

common possession of all normally-developed men; (3) That the want of colour-epithets in the Homeric poems is due to a defect of language rather than of perception, such as might naturally be expected from the circumstances of their authors. As to the existence and personality of a Homer, that is quite outside the present question.*

GRANT ALLEN.

* A short notice of the two tracts, by Dr. H. Magnus of Breslau, which called forth Mr. Gladstone's recent utterance on the subject, will be found below under the head of New Books. Prof. Robertson Smith, in a letter that appeared in *Nature* of Dec. 6th, gives brief expression to a view of the question essentially the same as Mr. Allen's (whose Note was independently written some weeks before), and cites a most interesting passage from Athenaeus, *Deipnos.* xiii., 81, which proves that the Greeks themselves were perfectly well aware of the looseness of their poetic vocabulary of colour.

EDITOR.

"*Transposition of Traces of Experience.*"—To the process thus aptly designated Mr. Verdon devotes a short paragraph in his valuable article on "Forgetfulness" in the last number of *MIND*. In each instance of its occurrence, as there represented, we find involved two objects of memory,—(1) a pair of words, syllables, or sounds, and (2) their order in a sentence. The former of these, viewed independently, are supposed to be perfectly well remembered: failure of memory exhibits itself only in respect of the latter. The writer adds that "the whole family of Malapropisms is nurtured upon this peculiarity". Now this general statement may or may not be true in its fullest extent; but before we admit its truth, we must at any rate examine many other typical examples of transposition than those of the exact kind indicated by Mr. Verdon.

At the outset, 'Malapropism' may be referred to a more general 'Maladroitness,' which brings dumb actions within our purview. In fact, the transposition of these is often more striking, and sometimes more amusing, than that of words. Thus a man shall, like Will Honeycomb, be standing by a river-side with his watch in one hand and a pebble in the other: he shall "squirr away his watch" into the water, and shall ("with great sedateness") pocket the pebble. Here the two familiar actions transposed correspond to the two remembered words above referred to, and just as these may be accurately spoken, so may those be accurately performed. But here, and generally, the order of combination is totally *new*,—an arrangement *proposed*, and not formerly learnt. How far, then, and in what sense, is a perturbation of that order chargeable upon failure of memory? Shall we say that an order of procedure is directed by the mind and instantaneously forgotten? or is, perchance, the apparently perturbed order of procedure the one actually directed, while forgetfulness relates to the positions of the objects,—it being momentarily forgotten that the watch lies (say) in the right hand, and the pebble in the left? And

what, if those positions have not been accurately perceived? Can that be, strictly speaking, forgotten which has never really been apprehended?

In a certain sense, indeed, we may be said to forget everything but the object on which the mind is, at each successive instant, actually fixed; nevertheless mistakes that fall within the present moment (this being understood to correspond with a material rather than a mathematical point) are generally charged upon want of *attention*. It would seem sometimes, as if the mind, after directing the performance of two actions, instead of superintending the performance, leaves the limbs to act, so to say, automatically; and these excite that action first which, from a nerve-and-muscle point of view, is the more important, or to which the more energetic impulse has been given. Or, again, the operations of the mind being much more rapid than the movements of its material agents, these—the limb, the tongue, the pen—necessarily lag behind, and are continually trying, as it were, to catch it up by leaping to that point in the line of thought to which the mind has preceded them; while the mind is as continually running back to bring them up abreast of itself. When these two movements occur simultaneously the result is some more or less grotesque transposition.

Hence, a general condition of *complete* interchange of two such actions, words, or what not, is that they fall pretty close together,—close, i.e., in time. If hand or tongue lags behind by any long interval, the mind, in reverting to its agent, usually discovers, and if possible rectifies, the first mistake, or at any rate prevents the perpetration of the counterbalancing one. This is nearly always the case in the comparatively slow process of writing. In a rapid succession of actions, moreover, the attention may be forcibly recalled by the oddity or physical effects of the first mistake. Thus, a friend of mine, dressing in great haste, and intending to use his shaving-brush and tooth-brush in succession, dashed the former vigorously into his mouth. Need it be added that he did *not* apply the other to his chin?

But this uncompleted interchange must, in the case of words, be discriminated from a species of Malapropism in which no interchange is either intended or possible; as *e.g.*, when Mrs. Malaprop herself talks of the burning *lather* running down Mount *Vociferous*. Here we step over our bounds into the region of what the Germans call *Volks-etymologie*, and find ourselves among linguistic phenomena of the "sparrow-grass" type. A foreign or strange word (never correctly apprehended) is assimilated to a native or familiar one; and then some absurd reason is invented for the special application of the latter.

But purely phonetic interchanges may certainly be embraced under the general process. These, although curtly dismissed by Mr. Verdon, are perhaps more interesting and linguistically important than any others. The accidental slips (for example, with their *h*'s), to which the best-educated people are liable, are indeed mere trifles, and are

explicable in the same way as the interchanges above referred to. But in other classes of society real or apparent varieties of such phonetic interchange, which I have elsewhere designated "Cross Compensation" (*Grimm's Law*, Trübner, 1876) have established themselves as dialectic characteristics. Thus the plant-seller that haunts our ways all the summer vociferates "Roots for your gardening all agrowin and ablowin"; and the lavender girl that follows him sings "sweet-smellin lavingder," &c. This class of instances, therefore, offers for investigation not only an origin but a history.*

The object of this note, however, is not (as is obvious enough) to investigate these curious phenomena, so much as to suggest that they deserve investigation. If Mr. Verdon, or some other professed psychologist, would subject them to a thorough discussion, he would, besides amusing himself, instruct inquirers in other lines of study (language, for example), which, without being purely psychological, necessitate a frequent reference to psychological principles.

T. L. M. DOUSE.

Prof. Jevons's criticism of Boole's Logical System.—The appearance of a new edition of Prof. Jevons's *Principles of Science* shows that his partial adaptation of Boole's system has gained a wider circulation than its original, and renders not inopportune a few words on the two men.

In the preface to this second edition Prof. Jevons says: "As to my own views of Logic, they were originally moulded by a careful study of Boole's works, as fully stated in my first logical essay". So it has seemed best to me to go back to this *Pure Logic* of 1864, and taking his first and last works together, to discuss carefully his criticisms of Boole. In both books one is struck by the fact that Prof. Jevons has never risen from the conception of the old Algebra of Number to the idea of Algebras in general. For him "all the wondrous branches of mathematical calculus" are merely developed Arithmetic (*P. of S.*, p. 162). Yet he appreciates the importance of Descartes' mathematical discovery without noting that it was really making a new Algebra, the Algebra of Geometry, introducing the directed line, the variable, &c., and not being a mere outgrowth from the old Algebra of Number. He mentions also the new Algebra of Quaternions, which contains laws flatly contradicting those of number, yet he does not draw the obvious conclusion. Finally, though Boole's Algebra of Logic is founded on the condition $x^2 = x$ or $x(1 - x) = 0$, which is not true of numbers in general, Prof. Jevons persists in considering it "a numerical system".

What would he say of Grassmann's system, of Mr. Spottiswoode's

* Many examples may be collected by the student of English popular idioms. A collection from the German dialects has recently appeared in Herr J. F. Kräuter's treatise *Die Lautverschiebung*, pp. 60-62.