

"the optical records in any aspect of them are only two-dimensional, and the latter cannot therefore have primacy."

I find it difficult to understand in what aspect the record on the retina as a curved surface is two-dimensional only. I submit that for fruitful co-relation any percipient event is four-dimensional. When, owing to retinal curvature, that which on other grounds we call a straight line is for appearance in some measure deformed, the question arises: Which are we to acknowledge as "really" deformed, the something out there or the percipient event in the record? On the basal principle of physical relativity, may we give primacy to either?

C. LLOYD MORGAN.

#### Organisation in Chemical Societies.

IN spite of Prof. Philip's able defence (NATURE, October 25, p. 609), it must be confessed that Dr. Travers' objections have much point. It is surely the main business of the Chemical Society in the first place to publish the discoveries of its members, and in the second place to maintain a reference lending library for the benefit of its members. It is doubtful if it should undertake the publication of Abstracts or of Annual Reports unless these pay their way. This is educational work simply, and might reasonably, especially in view of the great industrial importance of chemistry, be financed out of public funds. A Government Department, such as that of Scientific and Industrial Research, might quite well be expected to undertake the publication of chemical abstracts, of chemical patents similar to the publication of Friedländer, and of chemical books of reference, organic and inorganic, frequently revised, on the lines of Beilstein and Stelzner.

J. E. MARSH.

University Chemical Laboratory,  
Oxford, October 28.

PROF. PHILIP would have been well advised if he had struck out the last paragraph of his letter in NATURE of October 25. He may have found it satisfying, but it does not accord with the usages of professional controversy, nor does it strengthen his reply to my criticism.

I must point out that I did not attempt to deal with the finances of individual societies. That the Chemical Society has temporarily waived its entrance fee has nothing to do with the fact that 15*l.* is an undue tax on chemists who wish to belong to British chemical societies. Prof. Philip practically admits that American Chemical Abstracts are superior to the British equivalent. They cover "a wider area," a fact which, for some reason he does not give, he does not consider to be an advantage. They are published as a whole in *octavo* size, instead of half in *octavo* and half in *quarto*. One does not have to walk from one set of shelves to another to look up references in any one year. If Dr. Philip will accept a constructive suggestion, it is that his Committee should follow the lead of the United States in these respects.

My experience of the Chemical Society's library has been unfortunate. I have frequently been told that I could not have direct access to series of journals, because members were not admitted to the room where the journals were kept, because indexes were working in the room, etc. As to the meeting-room, on this point Prof. Philip is silent; most members of the Society are inclined to eloquence on the subject.

NO. 2871, VOL. 114]

This state of affairs will continue so long as the various chemical societies continue to cherish their individuality to the extent of preserving absolutely distinct offices, staffs, etc. At the moment they may be co-operating on paper; actually they are in active competition for members, using all the arts of advertisement, including the unique offer of some of the cheapest chemical qualifications in the world.

M. W. TRAVERS.

147 Queen Victoria Street,  
London, E.C.4,  
October 29.

#### The Physical Nature of Verse.

IF Prof. E. W. Scripture (NATURE, October 11, p. 534) had said that *normal English* verse was *mainly* a matter of rhythm—instead of saying that verse is purely a matter of rhythm—he would have been in line with ordinary opinion to-day. I have myself taught this, at Cambridge and elsewhere, for a quarter of a century. Prof. Scripture contributes nothing new except his method of research and the unnecessary word "centroid." His conclusion is too sweeping, and at the same time defective. The works of Homer, Pindar, Virgil, Horace, and Ovid are verse; and in them we are obliged to take account of quantitative feet. Shakespeare's blank verse line is rhythmic; Milton's is rhythmic and quantitative as well; both observe the principle of number. One of the great æsthetic principles, that uniformity shall admit of variety, so that we receive a continual satisfaction of expectation, mingled with recurrent surprise, would be thwarted if verse were written solely on Prof. Scripture's principle.

Old English verse was of this type:

|                      |                           |
|----------------------|---------------------------|
| Áthelstan sóvran     | of éarls the lórd,        |
| Bárons' beigh-giver, | and his bróther álso,     |
| Édmund Átheling      | of éndless fáme           |
| Sléw in báttle       | with their swórd's' édges |
| Thére at Brúnanbúrh. |                           |

Each half-verse had two stresses, and would admit a third, a half-stress; and the two were linked by alliteration.

Geoffrey Chaucer dropped the alliteration, introduced rime, number, and the suggestion of musical rhythm. He wrote, for instance:

|                        |                              |
|------------------------|------------------------------|
| Whán that Aprillé      | with his shóurés soóté       |
| The dróghte of Márche  | hath pérced to the roóte,    |
| And báthéd évery veíne | in swích licóur,             |
| Of which vertu         | engéndréd is the flóur . . . |

He managed the suggestion of musical stress by keeping two rules: (1) a stress must fall either on the fourth or the sixth syllable, unless stresses fall on the second, eighth, and tenth; (2) a stress must always fall on the tenth syllable, and it must be a full stress unless a full stress has fallen on the eighth syllable. In this way he combined the free rhetorical rhythm of the pure English verse with the (substantially indicated) musical rhythm of certain foreign verse.

Nearly all our good verse, everything that can be called classical, combines these two principles.

As for the ancient classical feet, when we mention them nowadays in describing English verse we use a certain licence. By "anapæst" we do not mean two short syllables followed by a long syllable, but two unemphatic syllables (interstresses) followed by an emphatic syllable (a stress). In that sense, for example, Swinburne's chorus in *Atalanta*, "When the hounds of Spring are on Winter's traces . . ." may be described as anapæstic.

Curiously enough, Prof. Scripture (in my view) marks