for?" Diese Frage wurde mit „Ja" beantwortet: „We conclude that the statistical enquiry supports the hypothesis of telepathy". Der Einwendung, dass seine Kritik gar zu streng gewesen wäre, wollte der Redner eine Autorität entgegensetzen, die hier entscheidend sein möchte. Mrs. Sidgwick schreibt selbst in einer älteren Abhandlung („Notes on the Evidences, collected of the Society of Phantasms of the Wead", 1885) folgendermassen: „We are bound, I think, to strain to the utmost all possible suppositions of recognized causes, before we can regard the narrative in question as even tending to prove the operation of this novel agency". Diese Regel wird von Mrs. Sidgwick gegen die Annahme einer Einwirkung von den Gestorbenen auf die Lebenden angewandt, und sie ist der Ansicht, dass eben aus diesem Grunde eine solche Annahme nicht statthaft sei. Der Ansicht des Redners nach sei aber eine telepathische Einwirkung von einer lebenden Person auf eine andere aus ganz demselben Grunde nicht statthaft. — Sonst war der Redner der Erste, das grosse Verdienst des Sidgwick-Comités anzuerkennen, und er wiederholte noch einmal, dass wir dessen Mitgliedern nicht dankbar genug sein könnten für die kolossale Arbeit, welche sie geleistet hätten.

Experiments in involuntary whispering, and their bearing on alleged cases of thougt-transference.

By Professor *Sidgwick (Cambridge, England)*.

In a paper published in Wundt's „Philosophische Studien", Mêssrs. Lehmann and Hansen, of Copenhagen, give the results of a series of experiments in what they call „involuntary whispering"; and on the basis of these results they attempt to show that the apparent success of two series of experiments in thought-transference of numbers, reported in the „Proceedings" of the Society for Psychical Research (Vol. VI pp. 128—170 and Vol. VIII pp. 536—552), may be explained by supposing the numbers to have been unconsciously whispered by Mr. G. A. Smith, the „agent" in the experiments.

The explanation is not novel: attention was expressly called, in the report of our first series of experiments, to „faint unconscious whispering" as the least improbable explanation of the results, supposing „thought-transference" excluded. But Messrs. Lehmann and Hansen have certainly placed this probability in a new light.

They have shown experimentally that a double number may be communicated from „agent" to „percipient", by faint whispering with closed lips, so that a bystander would be likely to hear nothing, and—unless he directed his attention to the neck and throat of the agent—to see no signs of movement of the organs of speech. I have made experiments in imitation of theirs which confirm this conclusion: as I have found that it was quite possible for an observer standing not more than two feet from the whisperer, and fixing his gaze on the latter's mouth, neither to hear nor see any sign of a whisper which the percipient, at a distance of 18 inches, heard with sufficient distinctness to guess the numbers whispered with a considerable amount of success.

Unconscious whispering, therefore gives a possible explanation of the results of our thougt-transference experiments, so far as they were performed with agent and percipient in the same room — on the assumption of hyperæsthesia in the hypnotised percipient. (But it should be noted that we found nothing to suggest that our percipients were ever hyperæsthetic, though we were on the look-out for evidence of this.)

The contention of the Danish investigators, however, goes considerably further than this: they infer from a comparison of the unsuccessful guesses in their experiments and ours respectively, that the same mode of communication was operative in both cases. Here I think their argument inconclusive. They made altogether 500 experiments, taking the parts of agent and percipient alternately, so that each made 250 guesses of numbers of two digits: thus guessing in all 1000 digits of which 538 were guessed rightly. In our experiments — also almost entirely with numbers of two digits — 1327 digits were guessed, 395 rightly. Dr. Lehmann compares the four numerals most frequently substituted for each of the ten digits (including zero) in the erroneous guesses of the two sets of experiments respectively; and he finds, that in the two sets of 40 substitutions thus compared there are 28 substitutions common to both sets. This is no doubt an amount of agreement decidedly in excess of what would most probably occur by mere chance. But Dr. Lehmann's figure exaggerates the agreement; as there are several cases in which two or more numerals are equal in frequency of substitution: and in such cases of equality he has uniformly made the selection most favourable to his conclusion. I find that if the selection

had been made on the opposite principle, his total of correspondences would have been reduced from 28 to 22.

A simple empirical test shows the valuelessness of this result to establish Dr. Lehmann's conclusion. I have compared, on Dr. Lehmann's plan, our thougt-transference experiments above referred to with a recorded series of quite unsuccessful experiments at a distance — mentioned in Proceedings S. P. R., vol. VIII., p. 547 — in which we may assume pure guess-work throughout. I find that the comparison of the 40 substitutions in these two cases gives a maximum number of 27 correspondences and a minimum number of 25 — according to the principle of selection adopted where two or more numerals are equal in frequency of substitution. This is no less remarkable amount of agreement than that indicated by the figures 28 and 22 of the other comparison: but as in the series of pure guesses there was no transfer of ideas at all, the cause of agreement here cannot be a mode of transfer common to both series.

A similar result is attained, if we compare the one most frequent substitution for each of the ten numerals, in each of the three series respectively.

I suggest that the amount, of correspondence in the three series compared is really to be explained by agreement in the „number-habits" of the percipients. I find that in the thought-transference experiments 3, 2, 5, 4, 6 are the five numbers most frequently guessed, and the same numbers, in the order 5, 2, 3, 6, 4 are the favourites in the series of mere guesses; while in Messrs. Lehmann and Hansen's whispered series 5, 3, 7, 4 are the only numerals guessed erroneously above the mean number of times, 2 coming next in frequency.

A strong reason for thinking that unconscious whispering was not the cause of success in our thougt-transference experiments lies in the success of a series of experiments (described Proceedings S. P. R, vol. VIII., pp. 536—596); in which the agent and percipient (Miss B.) were in different rooms, separated by a considerable distance and a closed door. Dr. Lehmann's attempt to extend to these results the hypothesis of unconscious whispering and hyperæsthesia seems extravagant: especially considering that the experiments succeeded in two different sets of apartments, and that the percipient's position within the room was intentionally often varied.

Dr. Lehmann's incidental remarks on other thought-transference experiments carried on by means of drawings appear to me to show imperfect acquaintance with the evidence. He suggests that they can all be explained by accidental coincidence and imaginative exaggeration of resemblance. But *no one*, I think, could assert this (e. g.) of the six consecutive reproductions given in Proceedings S. P. R., vol. II., pp. 33—35 (ses also Phantasms of the Living, vol. I., pp. 35—51); or of Mr. Rawson's drawing experiments, vol. XI.. pp. 1—17).