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ARTICLE I. Paro, & m. Samo

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THE FINAL CONFLAGRATION.

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It is a remarkable fact, that wherever the assaults of infidelity have been most confident and most contemptuous, with the loudest flourish of trumpets, and the boldest tones of defiance, there the progress of scientifick enquiry has most completely unmasked her pretensions, and confirmed the credibility of the Sacred Scriptures. Especially is this true, in regard to that permanent topic of Infidel derision,

"THE FINAL CONFLAGRATION."

Whatever may be our theory of the earth's "Internal Heat," whether we believe in a great ocean of central fire, increasing, as we descend, to an intensity of heat far surpassing that of melted iron, with Sir W. Herschell, and all the bolder theorists; or attribute all the phenomena, with Lyell and Sir Humphrey Davy, to the influence of chemical agencies, to the combination and decomposition of various elements, beneath the constant play of Vol. v.—No. 4.

in the past.

of the sun. Supposing that our sun has passed through even a very few of these variations, in the intensity of light and heat, either in an increasing or decreasing ratio, (AND WHY SHOULD IT DIFFER FROM OTHER SUNS?) such a change, such an augmentation or weakening of its light-process, may account for far greater and more fearful results for our own planet, than any required for the explanation of all geognostic relations, and ancient telluric revolutions."—Cosmos, vol. 3, p. 181-2.

Whether we refer these indications of prodigious changes in our climate, to the "Glacier Period" of Agazzis, or to an earlier era, is unimportant to our argument. If they be confined to this imagined era, then, they coincide with the "great geological event, which separated the tertiary period from the present;" the period of universal darkness, universal death, and (according to the glacial theory,) of ice almost universal. If we refer them to an antecedent era, or several eras, then, besides the observed revolutions in the distant stars, and the "tumultuous agitation in his luminous atmospheres" now visible in our sun, we have traced upon our own globe the indelible memorials of several successive variations, precisely analogous in nature, and probably equal in extent, to any which the revelations of the Bible, or of the telescope, would lead us to anticipate in the future, or have recorded

ARTICLE II. Rev. Elia Praggo

PRONUNCIATION OF GREEK.

History of the Greek Alphabet, with remarks on Greek Orthography and Pronunciation. By E. A. Sophocles. Cambridge, 1848. Pp. 136.

It is not our present purpose to go into an extended analysis of the above work. Its learned and acute author deserves the thanks of the University with which he is

connected, and of the American public, for having given in it a mass of information, on the subject of which he treats, hitherto almost entirely inaccessible to our students. His diligence also in collecting and arranging his authorities, and the clearness with which he has exhibited them,

are deserving of all praise.

From the practical result at which Professor Sophocles appears to aim, viz: the restoration of the pronunciation which prevailed in the golden age of Greek literature, (viz. according to his division, p. 86, from Homer to Aristotle,) we entirely dissent. Even if it could be known with certainty what that pronunciation was, we are not sure but there would be insuperable objections to its reproduction in our schools, arising from subsequent modifications in the language itself, and from other causes. And it will appear below, that we differ from the Professor in regard to the question, what was the sound of some of the letters. This, however, does not prevent us from strongly recommending his book to all those who would be in a position to form an intelligent judgment of their own, on the subjects of which he treats; and with this recommendation, we take leave of Professor S., and proceed to offer freely our own remarks and suggestions on the Pronunciation of the Greek Language.

The student who undertakes to learn Turkish, Arabic or Sanscrit, bends his first efforts to acquiring the pronunciation. No matter how difficult, irregular or complex it may be, the pronunciation he must get, and until he has gotten it he feels that he has not passed the threshold of the new language. And, were we not familiar with the fact, it would certainly seem surprising, that the pronunciation of Greek should be treated as a matter of indifference, by any who regard the study of that language as

an essential part of a liberal education.

And yet our professors and our grammars, when introducing us to the rudiments of that noble tongue, gravely tell us that the *pronunciation* is a matter of no consequence, or is irrecoverably lost, or both; and then as gravely set about teaching us a pronunciation, which it would be easy to prove has no claim to be regarded as the genuine and original one, were we not relieved of the labor

of this demonstration, by the circumstance, that no such claim is even advanced on its behalf.*

What would be thought of the application of such a principle to French, or German, or any other living language? Doubtless one might acquire a correct knowledge of French construction, and even appreciate in some measure, the beauties of French composition, and yet read comment vous portez-vous? as if the letters were sounded precisely as in our own tongue. But who would be contented to pursue such a course? The idea would be

treated as simply ridiculous.

And yet the Greek is not a dead language. Its tones have never ceased to live and breathe over the hills and plains, and among the islands of its fatherland, from the days of Hesiod until now. True, as at present spoken it has lost much. The Dual number, and the Middle voice have disappeared. The use of the Dative case is rare. The Syntax has been modernized; and many words anciently used are now obsolete. But the stock of words is, on the whole, the same. The same nouns and verbs, the same prepositions and adverbs, are employed at the present day, as were employed by Plato and Xenophon, to express the same ideas. Terms borrowed from Turkish or Italian are used to some extent in conversation, but no good writer of the present day allows himself to employ them.

Now, let the reader be told that one uniform pronunciation of this language prevails throughout insular, peninsular and continental Greece, Asia Minor, Thrace and Macedonia,† and he will at once exclaim, surely that uniform

pronunciation should be the standard.

* The current pronunciation of our schools is not even conformed, as it professes to be, to English analogy. Take for instance, the infinitive of the verb to be, Elvai. The pronunciation of the first syllable has but two words in our language to sustain it; that of the last, not one. There are other anomalies almost equally glaring, which the attentive student of Greek will easily

† The only exception worth naming, is a tendency among some of the islanders to soften the sound of the letter κ before ε and ι into that of ch as in church. In respect to all the other consonants, to all the vowels and dipthongs, and to the use of the accent, the most complete agreement prevails; so that the Greek language is spoken with far greater uniformity than th French, Italian, German or English.

And so it would have been, but for the misdirected genius and influence of one great man. The learned Greeks, who, on the triumphs of the Turkish arms in the 15th century, were scattered through Europe, were every where hailed as the teachers of a language, acknowledged to contain the master-pieces of human genius. As a matter of course they introduced their own pronunciation. They knew no other; and the whole world of letters knew no other, for no other existed. It ought to be known that the prevailing European pronunciation of Greek was a pure invention of Erasmus.

It will freely be admitted, that in some particulars, the original pronunciation of the Greek language has been corrupted in the course of more than thirty centuries. But of what language cannot a similar remark be made with truth? Besides, it can be satisfactorily shown that these changes are ancient, having taken place chiefly, if not entirely, before the christian era; and that the pronunciation of the Greek language, was substantially the same in the days of Paul and Plutarch, of Justin Martyr and Pausanias, that it is in Greece at the present day. However, Erasmus, observing these variations from the original pronunciation, and still more influenced by the difficulty to Europeans in general, of acquiring the true pronunciation of the letters γ , δ , β and χ , (no precise equivalents to which exist in their own languages,) proposed a system of his own, restoring, conjecturally, the sounds of those vowels which he supposed to have been changed, and accommodating those of the consonants to the unpliable organs of his countrymen. The convenience of this system, together with the personal influence of its author, rendered it acceptable to Europeans, among whom it has prevailed to the present day. English and American scholars, while (under the influence of the pronunciation of their own tongue) they have restored the sounds of η and ϑ to the Greek national standard, have swerved both from that standard and from Erasmus in respect to the vowel, and to some of the dipthongs.

But it is time to state briefly what the modern Greek pronunciation is.

A is uniformly sounded as a in father.

B " as v, never as b.

 Γ is gh guttural before a and o, but softer and more like y before ε , ι and υ .

 Δ th in this.

E a in mane or e in men.

z, never like dz.

H ee, same as 1.

Θ th as in thin.

I i as in machine.

K k.

 $\Lambda \cdot l$.

 \mathbf{M} m.

 \mathbf{N} n.

z as in wax.

o o as in whole.

 Πp .

P r somewhat stronger than in English, but not so strong as in Scotch.

 Σ s as in say.

T t.

 Υ y as in ruby, same as ι .

 Φf

X ch guttural as in German.

Y ps.

 Ω o, same as omicron.

The only vowels which appear to have changed their pronunciation since the most ancient times, (except that the distinction between long and short vowels is confessedly lost,) are η and υ ; the former having doubtless originally had a sound resembling that of ε , and the latter a sound corresponding to u French and u German. Both are now pronunced precisely like ι . With the change of the former, compare that which the letter e has undergone in our own language (from its original Roman sound,) and with that of the latter, the similar change in the pronunciation of y German, in the greater part of the countries where that language is spoken, and of u among the common people in Southern Germany.

The consonants which have in our schools a pronunciation different from that of the Greeks, are ε , γ , δ and χ . Beside these we deprive ξ and ψ of half their power, when they appear at the beginning of words, while the Greeks

sound them fully wherever they occur. Probably no one will attempt to justify the variations in respect to the χ , ξ and \downarrow , except on the ground of the difficulty to our organs

of pronouncing them accurately.

But, in the first place, the testimony in respect to these letters, afforded by the languages descended from the Latin, is not uniform. The Spanish, in many cases, pronounces b nearly like v, and d like th in this, (in other words, like the Greek ϵ and δ) and gives to g a guttural sound; while all the languages of the Latin stock vary the sound of g,

according to the vowel by which it is followed.

In the second place, it may be asked, where is the proof that ε , γ and δ were pronounced by the ancient Greeks

precisely as were b, g and d, by the Romans?

In Latin words, derived from the Greek, \mathcal{E} is represented not only by b, but by v; e. g. \mathcal{E} is \mathcal{E} is \mathcal{E} is \mathcal{E} is a vis, \mathcal{E} is \mathcal{E} is \mathcal{E} is and vice versa, Latin names transferred to the Greek change v into b; e. g. Octavius Oxta \mathcal{E} into \mathcal{E} into \mathcal{E} in \mathcal{E} into \mathcal{E} in \mathcal{E} is \mathcal{E} in \mathcal

in inscriptions.

That γ was originally a soft letter, is proved by the fact that even as early as the time of Homer, it was employed, like the Digamma, as an aspirate; thus $\gamma\delta_0\partial_{\pi}\circ_5$ for $\delta_0\partial_{\pi}\circ_5$, $\gamma\eta\delta\omega$ i. q. $\eta\delta\omega$; and by its insertion or omission in such words as γ ivo $\mu\alpha$ i, γ i γ vo $\mu\alpha$ i; γ iv ω i α i, γ i γ vo ω i, γ i γ vo ω i, also by its use in the Septuagint translation of the Old Testament to represent the Hebrew translation of Ayin; as in $\Gamma\dot{\alpha}\zeta\alpha$, $\Gamma\dot{\alpha}\mu\dot{\alpha}\dot{\beta}\dot{\alpha}$, &c. Prof. S. (p. 112,) after inferring "from Aristotle's and Sextus's definition of a mute consonant," that γ was sounded like g hard, says, "in later times, it had

the sound of the Romaic γ ; hence, in the Septuagint, it sometimes represents the Oriental Ain: as Γάζα, Γαιβάιλ, Γόμορὸς."

But when were these later times? Some ancient authors say that the translation of the Seventy was made in the time of Ptolemy Lagus; others, that this work was accomplished under the auspices of his son, Ptolemy Philadelphus. Now, Ptolemy Lagus commenced his reign the year before Aristotle died. Even if we assign the later period to the translation, no sufficient time remains for the supposed change. Besides, Sextus, the other author whose definition is relied on lived some centuries later

definition is relied on, lived some centuries later.

Respecting δ , the fact of its being interchanged with the Latin d, proves nothing; for, on the supposition that its pronunciation was the same in ancient times as at present, and that the Latin d was the same as ours, the Romans had no exact representative of it, and would naturally employ d as the letter most nearly resembling it; precisely as the Europeans do at the present day, in representing modern Greek names. We have, however, the testimony of Dionysius of Halicarnassus, who says that it was pronounced, "της γλώσσης άχρω τῶ στόματι πιοσειειδομένης, κατά τούς μετεωιοτέζους δδόντας, έπειθ' ύπὸ τοῦ-πνεύμαλος ύπορραπιζομένης, καὶ την διέξοδον αὐτῶ περὶ τοὺς δδόντας ἀποδιδούσης," by resting the tongue against the upper teeth at the extremity of the mouth, and pressing the breath upon it, (the tongue,) which thus gives utterance to this letter by the teeth. Now this is a plain description of the sound of th, as in the, and can by no means be made to signify that of d.

In regard to all three of these letters, \mathcal{E} , γ , δ , it is a strong proof that they had anciently the sound which they now have in Greece, that they were classed as $\mu \delta \sigma \alpha$ or medial, (in respect to aspiration,) between $\psi \lambda \lambda$, smooth mutes, π , κ , π , and the $\delta \alpha \sigma \epsilon \alpha$, rough ones, φ , χ , ϑ . Let the reader make the experiment with his own organs, and he will be satisfied that, as pronounced in our schools, they have no claim to such an appellation; while according to the pronunciation of the Greeks, no term could have been more

appropriate.

Add to all this, that these letters are pronounced with perfect uniformity throughout all the countries where Greek is spoken, and the argument approximates to a demonstration that that pronunciation has never been

changed.

The proper limits of an article like the present forbid a minute investigation of the pronunciation of the dipthongs. The result of such an examination would doubtless be that, although they have varied from their original pronunciation, yet, their present pronunciation was attained long before the date of the oldest Greek manuscripts which have come down to our times, and probably before the Christian era. Thus α_i was often employed by the Seventy to express the sound of the Hebrew tseri, as in the names Elam, Ethan, Heman, $Ai\lambda \dot{\alpha}\mu$, $Ai\beta \dot{\alpha}\nu$, $Ai\mu \dot{\alpha}\nu$; so to represent that of hireq, as in Elim, Dina, Seir, $Ai\lambda \dot{\epsilon}i\mu$, $\Delta \dot{\epsilon}i\nu\alpha$, $\Sigma \eta \dot{\epsilon}ig$; $\alpha \nu$ and $\epsilon \nu$ to represent the sounds av and ev, as David and Levi, $\Delta \alpha \nu i \delta$, $\Lambda \dot{\epsilon} \nu i$, &c.

The only serious objection to the universal adoption of the pronunciation existing in Greece, is the fact that the vowels η and υ , and the dipthongs ε_i , ω_i , and υ_i , are all sounded like ι .* But after allowing this objection its full force, we will venture to inquire, whether it is not much more

than balanced by the following advantages:

1. Uniformity seems very unlikely to be attained in any other way. There can be no other standard. However ingenious the speculations of an individual may be, or however accurate his researches, it seems highly improbable that any newly proposed scheme of pronunciation would meet the unanimous approbation of the learned in a single country, much less in all countries where the study of Greek forms a regular part of a liberal education. But by reverting to the pronunciation of the Greeks themselves, we have a standard which may fairly and reasonably be admitted by all other nations.

2. There is a familiarity and naturalness arising from the adoption of a pronunciation actually in use among a people of our own day, which greatly facilitates the progress of the learner. That modern languages are ordinarily acquired with greater rapidity than ancient, and are more familiarly treasured up in the memory, is owing, we apprehend, not mainly to any difference in their structure,

^{*} Great as is this variety of means for expressing the e sound, we can rival it in English. Witness the orthography of such words as me, thee, plea, relieve, perceive, machine, valley; not to speak of quay, people, Cæsar, æcumenical

but to the method pursued in their acquisition. Treat Latin and Greek as *living* languages, and they will *live* in your habitual regard and in your memory. This is a matter of experience, and we can only recommend to our readers to make the experiment for themselves, believing that

they will be satisfied with its results.

3. The adoption of the modern Greek pronunciation would naturally lead the learned of other countries to take increased interest in the literati of Greece, to maintain more intercourse with them, (an intercourse which it might be hoped would, in many ways, prove mutually beneficial,) and to pay more attention to their publications. ny a classical scholar visits Greece and finds himself cut off from intercourse with those who surround him, simply because he has studied their ancient language with a pronunciation which makes him a barbarian to them, and them barbarians to him. The rapid advance of higher education in Greece, gives promise that its rising university will ere long be a resort for students from other countries, who wish to perfect themselves in the knowledge of the ancient Greek. The advance to which we refer does not, however, relate so much to the study of Greek, as to the combining of other branches with that. The Greeks have never neglected the study of their ancient language. The writer has often listened, with astonishment, in their grammar schools, to the exercises of boys, from ten to fifteen years of age, whose promptness and skill in grammatical analysis would put to shame many of our college An increased acquaintance of learned foreigners with the schools of Greece, could not fail to advaace the cause of classical learning universally. We commend the subject of these remarks to all admirers of the language of Homer and Demosthenes, of Paul and John, of Gregory and Chrysostom.