There is a discussion by C. B. Nash and H. Forwald on the strength of evidence provided for PK by Forwald's placement experiments.

J. Eisenbud sympathetically reviews a volume in the Bollingen Series containing a monograph by C. G. Jung on Synchronicity and by Pauli on Archetypal Ideas and Scientific Theory.

R. H. THOULESS

CORRESPONDENCE

'SIX THEORIES ABOUT APPARITIONS'

SIR,—I should like to make some comments on the paper 'Six Theories about Apparitions', by Professor Hornell Hart and others (*Proceedings*, Vol. 50, Part 185).

r. As the title indicates, the authors concern themselves almost solely with apparitions. Auditory cases, etc., are excluded, and so are dreams. This seems to me to be an artificial division of the subject, and likely to give misleading results. No hard and fast line can be drawn between dreams and apparitions; the ordinary dream, the 'dream of an apparition', the 'borderland hallucination' and the apparition seen when fully awake form a continuous chain, and any theory which sets out to explain one should be able to explain the rest, or at least to say why it cannot do so.

2. It has been repeatedly pointed out, from the fifth century A.D. onwards, that the person seen as an apparition, etc., is not necessarily the person responsible for its appearance. The authors do not deal with this point ; yet even in their own material there are cases in which an alternative agent is likely. In their Case 5, for instance, the supposed agent (Mrs Alexander) knew nothing of what was happening, and the figure seen was in my opinion a parent-image derived from the mind of the dving girl. In other cases the veridical element in an apparition may be acquired precognitively by the percipient without the help of any agent. This possibility is likewise not discussed. In the list of cases given at the end of Part I, the authors nail their colours to the mast by naming the cases from the appearer whenever possible; it would, I think, be less question-begging to name from the percipient.

3. The sources from which the cases are drawn are somewhat heterogeneous. It might have been useful to divide them into two groups—one favouring the survival hypothesis, and the other hostile or neutral—and test for homogeneity. My impression is

Dec. 1956]

that the two groups of cases would differ significantly in some points.

4. I am not familiar with all the works listed; but taking one of them—*Phantasms of the Living*—as a sample, I am puzzled by the authors' rejection of numerous cases which seem to come within their criteria (pp. 155–6), and in particular of nearly all the 'borderland' cases. Do they count these as dreams?

5. Once included, all cases are on the same footing, and contribute on equal terms to the statistical arguments. It seems a pity that, having gone to the trouble of giving each case an evidentiality rating, the authors should have made so little use of it. For instance, the 15 clairvoyant cases listed in footnote 3 on p. 196 have an average rating of $\cdot 077$, compared with about $\cdot 30$ for the whole collection; the difference is obviously significant, and seriously weakens any argument based on these cases.

6. It is not clear to me that the five types into which the cases are classified (p. 155) are in fact natural divisions of the data. Type I, which may be called the haunting type, is certainly distinct from the others. But in what traits do Types II and III differ? Table II does not answer this. Again, cases have been allotted to Types IV or V on a question of evidence, not of fact. (This is the probable cause of a large difference in evidentiality between these two types. IV averages .30, against .20 for V.)

7. Although I agree with the authors that there is no essential difference between apparitions of the dead and those of the living, it seems clear that the significance figure given on p. 169 is exaggerated. It has been assumed, apparently, that the various traits of Tables I and III are independent, which is not the case. In Table I, for instance, traits 1, 2 and 3 would certainly influence 4, and in Table III traits 6, 7, 8 and 9 would often go together.

8. Table VI (p. 204) suffers from an inherent bias in the data. A Type I (haunting) case seen by a single percipient has little evidential value, and even less if a second person is present and sees nothing; whereas the same type seen by two or more persons has much more value. Consequently the cases which find their way into the collections are usually collective (or repeated). The same applies to Types IV and V when no veridical information is given; but not to Types II and III, since it has been agreed by most collectors that an appearance near the time of death is itself in the nature of a message of the death. Consequently it is not surprising that in I, IV and V there are 23 collective to 8 noncollective cases, whereas in II and III there are only 3 collective to 12 non-collective. The latter proportion is likely to be a fairer sample of all cases, and so the argument on the next page loses its basis. For similar reasons, it would not be safe to say from Table I, trait 12, or Table II, trait 4, that repeated appearances are specially characteristic of haunts.

9. In spite of these criticisms, I would agree with the conclusions given on pp. 225-7, with the following exceptions :

D6. This is not proved (see point 8 above). At the same time my own finding, from a quite different line of approach, is that a percipient in a collective case requires a lower degree of sensitivity than in an individual case.

D7. This rule may be accepted as a general statement; but there are numerous exceptions, which have not been mentioned by the authors.

D8. This may be so, but the authors make no attempt to prove it. Almost the only relevant information is given in Part A of Table II, and of four traits in this part, one (No. 4) cannot be used to prove anything, except a bias in the data. The authors now, towards the end of their paper, suddenly throw at us such items as 'associated with tragic or other emotionally intense experiences', and 'some relatively simple routine related to the long-past crisis', and seem to expect us to take them for granted.

D9. This is an important point, but I cannot criticise it as I do not know the cases on which it is based.

D13. Again I should like to know what cases the authors are thinking of. There is a reference to physical phenomena on p. 215, but no details are given. If the question is raised, it would surely be advisable to mention at the same time the wellestablished fact that apparitions leave no physical traces behind them.

10. We come now to theories. In our subject a good criterion of a theory is not so much that it should cover the kinds of case which happen, as that it should exclude the kinds of case which do not happen. Judged by this test, the authors' theory fails. I cannot imagine any case, real or fictional, which it would not accommodate.

11. Among the theories listed for discussion, that of Podmore (*Apparitions and Thought-transference*, pp. 301-2, English edition) is not included. This theory appears to me to be on the whole the most useful which has been put forward up to the present.

Dublin.

G. F. DALTON

SIR,—The international correspondence out of which the article in question emerged has as its basic objective the promotion of

Correspondence

DEC. 1956]

creative discussion. Such discussion is a co-operative process in which differences of opinion are regarded as potential assets from which sounder and more adequate formulations of truth may be developed. These criticisms from Mr Dalton are therefore to be welcomed cordially and explored open mindedly, in the hope that further insights may be obtained from them.

Mr Dalton's first criticism consists of objections to the way in which we limited our field of study. First he objects to our excluding purely auditory cases. He might have added purely tactual ones and also cases in which physical phenomena occurred with no apparitional aspects.

But let us suppose that we were making a study of office interviews between department store buyers and salesmen. It would not seem likely to bias the results seriously if we excluded from such a study an analysis of remarks overhead through partitions. appointments made by letter but broken, and traffic accidents experienced by salesmen on their way to such interviews. Remember that the genesis of our study was a previous analysis of ESP-projection cases. That previous study was open to the criticism that it needed to be examined in the perspective of apparitional cases in general. Mr Dalton's contention would seem to be that apparitional cases need to be examined in the full perspective of all psychical phenomena. Certainly that is part of the task of psychical research in general. But a specific study must concentrate on a field having limits of some sort, and for our purposes it seemed best to focus attention on full-fledged cases of apparitions, *including*, of course, auditory, tactual, and any physical phenomena which might be associated with such apparitions.

Mr Dalton also objects to the exclusion of dreams from our study. As I see it, there is a sharp and clear-cut difference between (1) an experience in which an individual who is perceiving the physical environment in which his physical body is located and who perceives an apparition as located in that environment and (2) an individual who ceases to be aware of his physical body and his physical surroundings, and who perceives dream images of persons in a dream-background. I quite agree that the relationship between dreams and apparitions needs to be explored. But once again, science cannot possibly examine all phenomena relating to a given topic, because all the phenomena of the universe are related to all the other phenomena of the universe. Limits must be set to any given study, and the difference between (1) an apparition seen by a waking person as being located in the percipient's normal physical environment and (2) a dream or vision divorced from the percipient's actual physical surroundings seems

2 D

to me to be a fairly legitimate point at which to segregate the body of data to be studied.

Mr Dalton's second point states: '... the person seen as an apparition, etc., is not necessarily the person responsible for its appearance.' This statement appears to take for granted a simple one-two type of causation in relation to apparitions. In the light of the six theories discussed in our article, is it not clear that apparitional phenomena can be understood only in the context of the total configuration which includes the appearer, the percipient, the emotional connexion between the two, and the emotional stresses and pressures existing between these individuals and the places and circumstances in which both the appearer and the percipient are located at the time? The theory that Mrs Alexander's apparition was a mere mother-image projected by the mind of the dying daughter ignores the fact that the mother said, on going to bed on the evening before her daughter's death : 'I am sure Helen [the daughter] is very ill.' She said this without having normal knowledge of her daughter's illness. While this fact, if it stood by itself, would quite likely be regarded as a mere coincidence, it must be analysed in the light of the whole body of facts in our article which show the significant connexion between the direction of motivated attention on the part of the appearer and the perception of the apparition.

Mr Dalton's third criticism suggests classifying the cases 'into two groups-one favouring the survival hypothesis, and the other hostile or neutral'. I should be interested to know by what objective and verifiable criteria he would achieve a valid classification of this sort. I am also interested in his reasons for lumping the 'hostile or neutral' into one category. The S.P.R. cases were presumably gathered, at least for the most part, by persons who sincerely wanted to find the truth without prejudice. Many of these cases were collected from persons who believed in survival. I should guess that it would be rather difficult to gather any adequate collection of thoroughly and dispassionately presented cases which originated from persons actively hostile to the survival hypothesis. I wonder what Mr Dalton would do with cases collected by F. W. H. Myers, whose procedure would seem to have been on the whole eminently inductive and critical, but who finally came out in a clear-cut statement of his belief in survival.

Certainly, on this point we can agree that strong prejudice on the part of the percipient or of the reporter of the case is a factor to be brought out in the record and to be taken account of so far as possible in appraising the case.

On Mr Dalton's fourth point, I admit that our collection of cases

DEC. 1956]

Correspondence

was not exhaustive. But I do wish to place on record my assurance that where any pertinent cases are omitted, this was due to oversights and to lack of time to make a more exhaustive study, and that it was not due to any biased desire to exclude cases of any kind which might have altered conclusions.

Mr Dalton's fifth point relating to the low evidentiality rating of the clairvoyant cases listed in footnote 3 on page 196, impresses me as a highly important contribution to the discussion. Certainly the criticism which he raises calls for a great deal of further study. But one technical point arises. Mr Dalton says : 'The difference is obviously significant....' Did Mr Dalton calculate statistically the significance of the difference? If so, what is the critical ratio?

In his sixth criticism, Mr Dalton objects to the five categories into which apparitions are classified on page 155. This objection would seem to indicate that Mr Dalton quite missed, or failed to apply at this point, the central plan of the statistical analysis. In his seventh paragraph he says, 'Although I agree with the authors that there is no essential difference between apparitions of the dead and those of the living. . . .' In the previous paragraph he says, 'In what traits do Types II and III differ?' In order to make the statistical analysis of likenesses and differences between apparitions of the dead and the living, it was obviously necessary to classify them into those two categories. But what shall be done in such a classification about the very numerous group of cases in which apparitions were seen at, or very close to, the moment of death? To set these apart, category III is defined as follows : 'Apparitions perceived at the moment of death or so close to it that no departure from that moment has been established.' The apparitions of persons who were alive at the time of the appearance needed to be subdivided into two groups in order to make fair comparisons with ESP-projection cases. One of these two groups should properly consist of 'conscious' apparitions of the living, and the other of 'unconscious' apparitions of the living. Conscious apparitions of the living would bear the closest relationship to ESP-projection cases in which no apparition of the appearer was seen. But how do we know whether an apparition really was conscious or unconscious? The only operational method of discriminating between these two categories is on the basis of the recorded evidence.

In paragraph six Mr Dalton speaks of the 'large difference in evidentiality between [Types IV and V]'. He cites this contrast as being between \cdot 30 and \cdot 20. What did he find to be the critical ratio of this difference?

In Mr Dalton's eighth paragraph of criticisms he brings out an 2 D2 385 illuminating explanation of the greater frequency of collective cases in categories I, IV and V than in categories II and III. While the suggestion which he makes is certainly worthy of respectful attention and further investigation, the statistical evidence which he presents needs critical analysis. The percentage of collective cases for types I, IV and V taken together is 74.2; the percentage of collective cases in types II and III taken together is 20.0. The difference between these two—54.2 per cent—is statistically significant, with a critical ratio of 3.5. Mr Dalton's point, that the percentage of collective cases among those reported is affected to a marked extent by selective factors, seems thus to be well taken.

Dalton's criticisms of conclusions numbered D7 to D13 amount quite largely to saying : 'Just what aspects of just what cases prove these points? I know some other cases which appear to prove something else.' From an absolute standpoint of science and logic, the objection to the incomplete specification of the data on which the generalizations are based is well taken. In a realistic sense, however, it might be pointed out that at the time of preparation for publication the pressure was strongly toward eliminating parts of the paper rather than adding further detailed evidence which, of course, runs very rapidly into space.

Moreover, Mr Dalton himself is open to the same sort of criticism in his failure to give full specifications of the cases which he has in mind and on which he bases some of his objections.

In his paragraph 10, Mr Dalton says: 'In our subject a good criterion of a theory is not so much that it should cover the kinds of case which happen, as that it should exclude the kinds of case which do not happen.' I am not sure just what he means by this dictum. Why should the basic principles of scientific generalization differ in psychical research from what they are in other sciences? Would he say that a criterion of the soundness of the law of gravitation, for example, is that it excludes what does not happen?

HORNELL HART

Dept. of Sociology, Duke University, Durham, N.C., U.S.A.

A SEVENTH APPARITION-THEORY

SIR,—Professor Hornell Hart and his associated collaborators, in their interesting discussion on Apparitions, describe six theories put forward to account for these. I would like to suggest a seventh

DEC. 1956]

theory, based upon the other six, but enabling us to dispense with unproved entities such as 'aetheric bodies' and 'a common unconscious'. In this theory we have to assume only the extension of powers which the mind is known to possess, and we assume them only because apparitions seem to imply these extensions. If apparitions do not occur, neither do the extensions, and minds are left only with those functions which we know them to have.

(My quotation marks enclose words I cannot even try to explain in a short letter, and whose ordinary connotation I do not necessarily believe in.)

(1) We know that the mind 'produces' mental images. These images consist of sense-data perceived 'internally' instead of in the 'external world'.

(2) We know that most people, in their dreams, find themselves with bodies not noticeably different from their waking bodies (except that they are insensitive to pain), and these dream-bodies are usually normally clothed. In day-dreams, too, we have imaged bodies which seem much like our waking bodies and are normally clothed.

(3) Almost always these images appear to be in our private 'mental' space, but we sometimes project mental images, as in 'eidetic images' and the mystic's 'external vision'. (Also in the drunkard's pink rats, but as these have a physical cause, they fall into a different category.) In mistaking a sheet on the clothes-line for a ghost, and in 'seeing' pictures in the fire or a wall-paper pattern, we are unconsciously projecting imagery to complete the picture. But all these projections seem to be private. No one sees them but ourselves, though they appear to us to be in the external world.

(4) Yet we do know that telepathy and perhaps clairvoyance sometimes give mental images a limited publicity.

(5) Though most images are ephemeral, some persist (in our memories) through a lifetime.

(6) In dreams and day-dreams alike, our mental self-images move and speak with a 'life' of their own.

All I propose to add to these known powers of the mind are the following extensions :

(1) and (2) I suggest that our mental self-images may be nearer to the truth of our appearance than we suppose; that, in fact, our 'unconscious mind', being perhaps less dependent on conscious sensory observation, may know the look of us better than our conscious mind does.

(That some factor in our unconsciousness may have wider perception than our physical senses was suggested to me by this : wak-

Journal of the Society for Psychical Research

ing each morning at the exact time of my usual rising I discovered that I was not roused by the chiming of the school clock half a mile away, which kept correct time, but by my own irregular watch, which lay on a chair beside me and was often two or three minutes wrong. What, in me, looked at my watch while my eyes were shut?)

(3) It is possible that some people, on rare occasions—which may be (but not necessarily) emotional crises—project their selfimages into 'external space', usually without knowing it. These imaged selves would, of course, be normally clothed, and there is no reason why any other appropriate mental images—a carriage or a dog—might not accompany them as naturally as in a dream.

(4) Clairvoyance may enable some people to see these projected image-bodies, perhaps more easily because they are projected.

Telepathy seems to me a less helpful suggestion, (a) because telepathy would not account for haunted houses unless we suppose the ghost as agent; and (b) it would hardly explain cases with a time-gap before perception.

Clairvoyance, too, seems to provide a better explanation of collective perceiving. Am I wrong in thinking that telepathy, involving two minds instead of the direct perception of clairvoyance, might produce more difference between what the various percipients perceive?

(5) That some of these projected image-bodies might persist (like memories), as in haunts.

(6) These self-images, which appear to be nothing more than imaged sense-data, have a limited life of their own : they walk, behave, sometimes speak. This need not surprise us. The images of ourselves and other people in our dreams do the same.

It appears possible, judging by apparitions of the living, that the self, or consciousness, may be temporarily, and to some extent, located in the image-body, though never with its full intelligence so far as we have yet discovered. Again, this is what happens in dreams and day-dreams.

To sum up, instead of supposing that we have aetheric bodies, it would be simpler to think that minds have, unconsciously, more-or-less correct images of their bodily selves; that a few minds under stress (recognised or unrecognised), can project their self-images into external space, and that sometimes these persist; and that a few clairvoyant people can perceive these imaged, partly-intelligent figures.

But what of apparitions, or image-bodies, of the dead? Those of the newly-dead can be explained as projected and persisting. Of the long dead, this may be the explanation : we do not know

Correspondence

DEC. 1956]

enough yet to dogmatise. Where the apparition seems to have come with a purpose, the explanation certainly would be very complicated. The possibility of self-images of the dead appearing cannot, as yet, be entirely ruled out.

MAY BELL

Grahamstown, South Africa.

THE SPECIOUS PRESENT

SIR,—The interesting article in the June S.P.R. *Journal* by Professor Denbigh, with its revival of Saltmarsh's theory of the Specious Present, raises many issues. Both Saltmarsh and Professor Denbigh assume, as the latter's diagram on p. 242 clearly shows, that the duration block of the specious present, our experiences 'now' includes, though minutely, the physical future, so they conclude that by subconscious extension of the 'now' more of the future might be apprehended.

The theory soon leads into difficult philosophical problems; but from the point of view of a moderate Realism it appears fallacious. Accepting perceptual Time with its 'before' and 'after' as real, there seem to be many ways of defining an objective physical instant, or 'now' dividing the two. A swinging pendulum has conceptually an 'infinite' number of such 'instants' or physical 'nows' separating 'before' and 'after' or 'past' and 'present'. The proposition 'Every time the pendulum reaches any point there is a physical now', is timeless and universal. To compare any x with our awareness of the same we must choose one, e.g. the lowest point in the swing, record it mechanically and compare the record with another of the 'now' of our perceiving the pendulum at that point.

Reaction time experiments do this repeatedly. An electric contact is made, and simultaneously a bulb lights and an electric time recorder starts—the physical 'now'. The subject records his experienced 'now' by breaking the contact and stopping the time recorder. There is always an interval between the two, occupied largely in the time taken in the physiological processes of nervous conduction from sensory organ to cortex and from cortex to muscle. It seems clear that the 'now' of experience, the specious present, because of the time taken in physiological processes, can not contain a single event belonging to the physical future, nor an event in the physical present ; it is all experience of events that are already over.

The facts of physical transmission show the same. We say