## XVII.—THE ORIGIN OF THE AUGMENT. By the Rev. A. H. SAYCE, M.A.

The origin of the augment in the Indo-European verb still remains a mystery. From the time of Bopp solution after solution has been attempted, but without success. The explanations that have been put forward have either sinned against phonetic laws or have made assumptions that are devoid of foundation. The progress that has now been made, however, in determining the phonology of the older Aryan languages, more especially as regards the vowels, and the light that has been thrown upon the formation of Aryan grammar by the application to it of the theory of assimilation, have so cleared the ground that the time has come for proposing another, and, as I hope, more satisfactory solution of the problem. It is this which will form the subject of the present paper.

Buttmann and Pott (see Et. Forschungen ii. 73), have suggested that the augment may be a sort of broken reduplication. As  $\epsilon \zeta \dot{\eta} \tau \eta \kappa a$  to  $\epsilon \dot{\zeta} \dot{\eta} \tau \eta \sigma a$ , so was it assumed that έγείρω or ὄκνος might stand for \*γε-γείρω or \*κόκνος (cf. Brugman in Curtius' Studien, vii. pp. 213 sq.). Bopp put forward two theories. His first was that the augment was identical with the privative à. Achorayam, for example, meant originally "I am not stealing now," that is, "I was stealing." It is hardly necessary to discuss this theory. The proper form of the privative particle is  $d\nu$ - (n), the nasal reappearing before a vowel, while the vowel of the augment, as we learn from Greek, is  $\epsilon$  and not a or n. Bopp's second theory was adopted by Schleicher and Curtius. the augment a demonstrative a "that," which in combination with the verbal stem had the meaning of the German damals or da. But both the demonstrative and its meaning are There was a demonstrative a in Old Basque, but there is no proof that there was any such in the Parent-Aryan. Moreover, the augment requires  $\epsilon$  and not a. Hoefer proposed to see in the augment the Teutonic ga, ge-, but this

would presuppose the loss of an initial guttural, contrary to the phonetic laws of Sanskrit and Greek. Benfey also thought of the German ge-, and suggested for the augment an instrumental case of a pronominal stem a, while Scherer identified it with a particle a, to which he gave the signification "in the neighbourhood of." But these theories fall upon the same rock as the second theory of Bopp. The particle a is non-existent, and the vowel of the augment is  $\epsilon$ . As for the old theory of Buttmann, we now know that the initial consonants of Greek and Sanskrit cannot be disposed of so easily as he imagined.

There are two facts connected with the augment which we must bear in mind before we proceed to investigate its The first of these is that its vowel is  $\epsilon$ , like the vowel of the reduplication, before the latter was assimilated to the vowel of the root in words like tutupa, tutudi. second is that the augment appears only in Sanskrit, Zend, Greek, and Armenian. Consequently, while on the one hand it must have been a possession of the Parent-Speech, since it is found in the Indian and European branches of the Aryan family alike, on the other hand it could not have been an inseparable companion of the past tenses. We must explain the fact that whereas some of the Indo-European languages retain the augment, others have discarded it, in the same way that we explain a similar fact in regard to the first person singular of the Active Present. The Parent-Speech must have had the option either of prefixing or of dropping the syllable. While some of the derived languages preferred the augmented form, others preferred the unaugmented form: hence the difference between Greek, Armenian, Zend and Sanskrit on the one side and the remaining Indo-European languages on the other.

In Greek we can trace the gradual disappearance of the augment through phonetic decay, helped no doubt by the action of analogy. In Homer and Hêrodotos forms with and without the augment stand side by side. What has happened in Greek may well have happened in the Parent-Speech. Here, too, phonetic decay brought about the loss of the

augment in certain forms which in some of the derived languages became the type and norm after which all other similar forms were fashioned. On the other hand, languages like Greek which preserved the augmented syllable, would have assimilated the forms which had lost the augment to those which still preserved it.<sup>1</sup>

Now in Greek there are certain cases in which the augment cannot be distinguished from the reduplication.  ${}^{2}H\gamma o\nu$  (Skr. agam) for  $\ddot{\epsilon}$ - $a\gamma o\nu$ , or  $\mathring{\omega}\rho\tau o$  for  $\ddot{\epsilon}$ - $o\rho\tau o$ , cannot be distinguished from the reduplicated perfects  $\mathring{\eta}\chi a$  for  $\ddot{\epsilon}$ - $a\gamma a$  or the Vedic  $\ddot{a}ra$  (for  $\epsilon$ - $o\rho a$ ). In fact, this must always have been originally the rule when the verbal stem began with a vowel. In the Parent-Speech the reduplicated syllable of a root, the initial of which was a vowel, must always have been the syllable  $\epsilon$ . It is possible that it was in these roots or stems that the loss of the augment first commenced; it is, I think, more than probable that we have to see in them the origin of the augment itself.

The analogy of the vocalic stems was followed by the consonantal stems; this is the theory I suggest to account for the origin of the augment. The augment, in short, is simply the reduplicated syllable of the vocalic stems extended by analogy to other verbal stems as well.

In the case of the vocalic stems it characterized the perfect as well as the imperfect and the aorists. In the consonantal stems, however, this was impossible; the initial consonant of the reduplicated syllable was too firmly established in them to be eliminated, and consequently the tense, which was distinguished by it, retained its primitive form. But no obstacle stood in the way of differentiating from the perfect the imperfect and the so-called "strong" aorists (in which I see old imperfects of the contracted or weakened stem) by prefixing to them what we now term the augment. The extension of the augmented syllable to them from the perfect

<sup>1</sup> It is of course quite possible that besides the forms which had lost the augment through phonetic decay, there were also forms which came down from the older period when the augment did not as yet exist, and which therefore never possessed it.

would first have taken place in verbs which began with a vowel; from the imperfect and the aorist of the vocalic stems it would subsequently have spread to those of the consonantal stems. In this way, we could best explain why augmented and unaugmented forms stood side by side in the Parent-Speech.

A reduplicated perfect like  $\dot{\epsilon}$ -aya, then, would first have given rise to imperfects and agrists like  $\dot{\epsilon}$ -ayo $\mu$  and  $\dot{\epsilon}$ -aym; and then to other imperfects and agrists like  $\dot{\epsilon}$ - $\phi$ - $\epsilon$ - $\rho$ - $\rho$  and  $\dot{\epsilon}$ - $\phi$ - $\epsilon$ - $\rho$ - $\rho$ . The sigmatic agrist would naturally be adapted to the pattern of the other agrists.

My hypothesis gets rid of an imaginary particle  $\epsilon$ , which cannot otherwise be discovered in the Indo-European languages, as well as the anomaly of a flectional prefix. It also brings the reduplicated syllable of one of the past tenses into a relation with the augmented syllable of the other past tenses which syntactical propriety would seem to require. may add that if the augment were originally an independent particle, it is difficult to understand how its addition to a verbal form could have given to the latter the idea of past time, since unaugmented forms existed with precisely the same past signification; and also that there is no more reason why the reduplication should not have been differentiated to express the different grammatical relations of the perfect and the imperfect, than that it should have been differentiated to express a perfect in δέδωκα and a present in δίδωμι. there is no inherent incompatibility between the reduplication and an agrist is shown by the reduplicated agrists of Greek.

My hypothesis is, then, that in the Parent Indo-European verb the reduplicated syllable of the perfect of vocalic stems was extended to the other past tenses, which had previously been without a prefix; that from the vocalic stems it passed to the consonantal stems (where the other past tenses had either been without a prefix or had possessed the ordinary reduplication), a means being thus provided for differentiating the perfect from the imperfect or aorist; and that subsequently what had now become the augment  $\epsilon$  was dropped in many cases through the action of phonetic decay. It is very possible that this action was assisted by the fact that

imperfect or a oristic forms still survived in consonantal stems which down to the epoch of Indo-European separation had not received the augmental prefix.

## XVIII.—ON THE PLACE OF SANSKRT IN THE DEVELOPMENT OF ARYAN SPEECH IN INDIA. By J. Boxwell, H.M. Bengal Civil Service.

The question of the place of Sanskrt in the development of Aryan speech in India has been prominently put forward by Dr Hoernle and Mr. Grierson in the introduction to their new Bihari Dictionary. This work has been deservedly well reviewed in Germany; but, strangely, their answer to this interesting question has not been noticed. The subject has often been touched incidentally, but never, so far as I know, fully investigated. Hoernle and Grierson give their opinion with much confidence, but no evidence. Their verdict is: "The Sanskrit was only a literary language, but never a spoken one, in the sense of a vernacular." And again, "The Gaudians, or modern vernaculars of North India, are not descended from the Sanskrit in any true sense whatever."

I hope to be able to show good reasons for affirming the contradictory of both of these propositions. I must first say what ground-work of fact there is for the theory against which I contend.

The ancient Aryan of India has no ethnic or territorial name, like 'Gaelic,' 'English,' 'Latin.' We call the language of the Vedas 'Vedic,' as we call that of Homer 'Homeric.' Sanskrt means 'perfected,' and at the time when it was first used as the proper name of a language, that language was not a living vernacular. Most of the extant classical Sanskrt literature was composed in a language not spoken as a vernacular at the time. Grammar was cultivated early, and the standard of composition fixed. The fatal facility for compounding words soon led to an artificial style; and Sandhi, which at first was a natural process of assimilation in the mouths of men, was elaborated