$ , e. g. τετάχα-αται, Homeric ἔρχ-αται (Rt. ἔργ), cp. § 287; and 2. the small number of the aspirated forms, which are quite unknown to the Homeric poems, where for instance we find κεκοπώς instead of κεκοφώς the form usual in later Greek. In *Tempora und Modi*, p. 196, I have enumerated but 21 aspirated Perfects in all, a great portion of which are not found before the time of Polybius. To these, it is true, a few more may yet be added. I have marked 5 which may find their place here by the side of those already noticed. Stems which have already an aspirate are naturally not counted. From stems in  $\kappa$  we find δέδειχα (Hesych.), δέδηχα (Babr.), δεδίωχα (Hyperides, c. *Lycophr.*, p. 29, 6 Schneid.), ἐνένοχα, κεκήρυχα, πέπλεχα, πέπραχα, πεφύλαχα; from stems in  $\gamma$ , ἦχα by the side of ἀγγήοχα, ἦλλαχα in compounds εἶλοχα, μέμαχα, μέμιχα, ἀνέωχα by the side of ἀνέωγα, ὄρω-ρεχότες (Suid.), τέταχα; from stems in  $\pi$ , βεβλεφα (ἀποβεβλεφότες Antipater ap. Stobæum, 70. 13), κέκ-λοφα, κέκοφα, πέπομφα, τέτροφα by the side of τέτροφα

(from τρέπω); from stems in β, βέβλαφα (Demosth. 19. 180) by the side of ἔβλαφα (C. I. n. 1570), τέθλιφα, εἰληφα, τέτριφα, τέθαφα (from θαμβέω). To these may be added the doubtful διαπεπαιχώς (παίζω) in the much discussed expression of Sophocles on his own artistic development, in Plutarch, *de profect. in virtute*, chap. 7, for which Bergk (*Præf. ad Soph.*, p. XXXI) conjectures διαπεπλακώς. Such being the case it is obvious that the Active perfect, with the exception of the forms in χ from vowel-stems, is on the whole a rare tense. Buttmann saw this (*A. Gr.*, I, 410). It is, therefore, very absurd to impress upon the memory of the pupil forms like τέτυπα and τέτυφα, neither of which are found anywhere, though they have not yet disappeared from our grammars and grammatical writings. And nothing is more unreasonable than to require the pupil should be taught to form an Active perfect to every verb. This is to make him learn more than the old Athenians knew. He ought certainly to learn that only which really occurs in the literature preserved to us in the best period of Greece, and not fancies fashioned after the model of supposed analogies such as were the *futura secunda* which before the times of G. Hermann and Buttmann disfigured our Greek grammars.

This discussion may be sufficient to justify the position which I have allotted to the Aspirated perfect, but a few words are still needed in regard to the form with χ which I denote exclusively as the weak perfect. This also can be traced in its gradual growth from Homer onwards. In Homer the χ is inserted in the first instance after vowels: τεθνηκώς by the side of τεθνηώς. At a later period it forced its way into stems in λ, ρ, ν, and dental mutes ἔσταλαχα, ἔφθαρχα, κεκόμικα. From these facts I formerly drew the conclusion that χ was here nothing more than a phonetic element introduced to unite



stem and termination. This view I now admit to be untenable for the reason that in no other instance has  $\alpha$  grown up out of the hiatus, and I have retracted it in *Grundz.*, I, 52, where will be found a conjecture on the origin of this  $\alpha$ . In any case the sound is analogous to other elements which are added to the verb-stem. Schleicher, *Compend.*, 558, adopts my view of the aspirated perfect, but marks the origin of the  $\alpha$  as obscure, p. 622.

## § 283.

To understand the formation of the pluperfect, we must begin with the Homeric forms.  $\acute{\epsilon}$ -τεθήπ-εα is distinguished from the perfect stem τεθήπ by the prefix of an augment belonging to a past tense and the addition of -εα. On the origin of this -εα we can scarcely have any doubt, when we call to mind the Homeric imperfect ἔα—'I was'—which stands for ἔσα and a yet older ἔσαμ. and came under our notice above in treating of the formation of the weak aorist. Since this ἔσαμ. is exactly the same as the Latin *eram* (for *esam*), it follows that there is the most complete identity between forms like  $\acute{\epsilon}$ -πεπήγ-εα and *pepig-eram*. The compound form  $\acute{\epsilon}$ -πεπήγ-εα, therefore, is not different in value from the periphrastic πεπηγώς ἦν (*Temp. und Modi*, 332; Schleicher, *Compend.*, 622). In the 3rd Sing. the  $\alpha$  passed into  $\epsilon$  as in the weak aorist and the perfect;  $\acute{\epsilon}$ -τε-θήπε-ε; the 3rd Plural  $\acute{\epsilon}$ -τεθήπ-εσαν has retained even the  $\sigma$ ;—terminations in -σαν being frequent in other formations also and especially in ἦσαν, ἔσαν, so that here there was no collision between two vowels. Thus far all is quite clear and without any difficulty. The old Attic first persons in -η, e. g.  $\acute{\epsilon}$ -πεπόνθη may also be simply explained by the rules of contraction; and if at first sight it is strange that the 3rd Sing., e. g. in Homeric

Attic ᾗδῃ—‘he knew’—has the same form, the explanation is that in this person also there was in the first instance an α, and that the contraction took place at a time when the 3rd Sing. did not yet end in -εε but in -εα; while the forms in -εν of this person are naturally to be regarded as contractions of -εε(ν) with ν *ephekkystikon*, and, therefore, stand in exactly the same relation to the more frequent forms in ει as ἐτεθήπασεν to ἐτεθήπασε. But here we are met by a real anomaly. When the diphthong ει had become usual in 3rd Sing. which is everywhere the most frequent form, it became inserted at a later period in forms where it was out of place like 1st and 2nd Sing. the Plur. and Dual; and after the analogy of numerous other first persons Sing. was introduced in that person also. But ἐ-λελύκει-ν is a much later formation than ἐλελύκει. Eustathius on Od. ψ 220 quotes good authority for the fact that the best manuscripts of Plato and Thucydides have η and not εν. The extreme point of confusion was reached when ει found its way into 3rd Plur. in which person there was never at any time any occasion for contraction, and consequently for the diphthong. But here also the result of the analysis of language has been most splendidly confirmed by the tradition of grammarians, which is the more trustworthy because it has no point of contact whatever with scientific views. The Atticists recommended the forms in -εσαν, rejecting those in -εισαν (Phrynichus, ed. Lobeck, p. 149) and good manuscripts have the latter form but rarely in Attic writers (Matthiæ § 198. 5, Krüger § 30. 6 Anm.).—In contrast to the common formation of the pluperfect by composition the Homeric ἐ-μέμηκ-ο-ν is formed simply, i. e. without the help of the addition of the substantive verb; so too those very old pluperfect forms like ἐ-τέθνα-σαν, ἐ-πέπιθ-μεν (§ 317), which have moreover no connecting vowel, being

indeed in no need of such an expedient inasmuch as they follow the formation of the pluperfect Middle, rather than the Active.

## § 291.

That the *Futurum exactum* or 3rd future is compounded of the perfect stem and the future of the root ἐζ, like the corresponding tense in Latin, δεδώσομαι like *ded-ero*, needs no further confirmation after what has been said. The insignificant variations in the quantity of the vowel in the future and the perfect stems which consist exclusively in this that the vowel is more often found long in the future than in the perfect, may very well be explained on two grounds. 1. The Greeks had always a tendency to lengthen short syllables when surrounded by others also short. Hence the ω in σοφώτερος, εὐώνυμος; 2. The analogy of the common Middle forms was obviously not without a certain influence—thus we have λελύσομαι following λύσομαι in contrast to λέλυμαι.

## § 292—299.

The two Passive stems are the most difficult forms in the Greek verb. In analysing them, the kindred languages are so far of no assistance that they present no form exactly parallel and used in a similar manner. It is not our object here to solve difficult problems but to put together results which can enliven and advance instruction in Greek. The following observations then may suffice. The two Passive stems like the Greek aorist, the future and the pluperfect are without doubt compound formations. The Passive meaning peculiar to these stems is not denoted by the person terminations as in the other Passive forms—on the contrary the terminations of

the two aorists are active—but must lie in the stems themselves, i. e. in the elements  $\varepsilon(\eta)$  and  $\theta\varepsilon(\theta\eta)$  appended to the verb-stems. I have already stated in *Temp. und Modi*, p. 329 sq. my conjecture that the  $\varepsilon$  has arisen from the root  $j\acute{a}$  ‘to go’ which we have already met more than once in another phonetic form. Here this root would be used without a connecting vowel after the analogy of the conjugation in  $-\mu\iota$ , e. g. as  $\sigma\tau\bar{\alpha}$  in  $\acute{\varepsilon}\text{-}\sigma\tau\eta\text{-}\nu$ ,  $\gamma\omega$  in  $\acute{\varepsilon}\text{-}\gamma\omega\text{-}\nu$ , and since the verb-stem, when it appears in its pure form, has an aoristic force, the direct application of a stem like  $\gamma\rho\alpha\varphi\text{-}\varepsilon$  to express the aorist is accounted for. The Passive meaning of this root is vindicated by Sanskrit forms in which the syllable  $j\acute{a}$  combined with Person-terminations Active no less than Middle gives a Passive meaning and also by forms like the Latin *vēnum ire* or *vēnire*, the Passive of *venum dare* or *vendere*.  $\acute{\varepsilon}\text{-}\gamma\rho\acute{\alpha}\varphi\text{-}\eta\text{-}\nu$ , therefore, was pretty nearly equivalent to German *ich ging schreiben*, *gerieth ins Schreiben* (‘I went a-writing—fell a-writing’); just as German *in Verfall*, *in Verlust gerathen* or *verloren gehen* is synonymous with *verloren werden* (‘to go lost’ = ‘to be lost’).—In regard to the weak Passive stem only so much is certain that it stands in close connexion with numerous other formations which present the same consonant  $\theta$ . The formation in point will be found collected in *Grundz.*, I, 54. It is probable that this  $\theta$  arose out of the root  $\theta\varepsilon$  (Sanskrit *dhā*) which even in Greek signifies not merely ‘to place’ but also ‘to do’ (e. g. Sappho, *Frag.*, 62  $\tau\acute{\iota} \kappa\acute{\epsilon} \theta\acute{\epsilon}\tau\mu\epsilon\nu$ ). But how this  $\theta$  comes to be used with a Passive meaning is a difficulty which I have attempted to solve in Kuhn’s *Zeitschrift*, I, 26. Schleicher, *Compend.*, 623; Corssen, *Jahn’s Jahrb.*, LXVIII, 368; Lange, *Ueber den lateinischen Infinitiv*, p. 23, have adopted more or less decisively my conjecture, that in the  $\theta\varepsilon$  we may recognize a

compound, a combination of the root  $\theta\epsilon$  with the  $j\epsilon$  already mentioned.

### § 301.

The shortness of the stem-vowel in the formation of the tenses of numerous verb-stems, e. g.  $\gamma\epsilon\lambda\acute{\alpha}\omega$ , fut.  $\gamma\epsilon\lambda\acute{\alpha}\sigma\sigma\alpha\iota$ , is here pointed out merely as a fact, because, though many conjectural explanations have been given of this phenomenon, proof can be obtained in very few cases. Since in the tense-stems in point a short vowel is the rule where the verb-stem has lost a dental consonant before the additional elements, e. g. in  $\pi\lambda\acute{\alpha}\text{-}\sigma\omega$  from the root  $\pi\lambda\alpha\tau$ ,  $\varphi\rho\acute{\alpha}\text{-}\sigma\omega$  from the root  $\varphi\rho\alpha\delta$ , and since the same stems present their final consonants elsewhere in the form of  $\sigma$ , e. g.  $\pi\acute{\epsilon}\pi\lambda\alpha\sigma\text{-}\mu\alpha\iota$ ,  $\varphi\rho\alpha\sigma\text{-}\tau\acute{o}\varsigma$ , it is natural to connect both phenomena, the shortness of the vowel and the frequent insertion of  $\sigma$  (§ 288, 298, 300), in such a manner as to assume that stems ending in a dental sound must be our starting point in explaining them. But while it is easy to advance this, it is difficult to establish it.  $\tau\epsilon\lambda\acute{\epsilon}\text{-}\omega$  has been given as a denominative from  $\tau\acute{\epsilon}\lambda\epsilon\varsigma$ , Nom.  $\tau\acute{\epsilon}\lambda\omicron\varsigma$ , to which  $\tau\epsilon\text{-}\tau\epsilon\lambda\epsilon\sigma\text{-}\mu\acute{\epsilon}\nu\omicron\varsigma$  only would stand in the same relation as  $\kappa\epsilon\text{-}\kappa\omicron\rho\upsilon\delta\text{-}\mu\acute{\epsilon}\nu\omicron\varsigma$  to the noun-stem  $\kappa\omicron\rho\upsilon\delta$ ; and in this case at any rate the formation of the present from such a stem can certainly be explained by the phonetic laws of Greek,  $\tau\epsilon\lambda\epsilon\sigma\text{-}\iota\omega$ ,  $\tau\epsilon\lambda\epsilon\text{-}\acute{\iota}\omega$ , Homeric  $\tau\epsilon\lambda\acute{\epsilon}\iota\omega$ ,  $\tau\epsilon\lambda\acute{\epsilon}\omega$ . Elsewhere kindred formations with  $\delta$ ,  $\sigma$ ,  $\tau$  have been brought forward, e. g.  $\sigma\pi\alpha\delta\text{-}\acute{\omega}\nu$  for  $\sigma\pi\acute{\alpha}\text{-}\omega$ ,  $\sigma\pi\acute{\alpha}\text{-}\sigma\omega$ ,  $\acute{\epsilon}\text{-}\sigma\pi\alpha\sigma\text{-}\tau\eta\text{-}\nu$ ;  $\acute{\alpha}\rho\upsilon\tau\text{-}\omega$  by the side of  $\acute{\alpha}\rho\upsilon\text{-}\omega$  for  $\acute{\alpha}\rho\upsilon\text{-}\sigma\omega$ . But here the rejection of the dental in the present between two vowels creates a fresh difficulty. Since no phonetic law in Greek forbids  $\sigma\pi\alpha\delta\omega$  as a form of the present, we should, in attempting to get rid of the old anomaly, create

a new one which was not in existence before. Besides, etymology is against the assumption of a root  $\sigma\alpha\delta$  (*Grundz.*, I, 237). In other cases in which a stem of this kind has been assumed by a similarly circuitous path, the assumption is not merely not confirmed by the other forms of the verb, and the corresponding words in the kindred languages, but rather contradicted, e. g. in  $\acute{\alpha}\rho\kappa\acute{\epsilon}-\omega$ , with which the Latin *arce-o* may be compared, in  $\acute{\epsilon}\mu\acute{\epsilon}-\omega$  the  $\epsilon$  in which is like the  $j$  in Lithuanian *vem-ju* (*Grundz.*, I, 288), in  $\acute{\alpha}\rho\acute{o}-\omega$  which on account of  $\acute{\alpha}\rho\omicron\upsilon\rho\alpha$  points rather to  $\acute{\alpha}\rho\omicron\mathcal{F}-\omega$  (*Grundz.*, I, 306), as  $\acute{\alpha}\lambda\acute{\epsilon}-\omega$ , in spite of  $\acute{\alpha}\lambda\acute{\epsilon}-\sigma\omega$ ,  $\acute{\alpha}\lambda\acute{\eta}\lambda\epsilon\kappa\alpha$  to  $\acute{\alpha}\lambda\acute{\epsilon}\mathcal{F}-\omega$  on account of  $\acute{\alpha}\lambda\epsilon\upsilon\rho\omicron\nu$  (*Grundz.*, I, 325 sq.). And what consonant can well be proved for the stems of  $\lambda\acute{\upsilon}\omega$  and  $\pi\tau\acute{\upsilon}\omega$ , or even for  $\pi\omicron\delta\acute{\epsilon}\omega$  and  $\pi\omicron\nu\acute{\epsilon}\omega$ ? Besides the shortness and length of Greek forms is something so variable that in very few of these verbs would one stem-form be sufficient, while for the most of them two stems would have to be assumed, each complementing the other, e. g.  $\delta\nu$  for  $\delta\acute{\upsilon}-\sigma\omega$ , and  $\delta\nu\sigma$  or something of the kind for  $\tau\acute{\epsilon}\delta\acute{\upsilon}\nu\chi\alpha$ . In short the whole method has no basis; it rests on mere conjectures of the boldest kind, and, therefore, is quite unsuited for notice in a school-grammar, even though some of the conjectures may not be altogether improbable. I may take this opportunity of pointing out that I cannot approve of the assumption of dental stems such as those which have been put forward for  $\kappa\epsilon\rho\acute{\alpha}-\nu\nu\mu\iota$ ,  $\kappa\rho\epsilon\mu\acute{\alpha}-\nu\nu\mu\iota$ ,  $\kappa\omicron\rho\acute{\epsilon}-\nu\nu\mu\iota$  and some other similar formations. In  $\acute{\epsilon}-\nu\nu\mu\iota$  alone the first  $\nu$  has been really proved to be due to assimilation (root  $\acute{\epsilon}\zeta$ ,  $\mathcal{F}\acute{\epsilon}\zeta$ , § 319. 3), and the same origin is in my opinion probable for  $\sigma\beta\acute{\epsilon}-\nu\nu\mu\iota$  (*Grundz.*, II, 146). But in a school-grammar the forms  $\acute{\epsilon}-\sigma\beta\eta-\nu$ ,  $\acute{\epsilon}-\sigma\beta\eta-\chi\alpha$  make the assumption of such a root unadvisable. The  $\sigma$  which in the formation of tenses no less than of nouns

appears between vowel-stems and the various terminations is as yet by no means thoroughly cleared up, and cannot certainly be removed at a stroke as it were by making it in every case a component part of the stem. Such a simple expedient carries us but a little way, as may be seen very clearly in forms like ἐδ-έ-σθη-ν, ἐδ-ήδ-ε-σ-μαι, ὀμ-ώμο-σ-ται by the side of ὀμ-ώμ-ο-ται, in which the preceding vowel has never once been proved to belong to the root. We must not be led away by the effort to explain the variation of quantity wherever possible by definite causes an effort quite correct in principle into hastily seizing upon any explanation which comes to hand, and embodying it at once in a school-grammar for the benefit of young scholars. It is not from any carelessness or inattention, but after the fullest consideration, that I have preferred in such cases simply to point out the anomaly.

### § 304.

The verbs in -μι might have been divided into more classes than I have made. More especially it seems advisable from a scientific point of view to treat as a separate class those which distinguish their present stem from the pure verb-stem by reduplication (§ 308). But the number was too small to justify us in doing so. There are but nine Greek verbs in all of this kind, and they can, therefore, be regarded merely as a part of the first class. The same holds good of the verbs in -νημι (§ 312. D.) which moreover with the exception of δύναμαι are not found in Attic prose. These also are nine in number, δάμ-νη-μι, κίρ-νη-μι, κρήμ-να-μαι, μάρ-να-μαι, πέρ-νη-μι, πιλ-να-μαι, πίτ-νη-μι, σκίδ-νη-μι, δύ-να-μαι.

Among these μάρ-να-μαι is used only in the present stem, δύναμαι has an unchangeable stem δυνα running through the whole formation of the tenses

and occasionally increased by the addition of a sigma (*δυναστής*); and all the others are provided with secondary forms of different structure which are in more common use. To treat the dissyllabic stems *ἄγα*, *ἔρα*, *κρεμα*, also as separate was the less necessary for my purpose, as no certain explanation can be given of their origin.

On the other hand, the verbs in *-νυμι* are clearly to be regarded as distinct. The syllable *νυ* is restricted to the present stem, and the number of the verbs of this kind runs up to 38. In every respect, therefore, they may claim to form a class by themselves. In their formation these verbs are evidently clearly allied to those numerous and variously formed verbs which extend the present by the addition of a nasal, either alone or in combination with different vowels, and, therefore, they stand in close connection with the fifth or nasal class which immediately follows them in my arrangement. As regards the origin of these nasal additions, I cannot in spite of the opposite theory so frequently brought forward, and lately adopted by Schleicher in his *Compendium*, p. 576, bring myself to the conviction that any pronominal element is contained in them; on the contrary, I still adhere to the view given in detail in *Tempora und Modi*, p. 53 sq., that these additions are of a purely phonetic nature and became formed into syllables in the course of time by a gradation which we can still trace with certainty. The Latin *pa-n-g-o*, therefore, into which the nasal enters only as an extension of the consonantal sound (cp. *ju-n-g-o*, *tu-n-d-o*, *ru-m-p-o*) I consider as more ancient than the Greek *νυ-μι*, where the nasal, combined with *ν*, forms a syllable by itself. Nasalization, which may take its place as a consonantal extension by the side of the extension of vowels, is a phenomenon which ought not to be



disregarded by the modern science of language so much as is usual. It would be difficult to prove any other origin for the nasal in πίμ-πλη-μι, πίμ-πρη-μι, τύμπ-ανο-ν (Rt. τυπ), ᾄμ-β-ος (Rt. ταφ), Λυγκ-εύ-ς (Rt. λυκ), ἔγγ-ελυ-ς, *anguilla*, *anguis* by the side of the Sanskrit *ahi-s*, Greek ἔχι-ς, βένδ-ος by the side of βάδος; and I cannot see that there is anything absurd in the supposition that the nasal which we find as ν *ephelkystikon* following upon short vowels at the end of words should be introduced into the middle of words to produce a greater fulness of tone like the extension of vowels which is accepted by every one.

### § 305 sq.

I have been reproached with the inconsistency of regarding sometimes the short vowel, e. g. in θε, δο, and sometimes the long one, e. g. in γνω, βιω as primary in roots which end in a vowel. But in assuming these forms with regard to which on the whole I differ but little from other grammarians, I have acted upon a definite plan: the root is quoted with a long vowel where the length extends to the greater number of forms, and with a short one where it is confined to the smaller number. The distinction between ἐ-θέ-την, θεῖναι, θέ-σι-ς, δέ-δο-ται, δοῦναι, δό-σι-ς, φά-θι, φα-τό-ς, on the one hand, and forms like γνῶ-ναι, γνω-τό-ς, γνῶ-σι-ς, βιῶ-ναι, ἄλῶ-ναι, ἄλω-σις, τέ-τρω-μαι, ἐ-τρώ-θη-ν, on the other, is sufficiently marked to justify the distinction. In stems like those of στῆ-ναι, μέμνη-μαι, τέ-θη-κα, there is the further practical consideration that as η can arise out of ε no less than α, it is only in στα. μα. θνα that we can recognize the real stem-vowel. The quantity, where it fluctuates, is purposely left unmarked. In this way I believe all objections are

removed so far as Greek grammar, and at any rate Greek school-grammar is concerned. When we take up a higher point of view so as to include in our observation the corresponding forms in the kindred languages, we shall, it is true, find reason to alter our judgment. The Indian grammarians allow no roots in *a*, but only in *á*, so that Sanskrit *dâ* corresponds to Greek  $\delta\alpha$ , Latin *dâ-re* (by the side of *dô-nu-m*), Sanskrit *dhâ* to Greek  $\theta\epsilon$ , Sanskrit *gâ* to Greek  $\beta\alpha$  ( $\beta\alpha\lambda\omega$ ). But Schleicher in an essay in Kuhn and Schleicher's *Beiträge*, II, p. 92 sq., has brought forward weighty reasons for universally assuming short *a* as the primitive form in these roots; and he takes the same view in his *Compendium*. But even in this case we must continue to regard the long vowel as the characteristic in those roots in which metathesis is found, e. g. in  $\gamma\omega$  (= Sanskrit *gnâ*, Latin *gnô* by the side of German *kann*), since that form of the root only in which the vowel stands between the two consonants (e. g.  $\theta\alpha\nu$ ,  $\beta\alpha\lambda$ ,  $\mu\epsilon\nu$ ,  $\tau\epsilon\mu$ ,  $\beta\omicron\rho$ ,  $\sigma\tau\omicron\rho$ ) regularly presents the short vowel; but, on the other hand, when metathesis takes place, the vowel is long ( $\theta\eta\eta\text{-}\tau\acute{o}\text{-}\varsigma$ ,  $\beta\acute{\epsilon}\text{-}\beta\lambda\eta\text{-}\kappa\alpha$ ,  $\mu\acute{\epsilon}\text{-}\mu\eta\text{-}\mu\alpha\iota$ ,  $\sigma\tau\acute{\omega}\nu\eta\mu\iota$ ). Consequently in roots which present the vowel in the latter position only, the length of the vowel is a part of the stem. More obscure in origin is a number of other stems like  $\beta\iota\omega$ ,  $\acute{\alpha}\lambda\omega$ ,  $\acute{\alpha}\mu\beta\lambda\omega$ , but in these also the long vowel is undeniably fixed, i. e. forms part of the stem.

### § 321.

In this, no less than in the following classes of verbs (as is pointed out even in the observations in the grammar), we must carefully observe that over and above the peculiar characteristics of each class

many isolated specialities present themselves. Since language in general applies very various means to distinguish the present stem from the verb-stem, we cannot wonder that we sometimes find several of these means united. Similar pleonasms may be observed in the most widely distinct provinces of language. We need only call to mind comparatives like *χρειαότερο-ς*, and superlatives like *πρώτιστος*. No one would think of availing himself of these extended forms to overthrow the usual arrangements of the Comparative and Superlative. Similarly in No. 1 of the verbs here given, *βάλω*, we find the double addition in the present stem. From the root *βα* arose first *βαν*, then *βαν-ι*. Here and elsewhere the doubt might arise which of these two additions is to give the mark for classification. Does *βάλω* on account of the *ι* belong to the 4th or I-class (cp. *μάλωμαι*), or on account of the *ν* to the 5th or Nasal class? The first arrangement would be recommended by the comparison of Latin *ven-i-o* by the side of *vén-i* (cp. Oscan *ben-ust = ven-erit*). But in favour of the second is the circumstance that in Greek the *ν* occurs in the present stem only, and we cannot, therefore, in this case establish a root *βαν*, whereas, on the other hand, in *φάλω* though we can go back to a root *φα*, yet if we leave a few Homeric forms out of sight (*φα-εν*, *πε-φύ-σσο-μαι*) *φαν* only can be recognized as the verb-stem, and the verb, therefore, belongs to the 4th class. As in this case then we find the 4th and 5th classes united, so the peculiar mark of the 7th or E-class and especially of the second division of it, viz. the lengthening of the verb-stem by an *ε* added to facilitate the formation of tenses, occurs occasionally in all the other classes. There is only this difference, that in the 7th class the additional element is the mark which distinguishes between the verb-stem and present stem, whereas

in the other classes it is something accessory and claims attention only for the formation of certain tenses. We, therefore, who have taken this distinction between verb-stem and present stem as the basis of our arrangement, can be in no doubt about the place which each verb ought to occupy. In spite of ἀμαρτ-ή-σομαι, ἀμαρτάνω belongs to the nasal class, and the same is the case with ἀΰξ-άν-ω in spite of ἀΰξ-ή-σω.—In ὀφλ-ισκ-άνω we find the additional elements of the inchoative and nasal class combined, as is pointed out by the reference to § 324. But the proper place for the verb was in § 322, among those which add -αν to the stem. So too the circumstance that the root πι is supplemented in the construction of many forms by the root πο, and consequently must be mentioned in the mixed class, is no reason that the relation of ἔ-πι-ο-ν to πίν-ω should not be mentioned in this section.

I have already pointed out p. 136 that I consider all these nasal additions to be purely phonetic. Here also we find a certain pleonasm in language. When the root-vowel is short, the mere addition of the syllable -αν is not enough, but the nasal is also inserted in the root and is thus doubly represented, μανθ-αν, τυγχ-αν, λαμβ-αν.

I have already referred p. 136 to the connection of this nasal class with the verbs in -νυ-μι. This connection is especially prominent in some of the verbs which belong to this place. The Homeric dialect has preserved the form τί-νυ-μι, and, therefore, it is not impossible that τί-ν-ω arose out of τι-νυ-ω, and φθινύ-θ-ω makes an older form φθι-νυ-ω for φθί-ν-ω not improbable. In § 318, 4 it is noticed how frequently we find secondary forms in the O-conjugation beside the verbs in -νυ-μι. In this way also we may explain ἐλάύ-ω by the side of the verb-stem ἐλα. We may carry it back to ἐλα-νυ-ω (cp.

Abrens, *Formenl.*, p. 127), and assume the same metathesis of the  $\upsilon$  which is brought before us so plainly in  $\gamma\omicron\upsilon\eta\text{-}\alpha = \gamma\omicron\nu\eta\text{-}\alpha$  (Latin *genu-a*).

No less plainly is the internal homogeneity of all the nasal additions of this class displayed by the fact that we possess double forms which exhibit a certain variation on the part of language in regard to the exact form of the nasal syllable. Thus by the side of  $\delta\acute{\alpha}\chi\text{-}\nu\text{-}\omega$  we find, in quotations of the grammarians only,  $\delta\alpha\chi\acute{\alpha}\nu\omega$ , which serves to combine forms like  $\beta\acute{\alpha}\nu\omega$  and  $\acute{\alpha}\mu\alpha\rho\tau\acute{\alpha}\nu\omega$ ; the connecting link between  $\acute{\alpha}\mu\alpha\rho\tau\text{-}\acute{\alpha}\nu\text{-}\omega$  and  $\chi\upsilon\text{-}\nu\acute{\epsilon}\text{-}\omega$  is  $\acute{\iota}\chi\acute{\alpha}\nu\text{-}\omega$  by the side of  $\acute{\iota}\chi\text{-}\nu\acute{\epsilon}\text{-}\omicron\text{-}\mu\alpha\iota$ ; while the Ionic  $\acute{\epsilon}\gamma\text{-}\nu\upsilon\text{-}\mu\alpha\iota$  (*καθίγγυμαι*), retained in Hippocrates, forms the transition to the verbs  $\text{-}\nu\upsilon\text{-}\mu\iota$  (Lobeck, *Technol.*, 209). So too  $\acute{\iota}\sigma\chi\acute{\alpha}\nu\omega$  (in a longer formation  $\acute{\iota}\sigma\chi\alpha\nu\acute{\alpha}\omega$ ) by the side of  $\acute{\upsilon}\pi\text{-}$ ,  $\acute{\alpha}\mu\pi\text{-}\acute{\iota}\sigma\chi\text{-}\nu\acute{\epsilon}\text{-}\omicron\text{-}\mu\alpha\iota$ . The numerous verbs which belong to this place have been illustrated by Lobeck on Buttman, *Ausf. Gr.*, II, 64 sq.

### § 324.

The 6th or Inchoative-class is one of those possessions common to Greek and Latin which shew how extremely close is the connection existing between the two languages. There is, it is true, something analogous to it in Sanskrit. But only three verbs in that language form the present stem in this manner, viz.—by the addition of the  $\acute{k}h$ , the regular representative of  $sk$  in Indian. We might, therefore, assume a  $ga\text{-}sk\text{-}\acute{a}\text{-}mi$  corresponding to the Greek  $\beta\acute{\alpha}\text{-}\sigma\chi\text{-}\omega$  (Schleicher, *Compend.*, 582), as the predecessor of  $ga\text{-}\acute{k}h\text{-}\acute{a}\text{-}mi$ , 'I go,' from the root  $ga =$  Greek  $\beta\alpha$ . But not merely have the sounds lost their original form in Sanskrit; in other respects also that language stands below the classical languages

in regard to these forms. In it there is no trace of that specific meaning of the additional element which in the two classical languages is retained to so great an extent that the class is termed from it the Inchoative-class. The Inchoative meaning is not only found in the verbs mostly of derivative formation which are termed Inchoative in the strict sense, e. g. γηρά-σκ-ω (cp. *sen-e-se-o*), ῥβά-σκ-ω (cp. *pubesc-o*), ἀνα-βιώ-σκ-ο-μαι (cp. *reviri-sc-o*), but may also be easily recognized in many others, e. g. in μι-μνή-σκ-ο-μαι (cp. *re-min-i-sc-or*), ἀλδ-ή-σκ-ω (cp. *adolesc-o*), γι-γνώ-σκ-ω (= *gnō-sc-o*), δι-δύ-σκ-ω the causative correlative of the intransitive *di-sc-o*. As the Inchoative meaning consists essentially in the fact that the action comes to pass gradually, those present stems which denote the gradual working out of an action, e. g. ἐπι-βά-σκ-ειν, *pac-i-sc-i* are distinguished from the Inchoatives in the narrower sense, which denote a gradual process, as transitive from intransitive, i. e. as ἴ-στη-μι and Latin *si-st-o* from *στῆ-ναι* and *stare*. Thus, therefore, πι-πί-σκ-ω, μεθύ-σκ-ω, ἀρ-αρ-ί-σκ-ω become intelligible. The reduplication found in not a few verbs in conjunction with the *σκ* is naturally to be regarded as an additional strengthening element, even as it is applied in an independent manner in the verbs in -μι to form the present, and occurs here and there in the verbs given § 327, 14—17 (γι-γν-ο-μαι, πί-πτω, τι-τρά-ω). After what has been said there can scarcely be any doubt that this class originally comprised those verbs only in which it was the intention of language to denote in the present stem the gradual realization of an action. Even in those forms, therefore, in which such a meaning can scarcely, if at all, be proved in the historical era of the language, e. g. βλώ-σκ-ω, θρώ-σκ-ω, στερ-ί-σκ-ω, Latin *ulc-i-sc-or*, we may reasonably assume that it existed at an

earlier period. We need hardly dwell upon the fact that the  $\sigma\kappa$  of the Iteratives in  $-\sigma\kappa\omicron-\nu$  is not different in nature and origin from the additional element in the present, and consequently the Iterative was only an isolated preterite of this formation of the present. The gradual realization and the repetition of an action are regarded by language as nearly akin. Both form the opposite to the sudden incidental action of the aorist. This class possesses a peculiar interest for the student of the verb in general, because we can in this case prove a particular meaning for the additional element in the present stem. It ought however to be mentioned that the origin of this  $\sigma\kappa$  is unknown to us, the last and highest question, therefore, still remains unanswered.

In the mode of adding the element also, Latin and Greek present a high degree of similarity. We need only compare (*g*)*no-sc-o*, (*g*)*na-sc-or*, *cre-sc-o* with  $\gamma\iota-\gamma\nu\acute{\omega}-\sigma\kappa-\omega$ ,  $\pi\iota-\pi\rho\acute{\alpha}-\sigma\kappa-\omega$ ,  $\kappa\iota-\kappa\lambda\acute{\eta}-\sigma\kappa-\omega$ , the derivative  $\acute{\eta}\beta\acute{\alpha}-\sigma\kappa-\omega$ ,  $\gamma\eta\rho\acute{\alpha}-\sigma\kappa-\omega$  with Latin *ira-sc-or*,  $\acute{\alpha}\lambda-\acute{\iota}-\sigma\kappa-\omicron-\mu\alpha\iota$ ,  $\sigma\tau\epsilon\rho-\acute{\iota}-\sigma\kappa-\omega$  with Latin *ap-i-sc-or*, *pac-i-sc-or*, and  $\delta\iota\delta\acute{\alpha}-\sigma\kappa-\omega$ ,  $\lambda\acute{\alpha}-\sigma\kappa-\omega$  in which a guttural is lost with *di-sc-o*, to perceive that the laws of formation are the same. It is a striking fact that the genius of language, which is ever intent on delicate distinctions, has separated the Iterative forms, which, in spite of their close relationship, have some peculiarities of application, from the Inchoatives, at least in part by the connecting vowel;  $\sigma\tau\acute{\alpha}-\sigma\kappa-\omicron\nu$ , it is true, is formed like  $\varphi\acute{\alpha}-\sigma\kappa-\omega$ , but  $\acute{\epsilon}\chi-\epsilon-\sigma\kappa-\omicron\nu$ ,  $\acute{\iota}\delta-\epsilon-\sigma\kappa-\omicron\nu$  are distinct from  $\sigma\tau\epsilon\rho-\acute{\iota}-\sigma\kappa-\omega$ ,  $\epsilon\acute{\upsilon}\rho-\acute{\iota}-\sigma\kappa-\omega$ ; and only  $\acute{\alpha}\rho-\acute{\epsilon}-\sigma\kappa-\omega$  which, though elsewhere also it retains the  $\epsilon$ , cannot be separated from  $\acute{\alpha}\rho-\mu\epsilon\nu\omicron-\varsigma$ ,  $\acute{\alpha}\rho-\tau\iota\omicron-\varsigma$  in the sense 'to accommodate one's self to' (*Grundz.*, I, 304) makes use of the connecting vowel. This desire for distinction stands in my opinion by the side of the consistent develop-

ment of the germs handed down from an earlier period, as a highly characteristic mark of the Greek language.

### § 325 AND 326.

The 7th or E-class is evidently composed of two formations of quite distinct origin. But as we have throughout made the relation of the present stem to the verb-stem the basis of our arrangement, and this relation in the verbs before us is shown in the fact that a superfluous  $\epsilon$  is sometimes found in one position and sometimes in another, it was certainly allowable for practical purposes to bring both under *one* point of view. That formation naturally occupies the first place which in unison with the classes already discussed presents the extended stem in the forms of the present. With regard to the  $\epsilon$ , the addition of which distinguishes  $\gamma\alpha\mu\epsilon$ ,  $\delta\omicron\kappa\epsilon$ ,  $\kappa\upsilon\rho\epsilon$ , &c., as present stems from the verb-stems  $\gamma\alpha\mu$ ,  $\delta\omicron\kappa$ ,  $\kappa\upsilon\rho$ , I have already conjectured *Temp. und Modi*, p. 92, 94, that it arose out of Jod. In my *Grundz.*, II, 183 I have illustrated and confirmed this explanation from other sources. The identity of this  $\epsilon$  with the Jod of the I-class is most apparent in the Homeric  $\acute{\epsilon}\rho\text{-}\acute{\epsilon}\text{-}\omicron\upsilon\tau\omicron$  (B 398,  $\Psi$  212). As  $\epsilon$  is found even outside the verb as the representative of an original Jod, this form, which belongs to the root  $\acute{\epsilon}\rho$  ( $\acute{\epsilon}\rho\text{-}\nu\upsilon\text{-}\mu\iota$ ), may be compared with Latin *or-i-untur*. If my view is correct, and I can see no reasonable objection against it, the first division of the seventh class presents at least in part the same element which characterizes the I-class. But there are good reasons for separating the two. Thus I could not maintain the same origin for the  $\epsilon$  in all the verbs of this class. In some it is quite as possible that the present stem is



formed from a noun, and the rest of the tenses from a shorter stem. In *χραισμέω* this is undoubtedly the case. The word evidently proceeds from *χρᾶ-σιμo-ς*, and is derived from it in the same manner as *ἄδικέ-ω* from *ἄδικo-ς*. The *ι* became inserted in the radical syllable by Epenthesis, on which see *Grundz.*, II, 247sq. Hence *ἔ-χραισμ-ο-ν* is quite an anomalous preterite, which like *ἔ-πιτυ-ο-ν* became fixed for the aorist solely because it was distinguished from the imperfect *ἐ-χραίσμ-ε-ο-ν* (cp. *ἐ-πίτ-νε-ο-ν*) as the shorter form. The origin of the *ε*, which in this case is certain and corresponds exactly to the origin of the same vowel in the derivative verbs in *-εω*, is at least possible in some other verbs, e. g. in *φιλέ-ω* (cp. *φίλο-ς*), *κτυπέ-ω* (*κτύπο-ς*), *ῥιπτέ-ω* which Lobeck on Buttman, II, 52 traced back to *ῥιπτό-ς*, and Hermann, *ad Soph. Ajax.*, 235 compares with *jactare* in contradistinction to *jacere*. Similarly in *πεκτέω* (Aristoph.). That a formation of the present, in which that tense only belongs to the derivative stem, and the others to the primitive, is not unknown in Greek is proved by the presents with *α* quoted in § 325 under *n-p* for this very purpose, *γοά-ω*, *μηγά-ο-μαι*, *μυγά-ο-μαι* by the side of *ἔ-γο-ο-ν*, *μέ-μηκ-α*, *ἔ-μυκ-ο-ν*. In Latin this combination of two stems thus distinguished has prevailed, as is well known, to a very great extent—e. g. *lav-a-re* (older *lav-e-re*, *λού-ειν*) by the side of *lāvi*, *son-a-re* (*son-e-re*) by the side of *son-ui*, *son-i-tus*, in which we cannot suppose that the long *a* has been dropped. For this reason I think it probable that the same view may be taken of the second or E-conjugation of the Latins, the *e* in which is confined to the present stem. *Doc-ui*, therefore, has not arisen out of *docē-vi*, any more than *ἔδοξα* out of *ἔδόκησα*, but in Latin as in Greek the forms without *e* are to be regarded as the verb-stems, those with *e* as extended forms, and,

therefore, confined to the present stem. Vaníček (*Latein. Schulgr.*, § 187) has also arranged these verbs on this theory; and the arguments which have been brought forward on the other side have not convinced me that we are in the wrong. After what has been said, sufficient reason appears to have been given for the separation of the presents extended with  $\epsilon$  as a distinct class. The division and arrangement of the phenomena of language ought not to be guided exclusively by our conjectures about their origin; but above all by the evidence of the facts before us. And there is no question that everything which comes under discussion here was gathered up by the instinct of language under the change of verbs in  $-\epsilon\omega$  and  $-\omega$ .

The second division of this class is of quite a distinct kind. Here the  $\epsilon$  comes before us as a vowel uniting the stem and the additional elements' of tense-formation. In many cases, therefore, it is simply an auxiliary or connecting vowel. Buttmann taking a similar view, classed together (II, 56) the epic perfects,  $\acute{\omicron}\rho\text{-}\acute{\omicron}\rho\text{-}\epsilon\text{-}\tau\alpha\iota$  ( $\tau$  377, 524) and  $\acute{\alpha}\kappa\text{-}\eta\chi\text{-}\acute{\epsilon}\text{-}\mu\epsilon\nu\omicron\text{-}\varsigma$  (E 364.  $\Sigma$  29), to which may be added  $\acute{\alpha}\rho\text{-}\eta\rho\text{-}\acute{\epsilon}\text{-}\mu\epsilon\nu\omicron\text{-}\varsigma$  in Apollonius Rhod. In many of the verbs belonging to this division we can feel the need of such a vowel, just as  $\epsilon$  is always inserted in forming the future of certain verbs (cp. Ahrens, *Formenlehre*, p. 119; Müller and Lattmann, p. 102), especially after  $\rho$  in the stems  $\acute{\epsilon}\rho$ ,  $\tau\omicron\rho$ , after the  $\lambda$  in  $\beta\omicron\upsilon\lambda$ ,  $\theta\epsilon\lambda$ ,  $\mu\epsilon\lambda$ , the nasals in  $\mu\epsilon\nu$ ,  $\nu\epsilon\mu$ , the double consonants  $\acute{\alpha}\lambda\epsilon\xi$ ,  $\acute{\alpha}\upsilon\xi$ ,  $\acute{\alpha}\chi\theta$ ,  $\acute{\epsilon}\psi$ ,  $\acute{\omicron}\lambda\iota\theta$ ,  $\delta\alpha\rho\theta$ ,  $\beta\lambda\alpha\sigma\tau$ ,  $\acute{\alpha}\lambda\iota\theta$ ,  $\acute{\alpha}\mu\alpha\rho\tau$ ,  $\acute{\epsilon}\rho\rho$ ,  $\mu\epsilon\lambda\lambda$ ,  $\pi\epsilon\rho\delta$ ,  $\acute{\alpha}\lambda\theta$ ; and even in dental stems like  $\acute{\alpha}\acute{\iota}\delta$ ,  $\acute{\epsilon}\acute{\upsilon}\delta$  (cp.  $\acute{\epsilon}\acute{\upsilon}\sigma\omega$  from  $\acute{\epsilon}\acute{\upsilon}\omega$ ),  $\kappa\eta\delta$ ,  $\mu\epsilon\delta$ ,  $\pi\epsilon\tau$ , the formation of the tenses gains in clearness by the addition, in so far as a number of phonetic changes are thus avoided. There are also many anomalies in verbs of other classes which may without difficulty be brought under

the same point of view (cp. *Grundzüge*, II, 302), e. g. ἐμ-ήμ-ε-κα, λόF-ε-σσα, ὀμ-ώμ-ο-ται, ἐδ-ήδ-ο-ται and ἐδ-ήδ-ο-κα, and the Homeric aorist from πέρ-νη-μι, ἐ-πέρ-α-σσα (§ 312. D. c). In the first instance the inserted vowel may have been universally short. But in the E-stem the resemblance to the vowel-stems in ε was too close to be always avoided. The vowel is still short in γέν-ε-σις (cp. *gen-e-tria*), but long in γεν-ή-σο-μαι, γε-γέν-η-μαι. A great number of these forms also are evidently of no great antiquity, especially those in which the present stem becomes a new verb-stem by the addition of ε; βουκ-ή-σω, καθ-ιζ-ή-σομαι (Plato), ὄξ-η-σα, κλαιήσω, μελλ-ή-σω, ἐ-μύζ-η-σα, ὠφείλ-η-κα, τυπτ-η-σω (Aristoph.). This convenient analogy appears to have been an especial favorite in the conversational language of Attica. It was aided without doubt in some cases by the desire to avoid confusion: thus we have οἴησομαι by the side of οἴσομαι (φέρω), ἐρρήσω by the side of ἐρῶ, μελλήσω by the side of μελῶ, δεήσω (from δεFήσω) by the side of δήσω, ἀχθέσομαι by the side of ἄξομαι (ἄγω), μαχοῦμαι by the side of μάξω (μάσσω), μαθ-ή-σομαι by the side of μήσομαι (μῆδομαι) and μάσω (μαίω). Anyone who wishes to follow further the spread of these aftergrowths must include the formation of nouns in his researches, the vowel being equally common there.

### § 327.

This last or anomalous class also comprises very various elements. But a further division of the material is hardly incompatible with the requirements of instruction. From a scientific point of view two principal divisions may certainly be distinguished. To the first belong those verbs the stems of which can be connected phonetically. Among these may

be counted the first seven of the verbs given in this section (αἶρ-έ-ω, ἔρχ-ο-μαι, ἔρδ-ω, ἐσθί-ω, ἔπ-ο-μαι, ἔχ-ω, μίση-ω), and further 9, 10 (πάσχω, πίν-ω), and the five last (εἶπον, γίγνομαι, πίπτω, τιτράω, ἰ-αύω), in which reference is made in the text of the grammar to the connection existing between the different forms. Thus in the last mentioned the present stem appears as a reduplicated verb-stem. Nothing is more intelligible than that γί-γνο-μαι as well as the Latin *gi-gn-o*, has arisen out of the root γεν and in the same manner πί-πτ-ω out of the root πετ. The roots are clearly to be seen in ἐ-γεν-ό-μην and the Doric ἔ-πετ-ο-ν. In regard to the second verb the Latin *pet-e-re* deserves notice. Like the old Latin *gen-i-tur* (Cic., *de Orat.*, II, § 141) it arises immediately from the pure root. That *pet-e-re* and πεσ-εῖν, and also πέτ-ε-σθαι are identical in origin is shown in *Grundz.*, I, 178. In many instances ἐμπεσεῖν is synonymous with *impetere*, *impetum facere*, e. g. II. O. 624. The ω in πέ-πτω-κα is explained by the ε of the Homeric πε-πτε-ώς to which it stands in the same relation as ἐδ-ήδ-ο-κα to ἐδ-ήδ-ε-σ-μαι. Without doubt the effort to distinguish the notions of 'flying' and 'falling' has helped to produce the O-sound, cp. πτώσις and πτήσις, πτωτικός and πτητικός. τι-τρά-ω needs no further explanation. The stem τρα stands to τερ (τέρ-ε-τρο-ν, τερ-έ-ω, Latin *ter-o*, *ter-e-bra*) as μνη (μιμνήσκω) to μεν (μέμονα), τμη (τμησίς) to τεμ (τέμνω). Another form of the shortest kind is presented to us in the Homeric τορ-εῖν.—In the Homeric ἰ-αύ-ω the stem, which begins with a vowel, is reduplicated simply by ι as in ἴ-η-μι, and more exactly still in ἰ-άλλ-ω (*Grundz.*, II, 128). The root is αF (*Grundz.*, I, 355). Hence αF-ε-σα (ἄ-ε-σα) as λοF-ε-σσα. In Odyssey λ 261 a rhapsody allowed to be of late origin, we do indeed find the aorist ἰαῦσαι, but the derivation of the

word from the root  $\acute{\alpha}F$  is as little affected by this form as the derivation of  $\delta\acute{\iota}$ - $\delta\omega$ - $\mu\iota$  from the root  $\delta\sigma$  by the occurrence of an isolated future  $\delta\iota\delta\acute{\omega}$ - $\sigma\omega$ . Thus in the conjugation in  $\omega$  we have a residuum, by no means inconsiderable, of that addition to the present which was more plainly marked in the verbs in  $-\mu\iota$  (cp. p. 135).  $\acute{\iota}$ - $\sigma\chi$ - $\omega$  also—the stronger form of the present  $\acute{\epsilon}\chi$ - $\omega$  quoted under No. 6—is apparently to be traced back to the same principle of formation inasmuch as it stands for  $\sigma\iota$ - $\sigma\chi$ - $\omega$ ,  $\acute{\iota}$ - $\sigma\chi$ - $\omega$ .

In the remaining verbs the phonetic changes are less clear. A middle point in which the stems  $\acute{\alpha}\lambda\acute{\rho}\epsilon$  and  $\acute{\epsilon}\lambda$  meet, has been found in the Cretan  $\acute{\alpha}\phi\alpha\lambda\acute{\eta}$ - $\sigma\epsilon\sigma\acute{\iota}\alpha\iota$  (*Grundz.*, II, 135, 249). We may assume a root  $F\alpha\rho$  which alternates with  $F\epsilon\lambda$ . The present, therefore, was probably in the first instance  $F\alpha\rho$ - $\iota$ - $\omega$  after the analogy of the I-class. From the penultimate the  $\iota$  passed into the stem-syllable.—The way in which such forms as  $\acute{\epsilon}\rho\delta$ - $\omega$  and  $\acute{\rho}\acute{\epsilon}\zeta$ - $\omega$  may be connected could be pointed out even in the grammar, no phonetic changes being involved beyond those mentioned in the chapter on sounds. The same holds good of  $\acute{\epsilon}\pi\sigma\mu\alpha\iota$  and  $\acute{\epsilon}\chi\omega$ . With regard to the first a word may be added on the aorist  $\acute{\epsilon}$ - $\sigma\pi$ - $\acute{\omicron}$ - $\mu\eta\eta$ . The Homeric forms  $\acute{\epsilon}$ - $\sigma\pi$ - $\omega$ - $\mu\alpha\iota$ ,  $\acute{\epsilon}$ - $\sigma\pi$ - $\acute{\epsilon}$ - $\sigma\acute{\iota}\alpha\iota$  show that the syllable  $\epsilon$  was originally considered part of the stem, and, therefore, we have here to do with a reduplicated aorist in which  $\acute{\epsilon}$  stands for  $\epsilon$  as in the perfect  $\acute{\epsilon}$ - $\sigma\tau\eta$ - $\chi\alpha$ . But in the Attic period the  $\epsilon$  was confounded with the augment and, therefore, dropped except in the Indicative:  $\sigma\pi\acute{\omega}\mu\alpha\iota$ ,  $\sigma\pi\acute{\epsilon}\sigma\acute{\iota}\alpha\iota$ . Of the forms belonging to  $\acute{\epsilon}\chi\omega$ ,  $\acute{\omicron}\chi$ - $\omega\chi$ - $\alpha$  deserves notice. It is regarded as an Attic reduplicated perfect, and stands, therefore, for  $\acute{\omicron}\chi$ - $\omega\chi$ - $\alpha$  (cp.  $\acute{\omicron}\acute{\chi}$ - $\omega\chi$ - $\alpha$ ) with a change of the second aspirate into the corresponding *tenuis* (cp.  $\sigma\acute{\omega}$ - $\delta\eta$ - $\tau\iota$ ).—The irregularities of  $\acute{\pi}\acute{\iota}\nu\omega$  are merely so far difficult as the change of

a hard vowel into  $\iota$  is usual in Greek only before a double consonant. For this reason the stems  $\pi\omicron$ , and  $\pi\iota$  could not be explained in the grammar. The Æolic  $\pi\acute{\omega}\nu\omega$  by the side of  $\pi\acute{\iota}\nu\omega$ , and still more the forms of the kindred languages quoted in *Grundzüge*, I, 245, leave no doubt that the soft vowel has arisen out of the hard one.

Three verbs,  $\epsilon\rho\chi\omicron\mu\alpha\iota$ ,  $\pi\acute{\alpha}\sigma\chi\omega$ , and  $\mu\acute{\iota}\sigma\gamma\omega$  have the common characteristic that the additional element in the present stands in connection with the Inchoative class. If we compare  $\epsilon\rho\chi\omicron\mu\alpha\iota$  with the stem  $\epsilon\lambda\nu\delta$ , we perceive at once that  $\epsilon\rho$  and  $\epsilon\lambda$  are identical. As then we have good reason to regard  $\rho$  as the older sound, when it alternates with  $\lambda$ , we shall assume  $\epsilon\rho$  as the root, which corresponds to the Sanskrit *ar* 'to go' (*Grundz.*, II, 54, 271). From this may be formed an Inchoative present  $\epsilon\rho\sigma\chi\omicron\mu\alpha\iota$ , which again corresponds exactly to the Sanskrit *ar-kh*, i. e. *ar-sk*, a form, according to the Petersburg Dictionary, found, like  $\epsilon\rho\chi$ , only in the present stem. How the combination  $\sigma\chi$  is sometimes changed to  $\sigma\kappa$ , and then deprived of the sigma in the press of accumulated consonants, is shown in detail in the places cited above. But the stem  $\epsilon\lambda$  also was not used as a verb without alteration. First of all, it took the additional vowel  $\upsilon$  which we see very frequently in combination with  $\lambda$ ; and with this we find it united in  $\pi\rho\varsigma\eta\lambda\nu\tau\omicron\varsigma$ ,  $\epsilon\pi\eta\lambda\nu\varsigma$ . Then was added that  $\delta$ , which serves in a number of old forms to coin peculiar tense-stems (§ 338. D.), and frequently, e. g. in  $\epsilon\acute{\epsilon}\rho\gamma\alpha\delta\omicron\nu$ ,  $\eta\mu\acute{\upsilon}\nu\alpha\delta\omicron\nu$  is affixed, as here, to a vowel added to the verb. We mentioned this  $\delta$  above (p. 132) while speaking of the weak passive stem. In the stem  $\epsilon\lambda\nu\delta$ , which thus arose, the auxiliary vowel is of a peculiar nature. Sometimes it is organically lengthened like a radical vowel, e. g.  $\epsilon\lambda\epsilon\upsilon\sigma\omicron\mu\alpha\iota$ .  $\epsilon\acute{\iota}\lambda\lambda\omicron\upsilon\delta\alpha$ ; sometimes, on the other

hand, it is thrown out, as in the Attic ἤλθον.—  
 πᾶ-σχι-ω beside the stems παῖ, and πενῖ, has been  
 frequently derived from παῖ-σχι-ω. The Aspirate,  
 it was thought, which was dropped before σ, became  
 united as the spiritus asper to the χ in the next  
 syllable. But elsewhere we frequently find that the  
 sibilants are able of themselves to exercise an aspi-  
 rating power (σφόγγος beside σπόγγος). Hence the  
 explanation given is doubtful, and the more so as  
 it is probable (see *Grundz.*, II, 271) that the ῖ in  
 παῖ is an additional element. We are led, there-  
 fore, to a root πα with a secondary form πεν (cp.  
 γα, γεν; τα, τεν), from which by the addition of ῖ,  
 we have πα-ῖ, πεν-ῖ, and by the addition of σχι,  
 πα-σχι, and with peculiar aspiration πα-σχι.—Finally  
 in regard to μί-σχι-ω, the Latin *misc-eo* makes a con-  
 nection between the σχι and the characteristic letters  
 of the Inchoative class probable. In this case, with-  
 out doubt, owing to some indistinct analogy with  
 forms like μιγῆναι, μιγ-νυ-μι, the medial takes the  
 place of the *tenuis*.

We have now only to say a few words on those  
 verbs belonging to this class which mark the highest  
 degree of irregularity, inasmuch as in them two or  
 more entirely distinct stems are combined into one verb.  
 These are but 5 in number: viz. 4. ἐσθίω, 8. ἐράω,  
 11. τρέχω, 12. φέρω, 13. εἶπον. The phenomenon  
 as a whole is of peculiar interest to the student.  
 It causes us to throw a glance at the abundance of  
 verb-stems, which the older language possessed to  
 express nearly related notions. Even the pupil can  
 be made to understand that, speaking strictly, in  
 all these cases several defective verb-stems of slightly  
 different meaning mutually supply each other's de-  
 ficiencies, so as to form one idea, τρέχω, ἔδραμ-ο-ν  
 are related to each other in the same manner as if  
 we were to say 'I walk' (present), 'I ran' (past);

ἔσθίω, ἔ-φαγ-ο-ν as 'I feast', 'I ate up'. Occasionally we can succeed with the aid of comparison in discovering the particular sense which was originally proper to the separate stems. I have attempted to do this especially in regard to the roots  $\text{Fi}\delta$  ( $\text{ιδεῖν}$ ),  $\delta\pi$  ( $\delta\psi\omicron\mu\alpha\iota$ ), and  $\text{Fo}\rho$  ( $\delta\rho\tilde{\alpha}\nu$ ), which supplement each other, in *Grundz.*, I, 79 sq.; and Tobler in Kuhn's *Zeitschr.*, IX, p. 241 sq. has examined this remarkable phenomenon in a manner substantially agreeing with my view. He places it very happily on the same level with the irregularities in Comparatives ( $\acute{\alpha}\gamma\alpha\delta\acute{\omicron}\varsigma$ ,  $\beta\epsilon\lambda\tau\acute{\iota}\omega\upsilon$ ; *bonus, melior, optimus*). It cannot be mere accident that language has fixed on one of the many roots which it possesses, for the present stem, and on another for the aorist stem. If the primary notion of the root *vid* was, as I believe that I have shown that it was, that of the discovering, perceiving look, that root was especially adapted to denote the momentary act (*conspicere*) expressed by  $\text{ιδεῖν}$ ; while the root  $\text{Fo}\rho$ —which recurs in our 'ware' ('to be ware of'), and in the Greek ὄρα—in the primitive use of the root as seen in the Homeric ἐπὶ ὄρονται (*Od.* γ 471, ξ 104), ἐπὶ ὀρώρει (*Il.* Ψ 112), no less than in οὐροσ 'watchman', denoted the cautious watchful look; and moreover in the derivative ὀρά-ω which presupposes a noun ορα, was thoroughly adapted to express the continuous action of the present stem.

We pass on now to the several verbs of this category. No. 4 ἔσθίω seems indeed to go back to two distinct stems, but does not do so. ἐδ and ἔσθ can be brought into connection phonetically. The second form is increased by that  $\sigma$ , which we find also in the present stem of  $\text{πλ}\acute{\eta}\text{-}\sigma\text{-}\omega$ ,  $\text{πρ}\acute{\eta}\text{-}\sigma\text{-}\omega$ . The Homeric ἔσ- $\sigma$ - $\omega$  is in ἔσ- $\sigma$ ί- $\omega$  increased by the Iota of the I-class. It is a noticeable instance of the agreement between the Greek and Latin languages that the root ἐδ, which the Latins inflect in many



forms without the connecting vowel *es-t*, *es-tis*, *es-sem*, presents in Greek at least one form inflected in the same manner—the Homeric ἔδ-μεναι.—The root φαγ, on the other hand, is analogous to the Sanskrit *bhaḡ* ‘to divide’, from which springs *bhagas*, *portio* (*Grundz.*, I, 92), so that we have a similar transition of meaning to that found in δαίς (Rt. δα ‘to divide’), unless we suppose that the yet more outward notion of ‘breaking’ is the primary one. This would agree very well with the use of the Indian words *bhaḡ*, and *bhañḡ*.

In regard to No. 8 little need be added to what has been said. The root ὀπ in the first instance stands side by side with the Latin *oculus*. The original *κ*-sound is to be seen in the gloss quoted by Hesychius ὀκκον, ὀφθαλμόν, and in the changed form caused by the influence of the adjacent *ι* in ὄσσε (= ὀκκ-ς), ὄσσομαι (= ὀκκ-ι-ο-μαι); see further *Grundz.*, II, 51.—The comparison of the kindred languages leads to no certain conclusions concerning the stems τρεχ, and δρεμ (No. 11); but in regard to the verb-stems signifying ‘to bear’ we find at least a number of points worthy of notice (*Grundz.*, I, 264, 292). Thus the root φερ is found only in the present stem in both the classical languages, and in both occasionally without a connecting vowel, φέρ-τε = *fer-te*. The stem ἐνεγκ, on the other hand, is elsewhere found only in the Slavo-Lithuanian branch of language, and there merely in the form Eccl. Slav. *nes* (Lith. *nesz*)—a form not surprising to those acquainted with the phonetic laws of that language. The Latins seized upon the Rt. *tul* (= Sanskrit *tul*, Greek τάλ, τλᾶ) to fill up the defects of the root φερ. The origin of the future is as yet a matter of conjecture, nothing certain having come to light.

Of the three stems given in No. 13, ἐρ and ῥε are only phonetically different. Both unite in the

root  $\mathcal{F}\varepsilon\varphi$ , with which Latin *ver-b-um* could be compared even in the grammar (cp. *Grundz.*, I, 308). The root  $\mathcal{F}\varepsilon\pi$  from which arose  $\acute{\epsilon}\pi\omicron\varsigma$ ,  $\acute{\epsilon}\tilde{\iota}\pi\omicron\nu = \mathcal{F}\varepsilon\text{-}\mathcal{F}\varepsilon\pi\text{-}\omicron\text{-}\nu$ , has, like  $\delta\pi$ , a specifically Greek  $\pi$ , to which  $c$  in Latin corresponds: hence  $\mathcal{F}\omicron\psi = \text{vox}$ ,  $\delta\sigma\sigma\alpha = \mathcal{F}\omicron\chi\jmath\alpha$  (*Grundz.*, II, 47). We may assume 'to shout', 'shout out' as the original meaning of this root, which again was obviously well adapted to express the aoristic action. To these may be added a fourth stem, quite distinct from all three—the Homeric  $\sigma\epsilon\pi$ , the kindred words to which are given in *Grundz.*, II, 55. Here also the primary sound was a guttural as is shown by old Latin *insece* =  $\acute{\epsilon}\nu\epsilon\pi\epsilon$ . By syncope we get the aorist  $\acute{\epsilon}\nu\text{-}\sigma\pi\text{-}\omicron\text{-}\nu$ . The Imperative  $\acute{\epsilon}\text{-}\sigma\pi\text{-}\varepsilon\text{-}\tau\epsilon$  is most naturally explained as reduplicated  $\sigma\varepsilon\text{-}\sigma\pi\text{-}\varepsilon\text{-}\tau\epsilon$ .

Further, in a certain sense the verbs here collected do not exhaust the mixed class. As in Latin (*e*)*sum*, *fui*, *esse* is compounded of the two roots *es* (Greek  $\acute{\epsilon}\varsigma$ ) and *fu* (Greek  $\varphi\upsilon$ ), so we may join  $\acute{\epsilon}\tilde{\iota}\mu\acute{\iota}$ ,  $\acute{\epsilon}\varphi\upsilon\nu$ ,  $\pi\acute{\epsilon}\varphi\upsilon\chi\alpha$  or  $\gamma\acute{\epsilon}\gamma\omicron\nu\alpha$  together in Greek. There is only this distinction that for the Greek forms of the aorist and perfect there is a present found in common use, whereas *fuam* and the like belong to the archaisms of Latin.—The three verbs also, which signify to strike,  $\pi\acute{\alpha}\iota\omega$ ,  $\pi\alpha\tau\acute{\alpha}\sigma\sigma\omega$ , and  $\pi\lambda\acute{\eta}\sigma\sigma\omega$  mutually supplement each other inasmuch as the first two are used especially in the present stem of the active, the third in the perfect and passive stem  $\pi\acute{\epsilon}\pi\lambda\eta\gamma\alpha$ ,  $\acute{\epsilon}\pi\lambda\acute{\eta}\gamma\eta\nu$ . But the relation between the three is not so fixed and radical that they could be included in the grammar.

### § 328.

The preference of the Greeks for the form of the future Middle over the Active occurred to Buttmann as a noticeable fact. In *Ausf. Gr.*, II, 85 he

collected 53 primitive and 14 denominative verbs, in which the future is Middle in form and Active in meaning. This number has been raised by Krüger § 39, 12 to 77 from the Attic authors only, including however the verbs which alternate between an Active and Middle future form. Buttmann was of opinion 'that this phenomenon was one of the peculiarities of the Middle generally, rather than the future. In the older language from Homer downwards, the Middle is frequently used for the Active without any distinction of meaning.' This view stands in connection with an incorrect notion of the older Greek language which Buttmann regarded as wanting in definiteness and development. We can by no means assent to it; on the contrary, the older period is just that in which it is most impossible to regard the Middle signification as something separable from the Middle form. Krüger, therefore, very properly strikes out another path, observing quite correctly that most of the verbs which come under this head, 'denote an expression of bodily or intellectual power', and consequently 'the Middle form is not at variance with the meaning.' In § 266 I have referred in a similar manner to the signification of these verbs. It is true, that I have only noticed the 'bodily activity, my reason being that I am in that place discussing only the so-called regular verbs, i. e. the verbs of the first four classes. The expression of 'intellectual force' is denoted almost exclusively by verbs which like γινώσκω, μανθάνω, πάσχω belong to other classes. It is without doubt a happy idea to combine the Middle future of Active meaning with that kind of Middle, which Krüger calls 'dynamic', and I call 'subjective', or 'inward' (§ 480). For in this usage less than any other is it possible to separate the Middle sharply from the Active. It depends on but a slight difference in the shade of thought whether

an action is regarded as purely external, or as one proceeding from the power of the subject in any other than the ordinary sense. The only doubt is whether in some verbs other usages of the Middle are not more in point, especially the indirect or dative Middle (§ 479) ὄψομαι, ἀκούσομαι as well as the Homeric ὀρώμαι, ἰδέσθαι, and the common Greek αἰσθάνομαι, οἶομαι, ἀπολαύσομαι, ἔδομαι, πίομαι like τέρπομαι, ἐστιάομαι, εὐωχέομαι are certainly explained more simply from the latter than the former. Here language appears occasionally to have regarded the action as one which the subject allows to take place of itself. But at the same time it is certainly no mere accident that this shade of representation is to be found to an especial degree in the future. As the future depends less on the volition of the subject, so it is more natural to denote a future action as one which is allowed to take place of itself, rather than one directly originated. The verb-root *jā* also, which we recognized p. 118 as an element in the formation of the future, denotes merely the intention; and it is not an insignificant fact, that the intransitive *werden* serves in German for the auxiliary verb of both the passive and future.

### § 329.

In roots, in which an alternation is found between the transitive and intransitive meaning, it is a striking fact that the intransitive is evidently the earlier. This is clear from the simple fact that it is found in the tense-stems of older formation, whereas the transitive force occurs in the present and the compound tense-stems. We shall certainly not be wrong in assuming that in the present stem ἵ-στα (= σι-στα) the change from the notion of 'standing' to that of 'placing' was not uninfluenced by the reduplication,

in regard to which it is noticeable that the same signification is found accompanied by the same phonetic element in Latin *sisto*. As an aorist for this notion of placing the later form  $\sigma\tau\tilde{\eta}\sigma\alpha\iota$  was adopted,  $\sigma\tau\tilde{\eta}\nu\alpha\iota$  having been given up to the older intransitive meaning.

### CHAP. XIII.—DERIVATION.

ON this chapter as a whole I may here repeat the words which I have used on the subject in another place (*Zeitschr. f. d. ö. Gymn.*, 1856, p. 13 sq.). ‘Derivation is rarely made a special subject of continuous study. Yet it is not, therefore, out of place in the grammar. For when the accident can be regarded as thoroughly mastered, the teacher will frequently find an opportunity, in explaining an author, to refer to this chapter, and by the help of the material here collected to induce the pupil to avail himself of the leading principles of derivation in order to facilitate and strengthen his knowledge of the Greek vocabulary.’ I believe that I am not wrong in maintaining that the knowledge of the vocabulary is a greater difficulty in learning Greek than the acquaintance with the forms and their usages. And owing to the excellent lexicons now in existence to help him, the student is very easily led to entertain the notion that a word is a thing on which it is possible to have recourse at any moment to the dictionary. Against such a purely external conception—which only encourages idleness—we have to contend. The pupil must regard a given word not merely as a word, but as a structure of speech united to others by stem and termination, no less than the grammatical forms. It is true that etymology, when driven to excess, is a great evil, and to neglect other subjects in favour of it would be very absurd. Nevertheless,

here as elsewhere the understanding may be allowed to assist the memory in acquiring the vocabulary, though less regularly, and in a manner which must depend entirely on the good sense of the tutor. In the later editions of my grammar I have also sought to call attention to this part of instruction, by always comparing the formation of nouns, when explaining the verb. But it must be borne in mind that in the noun the terminations are the important part, whereas in the verb the root and stem form the starting point and aim of our explanations.

To be exhaustive or complete was obviously quite beyond my purpose in this place, and in the first section also, which treats of the simple formation of words, it was no less impossible within the brief limits here allowed to make any strong distinction between form and meaning. On the whole, the derivation, especially of nouns, is still a much neglected part of grammar, which even in a severely scientific sense, yet requires a thorough revision. Valuable collections and comparisons are to be found in the works of Bopp (vol. III), Schleicher (*Compendium*, II), Pott (*Etymol. Forsch.*, 1st ed., vol. II); while with regard to the Greek language in particular, this subject has been treated by Lobeck especially with the accurate and comprehensive learning peculiar to him; and his work cannot be left out of sight, even by those who differ from him in aim and method. Still this is a subject in which it is very rarely possible to see to the bottom; and since, for such an insight, it is of prime importance to regard the phenomena of language from a general point of view, I approach the subject of derivation chiefly from that direction in my treatise, *De nominum Græcorum formatione* (Berlin 1842). More especially I have there shown how impossible it is to speak of any one original

specific meaning in regard to the numerous suffixes used in the formation of words; that, on the contrary, the different use of suffixes, originally distinguished only by the slightest shade of meaning, grew up by degrees in language, aided chiefly by the distinction of gender. Those categories of meaning, therefore, in which I have arranged my materials, with a view to teaching at school, are all of later date, and though necessary to the learner for acquiring a knowledge of the language in its fullest development, must not be supposed to have existed in the sense of language from the first. The object also of this whole chapter which is intended to be nothing more than a brief conspectus, did not permit me to give any more detailed description of the classes introduced, otherwise I should have had much to add on the changes which the several categories of meaning undergo. Thus, even a transient glance will show that the classes of words placed under B (*Nomina actionis*) and C (Nouns denoting the result of an action) have many points of mutual contact, and in the selection of examples, this has been pointed out, to some extent at least. For instance, among the *nomina actionis* we find δεσμός, which speaking accurately can only belong to this category so far as it denotes 'binding', but so far as it means 'that which binds', or 'is bound', belongs rather to the nouns which denote the result of an action (§ 343). The Homeric form of the Plural δέσμα-τα (§ 175. D), therefore, corresponds more accurately to the meaning of the word than the masculine form used in the singular. On the other hand, γένος is not confined to the meaning of what is 'created' or 'born', but encroaches on the meaning of γένεσις, 'birth', 'origin', to which is added also the collective application of the word to all that is born—'race'. The difficulty which stands in the way of a really



satisfactory explanation of derivation is owing in a great measure to the changeable nature of all these categories, which, without rendering it absolutely impossible for us to maintain a few leading distinctions, checks the enquiry into details at every step, especially as in many respects we are still without any thoroughly certain starting point. In this respect almost everything is yet to be done for science. Not till the various Indogermanic languages have been investigated in a comprehensive manner, not merely with regard to sounds, but also with a delicate observation of the meanings of words, shall we be able to go further. Nothing whatever is gained by hastily identifying suffixes which are only partially similar. On the contrary, at present very little is possible beyond a careful comparison of phenomena easily connected in sound and usage. As a useful help for Greek derivation I may here mention Pape's *Etymologisches Wörterbuch der Griechischen Sprache zur Uebersicht der Wortbildung nach den Endsilben geordnet* (Berlin 1836), and Schwabe, *De Diminutivis Græcis et Latinis* (Gissæ 1859), in its way a pattern of what an essay on a special subject should be.

## § 353.

The derivative verbs are so arranged that the three most frequent classes are placed at the beginning. The common origin of the verbs in  $-\omega\omega$ ,  $-\alpha\omega$ ,  $-\varepsilon\omega$ , from the form in  $-ajâmi$ , which is preserved in Sanskrit, has been already mentioned more than once (pp. 109, 115). The distinction of vowels was certainly in the first instance, not irregular. With Schleicher (*Compend.*, 295) I regard the vowel  $\alpha$  as the final vowel of a noun-stem; but  $-jâmi$ , as has been already shewn, as an auxiliary verb, originally meaning 'I go'. If, therefore, we assume an Indogermanic *tima-jâ-mi*

to correspond to the Greek τιμά-ω, the former would mean, literally, 'I go honour.' *Tima* is here assumed as a noun-stem, like Greek τιμα. So far as the meaning is concerned, we must, it is true, from the first, ascribe to the verb of 'going', the power of denoting the idea of 'production', 'operation', just as we see the intransitive στα pass into ἵστημι, and inchoative verbs, e. g. βάσχω, pass into causative (p. 142). Thus then this very signification 'I bring into honour' was retained for τιμάω; while in other verbs the intransitive idea of being 'busied about something' became prominent. Now when the original α was divided, and separate A and O-declensions began to be formed in Greek, it was natural that the same vowel should occur in the noun-stems, and the verb-stems derived from them. Thus, in the first instance, we may take it as a universal rule that only verbs in -αω should be formed from noun-stems in α, and only verbs in οω from noun-stems in ο. Moreover this relation of the noun-stems and verb-stems will actually be found to preponderate greatly, in the language as it has come down to us. For this reason, formations like μισθό-ω, τιμά-ω are put first in the examples given; but at the same time, a few are added in which noun and verb differ, e. g. γοά-ω, ζημιό-ω. The verbs in -εω occupy an indifferent position since ε is as far removed from ο as from α. But it is undeniable that in many cases the original rule has not been retained. Not merely is a different vowel found in verb and noun, but we even find a vowel in the verb, which is quite unknown in the noun-stem, e. g. πυρ-ό-ω, δηρι-ά-ομαι, ἱστορ-έ-ω. Many reasons may be given in explanation of this anomaly; thus in some instances it is easy to suppose that the stem retained in the verb was at a certain period of the language in use by the side of the noun-stem. But it is very

doubtful whether we are always justified in making this assumption. Endings which frequently occur easily acquire an independent existence in language. Verbs in  $-\epsilon\omega$ ,  $-\alpha\omega$  were so common that they were derived by extended analogy from noun-stems in which the elements of the derivative did not really exist. In this respect, as usual, Latin is even less consistent than Greek. The Latin verbs in  $-are$  ( $-ari$ ) correspond to those in  $-\alpha\omega$  and  $-\epsilon\omega$ , so that we not only have *coronāre* from *corona*, but also *domināri* from *dominus*. Nevertheless I think it probable that at an earlier period of the language, Latin also possessed an O-conjugation to correspond to the O-declension. But this has been preserved only in a few verbal adjectives like *agrō-tu-s*; from which we may, without difficulty, go back to a form *agrō-e-re* 'to make sick'; to which *agrō-tu-s* stood in the same relation as  $\iota\sigma\omega-\tau\acute{o}-\varsigma$  to  $\iota\sigma\acute{o}-\omega$ . And since the old *o* in Latin often passes into *u*, we may without difficulty regard *nāsū-tu-s*, *cinctū-tu-s*, *versū-tu-s*, as similar forms; and perhaps, compare even *argu-er-e* with *argū-tu-s* to a Greek ἀργό-ω (from ἀργός 'bright'), though, it is true, the form does not occur.—In the other leading classes of derivative verbs, that example is placed first, which gives the type as, for instance, in the seventh section,  $\sigma\eta\mu\acute{\alpha}\iota\nu-\omega$  from the stem  $\sigma\eta\mu\alpha\tau$ . After what has been already said on these formations of the present, it is hardly worth while to remark that  $\sigma\eta\mu\acute{\alpha}\iota\nu-\omega$  stands for  $\sigma\eta\mu\alpha\nu-\jmath\omega$ . The Jod belongs to the verbal element;  $\sigma\eta\mu\alpha\nu$  is the noun-stem  $\sigma\eta\mu\alpha\tau$  in an apparently older form. In the same manner  $\delta\omicron\nu\mu\acute{\alpha}\iota\nu-\omega$  is from an older stem  $\delta\omicron\nu\mu\alpha\nu$ , preserved in Latin *nōmen*, Sanskrit and Gothic *nāman*, and which also may be seen in  $\nu\acute{\omicron}\nu\upsilon\mu\upsilon\nu-\omicron-\varsigma$  among other words. For here, as in the instance just quoted from Latin,  $\nu$  has replaced the older  $\omicron$  (cp.  $\acute{\alpha}\nu\acute{\omicron}\nu\upsilon\mu\omicron-\varsigma$ ,  $\sigma\upsilon\nu-\acute{\omicron}\nu\upsilon\mu\omicron-\varsigma$ ), so that  $\nu\eta-\omicron\nu\upsilon\mu\upsilon\nu\omicron-\varsigma$  corresponds

to Latin *i-gnominu-s*, which is the hypothetical stem-word from *i-gnominia*.

With regard to composition, I have put together the most essential rules as briefly as possible. Owing to the extraordinary abundance of compounds especially in the poets, this portion of grammar is of peculiar importance in Greek, and cannot be omitted even in school-instruction, without endangering the accurate perception of Homeric epithets, and many highly poetical pictures in the Tragedians. Besides the comprehensive works already frequently quoted, the following deserve especial notice for this division: J. Grimm, *Deutsche Grammatik*, Vol. II, esp. p. 969 sq., where valuable materials for Greek are discussed from the author's point of view; Ferd. Justi, *Ueber die Zusammensetzung der Nomina in den Indogermanischen Sprachen* (Gott. 1861), a treatise distinguished by the most comprehensive learning, which must form the starting point for any more detailed researches of the future, even though we cannot entirely agree with the views on which it is based; Lobeck, *Parerga ad Phrynichum*, where some of the fundamental laws of composition in Greek are established for the first time, and many details discussed in a masterly manner.

### § 354.

‘A noun standing first in a compound appears in the form of its stem: *ἀστυ-γείτων*, *χορο-διάσκαλο-ς*, *σακέξ-παλος*.’

‘Consonant stems are usually united to the second part by the connecting vowel *ο*: *ἀνδριαντ-ο-ποιό-ς*, *πατρ-ο-κτόνο-ς*; *φυσι-ο-λόγο-ς*, and it regularly stands in place of *α* in the stem: *ἡμερο-δρόμο-ς*. The *ο* is dropped before vowels, *χορ-ηγό-ς*, but remains where

the word originally began with a digamma *δημιοεργός-ς* (Homeric); *δημιουργός* (Attic).'

Even the simple fact, that in the first part of a compound, the simple word-stem occurs in its pure form, is of the greatest importance in giving a correct insight into the formation of language. Could this one fact have been recognized, a number of errors would have been avoided, even before the remodelling of the modern science of language. Here the stems are clearly to be seen: the knowledge of which alone makes the declension of nouns intelligible.—By the manner also in which the two parts of the compound are joined together, we may illustrate important traits in the history of language. The uniting vowel was certainly, in the first instance, the short *α*, which was applied in the same manner in the Acc. sing., e. g. *πόδ-α-(ν)*. This *α* is retained in some words unchanged: *κυν-ά-μυια* (Il. Φ. 394), *ποδ-ά-νιπτρο-ν* (Od. σ. 504); but as a rule it passed into *ο*: *κυν-ο-κέφαλο-ς*, *ποδ-ο-κάκη*. And as the same *ο*, by the force of a gradually extending analogy, became the regular representative even of the *α* of the A-declension, e. g. in *μουσο-μήτωρ*, and became attached also to stems in *ι* and *υ*, it is the vowel which is almost universally to be looked for in the syllable which lies between the two component stems—'the composition-vowel', as J. Grimm calls it. But by another somewhat neglected formation we are led back in the compounds to the old *α*, which from the original identity of the hard vowels (p. 28) must always be regarded as the precursor of *ο* or *ε*. The Epic poets who lengthened words to suit the metre, have a whole series of compounds in which *η* represents *ο*, and this, not only in A-stems, in which the fact would be less remarkable, e. g. *μοιρη-γενής* (only in Boc. *μοιρηγενές*, Il. Γ, 182), but even in O-stems: *νεηγενής*, *έλαφη-*

βόλο-ς, and after consonantal stems: αἰῶρ-η-γενέτη-ς, εὐ-η-γενής. This variation is evidently due to the desire to gain a long syllable. But the ο is not, as we should have expected, lengthened into ω, but into η. This points back to a condition of language in which ο and η were still united in an original α. For the same reason, we find occasionally in the same place an ā, e. g. ἀρετᾶ-λόγο-ς, πολεμᾶ-δόκος (Pindar), σταδια-δρόμο-ς (Inscripp.). Thus then this fact in the composition of words establishes and confirms important traits in the history of sound; and also shows us at the same time, how in the course of the formation of languages, peculiar analogies arose, which were no longer understood even by the genius of language, if we may say so; and yet were retained with peculiar tenacity.

Other peculiarities which occur may be arranged under three heads. 1. We have a number of old forms in which the Composition-vowel is rejected: πυγ-μάχο-ς (Od.), μελαγ-χροιής (Od.), πυρ-φόρο-ς. These formations are not actually denoted in § 354 as irregular, inasmuch as σακές-παλος (cp. ἐπεεβόλος, σελαςφόρος, φωσφόρος), is there quoted in proof of the fact that stems are found in their pure state in composition. They are only so far uncommon as in the course of time the vowels mentioned above passed into general use. 2. We find all kinds of abbreviations in the first word-stem, especially in those compounds with sigma-stems, in which they are treated exactly as O-stems: τειχο-μαχία, κρησο-πώλη-ς. 3. We find case-terminations at the close of the first of the two component stems; sometimes the genitive: οὐδενός-ωρο-ς (Il. Θ. 178), sometimes, and far more frequently, the dative, δουρι-άλωτο-ς, κηρесси-φόρητο-ς (Il. Θ. 527), κηρι-τρεφής (Hesiod.); and the closely allied locative Ηυλοῖ-γενής (Il. B. 54). Since it is essential to the nature of composition that two word-stems should

be combined into a whole, without further defining their mutual relations. J. Grimm rightly names these compounds 'improper'. They are, to a certain extent, amphibious forms, which stand on the boundary between synthetic and syntactic combination.

### § 356 AND 357.

‘§ 356. A verb—without changing its nature—can only be compounded with a preposition. The looseness of the connection in such compounds is the reason for the position of the augment after the preposition ἀποβάλλω, ἀπέβαλλον. For the same reason prepositions are frequently separated from their verbs in the poets, and in Herodotus, and in some cases even in Attic prose. This separation is called *tnesis*.

When any other word is to be compounded with a verb-stem, a *nomen agentis* is first formed of the two, e. g. from λιδο-ς and stem βάλ, λιδο-βόλο-ς, and from this λιδοβολέ-ω; so likewise from ναῦς and μάχομαι comes first ναυ-μάχο-ς, and from this ναυμαχέ-ω; from εὔ and stem ἐργ, εὐεργέτης, εὐεργετέ-ω.

§ 357. A substantive of an abstract meaning can only be compounded with a preposition without changing its ending προβουλή. In every other compound the abstract substantive must take a derivative termination. λιδος and βολή make λιδοβολία, &c.’

These two paragraphs contain the most important rules for the composition of words in Greek. ‘Without changing its nature’, i. e. so long as it continues to be what it is, ‘a verb can only be compounded with a preposition.’ This is certainly the plainest way of stating the *regium præceptum Scaligeri* (as Lobeck terms it), which that great philologist first embodied in the simple observation that εὐαγγέλλω could not be a Greek verb. Lobeck, *ad Phryn.*, 560 sq. has

illustrated the validity of this law from every side; and the few exceptions to it, which are, for the most part, merely apparent. Compare also Buttman, *Ausf. Gr.*, II, p. 470 sq. The instinct of language felt the verb to be something far too mobile to enter into permanent combinations with any other part of speech. In its whole framework a very ancient synthesis of predicate and subject; forced moreover to distinguish Active and Middle, kinds of time, orders of time, moods; and this in not a few cases by means of composition—and with the most various changes of the stem-vowel—the verb was not adapted the verb-forms were not the places to combine two different conceptions into a new whole. Only prepositions, which, being originally adverbs, with case-forms not yet universally obliterated beyond recognition, leave the essential meaning of the verb-stem unaltered, and rather denote the direction in which the action aims both in the original or local, and in the metaphorical or intellectual sense, can be brought together with verb-forms under the compass of one principal accent, and thus become one word with them. But the laxity of the connection is evident from the fact that in the Homeric dialect, which in this respect resembles the Vedas, this bond is broken at every moment, and the preposition separated, by means of the so-called Tmesis from the verb which it defines; and yet more because the augment and reduplicated syllable invariably dissolve the connection.

- By the position of these elements, e. g. in  $\sigma\upsilon\nu\text{-}\acute{\epsilon}\text{-}\lambda\alpha\beta\text{-}\omicron\text{-}\nu$ ,  $\pi\rho\omicron\text{-}\beta\acute{\epsilon}\beta\omicron\upsilon\lambda\text{-}\alpha$ , language shews us unmistakably that the real body of the verb begins after the preposition. We might, therefore, even say that only individual verb-forms, and not verb-stems in the proper sense, are compounded with prepositions. The rule holds good in Latin no less than Greek; forms like *ædificio* or *ædi-ficio* being as impossible as  $\omicron\iota\chi\omicron\delta\acute{\epsilon}\mu\omega$ . But inasmuch as the Latin language possesses those



remarkable semi-compounds, or improper compounds, like *calefacio*, *benedico*, which are distinguished to a certain extent by accent and vocalization from the compounds proper, the rule is less strongly marked.

This dislike to permanent composition is shared by abstract substantives. Lobeck, *ad Phrym.*, 489 sq. shews that words like *μισθο-φορά*, *ιστο-δοκη*, *νεκρο-θήκη*, are rare, and only excused by their somewhat technical use; while, as a rule, language adheres to the principle that two ideas can never be permanently united except in personal nouns of agency, *οικο-δέμο-ς* (*adifex*), *λιθο-βόλο-ς*, *ναυ-μάχο-ς*. From these compounded and recreated stems come in their turn, first the derivative verbs, *οικοδομέ-ω* (*edificare*), *λιθο-βολέω*, *ναυμαχέ-ω*; and abstract nouns like *οικοδομία*, *λιθοβολία*, *ναυμαχία*, just as if in German we did not, as we do, in contradistinction to the Greeks, allow *wahr* and *sagen* to form *wahrsagen*, but first formed a noun *Wahrsager*, and then from it the verb *wahrsagen*, and the substantive *Wahrsagerei*. Thus, it comes to pass, that as a rule, in verbs and abstract substantives compounds are not found without the derivative. The middle form however has not, it is true, been preserved in every case. It often has merely an existence in theory for the sense of language. These rules are of very obvious importance, and give us in many directions a deep insight into the nature of language.

### § 358.

‘Compounds having the first part formed directly from a verb-stem are rarely met with, except in the poets. They are formed in two ways, viz.:

1. The verb-stem or present stem is joined directly to stems beginning with a vowel, and to those beginning with a consonant by means of the connecting

vowel ε, ι, or ω: δακέ-θυμος (Pres. δάκν-ω, cl. 5), πείθ-αρχο-ς (πείθομαι and ἀρχή), &c.

2. A form strengthened by σ and resembling the Weak aorist stem is joined in the same way to the second part of the word: λυσί-πονος, πλήξ-ιππος, &c.'

The old compounds here mentioned, like δακέ-θυμο-ς, which belong almost exclusively to poetical language, I have regarded, after the old plan, as combinations of a verb-stem with a noun-stem, although, of course, I am aware that Comparative Grammarians (Bopp, *Vergl. Gr.*, III, 438; Justi, p. 45) to some extent take a different view of them. But many as have been the attempts to establish a noun-stem in the first members of words like δακέ-θυμο-ς, λυσί-πονος, which Grimm regarded as forms of the Imperative, and valuable as have been the analogies brought forward in support of this view, especially for the second kind of formation, the question seems to me by no means settled as yet, and, therefore, in a school-grammar no other course was open but to adhere to the old method of explanation.

### § 359.

'In regard to their meaning compound adjectives and substantives are divided into three principal classes.

1. *Determinative* compounds. In these the second word is the principal, which, without in any way altering its meaning, is merely defined by the first. These compounds may be paraphrased by changing the first part either into an adjective or an adverb: ἀκρόπολι-ς, i. e. ἄκρα πόλις (Homeric πέλις ἄκρη); μεσ-ημβρία, i. e. μέση-ημέρα, &c.

2. *Attributive* compounds. In them the first word also defines the second, yet so that the latter alters

its meaning, and together with the first forms a new idea. These compounds can generally be paraphrased by employing the participle of ἔχω or a verb akin to it in meaning, and adding to this the second word as an object, the first becoming an attribute to the object: μακρό-χειρ, *longi-manus*, i. e. μαρὰς χεῖρας ἔχων, ἀργυρό-τοξο-ς, i. e. ἀργυροῦν τόξον φέρων; ὁμό-τροπο-ς, γλαυκ-ῶπι-ς, &c.

3. *Objective* compounds, or those of dependency. In these either the first word is grammatically governed by the second, or the second by the first, so that, in the paraphrase, one of the two must be put in an oblique case: ἡνί-οχο-ς = τὰ ἡνία ἔχων, λογο-γράφο-ς, i. e. λόγους γραφῶν, ἀξιο-λογο-ς, i. e. λόγου ἄξιος; φιλό-μουσο-ς δεισι-δαίμων, &c.

Even a question which appears to belong so peculiarly to Greek, and to be so closely connected with the strictest problems of philological inquiry, as the inquiry into the meaning of compounds, was satisfactorily explained for the first time by the aid of comparative grammar, and especially of Sanskrit. We do not know that the Greek grammarians ever made the compounds generally an object of minute study, or investigated their meaning. The Indians, on the other hand, with the acuteness peculiar to the nation, have arranged the infinite mass of compound words which occur in Sanskrit, in six classes, according to their meaning. This arrangement, though certainly not satisfactory in every respect, brings into striking prominence the most essential distinctions, and is, therefore, of great importance, not merely for Sanskrit, but for all the kindred languages, and even for linguistic enquiry in the widest sense. Justi in the work so often quoted has attempted in a manner well worth notice to make this division clearer and render the classes more definite.

In the grammar it was merely necessary to separate distinctly and denote clearly those kinds of composition which are most common in Greek. Now without any doubt three kinds stand prominently forward, and among these, that is placed first which in many respects is the simplest. Here the force of the composition is manifested only in defining the second word more accurately by the first. For this reason I join with Bopp in calling this class of compounds '*Determinativa*'. Objections have been brought against the term as too wide because, strictly speaking, one word is defined more accurately by the other in every compound. But in this class the definition, and nothing more, is the essential part. Justi p. 87 prefers the expression 'defining by apposition', which certainly denotes the relation more clearly, but is inconsistent with the view of apposition which I have introduced with good reason into my syntax (§ 361, 12); and moreover does not cover all the cases which may be brought into this class. In ὁμό-δουλο-ς (fellow-slave), for instance, we cannot without some violence speak of ὁμο as in apposition to δοῦλος; still less, in compounds like παμμήτωρ (Soph. Ant. 1282 τοῦδε παμμήτωρ νεκροῦ), Δύσπαρις, ἀγα-κλειτό-ς, ἀμφι-θεάτρο-ν. For the same reason, the expression 'attributive', which Lange proposes for this class of compounds, is unsuitable.—To this class applies the observation of Lobeck (*ad Phryn.*, p. 600): '*non solent Græci substantivum cum adjectivo ita componere, ut compositorum eadem significatio sit, quæ fuerat appositorum.*' By the composition of two words, language attempted as a rule, to express something which could not be expressed by simply placing them side by side. In some cases, it is true, the instinct of language was contented with obtaining by this method, a technical, and, therefore, specially limited expression, e. g. in ἀκρό-πολι-ς, which does not mean 'every high city',

but the fortified high part of the city, that is to say the high city, as raised above the rest; and, nevertheless, the word is unknown to Homer\*. Similarly in the numerous botanical compounds with ἀγριο-, ἀγριελαία, &c.; which however came into use by slow degrees. Others are coloured by the fancy of the moment, or are nicknames with a special point in them, as Il. Ψ. 791 ὠμογέροντα δέ μιν φασ' ἔμμεναι (cp. Od. ο. 357 ἐν ὠμῷ γήραϊ ᾤκηεν), Αἰνόπαρις.

The second class stands in the strongest contrast to the first. The same formations have quite a different sense according as they belong to this or that class. This did not escape even the Byzantine grammarians. Lobeck (see above) quotes Tzetzes *ad Lycophr.*, 731 καλλίπαις ἢ καλῆς παιδὸς μήτηρ καὶ ἢ καλὴ παῖς (following Lobeck's certain emendation). In the first or attributive sense, according to my terminology, the epithet is given to Phædrus in Plato 261 A as the sire of beautiful speeches. καλλίπαις, in the second, or as I call it, determinative sense occurs in Eurip. *Orest.* 956; where Persephone is spoken of as καλλίπαις θεά. The peculiarity of the second class consists in this that, to borrow the striking expression of Justi p. 118, 'the subject is not *in*, but *outside* the compound.' That is what I have attempted to point out by the epithet 'attributive', which word I do not use here in the sense in which it occurs here in the syntax. These compounds are nothing by themselves; they have a meaning only in combination with a substantive. In a work of art the attribute is often added to god or hero in the loosest manner, without any regard to the particular situation in which the artist introduces him, and the case is similar with these attributive compounds, which in epic poetry form a great portion of the

\* The word occurs twice in Od. VIII 494 ὄν ποτ' ἐς ἀκρόπολιν δόλον ἤγαγε διὸς Ὀδυσσεύς, and 504 ἐς ἀκρόπολιν ἐρύσαντα.

characteristic *epitheta ornantia*, like χρυσα-κόμη-ς, λευκ-ώλενο-ς, βο-ῶπι-ς, ῥοδο-δάκτυλο-ς. Since in this case, language, by simply bringing together two word-stems under one accent, creates a new formation in the shortest manner possible, we may say that these compounds occupy in some measure the highest rank; and Justi very properly distinguishes them from the rest, as ‘the higher kind of composition’. But just for the very reason, that in these compounds a peculiarly energetic effort is required on the part of the creative imagination, they do not suit except, to a very small extent, the dead level of every-day speech. The Indians name these compounds *Bahuvrīhi*, i. e. ‘much rice’, or more clearly ‘rich in rice’, after an example of the class which in Greek would be πολυ-όρυζο-ς. Bopp, *Vergl. Gr.*, III, 455 has used the term ‘possessive compounds’, because they ‘denote the possessor of the qualities expressed by the separate parts of the compound, so that the idea of possession has always to be supplied.’ This name and definition can be applied to many, but not by any means to all the formations belonging to this class. Even some of the examples quoted in the grammar, e. g. πικρόγαμος (Od. α. 226 πάντες κ’ ὠκύμοροι τε γενοίατο πικρόγαμοί τε), δεκαετής, show that the field occupied by these compounds is not so narrow as Bopp supposes, and for the language of the Tragedians the possessive signification is quite insufficient. The stiff and awkward paraphrase ‘having a double tongue’ would not be an equivalent of our word ‘double tongued’ (cp. ἀμφίγλωσσοι in Eustathius), and still less could we translate πικρόγλωσσοι ἀραί (Aesch. Sept. 768 Herm.) by ‘having a bitter tongue.’ Thersites is not called ἀμετροπέης because he has, but because he utters unmeasured words (cp. λιγύ-φθογγο-ς); οἰοχίτων (Od. ξ. 489) is not merely the man who merely has but one coat,

but the man who wears but one. *χειροδίκαι* (in Hesiod. *ἔργ.* 189) are men who practise the 'right of hand'; the *πολύκερως φόνος* of the raging Ajax (Soph. *Aj.* 55) does not possess, but falls upon 'many horns'; the *λευκοπήχεις κτύποι* (Eurip. *Phœn.* 1356) denote the beating caused by white arms; in short, the connection of these compounds with their substantives can by no means be explained in every case by the idea of possession; and I doubt whether any more accurate definition is possible than that given in the grammar. 'The new idea formed by the composition is attributed as a quality to another word.' The attempt to express the same idea by other means than composition is carried out in a very different way.

The third kind of compounds is so far nearer the first than the second, that in it, one of two ideas is defined by the other without undergoing any further change or modification. But the relations between the ideas in the two classes are different; in the one case we have congruity, in the other, government. Besides this, another distinction, the freedom of position, comes before us. In the third class also, it happens more frequently than in the other two that the second word had no existence before composition. This is especially the case with the numerous compounds in *-ο-ς* in the nom., which, chiefly in an active sense together with those in *-ης*, in a passive sense, arise from the combination of a noun-stem and verb-stem, e. g. *μελο-ποιό-ς*, *βουνόμο-ς*, in an active sense, beside the passive *βού-νομο-ς*, *πατρο-κτόνο-ς*, but also *θεοστυγής*, *οἰκογενής*. But the essential characteristic of this class is the relation of government which exists between the two members of the compound. The difference of government is shown by the examples. Those compounds are the most frequent which when paraphrased by a participle

or verbal adjective require the dependent word to be in the accusative or instrumental case. Examples of the first are: δρυ-τόμο-ς, δορυ-φόρο-ς, λοχ-αγό-ς, ἱππό-δαμο-ς, πτολί-πορτο-ς, ἱππ-αγωγό-ς, ἔλκε-χίτων, of the second: αἰχμ-άλωτο-ς, θεό-δημητο-ς, ἱππό-βοτο-ς, ναυσί-πορο-ς. But the relations expressed by the other cases are also found, e. g. the locative in Θηβα-γενής, or with locative form Θηβαι-γενής, ὄρει-βάτη-ς; the dative in ἐπιχαιρε-κακό-ς, θεο-εἰκελο-ς; the genitive, in German the most frequent, but rather rare in Greek, in οἰκο-φύλαξ (Aesch.), ἀστυ-γείτων, χορο-διδάσκαλο-ς.

This is not the place to enter further into the subject of composition. Here I could only illustrate the leading classes by a larger number of examples and a few additional words of explanation. It will certainly be an advantage to the pupil also in the explanation of the bolder compounds in Homer and the Tragedians to cast a glance into this laboratory of language. For the wealth, and wise moderation of the Greek language in this respect are truly admirable.

---



## PART II.—SYNTAX.

THE Syntax given in my grammar will require far fewer explanatory notes than the Accidence, because it deviates far less from the usual treatment of the subject. A thorough revision of this part of grammar is as yet impossible owing to the want of the necessary scientific preparations, and above all of ample collections of the syntactical usages of the kindred languages, such as have hitherto been made only for Latin, and alas! incompletely for German in the fourth volume of J. Grimm's German Grammar, a book which the student of Greek syntax will find remarkably instructive. The want of a syntax of Sanskrit is still constantly felt. For the Slavonic languages Schleicher has at least made a commencement in his Lithuanian Grammar (Prague 1856), which was often instructive to me in comparison with the Greek usages. Many excellent hints of a general character, and important comparisons for a particular department of syntax—the prepositions—are contained in Ludwig Lange's paper, '*Ueber Ziel und Methode der syntaktischen Forschung*', in the transactions of the Gottingen Philological Association (Gott. 1852). Kvičala has lately expressed himself in a similar manner with regard to the requirements of syntax in his admirable review of Bäumlein's '*Partikeln*'—*Zeitschr. f. d. ö. Gymn.*, 1863, p. 304.

Such being the position of scientific enquiry, a

certain amount of moderation was prescribed in dealing with the Syntax. Only where the analysis of the forms secured a firm foundation, or where the change in our conception of the life and nature of language urgently recommended new points of view, could and must a change be made. For the rest my aim was merely to put together in a plain and compendious manner the actual usages of the language, as they have been fixed by the industry and acuteness of the excellent philologists of the last half century. After Gottfried Hermann, whose works form an epoch, K. W. Krüger and Madvig deserve especial mention in this respect. But in so doing a double object had still to be kept in view throughout. First the positive object of preserving the greatest possible uniformity between the syntax and accidence both in the general point of view and in the mode of expression, and secondly the negative object of keeping at as great a distance as possible all that was fanciful, all preconceived notions or constructions such as still alas! continue to force their way into our grammatical manuals though in garbs changed for the occasion. All these categories of language, forms of thought, relations of the sentence or whatever else be the name by which they are or have been called, on which so much weight is and still will be laid to some extent from different quarters, rest at bottom on the notion that thought was prior in development to language, and that the forms of language are the product of acute reflection, the invention of certain individuals who founded language, the *inventores, constitutores sermonis*, as they were once termed. This conception, which corresponds to the modes of thought current in the last century, is now completely contradicted especially by the profound enquiries of W. von Humboldt and by all that the science of language in the widest sense has brought

to light since his time. In this respect we need only refer to the various works of Steinthal and Heyse's '*System der Sprachwissenschaft.*' Thought grew up by and with language; the forms of thought with and out of the forms of language in a thoroughly instinctive and popular manner. Hence the usages of syntax also are wholly a growth which like growths of other kinds admits no tying up into logical formulæ, but can only be understood by historical study and correct conception of the development of language.

If, therefore, in explaining the syntax we must to some extent abandon that deceptive charm which may be gained even in a school-grammar by connecting individual usages with general principles, if a certain amount of dullness and dryness is the necessary consequence of strict adherence to the truth—there are yet other elements intellectual in themselves or calculated to arouse the intellect which need not be despised. One such element, for instance, was found in the arrangement of the phenomena connected with each other. Even where the ultimate questions must still remain unanswered, the proof of such internal connection serves to combine individual usages together and to give life to the study of them. But we must, it is true, allow that in this respect the final sentence has still to be pronounced in many instances; and many usages can be connected in more than one way. I am very far from supposing that I have always taken the right path here. The certainty attained in the Accidence is often not attained in Syntax. But I can assure the reader that the arrangement and connection of the different usages given in my Grammar is due to mature consideration and that I have always kept the syntax carefully in view though my studies have been more especially directed to other departments of language.

Another more peculiar feature in my treatment of the syntax is the connection of Greek usages with these equivalents in German and Latin. If, as we have seen, the life of language is to be regarded as something instinctive, it follows that the usages of language can by no means be taught by rules and definitions merely, but it is an essential part of teaching that they should be connected with known usages in other languages and best of all with those of the student's mother tongue as the language with which he is most familiar. In this way better than any other is made good that beautiful saying of W. von Humboldt that 'strictly speaking language cannot be taught, but we can only awaken it in the feeling of the learner.' Thus teaching actually becomes as in Plato an ἀνάμνησις, not however of knowledge acquired in an earlier condition of the soul, but of the notions and perceptions born and bred in each individual. Thus, for example, I attempt in § 361, 10 to bring the further predicate as conceived in the Greek mind nearer to the pupil by a few German examples of a kindred nature:—*Ich fühle mich gesund, halte dich bereit, wir nennen dich unsern Vetter.* I explain the apparent variety in the Greek genitive in combination with substantives by the addition of German compounds, § 408:—e. g. *Landsmann, Hausfreund, Eisenbahn, Erbtheil, Vaterfreude, &c.*; in many verbal constructions and also for the Genitive absolute (§§ 417, 428):—*stehenden Fusses* I adduce similar constructions from German.\* In this respect of course great moderation must be preserved just as the comparisons with Latin also must be limited to what is important in the way of similarity or contrast. But it would be unnatural to make no use of the grammatical conceptions and analogies implanted in the pupil by his own sense of language;

\* These German parallels are of course omitted, or replaced by English equivalents in the translation of the Grammar.

and it is not less undesirable that the knowledge already attained of Latin should remain entirely unconnected with his knowledge of Greek. In regard to both languages moreover, it is quite as important to call attention to what is different as to what is similar. Now the difference is often marked in the shortest and most striking way by translation. This is the reason that I always lay such great weight on exact translations of the Greek constructions. The translations in my grammar are intended to be committed to memory by the pupil together with the Greek examples. For this reason they are added throughout and not left either to the pupil's uncertain intelligence or to the teacher's caprice. Indeed, the definite form of the translation often appeared to me quite as essential as the definite framing of the rules. Moreover had I chosen such instances only as admit of a correct translation apart from the context in which they occur, I should have been limited far more in my choice, or I must have given references to the places where they may be found. For many passages are not really intelligible till we see them in the context. Of course these examples cannot by any means take the place of independent exercises in translation. But for such sufficient material could not be given within the narrow limits prescribed for my grammar. After I had made the attempt in the first edition by a very considerable collection of characteristic examples, I felt convinced on my attention being drawn to the matter that my collection was still insufficient and preferred to make a complete separation between the grammar and exercise-book. In all subsequent editions, therefore, the grammar contained so many examples only as were absolutely necessary to make every rule clear; and in order to guard against misunderstanding of any kind a translation both into Latin and German, carefully con-

sidered and as verbal as possible is added to every example. From that time the *Griechisches Elementarbuch* by Dr. Carl Schenkl, now Professor at Innsbruck, was intended for an exercise book both in the Accidence and Syntax. It contains a large amount of material, well arranged, and has perhaps sufficiently proved that it serves its purpose by the simple fact that it has gone through five editions (Fifth, Prague 1863). To this may be added the *Uebungsbuch zum Uebersetzen aus dem Deutschen und Lateinischen in's Griechische* by Dr. C. Schenkl (2nd edit. Prague 1861), and the still larger collection '*Aufgaben zum Uebersetzen in das Griechische*' by Dr. Gottfried Boehme (Leipsic 1859). Besides, the reading of the easy prose authors, with which instruction usually commences after the most necessary grammatical knowledge has been acquired, offers at every step vouchers for the doctrines laid down in the grammar and supplies the teacher with ample opportunities of explaining from the grammar the phenomena of language which come before us.

In selecting the matter to be comprised in the syntax I have been very strict. It appeared to me the most essential point to bring out in the clearest light the typical usage of the language in the most important phenomena. When this object has been attained by the teacher with the aid of the grammar and a suitable exercise-book, when once the sense of the rule, I might say, of the syntactical rhythm of Greek has been aroused, it will not be difficult to explain to the pupil isolated deviations and licences with respect to what has been learnt. It is perhaps even a gain for instruction that much is here left to the discretion of the teacher. Moreover, in this respect it is certainly not quite easy to find the limit between too much and too little. Here and there, it is true, the wish has been expressed by teachers taking an

interest in my book, that I would make some enlargement in the syntax, but, on the other hand, the very brevity and conciseness of my synopsis have been brought forward as an advantage. For this reason I have hitherto acceded to the demand for extension to a very slight degree.

---

## CHAP. XVI.—THE CASES.

WITH a great number of scholars, and even one or two Comparative Philologists of eminence, the view still appears to meet with much approval, that the Cases denoted, in the first instance, relations of space; and were thence by slow degrees, transferred to relations of a more intellectual character. At first sight this assumption stands in a certain degree of unison with the fundamental theory which, quite properly, governs modern science; and which, as a rule, recommends us to start from what is concrete as distinguished from what is purely ideal. Relations of directions in space appear to be more concrete than the mutual relation of the parts of a sentence: and, therefore, fitted to form the basis of them. But on closer examination this appearance vanishes, and difficulties everywhere arise. Had language as a fact conceived the action of the verb as a movement straining from the subject towards the object, then not merely must the point towards which this action tends—the *quo*—have given rise to the case of the object, as many assume, but obviously, the starting point—the *unde*—must also have given rise to the case of the subject; and thus, strictly speaking, but one local relation, the *ubi*, remains for the other cases. Consistently carried out, therefore, this assumption must lead to the conclusion, that the Nom. is identical with the Ablative, and with the Genitive also, if this case is regarded as the counterpart of the Ablative. But who would venture



to maintain this? The only certain starting-point for the explanation of the use of the cases,—but also, it is true, a point to which the advocates of the local theory have paid the least attention—is supplied by the forms of the cases. Now when we look at their form *one* group of closely connected cases at once rises to the surface—the Nom., Acc., and Vocative. Throughout the Indogermanic languages these cases always coincide in the Neuter; whereas none of them ever displays the least contact with the remaining cases—that is, a Vocative, Nominative, or Accusative form never takes the place of a Genitive or Dative form, in the way, in which, e. g. in the Latin Plural, Dative and Ablative; in the Greek Dual, Genitive and Dative are identical in form. Within this group the Vocative, as the case of appellation, is without any case sign, the stem without any addition—the word in a condition antecedent to the formation of the cases. The Nominative is unmistakably the case of the subject. It appears, as Bopp was the first to perceive, that the sigma of the Nom. is identical with the Pronoun-stem *sa*, which in separate use is  $\delta$  in Greek. Language, therefore, denoted the subject as the leading word of the sentence by a pronoun placed like an article after it. The opposite of the subject is obviously the object. We cannot see through the formation of the Accusative, so clearly as that of the Nominative; but we have already seen (p. 62) that it is very noticeable that in the neuters, that is, in words which from their meaning cannot be subjects of an action in an operative sense, like the Masculines and Feminines, the case of the object represents also the case of the subject. If however this is in reality the relation, if  $\tau\acute{\epsilon}\lambda\omega\sigma\text{-}\sigma$  from a formal point of view, is just as much the Acc. of the stem  $\tau\acute{\epsilon}\lambda\omega\sigma\text{-}$ , as  $\delta\epsilon\acute{\omicron}\nu$  is the Acc. of the stem  $\delta\epsilon\acute{\omicron}\sigma\text{-}$ ,

how is it then possible that τέκνον originally signified 'towards' or 'to the child'? Or, to reverse the question, granting that τέκνον originally signified this, how could it ever be used for the Nominative and Vocative. Would or could language interchange the starting point of an action with the goal of it? Such a change, if at all, would at best be possible only when the original meaning had been completely forgotten, through a lingering process of decay. But this vicarious use of the Acc. for the Nom., is of great antiquity; it is older than the separation of the Indogermanic languages. Consequently if it were the case, which is certainly incredible, that in the very beginning, the creation of the cases arose out of ideas of space, this point of view must have been already given up again at the time when the forms of language became fixed, before the separation of the languages of the Indogermanic stem. But then it would further follow from this, that this supposed relation of direction had already, at that early period, become completely confused in the sense of language; and consequently it would in no way be adapted to be taken by us as a basis for the complicated uses of the cases, as they became fixed at a time obviously far later. In short in the Acc. we see as plainly as possible how inadmissible the local theory is. Here also the greatest difficulties present themselves in explaining the individual usages. For that widespread and very ancient kind of Acc., more especially, which I call the Acc. of the Internal Object, cannot without great violence be wrung out of the category of *quo*.

If, therefore, it is certain that in denoting the Nom. language started from quite other than local perceptions; and if it has been found impossible to explain the Accusative from the category of *quo*, the whole local theory is now deprived of important

support. For the charm of the theory lay just in this that the three oblique cases in Greek could be fitted so neatly into these three convenient categories of *unde*, *ubi*, and *quo*. *Ubi*, and *unde* still remain. But for *ubi*, even the Indogermanic language had originally a special case,—the Locative, which at least in one class of languages, is retained in form and meaning beside the Dative, and quite distinct from it. Elsewhere, it is true, these two cases have several points of contact. But still it by no means follows from this that they were originally identical: and it would be very difficult to derive the leading use of the Dative, i. e. its use for what is called the remoter object, from the category of *ubi*. The case is similar with the Ablative and Genitive. We do not see why these should be two cases if both expressed originally one and the same relation of space. Here too, especially in the Plural, where the Ablative coincides with the Dative, each case takes its own course. And the application of the Genitive to bring into prominence the connection between two nouns—by far the predominant use in all languages—is far removed from the notion of *unde*. To explain the widely extended use of the Genitive from this category of *unde* is to explain an infinite abundance of applications from a small and decaying minority. Even the Latin use of the Dative as of the Genitive should have warned us against the mistaken idea of placing local relations at the head in these cases. For in truth there is scarcely any ground whatever for such a theory. If then it is now plain that in three of the original eight cases, viz. the Voc. Nom. and Acc., it is impossible to carry out the local meaning and that in two, the Dat. and Gen., such a meaning is barely conceivable, yet again for two others, the Loc. and Abl., this meaning is probable inasmuch as we can without difficulty trace back

all the functions of the Loc. to *ubi* and those of the Abl. to *unde*. But since both these cases have become extinct in Greek, the local theory has for this language a certain amount of importance only in so far as the functions of these cases have been adopted by others. Finally the eighth case—the Instrumental—in certain applications called also the Sociative or Comitative, because it expresses all the relations for which in German the preposition *mit* is used, is obviously of so specific a character that it cannot be inserted without violence in any one of the three categories. The form also gives us no ground for regarding it as a simple variety of a local case.

These few remarks will suffice to show how little reason there is for speaking of the local theory, as is still constantly done, as an established fact. That is not the case; we are fully justified in completely disregarding so unsound a basis in explaining the use of the cases in Greek. The triple division of the oblique cases in Greek, which, by reason of its apparent simplicity, has been essential in recommending the local theory to favour, even if it has not created it, is not a mark of antiquity, but rather a corruption of the larger system of cases which is retained, to some extent in Latin, and completely in Sanskrit.

This important fact must form the basis for the arrangement of the use of the cases in Greek. There was an early period in this language, in which all eight cases were in existence. Indeed many traces of them all are still to be found. Case-forms which in individual use have become detached from the others of the same stem, and thus have lost their status as such, we call adverbs. In the Adverbs in  $-\deltaον$ ,  $-\deltaην$ , Lat.  $-tim$ , the Accusative form, in  $\epsilon\tilde{\iota}\tilde{\sigma}\tilde{\eta}\zeta$  (Homeric  $\epsilon\tilde{\iota}\tilde{\sigma}\tilde{\iota}\eta\zeta$ ),  $\epsilon\muο\tilde{\sigma}\tilde{\upsilon}$ , the Genitive form, in  $\kappaο\mu\tilde{\iota}\delta\tilde{\eta}$ ,

παντάπασι the Dative form is unmistakable. The very common adverbs in -ως, like the Latin in *ō* (for *ōd*) and *ē* (for *ed*) are proved to be Ablatives. Locatives are concealed not merely in *χαμα-ι*, *μέσο-ι*, but also in *ποῖ*, *οἷ*, in *ἀμαχεί*, *ἀμισθί*. Forms like *ἄμα*, *πάντ-η*, *ἴ-ν-α* corresponding to the Sanskrit Instrumental in *ā*, are in all probability to be regarded as petrified instrumentals; while, on the other hand, the epic forms in -φι also are at least in part to be considered as another formation of this case. Thus, therefore, even Greek itself still points back to a condition of language in which the cases were more numerous; and the question arises—how was the language able to replace the gradually encroaching decay of the cases? The answer obviously is that another case by degrees assumed the functions of the decaying one, in addition to its own. In what order this took place, cannot, it is true, be ascertained with certainty. But since we have good reason from the close relation which mutually prevails between the two South European languages, to presuppose that any share which Latin had in the ancient heritage, existed in Greek also in a period which, though prehistoric, is not imaginary, it is not improbable that those cases were retained the longest in Greek, which were retained to the end in Latin, while, on the other hand, those were the earliest to decay, which in Latin also ceased to exist. Consequently the Instrumental would be the first to give way. The functions of this case were assumed in Latin by the Ablative, language regarding the instrument as that from which the action indirectly arose, but in Greek, where the Ablative also was allowed to drop out of use at a very early time, by the Dative, to which, as the case of the interested person, the Comitative side of the Instrumental lay very near. After the Instrumental the Ablative was

apparently the next to disappear. In its place came the Genitive as the case of connection. For in the idea of origin the ideas of *unde* and of connection meet and touch. Lastly, the Locative, the proportionately late disappearance of which case is proved by the numerous local Adverbs with locative forms found both in Sing. and Plur.—was replaced by the Dative, after it had already become considerably extended by the assumption of the functions of the Instrumental. In these considerations moreover the fact must not be overlooked that the use of prepositions in combination with distinct cases must have essentially contributed to remove any indefiniteness in the expression, and, as it were, to relieve the cases of their accumulated functions. Hence it follows that the Acc. alone in Greek has not exceeded the limits of its original sphere. The Genitive and Dative are mixed, or as Pott, *Etym. Forsch.*, I, 22 terms it, 'syncretistic' cases. The use of each of these cases cannot at all be traced back to one single principle. Rather must we analyse both into the modes of use which have run together in them; and, therefore, distinguish a double Genitive (Genitive, and Ablative); and a triple Dative (Dative, Instrumental, Locative). In Latin where the Genitive and Dative have remained within their proper spheres, we can perceive most clearly the genuine primary nature of these cases. It is significant that neither case ever occurs in this language with a preposition; and that, generally, the older condition of the case-system in Latin allowed writers to express much by the simple case, which in Greek required the aid of preposition.

Such being our conception of the cases, it is self-evident, that we must be on our guard against all over strict definitions of the separate cases; and not allow ourselves to be led away by the delusion that

our explanation becomes scientific when we trace back the various usages by violent means to some single point confined within narrow limits and strictly unalterable. Yet, on the other hand also, it is clear that every case is to the sense of language at a particular period an individual, which was felt as such, and distinguished in its characteristic peculiarities from others. It is also by no means indifferent for the nature of the separate cases, whether the language possesses three or six oblique cases. We can, no doubt, trace back a certain portion of the usages of the Genitive to the Ablative, and derive certain of its functions, e. g. the Genitive of separation, from this source; and, accordingly, denote them as vicarious functions. But the sense of language itself ceased in time to perceive the distinction clearly, connecting links became formed unconsciously between the two cases, and the Genitive, increased by a part of the usages of the Ablative, grew up gradually to a peculiar case of more extensive use. Hence a difficulty arises for the grammarian. It is, at times, not easy to decide whether a mode of use belongs to the original capital, or to the later inheritance of a stem; and again, when the inheritance is twofold, as in the Dative, to which part it belongs. In this latter case however the relations are less complicated; and the decision would perhaps only be difficult in regard to the looser use of the Dative treated in § 144. On the other hand, the Genitive owing to the greater extent of application, is much more difficult. Here the Localists have wrung everything out of their category of *unde*. And how much may be developed out of this relation can be shown by the extensive use of the German preposition *von* (of). The only point is, to find the proper limits. The Genitive of the object compared with Comparatives, e. g. which corresponds to the

Latin, and Sanskrit Ablative, can without violence be explained as a later function adopted from the Ablative. But still it is undeniable that with this use the original and proper use of the Genitive offers many points of connection. In the sense of language the notion of the Genitive has become developed to that of relativity in general. In the Adjectives (§ 414) especially, this is clearly to be seen. If the Genitive with ἄξιός, ἀντάξιός is certainly a genuine Genitive, if we must judge the same of the adverbs quoted in § 415—e. g. πρόσω, πρόσθεν, ἄνω—it is not difficult to take the same view of the Genitive used with μείζων, μείων. From the verbs also of comparative meaning the Genitive with comparatives can hardly be separated, and yet it is certainly simpler to explain the Genitive with ἄρχειν, βασιλεύειν from the idea of relation than from that of *unde*. My principle, therefore, was, in the Genitive, not to be too strict in holding asunder the originally different usages, and mainly to keep in view the simple juxtaposition of what can be easily connected in the period when the language had become developed.

By taking this view of the cases we avoid a fault which is noticeable in many explanations proceeding from different points of view;—the fault of starting from quite isolated and in part poetical modes of use. In my grammar, on the contrary, the leading use is always placed at the head, that use, which gives the peculiar type and characteristic of the case. For the Accusative the starting point must in any case be the construction with verbs, as for the Genitive the construction with substantives. But in Greek—for Latin in its stricter fashion takes its own course—we can in every case distinguish a more independent use by the side of the usage found in a multitude of quite common constructions. In time



the cases obviously extend their usage beyond the range of the original analogies. Therefore, I distinguish in every case a looser or freer use. The last step in this path is the adverbial use. The Grammarian must make it his task to illustrate the course of the history of language so far as possible by characteristic examples. For the Accusative the category of the inner object is of supreme importance in this respect; in regard to which I have adopted Krüger's terminology. How very prone the Greek is to supply in thought to every verb the notion contained in it, in the form of the object, is shown by usages like Soph. El. 1415 παῖσον διπλῆν, where an attribute is added to the internal object though omitted. Schömann in his excellent work *Redetheile* (Berlin 1862), especially p. 148 sq., where he is treating of the origin of the adverbs, takes quite the same view; as also Haase on Reisig's *Vorlesungen über Lat. Sprachwissenschaft*, Anm. 509, and 559. Both with justice lay stress on the fact that even the substantive verb very easily admits the notion of an internal Accusative; and consequently even the freer, and in part quite adverbial Accusatives like ἀκῆν ἔσαν are to be regarded in this light. ἀκῆν ἔσαν means literally 'they were rest'; i. e. 'they were a quiet being' (cp. § 400 c.), in the same sense as we might say: 'they went a quiet walk'. In Sanskrit also the Accusative of the action stands in quite a similar manner with the substantive verb in the paraphrastic formation of the perfect, e. g. *īcām āsa*, or *īcām babhūva*, literally *dominationem fui*, i. e. 'I have ruled' (Bopp, *Sanskritgr.*, § 419). The great antiquity of this very use of the Accusative can hardly be doubted. The numerous adverbs of Accusative-form, the use of the Supines in *-tum* in Latin (*nunciatum ire* = ἀγγελίην ἐλθεῖν) and much besides, proves this. In Latin also the wider use

of the Accusative is by no means always to be regarded as a Grecism; but sometimes as a residuum of a power of this case, which in later times became more and more cut down. This is shown not merely by such national usages as *excubias*, *infittias ire*, with which our phrase 'to stand guard' may be compared, but also by the very frequent occurrence of usages of quite a Greek character in the older writers, e. g. Plaut., *Epid.*, IV, 1, 39: *ut alias res est impense improbus* (Holtze, *Syntaxis prisc. script. Lat.*, I, 221).

In the Genitive—this orthography, and not Genetive, will still be permitted in writing German and English—my chief object was to make clear the wide range of relations, which this case can indicate, especially in the simplest combinations of two substantives with each other. To quote all the possible varieties of such combinations was superfluous: on the contrary, my purpose was simply to bring forward the most essential, and to make it plain that all those different significations of origin, possession, material, &c., are not really expressed by the Genitive, but rather merely infused by the intelligence into the connection denoted by the Genitive. Hence there are instances which can be subsumed under none of these categories; and where the attempt to do so would be simple sophistry, e. g. Demosth. *Mil.* 35 βλάβης νόμος. And it would be foolish to assume a special Genitive of comparison on account of such a passage. as Soph. *Ant.* 114 πτέρυξ λευκῆς χιόνος. So too there are other instances which can be placed with equal right under two of the varieties quoted. ὄρκων πίστις can denote 'faith in an oath', no less than the 'confidence which springs out of an oath sworn', the latter as in δός μοι χερὸς σῆς πίστιν, Soph. *Oed. Col.* 1632, just as *fiducia virium* is quite indefinite when standing by itself, so that the translator is often compelled

in these loose combinations of two ideas, to introduce more than is really there, owing to the want of similarly loose combinations in his own language. The partitive Genitive also is naturally nothing more than a Genitive of connection with a whole, or to use an expression proper in many cases, with a totality. This species of the Genitive was obviously first developed in the plural; but spread out widely from thence in all the kindred languages. Hence I do not believe that we can dispense with it. In a construction like  $\Theta\tilde{\eta}\beta\alpha\iota \tau\tilde{\eta}\varsigma \text{Βοιωτίας}$ , therefore, the Genitive is certainly one of connection, but the specific kind of connection here intended is that of a part with the whole, as becomes quite clear from the looser use quoted in § 425  $\tau\tilde{\eta}\varsigma \text{Ἰωνίας νερόμισται}$ , i. e. 'in the district of Ionia'.

In the use of the Genitive with verbs, so widely developed in Greek, I have felt myself specially called upon to point out everywhere the relations to the more familiar use in combination' with Substantives and Adjectives. Here the older German language especially offers many valuable parallels. Here, therefore, it is especially instructive to compare J. Grimm, IV, 646 sq. As opposed to the variety of the uses of the cases in Greek, Latin presents a monotonous logical consistency; especially in the use with verbs. For this use in Greek, I have, not without opposition, given a wide range to the partitive Genitive. J. Grimm l. c. says: 'The Accusative denotes that the object is completely overpowered. In the Genitive the power of the subject is regarded as exerted to a less degree. The active power is, as it were, only tried and roused, not put forth to the full extent.' This is merely another way of saying that the power of the verb, when a Genitive is added, refers only to a part of the object. How far we can extend this

category of the partitive Genitive may certainly be doubtful. Here we are still in want of copious, and properly arranged collections, but thus much is certain: where we find one and the same verb in two constructions, sometimes with the Gen. and sometimes with the Acc.; and this with just the distinction that the Acc. denotes the object as completely overpowered, or indivisible—then we are justified in considering the Gen. as partitive in distinction from the Acc. Thus for the Gen. with verbs of ‘aiming at’, or ‘striving after’ (§ 419 d). *Soph. Ant.* 770 is significant: *τεύξεται τὸ μὴ θανεῖν*.—On the other hand, for the verbs of exclusion it is certainly easy to regard the Gen. as the representative of the Abl., just as also the Abl. is found throughout with the corresponding verbs in Latin. Yet we must also bear in mind that the Adjectives mentioned in § 414, 5 correspond to these verbs. Since it is certain that *ἄμειρος* and Lat. *expers* have the same Genitive as *ἔμειρος* and *particeps*, there is no contradiction at all in assuming an internal connection between *ἀπέχομαι*, *εἶργω*, *ἀποτυγχάνω*, and *μετέχω*, *μεταδίδωμι*, *τυγχάνω*. In the German languages it is doubtful whether the Gen. has assumed the representation of the Abl.; but certain that a number of verbs of privative meaning (J. Grimm, VI, 674 sq.), especially in the older language take the Gen., and some of these are still retained. Grimm explains these from the same point of view as the constructions with the corresponding positive verbs. But because the explanation from the Abl. is also possible, I have in the latest edition quoted this class of verbs in § 419 b, separately from the former.

The free use of the Gen. I have everywhere compared with the kindred applications of the more fixed use, so as to point out an internal connection. That the Genitive of the cause § 427 is combined

with that of the aim, i. e. the *causa efficiens* with the *causa finalis*, needs, of course, no justification. The Gen. Absolute also ought by no means always to be explained from the category of *unde*. There are many constructions in modern German which warn us against that\*. It is not improbable that a stock of similar usages was already in existence, when the Abl. fell into dislike among the Greeks, and that the Gen. absolute by slow degrees forced itself into the place of the Abl., and in this way has now certainly become extended far beyond its original range. Moreover the Gen. absolute is in Greek itself a growing construction, the continually increasing spread of which can be observed from Homer onwards. On this as on many questions belonging to this subject, compare the beautiful researches of Classen, '*Beobachtungen über den Homerischen Sprachgebrauch*' (Frankfort on Maine 1854—56).

In the arrangement of the use of the Dative the various sources can be distinguished more definitely. The instrumental use especially is plainly to be separated off, as forming a close category to itself with several subdivisions. But nevertheless a complete analysis appeared impracticable. The Dative of community (§ 436) has its source obviously in the sociative or comitative use of the old Instrumental: for which reason the Ablative—elsewhere also the Italic representative of the lost fellow-case—corresponds in Latin to the Greek Dative and the Sanskrit Instrumental in this usage. The Preposition *sa* 'with' is in Sanskrit combined with the Instrumental; the corresponding ἄμα, ξύν, σύν in Greek take the Dative; *cum* in Latin has the Ablative. Hence something may be said in defence of placing this use after

\* E. g. *Er ging eilenden Schrittes, er ritt verhängten Zügels, ihr zogt unverrichteter Sache ab, er ward verdientermassen* (mhd. also *unverdienter Dingen*, Grimm, *Gr.*, IV, 907) *geehrt*.

the instrumental use. But in the language, as we find it, the sociative Dative is more nearly akin to the proper original Dative, than the instrumental; and in general it certainly forms the connecting link between these two cases, since it was easy to denote the person, or thing connected with an action by the same case-form which was already in use for the person interested. We need only call to mind the Homeric σοὶ ἄμ' ἐσπόμην, beside the Attic σοὶ ἐσπόμην. Hence the Dative of community is put in this position. With regard to the proper, and, so to say, genuine Dative, I have distinguished two cases. That kind of Dative is put first from which the case has received its name δοτικῆ. Krüger terms this, which in his arrangement is placed later on, 'the objective Dative of the thing interested' § 48, 7. It might otherwise be called 'the Dative of the Indirect Object'. But it appeared to me advisable to keep the term object within the narrowest limits possible, in a school-grammar, in order to avoid confusion. Hence in the explanation I preferred the words 'the person remotely affected by anything'. The Dative in transitive verbs like δίδόναι, ἐπιτρέπειν, παρέχειν, and with intransitives like βοηθεῖν, δοκεῖν, πείθεσθαι, but also with adjectives like φίλος, πιστός, ἱκανός, is as it were necessary. The enunciation remains imperfect without the mention of the person. This is what the expressions 'interested', 'affected by', are intended to mean. On the other hand, the Dative of 'the Interest' as I call it (cp. Krüger § 48, 3) is different. This Dative is to a certain extent added at pleasure; not required by a government of the verb which has become typical. On the contrary, the sentence is extended in a peculiar manner by the introduction of the word standing in the Dative. The so-called *Dativus commodi* and *incommodi* can be added to any verb whatever.

It, therefore, and the Dative generally now under consideration, is very frequently replaced by other constructions, especially with prepositions. Language has the choice between two different modes of expression. This, so to say, 'facultative' use of the Dative is seen most strikingly in the ethical Dative as it is called (§ 433), which has received this name from the very fact that it is not so much required by the thought, as by a reference of the feelings. The choice, on the other hand, between the simple Dative, which in this instance has something personal in it, and a preposition combined with the corresponding case, meets us most strikingly in the combination with the passive (§ 434).—For the rest, in all these instances especially few examples seemed to be requisite to me, because there are but a few in which we can speak of a peculiarly Greek idiom. That the freer Dative in its application to place and time is derived from the Locative, was already mentioned. For this very reason the Latins use the Ablative, which in their language has assumed a portion of the Locative use, in the same sense.

---

## CHAP. XVII.—THE PREPOSITIONS.

IN order to understand the government of prepositions, nothing is more important than the indisputable fact that all prepositions were, in the first instance, adverbs. There was, therefore, a condition of language in which these words did not yet exist as such, that is, in their proper prepositional use. The government of prepositions tended to become more and more fixed as language developed. Excellent remarks on the nature and origin of these words are given by Schömann, *Redetheile*, p. 138 sq. Now as adverbs the prepositions could primarily take the Genitive, as the case of connection. To this source of combination with cases, which is often quite overlooked in the government of prepositions, reference is made in § 447, 2. *ἀντί* is, without question, the Locative of a noun-stem, of which we have another case, the Acc., in *ἄντα*, and yet another, the Ablative turned Locative, in Latin *ante-d*. The Genitive depends, therefore, on *ἀντί* in precisely the same manner as in the German *Angesicht*, *Laut*, *Kraft*. With *πρός*, also, to which the Lat. Ablative *pro* corresponds, the case is, no doubt, the same; and with *διά*, the Æschylean form of which, *διὰ*, has the sign of the Locative. *διά*, without question, goes back to a noun-stem (cp. *δίχα*) which denoted duality. The same is the case with *ὑπέρ* = Sanskrit *upari*, which evidently signified in a literal sense 'on the upper side', as *ὑπό* (*ὑπαί*) 'on the under side'; and with many others. Nowhere is the perversity



of the Localists shown more plainly than in the attempt to trace back the Genitive in this connection invariably to *unde*. When, in Latin, the prepositions *in, pro, prae, sub, super* take the Ablative, that case is here, as often, to be regarded as the representative of the Locative. But the Genitive in Greek depends in this usage on the preposition which it takes, in the strictest sense. The most decisive confirmation of our view is found in the fact that all the improper prepositions, that is, the prepositions which still continue to have more of the nature of adverbs, take the Genitive.

The first step in the departure from this adverbial use of the prepositions was taken when they were used in a supplementary manner, and in a loose connection with verbs, especially with a view to define more accurately the direction of the verb. In the Homeric language this usage is still clearly to be seen, in so far as this, that here the preposition though often undoubtedly forming one notion with the verb, can nevertheless, be separated therefrom not only, as continued to be the case in the later language, by the augment and reduplication, but also by independent words. The careful researches of Hoffmann on '*ἀπὸς* in der *Ilias*', and '*Die Tmesis in der Ilias*' (Lüneburg and Clausthal 1857—60), show very plainly how hard it often is to decide whether a preposition must be taken adverbially or in combination with a verb. Now, inasmuch as the preposition in connection with a verb forms a whole in idea, it can in this connection require a case. When we find in Od. δ 43 αὐτοῦς δ' εἰσῆγον Τεῖον δόμον, we have an instance in which the older usage is no doubt retained; and εἰς-άγειν as a whole takes the Accusative. Il. I, 89 illustrates the later use, when εἰς had already become movable and independent. Ἀτρειδῆς δὲ γέροντας ἀολλέας

ἦγεν Ἀχαιῶν ἐς κλισίην. But in idea the Accusative here no less than in the former instance depends on the unified conception in εἰσάγειν. By the addition of a preposition signifying the direction, a verb gains the power of governing an external object of that to which the action is directed; which however is no longer felt to be such so soon as the preposition is detached and placed immediately before the case. This is the reason that the Accusative frequently denotes the aim; and the other meanings also mentioned in § 447 follow from this. In a similar manner the Dative is often to be regarded as a Dative of community, which depends on the verb connected in thought with the preposition, e. g. in the Homeric usage πὰρ δέ οἱ ἔσται, Δέων δέ οἱ ἄγχι παρέσται, beside ἐσταότες παρ' ὄχεσφιν II. Θ. 565. This use of the Dative also is the reason why the power of expressing a more external connection is ascribed in § 447, 3 to the Dative in combination with prepositions.—For the Genitive, it is true, we must certainly allow that to some extent, even when dependent on prepositions, it is the representative of the Ablative; yet in such a manner that even here the Ablative was dependent in the first instance on the verb together with the preposition, e. g. A. 346 ἐκ δ' ἄγαγε κλισίης Βρισηΐδα, and then the Genitive came in as its originally less definite representative.

These observations will be sufficient to indicate in what manner I combine the use of the prepositions with cases with the other uses of the cases, and to refute the objection that I assume for the prepositions a basis of local meaning, which I deny elsewhere.

---

## CHAP. XX.—THE TENSES.

THE doctrine of the use of the tenses required considerable revision. Here, as a fact, by a more accurate enquiry into the form of language, quite a new foundation had been obtained for the use of language; and without going further into the theory than was absolutely necessary, I attempted to apply the insight, thus obtained, to syntax. The older grammarians treated the aorist throughout, and the perfect also in part, as tenses of past time. But the analysis of the forms proves in the most striking manner (cp. p. 98, 102, 110) that language possesses no other means whatever to denote past time generally, than the augment; and, therefore, the denotation of past time can only be primarily assumed where the augment stands, that is, in the imperfect, pluperfect, and Indicative of the aorist, and, therefore, generally in the Indicative only. Now in these Indicatives we can see in the plainest manner that in such forms, language denotes another notion in addition to that of past time, and of quite a different nature. ἐ-γέν-ε-το, ἐ-τίγν-ε-το, ἐ-γεγόν-ει are distinguished from each other by something quite different from that which distinguishes ἐτίγνετο from γίγνομαι, ἐγεγόνει from γέγονα. For this something, which is denoted in the *stem* of the tense-form, and for this very reason is marked as fixed and essential, we need an expression. Hitherto Grammarians have found none for it; even the most artistic theories of the tenses, which from the days of the Stoic grammarians,

down to the most modern times, have set up distinctions such as were never observed in any living speech, left this point out of sight. But for the Greek language this distinction is undeniably requisite even in a school-grammar. In the Greek sense of language lay a triple distinction of time, which crosses with that of present, past, and future; and runs through the whole rich system of tenses, moods, and verbal-nouns. Not finding a general name for each of these triple distinctions ready to my hand, it became necessary to invent one. Now it was evident that of these two distinctions of time, one was rather external and the other internal. The distinction of present, past, and future rests merely on the relation of the action to the speaker. This distinction, therefore, in which we have only to do with the standing point, I call the 'grade of time'. The action is either coincident with the standing point of the speaker, or it lies, as a previous grade, behind it, or again, before it, as a grade still to be reached. The expression cannot, I believe, be misunderstood. In the image chosen it is also clearly pointed out that the distinction is removed by simple progression in time, without any internal change. But the difference between γενέσθαι, γέγεσθαι, γεγόναι must obviously be denoted by a word, which at once indicates that here we have to do with a difference lying within the action itself, not merely with the relation to something external to it. In this sense I chose the expression 'kind of time', especially as 'kind' is the very word which we use to signify specific, internal peculiarities. Heyse, in his *System der Sprachwissenschaft*, in a similar but not quite the same sense, distinguishes between 'subjective', and 'objective' time (p. 457 sq.). These expressions would, I believe, in any case be more equivocal. But what has already been said about the difficulty

attending innovations in terminology applies to these technical terms, no less than others.

The triple kind of time must now in turn be distinguished by three different names. Two of these present themselves at once. The action of the present stem is *continuous*, that of the perfect *completed*. But how shall we briefly denote the action expressed in the aorist stem? The word 'momentary' opens a door to numerous errors. If this term is chosen, we are tempted to measure the distinction between ποιεῖν and ποιῆσαι, νικᾶν and νικῆσαι, ἔβαλλε and ἔβαλε merely by lapse of time, whereas in reality the distinction is quite different and far deeper. Whether the artist wrote ΕΠΟΙΗΣΕ or ΕΠΟΙΕΙ under his work, did not depend on the length of time devoted to the task, but on his intention to lay stress either on the simple fact that he was the artist, or on the labour spent upon it. I preferred, therefore, to adopt the terminology of Rost, and Krüger, who call the aorist '*eintretend*'. The epithet is difficult of translation, and cannot be represented in all its bearings by any single English word. It is 'initial' as opposed to 'continued', 'culminating' as opposed to 'preparatory', 'instantaneous' as opposed to 'durative'. An action so qualified is, first of all, quite distinct from a beginning or impending act; it has nothing in common with the *tempus instans* with which it has sometimes been erroneously confounded. On the contrary, it is opposed to two other actions. First, to a continuing act. Thus the advent of winter is opposed to its continuance. In a similar manner νοσῆσαι (to fall sick) is opposed to νοσεῖν (to be sick) and βασιλεύσαι to βασιλεύειν. Secondly, as denoting an incident, it is opposed to an act that is not yet finished; and this is the relation of πράξαι (to accomplish) to πράσσειν (to be doing), πείσαι (to persuade) to πείθειν (to advise). Lastly an act to which

this epithet is applied, is invariably an act achieved at one blow, or an act the single moments of which are not to be taken into account. Hence this German word appears to me very happily chosen for our purpose. It has been objected that the word is equivocal and indefinite, but the Greek aorist has, as a fact, its different sides; and the peculiar advantage of the word lies precisely in the fact that it has a certain width of meaning, by which it becomes applicable to the different sides of the aorist, while at the same time a firm nucleus is unmistakable and can be perceived by our sense of language. It will always be a hopeless task to give a cut and dry definition of the Greek aorist. The distinction of the kinds of time rests on a certain instinct, which we can only acquire by entering ourselves into the Greek modes of thought; and for that purpose an image or mode of expression belonging to our own language is a far greater help than any logic. Among the living languages the Slavonic possesses very similar refinements as to the kinds of time; and, therefore, Slavonic speaking people find it very easy to realize the use of the aorist and its distinction from the forms of the present stem; cp. Kobliska, *Ueber das Verhältniss des Aorists zu den Formen des czechischen Verbums* (Königsgrätz 1856); Kvičala, *Zeitschr. f. d. ö. Gymn.*, 1863, p. 137.

In the observation on p. 274 of the Grammar I have attempted to define the three kinds of time more accurately by means of another illustration, borrowed from mathematics. The expression 'a point of time' is in common use; and to this I refer in saying that the action of the aorist can be compared to a point. A point, as is well known, does not admit of any extension at all; and in the action denoted by the aorist its extension in time is not at all taken into account. And as objects which are

remote or passing into the back ground appear as points in spite of their actual extension in space, so also from the speakers point of view do the actions, which he brings forward merely as aoristic. But a line is opposed to a point inasmuch as it admits of extension, though indefinitely. Hence in carrying out the illustration, it forms the counterpart to the continuous action, the essential characteristic of which is that it admits of extension in time, without any internal limitation. Lastly, a completed action is one completely limited in every direction. Hence, therefore, it may be compared to a surface bounded by lines.

It was not my purpose to follow out in greater detail these leading conceptions peculiar to every tense-stem. But some few hints may find a place here. In the idea of an aoristic act we recognized two moments. On the one hand, an aoristic action is opposed to a continuing one; as a man's arrival at a house is opposed to his stay in it, or the advent of darkness to continuous gloom. In this sense an aoristic action denotes as it were the starting point of a line. ἐρασῆναι or ἐράσασθαι, i. e. 'to fall in love', (e. g. II. II, 182 ἡράσατ' ὀφθαλμοῖσιν ἰδὼν ἐνὶ μελπομένησιν) is followed by ἐρᾶν, as ἄρξαι by ἄρχειν, διανοηῆναι by διανοεῖσθαι. This use of the aorist we may call the *ingressive* (cp. § 489). Here the force of the aorist is especially prominent, so much so that at times the aoristic action requires quite a different translation from the durative. On the other hand, the culmination of an act is opposed to the preparatory steps; as a bright flash is opposed to a glimmer, the fall of night to evening twilight. Thus δίδοναι can be used to express the simple attempt to give, the offer; δοῦναι the actual giving, the handing over of the gift; ἄγειν means to 'lead on', ἀγαγεῖν 'to carry away'; κτᾶσθαι 'to acquire',

κτῆσασθαι 'to possess'. We may term this the *effective* use of the aorist. Here the tense denotes the last point in a line; and is preceded by the durative action. This use of the aorist, under the name *συντελικῶς*, was opposed by the old grammarians to the action of the imperfect, which was denoted as *παρατακτικῶς*, e. g. Aristonicus *ad* II. A. 368 (cp. Friedländer, *Ariston.*, p. 5). It rests with language to bring into prominence one of these two usages, or, from another point of view, the fundamental meaning of every verb and the context present sometimes the one, and sometimes the other sense to the reader, though, it also frequently happens that neither can be distinguished with certainty, and the notion conveyed by the tense is simply that of a point of time without any reference to other actions.

The need of distinctions of time like those which were certainly presented to the Greek from a very ancient period in the use of the aorist is felt in all languages. Here also we can find points of connection existing in our own sense of language, and to point out this is the object of the observation on § 485. The effect of an aorist is frequently replaced in other languages by composition with prepositions; and in this respect the Slavonic languages offer the most noticeable analogies. A parallel to the ingressive signification is found in German compounds like *einschlafen*, *einschen*, and Latin like *insonare*, *incitare*, where the *in* (*in*) means simply that the subject is entering into a certain state. In German the prefix *er* i. e. *aus* forms more especially a marked parallel to the use of the aorist, and similarly the Latin *ex*. Here of course language regards the earlier condition or state, as that from which the new action springs forth, as in the intransitives *erklingen*, *erwachen*, *ergrinnen*, *erschrecken*, *ersterben*, and in the transitives



*erwecken, erfinden, erregen, erkennen, erschliessen* (cp. Grimm, *W.*, III, p. 694); Latin *efficere, evenire, evincere, evitare, excitare, exclamare, emori*. Yet another point of view is taken up in the use of the preposition *con*, e. g. in *conspicere* = ἰδεῖν, *consequi*, distinguished from *sequi*, as denoting the happy termination of the action commenced in the simple verb, *conticuere omnes* = ἐσίγησαν πάντες, *cohorruit* = ῥήγησεν, *comedere*, 'to eat all up together'. The *con* (compare also the Greek συντελεῖν beside the aorist) denotes the collective moments of the action which are united for the complete attainment of the object. In a similar manner *per* denotes the action as brought through to an end; *persuasit* is related to *suasit* as ἔπεισε to ἔπειθε. The German word *stehen*, out of compounds, denotes as a rule a state which the Greek conceives as the result of the act necessary for attaining it, and, therefore, denotes by the perfect; ἔστηκα *ich stehe* (I stand, I have placed myself). In compounds, on the other hand, the word does not denote a state, but for the most part an individual act, and corresponds, therefore, to the Greek aorist; στῆναι *auf-stehen* (to stand up). The same meaning may be also found in the M.H.German, e. g. *von dem Rosse stân*. In German and Latin, therefore, the value of a verb is altered by composition with prepositions, in much the same manner as in Greek by the change of kinds of time. It is true that the two phenomena are not completely co-extensive. In Latin the perfect combines the significations of the aorist and the perfect proper; *conticui*, therefore, answers not only to the Greek ἐσίγησα, but to σεσίγηκα also; and in *conticesco*, the present corresponding to the perfect *conticui*, we have a union of the effective and inchoative significations unknown in any Greek form. The German *erwachen* stands, it is true, in the same relation to *wachen*, as the

Homeric ἐγρεσθαι to ἐγρηγορέναι, but there is also a prolonged *erwachen* (awaking, *expergisci*—ἐγείρεσθαι), whereas ἐγρετο denotes merely the point of time when the sleep ends. The German word, therefore, is not a perfect translation of the Greek one. This is a subject on which a wide field for observation still remains open, as Schömann (*Redetheile*, p. 139), though from a somewhat different point of view, has already briefly pointed out. In our Lexicons also scarcely anything at all has been done to trace out the distinctions between the different kinds of time in Greek, though these are almost quite as important in explaining the various usages of the word, as the distinction between Active and Middle to which so much attention has been paid. This neglect arises from the πρώτον ψεῦδος that the aorist and perfect are Tenses of past time, and that the difference between the present and aorist, the present and perfect, affects the real meaning of the verb no more than that between present and future.

### § 496.

The view of the Tenses here brought forward as the correct one appears to be contradicted to a certain extent by the fact that the participle of the aorist is frequently applied to actions previous to a point in past time. Since the participle, like the other non-augmented forms of the aorist, has nothing whatever to do with the denotation of past time, and since time previous to a point in past time is not the less a kind of past time, we do not here understand at once how the participle became used in this sense. But the enigma is solved when we examine the nature of the aorist and participle. The latter, an adjective in origin, fixes one action in relation to another. The action which is denoted by the finite

verb is the principal one. When the secondary action continues side by side with the principal action, it must stand (*παρατατικῶς*) in the participle of the present; if again referred to the future, the proper sign of the future is needed; and similarly, the perfect participle serves to express an action regarded as complete in reference to the principal action. If however it is intended to denote the secondary action without any reference to continuousness, and completion, and futurity, but merely as a point or moment, the aorist participle alone remains for this purpose. We indeed by a sort of necessity regard a point which is fixed in reference to another action as prior to it, but strictly speaking this notion of priority in past time is *not* signified by the aorist participle. But owing to the frequent use of it in narratives, it is quite intelligible that the notion of priority in past time became spontaneously connected with the aorist participle. For this reason, therefore, it could not be passed over without mention in the Grammar. Even from the examples quoted in the observation (*γελάσας εἶπε*, he began to laugh, and said: ὧδε δέ τις εἶπεσκεν ἰδὼν ἐς πλῆσιον ἄλλον; χάρισαί μοι ἀποκρινάμενος), it is clear how nearly the past and present often seem to meet in the participle. In the predicative use of the aorist participle with another aorist, more especially, it is often quite impossible to speak of priority in past time, e. g. in εὖ ἐποίησας ἀναμνήσας με (Plato, *Phaed.*, p. 60c)—‘you did well to remind me’. Again in Herodotus, V, 24 we have εὖ ἐποίησας ἀφικόμενος, where it is quite clear that the notion of the verb is not subsequent to the notion of the participle, for the kindness consisted precisely in the coming (cp. Krüger, § 53, 6. Anm. 8; § 56, 8. Anm. 1). So too in the proverb λάθε βιώσας, both actions are regarded as on one and the same level in point of time. If,

therefore, in those other usages the priority merely arises out of the connection, without being expressed as such by language itself, the preterite signification of the aorist participle stands exactly in a line with that of the Infinitive and Optative, when these refer to past actions in categorical sentences (§ 497). In a sentence like *Κύκλωπες λέγονται ἐν Σικελίᾳ οἰκῆσαι*, language does not really denote the grade of time at all, but only the kind of time; and the aorist is used because the fact is regarded merely as an incident, and no stress is laid on the continuance of it. Were it otherwise, were it our object to denote a continuous state, we might use *οἰκεῖν*, e. g. *Κύκλωπες λέγονται τότε ἐν Σικελίᾳ οἰκεῖν*, and in translating it, must have used 'have dwelt' or 'dwelt' just as in the case of the aorist. In these cases, it is true, the aorist must as a rule be translated as a past tense, but it is not on that account felt to be such in the Greek sense of language, for in German (and English) we are frequently compelled to mark a grade of time which the Greeks left out of sight. Exactly the same holds good of the Indicative aorist as the representative of a German and Latin pluperfect (§ 493). The past time is here expressed in Greek, but the priority in past time is left unmarked. Here, as a rule, German stands far nearer to Latin than to Greek.

## CHAP. XXI.—COMPOUND SENTENCES.

### § 519 sq.

HERE it was my object to indicate at least the two principal points of view which present themselves in discussing the combination of sentences, viz. the form of their combination, and the signification arising out of it.—The formal side, therefore, is taken first and explained in § 519. Here too, owing to the brevity necessary in a school-grammar, it was by no means easy to introduce the knowledge of the origin and growth of the form of Sentences derived from the historical study of language, and at the same time to give the necessary prominence to the forms occurring in actual use. In Greek as we find it even in the Homeric poems the two leading forms of combination, parataxis and hypotaxis, meet us as characteristic, but it is clear that the latter is, historically speaking, invariably a development from the former. Hypotaxis was impossible until the relative had become sharply distinguished from the demonstrative, but in the first instance as we have already seen (p. 86), this was not the case. Even in Homer the demonstrative and relative still coincide in many instances, and in consequence we find the older parataxis still frequently underlying and breaking up through the Homeric hypotaxis. The best known instance of this is the case of  $\delta\epsilon$  in Apodosis, which admits of no other explanation. But the same confusion, or more correctly speaking, the same incomplete separation of the two forms, is also to be

seen in the various usages of the copulative article side by side with a hypotactic combination; e. g. II. A 218 ὃς κε θεοῖς ἐπιπέθηται, μάλα τ' ἔκλυον αὐτοῦ (cp. § 624, 5). Hypotaxis has obviously arisen out of parataxis in two ways. First directly, one of the sentences, which originally were equally independent, being thrust into the background. In this manner have arisen relative sentences—subordinate and parenthetical—like μῆριν οὐλομένην ἣ μυρὶ' Ἀχαιοῖς ἄλγε' ἔθηκεν. These sentences continue to preserve something of the free nature of paratactic combination, even as they are carried on in a thoroughly paratactic manner (§ 605). But a far more fertile source of hypotaxis is the correlative combination of sentences which in innumerable instances forms the connecting link between parataxis and hypotaxis. In a Homeric sentence like II. A 125 ἀλλὰ τὰ (μὲν) πολίων ἐξ ἐπράθομεν τὰ δέδασται, we perceive as yet no formal distinction at all between parataxis and correlation. Emphasis alone marks the second member τὰ δέδασται as the most important. Here we see how one of the two demonstrative pronouns became weakened into a relative while the other became more and more prominent. The attention was roused by the accent in the first member (πρότασις) and satisfied in the second (ἀπόδοσις); and in this consists the essential characteristic of correlation. The more also that the demonstrative pronouns and particles became separated in form from the relatives, the more did correlation begin to be distinctly marked as differing from parataxis. Even in Homer the correlative combination of sentences is developed to a great extent. But in the later language also this combination of sentences is of great importance on account of the hypothetical clauses (§ 534), and, therefore, it could not be passed over. In its nature the correlative combination is distinguished from the

hypotactic by the fact that in correlatives neither of the two sentences can be regarded as absolutely pre-eminent, and, therefore, we cannot yet speak of any subordination. As the protasis is completed in the apodosis, so, conversely, the apodosis is not intelligible till we refer to the protasis, whereas at least some kinds of hypotactic combination are of such a nature that the main sentence is easily intelligible by itself, but the dependent sentence contains an addition not absolutely required to make the meaning clear, e. g. § 531 τοῦτ' αὐτὸ νῦν δίδασχ' ὅπως ἄν ἐκμάθω. This is the reason that in the earlier editions of the grammar down to the fifth the correlative sentences are separated from hypotaxis, and put in a class by themselves. From a scientific point of view such an arrangement is correct enough. There is really a distinction, though a delicate one, between correlative and hypotactic arrangement; but I admit that the distinction cannot always be realized in practical instruction. From Homer downwards language is at pains to amalgamate correlative sentences more closely. Even the fact that the pronouns and particles are frequently allowed to remain in the apodosis obscures the mutual interchange of the clauses, which is again still further confused by the frequent transfer and combination of the particles peculiar to the protasis and apodosis. Thus ἄν and κέν are particles belonging properly to apodosis only, but in certain shades of hypothesis they are attracted by prolepsis into the protasis. Hence arose εἰ ἄν, εἰάν, ἤν or εἰ κεν. In a similar manner ἐπεὶ may certainly be analyzed into ἐπί and εἰ. ἐπί which is here adverbial in the sense of 'thereupon' (cp. Sanskrit *api* also) is in the first instance a correlative, in regard to time, of εἰ, a particle of similarly temporal signification = 'when'. ἐπεὶ εἶδεν ἔγνω is, therefore, an abbreviated

expression for εἰ εἶδεν ἐπὶ ἔγνω, i. e. 'when he saw, then he knew'. Similarly Latin *tametsi* = *tamen etsi*, *tamquam* from *quam* (protasis), and *tam* (apodosis), and *priusquam*. When in the effort made by language to bring forward as quickly as possible the leading thought of the sentence, confusions of this kind had become numerous, the distinction between correlation and hypotaxis disappeared altogether in many cases. Both stand in common contrast to parataxis; hence the separation between the two has been given up in the Grammar. But for the same reason it is quite impossible to bring forward throughout, the real nature of those correlative sentences which now appear as a kind of hypotaxis. This is done only in the hypothetical sentences (§ 534), in which the correlative relation can easily be made clear. The dependent interrogative sentences also have without doubt arisen from this class—question and answer being an essential kind of correlation. In εἰπέ μοι τίνα γνώμην ἔχεις, the second sentence was originally an independent question, which formed the protasis to the apodosis εἰπέ ('What opinion hast thou, that tell me'). But I very much doubt if it is advisable to point this out to a pupil, for the fact has little in common with the teaching of Greek as distinct from other languages, but applies equally to all. Moreover, it is often a matter of doubt what view ought to be taken of such sentences, and exact knowledge is in many cases impossible, until we have enquired into the origin and primary meaning of the conjunctions. Nevertheless I consider it essential that the idea of correlation should not escape the pupil, because it is necessary to a proper understanding of the combination of sentences. This is not the only case in which a school-grammar must be content to indicate explanations without entering into further detail.



The second point to be noticed in the combination of sentences is the meaning of the sentence or the relation of ideas which prevails between the matter of one sentence and the matter of another. This is denoted in two ways, by moods and by conjunctions.

1. The form of the moods is obviously somewhat indefinite. By the use of the two moods, which, when connecting sentences, may be termed oblique after the analogy of the oblique cases, no more is really signified than that one sentence is to be regarded in comparison with the other as something merely required or thought of.

2. The meaning of the conjunctions is at first sight more specific, but on going deeper and enquiring further into their origin, we frequently find that the specific meaning is merely a delusion. The same particles ὡς, the fundamental meaning of which is undoubtedly 'how', and ὅπως, which is not materially different, meet us in nearly every sort of sentence relative, temporal, final and categorical. ὅτι 'that', and ὅτι 'because' are one and the same, the inference being that language did not mark the distinction between categorical and causal sentences. εἰ was unquestionably a temporal particle in the first instance, like the German *wenn*, which is a weakened form of *wann*. ἐπί has already been explained from this original signification, and from it also the meaning of εἰ with the optative discussed in § 547 is rendered intelligible. Hence we see that even the hypothetical relation was not originally distinguished by language from the temporal. It follows, therefore, that in all our classifications of sentences, we are rather logical than grammatical, importing more into the words than the language really means. Nevertheless some arrangement of dependent sentences according to their meaning is necessary in instruction. But it would be very absurd to preserve a strict consistency in this respect

in opposition to the genius of the language. An able teacher will perceive that I have guarded against that. Thus the sentences in which ὅπως occurs with the future indicative are indeed included amongst the sentences of purpose in § 552 Obs. for the sake of completeness, but they will be found explained in detail among the relative sentences in § 553, and that with reference to § 500. The future indicative in a sentence like σκόπει ὅπως τὰ πράγματα σωθήσεται becomes intelligible only when we remember that ὅπως is really a relative particle signifying 'how'; 'consider how, in what manner, the state will be preserved'. The modal signification changes into the final by a usage parallel to that of the Latin *ut*. Elsewhere also I have been at pains to avoid anything like those logical systems, which do but stand in the way of a living insight into the processes of language, and to refer to the connections and transitions which prevail between usages apparently distinct.

If now we ask how language has distinguished the conjunctions from each other, and has applied these distinctions to the sentences introduced by them we must here as elsewhere go back to the form. The conjunctions used in the protasis and apodosis have all with few exceptions arisen out of relative stems. But they display different forms, and four cases especially can be distinguished, viz. Accusative, Locative, Instrumental, and Ablative. Accusatives are ὅ, the compound ὅτι (= ὅ τι), Latin *quod*, and perhaps also *quia*, as the plural of *quod*. ὅτι, as an accusative of substance, brings the contents of the dependent sentence under the action of the governing verb in the leading sentence; and, therefore, serves as the particle in sentences of assertion and opinion. ἕως and the correlative τέως (cp. *quandiam*, *tandiu*) are also accusatives, the case being

here used in a temporal sense, and, therefore, like *quantum—tantum temporis*. ἤρος, a form proved by the metre in Homer, corresponds to the Sanskrit *jāvat*, the neuter accusative of the pronoun stem *java(n)t* (*quantum*), which is used in exactly the same sense. ὅ-τι is naturally to be explained in the same manner. εἰ is a locative used in a temporal signification (cp. Latin *ubi*); in form it may be compared to the Latin *si* and Oscan *svai* (cp. also *Romai*, χαμαί). As we have already seen, it meant ‘when’, with this qualification, that it did not, like ὅτε, refer to a continuance of time, but merely to a point. ἕ-ν-α is an instrumental of the relative stem *ja*, which is here weakened into *ἕ*. Originally, therefore, it meant ‘wherewith’ and may be compared to the Latin instrumental ablative *quō* and the German *damit*. Finally ὡς together with ὅπως and the correlatives ὅς, οὕτως are ablatives. Here as in the other adverbs in *ως* the modal signification of the ablative has arisen out of *unde*. In this manner the doctrine of sentences may be connected with the doctrine of cases and from the very forms of language a principle of arrangement may be obtained for the sentences introduced by conjunctions. We might divide them into accusative, locative, instrumental and ablative sentences. In so far as such an arrangement rests on elements which we find denoted in language itself, it would be more justifiable than the arrangements now in use, which have arisen from mere abstractions, and for that very reason are found to be unsuitable and incomplete, when we classify the individual phenomena under them. The sentences thus divided into four classes might in turn be collected under the common name of conjunction-sentences and distinguished from the relative sentences in the narrower sense, i. e. from sentences introduced by actual case-forms of the relative pronoun. Only the interrogative sentences

would then, it is true, still require a separate treatment. But I need hardly remind my readers that such an arrangement must first be carried out in a strictly scientific manner, and worked through on all sides, before it is fitted for a place in a school-grammar. In such a work, especially on account of the great importance of the hypothetical sentences for the construction of the relative as of the temporal sentences, we can hardly avoid giving an earlier place to that class of sentences than to the latter.

---

## CHAP. XXII.—THE INFINITIVE.

### § 559 sq.

IN the Infinitive as elsewhere it is necessary to start from the form. The Infinitive, in its origin, is the petrified case of a substantive of abstract meaning, but one which in many instances is united more closely to the verb than all other abstract substantives. As to the definite case-form, which underlies the Infinitive, scholars are hitherto only so far agreed, that the forms in  $\alpha\iota$ : εἰπέμεναι, γεγονέναι, λέγεσθαι are pretty generally regarded as the fullest and oldest. But whether these forms are really Locatives, or Datives is a point on which views differ. In my treatise, *De nominum formatione*, p. 58, I have attempted for the first time to establish the Locative form of the Infinitive. Bopp, *Vergl. Gramm.*, III, 323 sq., pronounces for the Dative, and also Leo Meyer in his treatise on the Infinitive (Göttingen 1856), and Lange in his review of my grammar, *Zeitschr. f. d. ö. Gymn.*, 1855 sq., p. 728 sq. These scholars lay stress more especially on the circumstance, that in the dialect of the Vedas forms distinctly dative are applied as infinitives. I am joined by Schleicher, *Compend.*, p. 335 in starting from the Locative, and also, though less decisively, by Schömann, *Redetheile*, p. 66. Two reasons especially seem to me to be in favour of the latter view. In the first place Datives in  $\alpha\iota$  are unknown in Greek, whereas certainly one Locative at the least occurs with this termination, χαμαί, to which, after what

has been said αὶ with the weaker form εἰ may be joined. As χαμαί is a Locative from χαμα, so must the Infinitives in -μεναι be regarded as Locatives of abstract substantives in -μενα. We must assume a noun-stem ἔδ-μενα, the suffix of which is only distinguished from that in πλησ-μωνα by a difference in the vowel. If this ἔδ-μενα signified 'eating', the Locative ἔδ-μεναι means literally 'in eating'. In the second place the meaning of the Locative is exactly suited to explain the various usages of the Infinitive. The Infinitive denotes the limits, the sphere, in which the action of a verb moves; δύναμαι λαβεῖν, also the province in which the meaning of an adjective is realized: θεῖτεν ἀνέμοισιν ὅμοιοι. In this sense the Indian Grammarians use the Locative, in order to apply the idea contained in a root, e. g. *budh* (= Greek πυνδ) *védané* (Locative from the Nom. *védana-m* 'knowledge'), i. e. εἰδέναι, and, therefore, exactly in the manner of the Infinitive. This more indefinite signification of the Locative appears to me better suited to give the starting point of the various usages of the Infinitive than the signification of 'aim' or 'object', from which those start, who assume the Dative as their basis. My account of the Infinitive, therefore, is tacitly based on the assumption that it was originally a Locative, and by slow degrees has grown up to a wider usage. At the same time it was also natural to presuppose that language herself lost the consciousness of this origin at a very early period, and, therefore, I have been very careful not to allow this view of the origin of the form to have too much influence in the arrangement and explanation of the usage. •

---

## CHAP. XXIII.—THE PARTICIPLE.

WHILE the use of the Infinitive 'in Greek is on the whole simple, and chiefly requires explanation at length in regard to one point only, viz. the combination with cases, the participle presents a considerable number of peculiar usages. In classifying these I have, in all essentials, followed K. W. Krüger, without however adopting his arrangement. The expression 'attributive use' is intelligible without explanation. The 'appositive use' is connected with the definition of apposition given in § 361, 12. By 'apposition' I mean an addition of a looser kind, which as a rule is synonymous with a descriptive parenthesis, or subordinate sentence. Hence the appositive participles are a shorter looser and, therefore, also less definite mode of expression, serving essentially the same purpose, which is attained in a more compact manner by relative and conjunctive sentences. Classen in his excellent remarks on the use of language in Homer gives the name 'predicative' to the use which I call appositive. I am not ignorant that this term can be justified, in so far as the appositive participle, as distinguished from the attributive, possesses, it is true, a certain predicative power, which meets us most decisively in the absolute constructions. But still it appeared to me more advisable to limit the expression 'predicative participle', as Krüger has done, to that usage, in which the participle serves to supplement a verbal predicate (§ 589—594), and forms as such an essential part

of the predication. This widely ramifying use, to which the Greek language is especially partial, is of supreme importance to the pupil. The predicative participle, or, to speak more truly, the participle which unites with the verb to form a predicate, has without doubt arisen out of the appositive;  $\lambda\alpha\nu\tilde{\sigma}\acute{\alpha}\nu\omega$   $\tau\iota$   $\pi\omicron\iota\tilde{\omega}\nu$  means, properly, 'I remain concealed while I do something'. But the participle becomes so much changed by usage, that the real predicate is often contained in it,  $\tilde{\iota}\sigma\tilde{\tau}\iota$   $\lambda\upsilon\pi\eta\rho\acute{\omicron}\varsigma$   $\tilde{\omega}\nu$ . And, therefore, especially as the usage is a widespread and manifold one in combination with cases, a special name is absolutely necessary for it. Here, as in the discussion of the participle generally I have felt myself specially called upon to familiarize the Greek usages, by the comparison of the corresponding but more familiar phenomena in German.

---



## GREEK INDEX.

### A.

ἀγάγωμεν 92.  
 ἀγακλειτός 172.  
 Ἀγάμεμνον 69.  
 ἄγειν 207.  
 ἀγήοχα 127.  
 ἄγνυμι 97.  
 ἄγον 110.  
 ἀγριελαία 173.  
 ἄγω 97.  
 ἀδικέω 145.  
 Ἀθήνησι 65.  
 αἰδώς 57.  
 Ἄϊδος 76.  
 αἰεΐ 26.  
 αἰζηγενέτης 166.  
 αἰσθάνομαι 156.  
 αἰχμάλωτος 176.  
 ἀκούσομαι 156.  
 ἀκηχέμενος 146.  
 ἀκρόπολις 170, 172.  
 ἀλδήσκω 142.  
 ἀλείφω 124.  
 ἀλέω 134.  
 ἀλήλιφα 124.  
 ἀλίσκομαι 143.  
 ἀλκή 76.  
 ἀλλήλων 37.  
 ἄλλος 42.  
 ἄλλομαι 42.  
 ἄλλο 86.  
 ἄλλυδις 84.  
 ἀλώναι 137.  
 ἄλωσις 137.  
 ἄμα 29, 197.  
 ἀμαρτάνω 140, 141.  
 ἀμείνων 82.  
 ἄμμες 85.

ἄμοιρος 196.  
 ἄμυδις 84.  
 ἀμφιθέατρον 172.  
 ἀναβιώσκομαι 143.  
 ἀνδάνω 111.  
 ἀνδράσι 76.  
 ἀνδριαντοποιός 164.  
 ἀνέωγον 112.  
 ἀνέωχα 127.  
 ἀνήρ 76.  
 ἀνθρωπος 63.  
 ἀντί 28.  
 ἀνύσω 18.  
 ἀνώγειον 65.  
 ἀξιόλογος 171.  
 ἄξομεν 92.  
 αἰοιδιάει 113.  
 αἰοιδιάουσα 116.  
 ἀπέχομαι 196.  
 ἀποβάλλω 167.  
 ἀπολαύσομαι 156.  
 Ἀπόλλω 75.  
 ἀποτυγχάνω 196.  
 ἀραρίσκω 142.  
 ἀργός -οω 163.  
 ἀρείων 82.  
 ἀρέσκω 82, 143.  
 ἀρετῆ 113.  
 ἀρεταλόγος 166.  
 ἀρετή 82.  
 Ἄρης 76.  
 ἄριστος 82.  
 ἀρκέω 134.  
 ἄρξαι 207.  
 ἀρνάσι 76.  
 ἀρόω 134.  
 ἄρρηκτος 44.  
 Ἀρτεμιῶν 59.  
 ἀρύτω 133.

ἄσβεσθε 110.  
 ἄσσοτέρω 84.  
 ἄστεος 57.  
 ἀστυγείτων 164.  
 αὐξάνω 140.  
 αὐξήσω 140.  
 ἀφαιλήσεσθαι 149.  
 ἀχθέσομαι 147.

### B.

βαίνω 139.  
 βασιλεύειν 205.  
 βασιλεύσαι 205.  
 βασιλῆος 71, 115.  
 βάσκω 141, 162.  
 βέβαμεν 123.  
 βέβλαφα 128.  
 βέβληκα 138.  
 βέλεσι 40.  
 βέντος 137.  
 βιώναι 137.  
 βλώσκω 142.  
 βόες 71.  
 βοηθεῖν 198.  
 βοσκήσω 147.  
 βουνόμος 175.  
 βουῆς 27.  
 Βουτοῦν 59.  
 βωῶπις 174.  
 βράσων 43, 82.  
 βραχύς 43.

### Γ.

γέγονα 123, 154.  
 γέγραφα 124.  
 γελάω 133.  
 γέλως 74.

### P

γένεος 51.  
 γενέσθαι 204.  
 γένεσις 147, 160.  
 γένος 72, 160.  
 γηράσκω 142, 143.  
 γίγνομαι 142, 148.  
 γιγνώσκω 100, 142,  
 143, 155.  
 γλαυκῶπις 171.  
 γλυκεῖς 70.  
 γνῶναι 137.  
 γνώσις 137.  
 γνωτός 137.  
 γόασσκον 114.  
 γοάω 162.  
 γόνυ 74, 76.  
 γούνα 73, 141.  
 γυνή 78.

## Δ.

δαίμων 23, 54, 59, 67.  
 δαίς 153.  
 δακέζυμος 170.  
 δάκρυον 76.  
 δάμνημι 135.  
 δεδάσθαι 114.  
 δέδειχα 127.  
 δέδοται 137.  
 δεδώσμαι 131.  
 δεήσω 147.  
 δείκνυμεν 36.  
 δεισιδαίμων 171.  
 δεκαετής 174.  
 δεσμός 160.  
 δημιουργός 165.  
 Δημοσθένης 55, 69.  
 δῆν 45.  
 δηριάζομαι 162.  
 διά 19, 200.  
 διανοησθῆναι 207.  
 διαπεπαιχώς 128.  
 διδάσκω 142, 143.  
 διδόναι 198, 207.  
 δίδωμι 149.  
 δίκαι 93.  
 δίκαιος 54.  
 δικάϊωμα 36.

διώρυχος 124.  
 δοῖδουξ 25.  
 δοκεῖν 198.  
 δόρυ 74, 76.  
 δορυφόρος 176.  
 δόσις 137.  
 δοῦναι 137, 207.  
 δουριάλωτος 166.  
 δράοιμι 115.  
 δρυτόμος 176.  
 δρύφακτος 25.  
 δρώωσι 115.  
 δύναμαι 135.  
 δύο 25.  
 Δύσπαρις 172.  
 δυσμενής 68.  
 δῶρα 63.  
 δωσίω 118.

## Ε.

ἐάγην 98.  
 ἐάων 112.  
 ἐάν (εἰ ἄν, ἤν, εἴ κεν)  
 215.  
 ἑαυτοῦ 85.  
 ἐάω 111.  
 ἔβαλλε 205.  
 ἔβην 96.  
 ἐγείρεσθαι 210.  
 ἐγένεο 51.  
 ἐγένετο 203.  
 ἐγνων 96, 132.  
 ἐγράφην 98.  
 ἔγρεσθαι 210.  
 ἐγρηγορέναι 210.  
 ἔγγελος 137.  
 ἐδῆδοται 147.  
 ἔδομαι 120.  
 ἔδοξα 145.  
 ἔδραμον 151.  
 ἔδυν 104.  
 ἔδωκα 125.  
 εἰκόσι 34.  
 ἐέργασον 150.  
 ἔζομαι 43.  
 ἐήνδανον 112.  
 ἔης 87.

ἐΐτην 137.  
 ἔστηκα 125.  
 ἐτίξω 111.  
 εἰδέσθαι 37.  
 εἰλήλουσα 150.  
 εἰληρα 128.  
 εἶλον 111.  
 εἶλογα 127.  
 εἴμην 111.  
 εἰμί 154.  
 εἶναι 24.  
 εἰνί 81.  
 εἶπα 121.  
 εἶπον 148, 151, 154.  
 εἶργω 196.  
 εἶς 67, 69.  
 εἰς 201.  
 εἶσα 111.  
 εἶχον 33.  
 ἐλαύνω 140.  
 ἐλαφθρόλος 165.  
 ἐλαχεῖα 83.  
 ἐλελύκειν 130.  
 ἔλεξα 104.  
 ἐλεύσομαι 150.  
 ἔλιπον 100.  
 ἐλίσσω 111.  
 ἐλκεχίτων 176.  
 ἔλω 111.  
 Ἐλπῆνορ 69.  
 ἐλπῖς 49.  
 ἔλυον 106.  
 ἔλυσα 93, 120.  
 ἐμέμηχον 130.  
 ἐμετριώμεζ 116.  
 ἐμέω 134.  
 ἐμήμεκα 147.  
 ἔμμασε 46.  
 ἐμύζησα 147.  
 ἐνήνοχα 127.  
 ἐννυμι 134.  
 ἐορτάζω 112.  
 ἔος 85.  
 ἐπασσύτεροι 84, 86.  
 ἐπέι 215, 216.  
 ἐπεισε 209.  
 ἐπεπήγεα 129.  
 ἐπέπιπμεν 130.  
 ἐπεπόνθη 129.

ἐπεσβόλος 72, 166.  
 ἔπηλυς 150.  
 ἐπί 217.  
 ἐπιβάσκειν 142.  
 ἔπιον 104, 140.  
 ἐπιτρέπειν 198.  
 ἐπιχαιρεκακός 176.  
 ἐποιήσῃην 36.  
 ἔπομαι 111, 149.  
 ἐρασαῖσθαι 207.  
 ἐργάζομαι 111.  
 ἔρωδω 149.  
 ἔριδος 57.  
 ἔρωπω 111.  
 ἔρρεον 111.  
 ἐρρήσω 147.  
 ἔρχομαι 150.  
 ἔρωσ 74, 76.  
 ἔσβην 104, 134.  
 ἐστίω 151, 152.  
 ἐσίγησα 209.  
 ἔσομαι 40.  
 ἐσπάσθην 133.  
 ἔσσομαι 40, 119.  
 ἔσταλκα 128.  
 ἔστατε 123.  
 ἔστην 92, 132.  
 ἐστιάομαι 156.  
 ἐστιάω 111.  
 ἔσχατος 84.  
 ἐτέσῃπεεν 129.  
 ἐτέσνασαν 130.  
 ἔτενα 121.  
 ἔτραπον 104.  
 εὐαγγελλω 167.  
 εὐγενής 72.  
 εὐερέτης 167.  
 εὐήνορα 20.  
 εὐμενέστερος 54.  
 εὐοί 26.  
 εὐφρων 28.  
 εὐώνυμος 131.  
 εὐωχέομαι 156.  
 ἐφθάρα 128.  
 ἔφυν 151.  
 ἔχει 20.  
 ἔχεσκον 143.  
 ἔχίς 137.  
 ἔχω 100, 111, 149.

ἔψηλα 37.  
 ἔωνοχόει 112.  
 ἐώρασον 112.  
 ἔως 218.

## Z.

ζά 19.  
 Ζεύς 19, 78.

## H.

ἦα 120.  
 ἠβάσχω 142, 143.  
 ἠβώωσι 115.  
 ἠδέσθην 135.  
 ἠῆδη 131.  
 ἠδίων 41.  
 ἠείδη 112.  
 ἠκα 125.  
 ἠλθον 151.  
 ἠλλαγα 127.  
 ἠμεροδρόμος 164.  
 ἠμύνασθον 150.  
 ἠνεγκα 121.  
 ἠνίοχος 171.  
 ἠος 219.  
 ἠπαρ 75, 76.  
 ἠρώ 59.  
 ἠσαν 110.  
 ἠσσαν 43, 82.  
 ἠγα 127.  
 ἠώς 57, 58.

## Θ.

θάμβος 137.  
 θάσσον 42.  
 θεῖναι 137.  
 θεόδημος 176.  
 θεοεικέλος 176.  
 θεοῖο 64.  
 θεοστυγής 175.  
 θέσις 137.  
 Θηβαγενής 176.  
 θήρ 49.  
 θηρών 52.  
 θησανυρός 20.  
 θηητός 138.

θρώσχω 142.  
 θύσω 134.

## I.

Ἴασον 69.  
 ἰαύω 148.  
 ἰδεῖν 152, 209.  
 ἰδέσθαι 156.  
 ἰδεσκον 143.  
 ἰδιος 85.  
 ἰδίω 41.  
 ἰδμεν 123.  
 ἰέται 117.  
 ἰκανός 198.  
 ἰκάνω 141.  
 ἰμι 26.  
 ἰνα 219.  
 Ἰοῦν 59.  
 ἰπαγωγός 176.  
 ἰππόβοτος 176.  
 ἰππόδαμος 176.  
 ἰσαι 39.  
 ἰσμεν 39, 123.  
 ἰστε 39.  
 ἰστημι 142, 162.  
 ἰστοδόκη 169.  
 ἰστορέω 162.  
 ἰσχω 149.

## K.

καςιζήσομαι 147.  
 καλαῦροψ 111.  
 καλλιπαις 173.  
 κάλλος 83.  
 κάρη 74.  
 κεικήρυχα 127.  
 κέκλοφα 124, 127.  
 κεικόμικα 128.  
 κεικοπώς 127.  
 κέκραγα 135.  
 κέλω 120.  
 κεράννυμι 134.  
 κηρессиφώρητος 166.  
 κηριτρεφής 166.  
 κίταρις 24.  
 κικλήσκω 143.  
 κίρημι 135.

κίς 24, 57.  
 κισσός 24.  
 κιχάνω 24.  
 κίων 24.  
 κλαιήσω 147.  
 κοῖλον 24.  
 κόρυς 49, 70.  
 κορυφῶ 29.  
 κούνες 26.  
 κρείσσων 42.  
 κρεοπώλης 166.  
 κρήναμαι 135.  
 Κρησί 18.  
 κρίνω 42.  
 κτᾶσθαι 207.  
 κτήσασθαι 207.  
 κτυπέω 45.  
 κυκειῶ 75.  
 κυνάμνια 165.  
 κυνέω 141.  
 κύρσω 120.

## Δ.

λαῶς 76.  
 λαβεῖν 45.  
 λάσκω 43.  
 Λατοῖν 59.  
 λαχεῖα 83.  
 λέαινα 28.  
 λέγοιεν 109.  
 λέγομεν 108.  
 λέγω 104.  
 λείπειν 117.  
 λείπω 97.  
 λέληθα 35, 124.  
 λέλυκα 93.  
 λελυκώς 68.  
 λέλυμαι 122.  
 λελύσομαι 131.  
 λέλυται 121.  
 λέουσι 53.  
 λεύειν 77.  
 λευκῶλενος 174.  
 λέων 28.  
 Δητῶ 59.  
 λιθοβολία 167.  
 λιθοβόλος 167.  
 λογογράφος 54, 171.

λόγον 52.  
 λόγος 52.  
 λοχαγός 176.  
 Λυγκεύς 137.  
 λυκοῖν 65.  
 λύσειν 107.  
 λύσειε 107.  
 λυσίπονος 170.  
 λύω 97, 100, 134.

## Μ.

μαθήσομαι 147.  
 μακρόχειρ 171.  
 μάλλον 42.  
 μανθάνω 100, 155.  
 μάρναμαι 132.  
 μάρτυς 76.  
 μάχη 61.  
 μαχοίατο 107.  
 μαχοῦμαι 147.  
 μέγας 45.  
 μεθύσκω 142.  
 μείζων 42, 76.  
 μέλων 83.  
 μελαγχροΐτης 166.  
 μέλαννα 42.  
 μελλήσω 147.  
 μελοποιός 175.  
 μέμακα 127.  
 μέμικα 127.  
 μέμνημαι 137, 138.  
 Μενέλαος 65.  
 μενέω 119.  
 μένος 72.  
 μεσημβρία 176.  
 μέσσοι 78.  
 μέσσος 44.  
 μεταδίδωμι 196.  
 μετέχω 196.  
 Μητροῦν 59.  
 Μητρῶ 59.  
 μήτρως 58.  
 μίσγω 150, 151.  
 μισθοφορά 169.  
 μισθῶ 162.  
 μιμνήσκομαι 142.  
 μναόμενος 115.  
 μνήμων 23.

μόνος 30.  
 μούνος 30.  
 Μοῦσα 61.  
 Μουσάων 52.  
 Μούσησι 61.

## Ν.

ναιετάουσι 113.  
 ναυμάχος 167, 169.  
 ναῦς 77.  
 ναυσίπορος 176.  
 νεηγενής 165.  
 νεικεῖω 115.  
 νεκροσκήκη 165.  
 νεότης 54.  
 νεοτόκος 54.  
 νέφεος 46.  
 νηπιάας 114.  
 νικᾶν 205.  
 νιφόεντα 45.  
 νόος 115.  
 νοσεῖν 205.  
 νοσήσαι 205.  
 νύμφα 54.  
 νώνυμος 163.

## Ξ.

ξεῖνος 30.  
 ξημιτώ 162.  
 ξύν 197.

## Ο.

ὄδωδα 36.  
 ὄδους 68.  
 οἶ 78.  
 οἶδα 37.  
 οἰήσομαι 147.  
 οἶκαδε 29.  
 οἶκεῖν 212.  
 οἰκογενής 175.  
 οἰκοδομέω 169.  
 οἶκοι 78.  
 οἰκοφύλαξ 176.  
 οἶμαι 156.  
 οἶς 21.

ὄγκον 153.  
 ὀλίζων 43.  
 ὀμιώμενοι 116.  
 ὄμμα 39.  
 ὀμόδουλος 172.  
 ὀμότροπος 171.  
 ὀμοῦ 29.  
 ὀμώμοσται 135.  
 ὀμώμοται 147.  
 ὄο 64.  
 ὄου 87.  
 ὄπως 217, 218, 219.  
 ὄραμα 113, 151, 152.  
 ὀρώων 114.  
 ὀρώωσα 114.  
 ὄρειβάτης 176.  
 ὄρέοντο 144.  
 ὀρώμαι 156.  
 ὄρωρεχότες 127.  
 ὀρώρεται 146.  
 ὀρώρουχα 124.  
 ὄς 85, 86.  
 ὄσσε 76, 153.  
 ὄσσομαι 153.  
 ὄτι 217, 219.  
 οὐδενόσωρος 166.  
 οὔνομα 30.  
 οὔρέω 111.  
 οὔς 77.  
 οὔτως 219.  
 ὀφείλετη 26.  
 ὀφθαλμόν 153.  
 ὀφθαλκῶν 140.  
 ὀψομαι 156.

## Π.

παίδιον 54.  
 παῖς 21.  
 παῖω 154.  
 παλαιῶ 115.  
 παμμήτωρ 172.  
 παντός 52.  
 παρέχειν 198.  
 πᾶσα 80.  
 πάσχω 100, 150, 153.  
 πατάσσω 154.  
 πατήρ 67, 68.  
 πατράσι 76.

πατροκτόνος 164, 175.  
 Πατρώ 59.  
 πάτρως 58.  
 πέδοι 78.  
 πείθωρχος 174.  
 πείθειν 205.  
 πείθεσθαι 198.  
 πειθόμενα 108.  
 πείσαι 205.  
 Πελοποννησιακός 29.  
 πεπαίδευνται 20.  
 πέπεισμαι 39.  
 πέπλασμαι 133.  
 πέπλεχα 127.  
 πέπομοφα 124, 127.  
 πέπραγα 123.  
 πεπραγάμεν 123.  
 πέπραγμαι 122.  
 πέπραχαί 127.  
 πέπτωχα 148.  
 περιρρυτος 44.  
 πέρνημι 135.  
 πεσεῖν 148.  
 πέτεσθαι 148.  
 πέφυκα 154.  
 πεφύλαχα 127.  
 πείθεσθε 108.  
 πῆτι 96.  
 πικρόγαμος 174.  
 πίνναμαι 135.  
 πίμπλημι 137.  
 πίμπρημι 137.  
 πίνω 140, 149.  
 πίομαι 120, 156.  
 πιπίσχω 142.  
 πιπράσχω 143.  
 πίπτω 142, 148.  
 πιστός 198.  
 πῆτημι 135.  
 πλάσω 133.  
 Πλαταιᾶσι 65.  
 πλείων 83.  
 πλευσσοῦμαι 36, 97,  
 110.  
 πλέω 58.  
 πλήρω 152.  
 πλήξιππος 170.  
 πλήσσω 154.  
 πλώω 58.  
 πόδα 165.  
 ποδάνιπτρον 165.  
 ποῦέω 134.  
 ποῖ 78.  
 ποιεῖν 205.  
 ποιήεις 36.  
 ποιητρία 41.  
 ποιμαίνω 28.  
 ποιμήν 28, 67.  
 πόλεις 70.  
 πολεμάδοκος 166.  
 πόλεως 65.  
 πόλιν 52, 57.  
 πόλις 71.  
 Ποσειδῶ 75.  
 ποσί 40.  
 ποτί 75.  
 πουλὺς 81.  
 πράξει 205.  
 πράξω 120.  
 πράσσειν 205.  
 πράσσω 97.  
 πρεσβυτός 66.  
 πρό 200.  
 προβέβουλα 168.  
 προβούλη 167.  
 προῖξ 24.  
 προσήγυθα 113.  
 προσήλυτος 150.  
 πρωτίστος 84, 139.  
 πτολίπορθος 176.  
 πτύω 134.  
 πτώσις 148.  
 πυγμάχος 166.  
 Πυλογενής 166.  
 πυρόω 162.  
 πυρφόρος 166.

## P.

ράων 83.  
 ρέζω 149.  
 ριπτέω 145.  
 ροδοδάκτυλος 174.

## Σ.

σακέσπαλος 54, 164,  
 166.

σακασφόρος 72.  
 Σαπφώ 59.  
 σαφής 68.  
 σβέννυμι 134.  
 σελασφόρος 166.  
 σεσίγηκα 209.  
 σεύει 26.  
 σημαίνω 163.  
 σκίδνημι 135.  
 σκώρ 75.  
 σμικρός 83.  
 σός 114.  
 σοφώτερος 36, 131.  
 σπαδών 133.  
 σταδιαδρόμος 166.  
 στάσκον 143.  
 στερίσκω 137, 143.  
 στήναι 137.  
 στήσαι 157.  
 σύ 30.  
 σύν 197.  
 συνέλαβον 168.  
 συντελείν 209.  
 σνός 57.  
 σύρω 42.  
 σύς 71.  
 σφόγγος 151.  
 Σώκρατες 54, 69.  
 Σωκράτης 55, 76.  
 σώμα 49.

## T.

Ταλκυβιάδης 29.  
 τέταφα 128.  
 τέθεικα 19.  
 τέθηκα 137.  
 τεθηκώς 128.  
 τέθλιφα 128.  
 τεθνήναι 96.  
 τεθνηώς 81, 128.  
 τέτυκα 134.  
 τείνω 41.  
 τειχομαχία 166.

τέκτων 68.  
 τελέω 133.  
 τενέω 119.  
 τέρευνα 21.  
 τέρην 69.  
 τέρπομαι 56.  
 τέτακα 127.  
 τετάχεται 127.  
 τετίμηκα 36.  
 τέτριφα 128.  
 τέτροφα 124, 127.  
 τέτρωμαι 137.  
 τέω 87.  
 τέως 218.  
 τιθείς 68.  
 τιθεισι 69.  
 τιμάω 162.  
 τιμάομεν 109.  
 τιμή 61.  
 Τιμοῦν 59.  
 τίνω 140.  
 τιτράω 142, 148.  
 τίω 87.  
 τύπτω 97.

## Y.

υιάσι 76.  
 ὕδωρ 75.  
 υἰός 76.  
 ὕμμες 85.  
 ὑπέρ 200.  
 ὑπνόνοντας 115.  
 ὑπνός 81.  
 ὑπό 200.

## Φ.

φάντατος 114.  
 φαάνθη 114.  
 φάτι 137.  
 φᾶσι 30.  
 φατός 137.  
 φέρετε 109.

φέρω 151, 153.  
 φέρων 68.  
 φησί 30.  
 φθίνω 140.  
 φιλέω 145.  
 φιλομειδής 44, 46.  
 φιλόμουσος 79, 171.  
 φίλος 198.  
 φώς 115.  
 φράσω 133.  
 φράσσω 43.  
 φρέαρ 76.  
 φρήν 28.  
 φρίσσομεν 109.  
 φύγειν 99.  
 φύσει 36.  
 φυσιολόγος 164.  
 φύσω 36.  
 φωσφόρος 166.

## X.

χαμάδις 79.  
 χαμαί 78, 221, 222.  
 χαρίεις 70.  
 χαρίεσι 69.  
 χειροτερος 139.  
 χείρων 82.  
 χέρρων 42.  
 χορηγός 164.  
 χοροδιδάσκαλος 164,  
 176.  
 χραισμέω 145.  
 χρυσοκόμης 174.

## Ω.

ᾠζήσα 147.  
 ᾠτέω 111.  
 ὀνέομαι 112.  
 ὄροτο 110.  
 ὦς 33.  
 ὠφέληκα 147.  
 ὠφέλλα 121.

## INDEX OF SUBJECTS.

### A.

- Ablative 187, 197.  
Abstractions in grammar 53.  
Accent 18, 65, 69, 106.  
Accidence and Syntax 13, 178:  
arrangement of 48.  
Accusative, plural 66, 70, 71:  
sing. 185, 193.  
Adverbs 188, 200.  
Analogy 55, 73.  
Anomalous nouns 55, 75; ad-  
jective 82; verbs 98, 147, 162.  
Aorist, strong 99; weak 101,  
120; passive 131; participle  
210; infinitive and optative  
212; meaning of 205 sq.; in-  
gressive 207, effective 208.  
in German and Latin, &c.  
208 sq.  
Apodosis 214.  
Aspirates 19, 20; aspiration  
127, 151.  
Assimilation 38, 39, 113, 121.  
Attraction of vowels 42, 81;  
see Metathesis.  
Attributive compounds 173.  
Augment 102, 110 sq.

### C.

- Cases 61 sq.; 184 sq.; decay of  
189, explanation of 190.  
Changes of sounds 30, 37, 38,  
39, 125.  
Classification of the noun 55sq. ;  
of the verb 96 sq.  
Comparative grammar 6, 72:  
syntax 180.

- Comparatives 74.  
Compensatory lengthening 37,  
67 sq., 121.  
Compound sentences 213; clas-  
sification of 219.  
Composition 164; -vowel 165;  
of verbs and abstract nouns  
167; meaning of 170 sq.  
Conjugations 95, 107.  
Conjunctions, meaning of 217;  
form of 218.  
Connecting vowel, in nouns 76;  
in verbs 107 sq., 120, 121 sq.,  
143, 146; in compounds 164.  
Consonants 31; double 40, 45,  
111; auxiliary 40; extension  
of 136.  
Contracted verbs 109, 161; in  
Homer 112 sq.  
Contraction of vowels 113.  
Correlative sentences 214.

### D.

- Dative, dual 65; plural 69;  
sing. and plural 187, 197.  
Declensions, Attic 65, 71; dif-  
ference between 56 sq.; di-  
vision of 60.  
Defective adjectives 82; nouns  
76; verbs 151.  
Dentals, changes of the 38:  
omission of 40.  
Derivation 50, 158 sq.  
Determinatives 172.  
Dialects 11, 30; Æolic 26, 66,  
84, 85; Bœotian 26; Doric  
66, 118; Homeric 33, 46, 64,  
86, 129, 155, 201, 213.

Digamma 32, 59; in Æolic and Doric 33.  
 Diphthongs 20 sq.; -stems 70; in declension 56 sq.  
 Dissimilation 37.

## E.

Elision of  $\nu$  73, of  $\sigma$  72, of  $\tau$  73.  
 Epenthesis 145.  
 Etymology 158.

## F.

Feminine terminations in  $\iota$  59, 81.  
 'Flying' and 'falling' 148.  
 Formation of tenses by composition, present 117; future 118; aorist 120, 121.  
 Future 101, 118, 131; middle 154.

## G.

Genitive 62, 64, 187, 194 sq.; dual 65.  
 Grammar, and science 8; at school 13.  
 Greek dialects, importance of 5.  
 Greek language, characteristics of the 1, 38; best method of teaching and learning 2, 3.

## H.

Heteroklisis 55.  
 Homer 11, 46, 64, 113, 125, 213.  
 Hypotaxis 213 sq.

## I.

Inchoative verbs 141.  
 Infinitive 221.  
 Inflection 49.  
 Instrumental case 79, 188.  
 Iota subscriptum 27; in optative 107.  
 Iterative verbs 142.

## J.

Ja 'to go' 107, 109, 118, 132, 156.  
 Jod 32, 41 sq., 57, 70, 80, 163.

## L.

Language, the life of 38; inconsistency of 68; and thought 179.  
 Lengthening of vowels 37, 45.  
 Local origin of the cases 164 sq.  
 Locative case 78.  
 Logic and grammar 217.

## M.

Meaning of words 160.  
 Metathesis 42, 71, 76, 81, 138, 141.  
 Middle and Active 154.  
 Momentary sounds 31.

## N.

Nasal element in verbs 136, 139, 140.  
 Neuter nouns 62, 185.  
 Nom. Sing., formation of 66 sq., 185.  
 Nouns, abstract 167; and verbs 49, 116; declension of 49 sq.

## O.

Organic Lengthening 35, 117.  
 Optative 107.

## P.

Parataxis 213 sq.  
 Participle 222.  
 Passive stems 103.  
 Perfect 101, 122 sq.; secunda and prima 123; aspirated 124 sq.; participle 81.  
 Periphrasis 122.  
 Person-terminations 105.



Phonetic changes in verbs 148, 149.

Pleonasm 139, 140.

Pluperfect 129.

Prepositions 200.

Present tense 98 sq., 117.

Pronouns, Neuter of 86; Personal 85; Relative and Demonstrative 86; Interrogative 87.

Pronunciation of *t* 18, of *ζ* 18, of *θ* 19; of the aspirates 19, 20; of modern Greek 20—26; of diphthongs 21; changes in 22; of *αι* 23, of *ει* 23, of *οι* 24, of *υ* 25, 27, of *ευ* 20, of *οε* 25.

Protasis 214.

## R.

Reduplication 121, 122, 142.

## S.

Slavonic languages 44, 85, 206, 208.

Sounds and letters 17.

Spirants 32, 57.

Stems 49, 54; in diphthongs 56, in *ο* and *ω* 57, in *α* 61, in *τ* and *θ* 70, in *ω* 71; elided 72; in verbs and nouns 91, 97, 116; of tenses 97 sq.

'Strong and weak' tenses 104.

Suffixes, meaning of 160.

Syntax and Accidence 178.

## T.

Tenses, 'strong and weak' 10, 104; arrangement of 90; Present 99 sq.; Future 101; Strong Aorist 101; Perfect 102; Passive 103; general and special 98; use of 203 sq.

Terminations 49.

Time, distinction of 204.

Tmesis 167.

Transitive and Intransitive meaning 156.

Translation 181.

## V.

Verb, classes of 104; Inflection of 88 sq.; stems in 91 sq.; Division of 95 sq.; arrangement of 99 sq., 139.

Verbs in *μτ* 135; anomalous 147; Inchoative 141; Defective 151; Derivative 161; and nouns 145, 162.

Vocative 54, 69, 185.

Vowels 17, 28 sq., 35; auxiliary 106, 146; long 30, 46, 131; short 115, 134, 137, 147; in Inchoatives and Iteratives 143.

Vriddhi 35.

PRINTED BY F. A. BROCKHAUS, LEIPZIG.





PA  
258  
C983

Curtius, Georg  
Elucidations of the  
student's Greek grammar

PLEASE DO NOT REMOVE  
CARDS OR SLIPS FROM THIS POCKET

---

UNIVERSITY OF TORONTO LIBRARY

---

