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Normal and Supernormal Phenomena.

ABOUT two years ago a plea was made in our columns by Dr. R. J. Tillyard for a wider and more generous outlook on the part of science towards psychical research. The correspondence which followed showed that one of the reasons why scientific investigators hesitated to undertake research into these problems was the uncertainty that, however faithfully they might follow up clues, they were unlikely to be able to reach precise conclusions. There are so many unsolved problems in the natural world to attract the attention of scientific workers, and so many natural mysteries from which they may be able to lift a corner of the veil, that however willing they may be to enter into the field of supernatural or supernormal manifestations, the claims of normal facts and phenomena are too strong to permit them to do so. If few men of science devote themselves to "the scientific study of what are called supernormal phenomena" it must not be assumed, therefore, that they are altogether indifferent to observations and conclusions in that field, any more than it can be assumed that students of atomic constitution have no interest in the structure of the cell.

We ourselves preserve an open mind towards work for the advancement of knowledge and the acquisition of truth in all spheres of intellectual activity. It is on that account that we publish this week an article by Dr. R. J. Tillyard in which he presents evidence, regarded by him as sufficient, of the survival of a human personality. The search for evidence that human personality survives the shock of physical death, and that, after severance from the body, it can continue to function on some other plane of existence, will no doubt be prosecuted so long as man possesses that curiosity from which discoveries are born. Dr. Tillyard is one of those who, much to his credit, has decided to make his contribution to the problem by both a consideration of, and practical experience with, those obscure and hotly debated phenomena which form the subject matter of psychical research.

In his article published in this issue of NATURE, he describes certain of his experiences, and as a result he has come to the conclusion that a certain human personality who parted from his body in 1912 has "fully proved in a scientific manner" that he has survived physical death. Now it is a little difficult to suppose that the experiences related by Dr. Tillyard have been the sole means of convincing him of the truth of such a momentous question. Such a supposition would scarcely be

fair to him. We must imagine that these experiences have been the culmination of a series of other incidents observed elsewhere, which, so to speak, have tipped the scale in favour of the hypothesis of survival. This assumption is made because, from a consideration of Dr. Tillyard's remarks, it is not easy to understand on what he bases the "*scientific proof* of survival" which he believes to have discovered in the evidence presented. It may be of interest to indicate a few of the points in his article which must occur to any one at all acquainted with the methods by which inquiries into 'psychical' phenomena are usually conducted.

Dr. Tillyard divides his experiences into two parts—(a) Supernormal Cognition of Unknown Objects, and (b) Supernormal Production of Thumb Prints. Now it would seem fairly clear that in the Margery mediumship we have the choice of two alternatives. Either the phenomena are 'supernormally' produced in the sense in which Dr. Tillyard uses that term; or they are the result of normal methods which have deceived the observers. In other words, Margery is either the instrument of some unrecognised 'Forces'; or she, and possibly others, are engaged in a mystification for some undisclosed purpose. There seems no doubt that Dr. Tillyard prefers the first hypothesis, which he has somewhat elaborated so as to include the survival of an active human personality.

Let us briefly examine his evidence. Dr. Tillyard tells us that for the alleged supernormal cognition of unknown objects he "proceeded to make the following preparations for supernormal tests." Now the inadequacy and oddity of these tests must strike even the most casual reader. We do not know who actually invented these tests, but it would seem probable that they were devised by the control 'Walter,' or, in other words, on the hypothesis of normal action, by the medium and her associates. If this were so, Dr. Tillyard and Mr. Evans were merely the instruments used in preparing experiments devised by others—not altogether a satisfactory beginning of a test for supernormal activity. Moreover, it is 'Walter' who arranges the sitting and tells Dr. Tillyard when preparations are complete for examining the calendar, the diagrams, or the magazine.

We find it difficult to imagine what possible reason Dr. Tillyard can have for supposing that anything supernormal was in progress during the acquisition of knowledge regarding these objects. We do not deny that supernormal activity *may* have been present, but we would submit that the experiments were unsuitable to demonstrate it.

Had 'Walter' given the order of the calendar sheets before they left Dr. Tillyard's pocket it might have been more difficult to seek a normal explanation. Had he described Mr. Evans's diagrams in a similar way it might have been worth our careful attention. But he did neither of these things. He took away the calendar and the diagrams and returned them later. Doubtless Dr. Tillyard will say that he took them away in order to read them: others may think they were taken away for some one else to read them.

The difficulty of darkness is not one which even a moderate ingenuity could fail to surmount. All that is required, therefore, upon the hypothesis of normal procedure, is that someone saw the objects handed over by Dr. Tillyard and Mr. Evans, and that Margery, having acquired knowledge of them, wrote it down afterwards. It would seem that any one could produce the same 'phenomena' under the same conditions with some degree of practice, provided he desired to do so. Similarly, if we assume that Mrs. Litzelmann was willing to assist, why is it difficult to explain her knowledge of the calendar numbers? Dr. Tillyard says of the calendar sheet (May 8) torn from the block at the sitting that the 8 was "My number." It was nothing of the sort. It was 'Walter's' choice from a set of 31 sheets. By signing *all* the sheets of both months Dr. Tillyard and Mr. Evans themselves provided the means for prearrangement, and what we should like to know is whether or no they did this under instruction. Again, why did Mr. Evans make ten diagrammatic drawings instead of one? Because on the hypothesis of mystification the medium in Maine would be fairly safe in choosing a square and a circle, as it is unlikely that *both* of these would be absent in *ten* diagrammatic designs.

Lest it be thought impertinent to criticise a sitting at which one was not present, it should be understood that only a few of those factors have been indicated which, instead of suggesting that the so-called cognition of unknown objects belongs to the "category of normal impossibilities" as Dr. Tillyard avers, point rather to normal interference from internal evidence alone.

With regard to the thumb prints, Dr. Tillyard has not yet even *begun* to prove that the prints obtained at the sitting are identical with those of Walter Stinson in life. Certainly *if* it could be proved that a print was found on the razor, *and* that it was made by Walter on the morning of his death, then there would be some reason for suggesting that certain features of the prints

made on wax resembled, or were identical with, certain features of Walter's thumb print made when alive. But this is all that can be said, and until we have seen an untouched photograph of the print alleged to have been found on the razor, it may be as well to suspend our judgment on the resemblances between it and the wax impressions.

Apart from this, however, even assuming that everything occurs exactly as related by Dr. Tillyard, it is not easy to understand what possible connexion the thumb print has with Walter's surviving personality. For, we can scarcely suppose, as Dr. Tillyard appears to do when he speaks of Walter's "surviving voice", that Walter's *body* has survived and is living in some other world. The thumb is, if we understand Dr. Tillyard's theory correctly, built up afresh at each sitting out of 'teleplasm' produced from the medium's body. Since, according to this hypothesis, we grant such staggering powers to the medium, what reason have we to deny her the additional power of producing out of teleplasm the thumb prints of anyone, living or dead? Assuredly few of us could, without detailed study, make a rough drawing of our thumb prints while we have our thumbs: what conceivable reason have we for supposing that we could make accurate reproductions when the flesh of our thumbs has long since crumbled to dust? The problem has no longer any basis from which speculation is possible. If these be facts, then they prove nothing beyond the very remarkable powers of Margery.

Returning from our flights of phantasy we may well ask why Dr. Tillyard preferred a stranger to accompany him to the sitting, whilst his associate, Mr. Evans, was left outside the door. Moreover, from Dr. Tillyard's account it is clear that 'Walter' and not he was in control. As before, they are not Dr. Tillyard's experiments: he is merely a spectator at one of "Nature's shows." We cannot help asking ourselves whether, if he had been the experimenter, and not "the respectful audience," the show would not have been more like Nature—natural. We believe that Dr. Tillyard will have to bring much more convincing evidence of the actual existence of Walter's spiritual personality than that presented by him in his article before it can pass the critical bar of science. The existence alone of a spiritual voice capable of producing compressional waves in air, having a characteristic quality and capable of being recorded and analysed by suitable instrumental means, requires so many physical assumptions that only by demonstration under the most precise conditions could such a

spiritual means of producing sound be established. We suggest that any further inquiries should be concentrated upon this point. Once it is proved that a spirit can mould a larynx and mouth cavity out of ectoplasm, and can force air through them so as to make sound and speech by such means, it would be easy to accept most of the other supernormal phenomena to which Dr. Tillyard has given attention.

Private and State Forestry.

THE position of private forestry in Great Britain was dealt with by Lord Clinton in an address delivered at the annual meeting of the Royal Scottish Arboricultural Society and published in a recent issue of the *Scottish Forestry Journal*. Lord Clinton pointed out that some 50,000 acres of woods had been felled during and immediately after the War, and that but a small proportion of this area had been replanted. "The causes," he said, "are quite easily seen. It is partly, but not wholly, owing to the War. It is mainly due to penal taxation during the War and later, which has made it impossible for many owners to replant their land. . . . It is very difficult indeed to get any exact estimate of this downhill progress, but we have estimates, for what they are worth, and it appears to us [the Forestry Commissioners] that there is being felled annually throughout the Kingdom a total of about 50 million cubic feet, representing perhaps 20,000 to 25,000 or even more acres, and we cannot ascertain that there is a larger area being planted than about 12,000 acres, obviously a quite insufficient replacement."

Lord Clinton anticipates that it is probable that the whole of the coniferous timber and almost the whole of the hardwoods (that is, broad-leaved species) now growing will have been felled by the end of the next seventy years. There has been little planting of hardwoods for a long time; many of the existing private woods have not been planted from the economic point of view, their *raison d'être* having been either sport, amenity, or protection; and the stocking therefore was in most cases very poor. If planting in one form or another is not carried on on a greater scale, by the end of seventy years there will be a smaller area of woodlands in Great Britain than the 3,000,000 acres present in 1914. On the Continent the State by no means owns the major part of the forested area, for example, Finland 43 per cent, Germany 25 per cent, and Sweden 20 per cent only. The remaining forests are either held in communal ownership or