

Winters and Dr. Houfang

PROCEEDINGS
OF THE
SOCIETY FOR PSYCHICAL RESEARCH

Volume 52, Part 188, February 1959

DREAMING, AND SOME OF
ITS IMPLICATIONS

Presidential Address, 1958

By Professor C. D. Broad, Litt.D., F.B.A.

(p. 53)

SOCIETY FOR PSYCHICAL RESEARCH
1 ADAM & EVE MEWS, LONDON, W. 8

Price: 2s. 6d. (\$0.50)

BW

2

W

OFFICERS AND COUNCIL FOR 1959

President

PROFESSOR C. D. BROAD, Litt.D., F.B.A.

Vice-Presidents

PROFESSOR HENRY HABBERLY PRICE, F.B.A. MRS W. H. SALTER
PROFESSOR F. J. M. STRATTON, D.S.O., F.R.S.

Council

H. TREACHER BOWDEN	A. T. ORAM
J. H. CUTTEN	D. PARSONS, M.Sc.
PROFESSOR C. D. BROAD, Litt.D., F.B.A.	PROFESSOR H. H. PRICE, F.B.A.
PROFESSOR E. R. DODDS, D.Litt., F.B.A.	W. H. SALTER, M.A.
DR LETITIA FAIRFIELD, C.B.E.	C. S. SCOTT
G. W. FISK	K. E. SHELLEY, Q.C.
MRS OLIVER GATTY	S. G. SOAL, D.Sc.
THE HON MRS C. H. GAY	BRIGADIER C. F. C. SPEDDING
MRS K. M. GOLDNEY, M.B.E.	PROFESSOR F. J. M. STRATTON, D.S.O.
PROFESSOR SIR ALISTER HARDY, F.R.S.	F.R.S.
MRS FRANK HEYWOOD	ADMIRAL THE HON. A. C. STRUTT, R.N.
MISS E. M. HORSELL	THE HON CHARLES STRUTT
MISS INA JEPHSON	R. H. THOULESS, Sc.D.
SIR GEORGE JOY, K.B.E., C.M.G.	MRS JERRARD TICKELL
G. W. LAMBERT, C.B.	D. J. WEST, M.B., D.P.M.

FORMER PRESIDENTS OF THE SOCIETY

PROFESSOR HENRY SIDGWICK - 1882-4	T. W. MITCHELL, M.D. - - 1922
PROFESSOR BALFOUR STEWART, F.R.S. - - 1885-7	CAMILLE FLAMMARION - - 1923
PROFESSOR HENRY SIDGWICK - 1888-92	J. G. PIDDINGTON - - 1924-5
THE EARL OF BALFOUR, K.G., O.M. - - 1893	PROFESSOR DR HANS DRIESCH - 1926-7
PROFESSOR WILLIAM JAMES - - 1894-5	SIR LAWRENCE J. JONES, Bart - 1928-9
SIR WILLIAM CROOKES, O.M., F.R.S. - - 1896-9	DR WALTER FRANKLIN PRINCE - 1930-1
FREDERIC W. H. MYERS - - 1900	MRS HENRY SIDGWICK (<i>President of Honour</i>) } 1932
SIR OLIVER LODGE, F.R.S. - 1901-3	SIR OLIVER LODGE, F.R.S. } 1933-4
SIR WILLIAM BARRETT, F.R.S. - 1904	THE HON MRS ALFRED LYTTELTON, G.B.E. - - - 1935-6
PROFESSOR CHARLES RICHET - 1905	PROFESSOR C. D. BROAD, Litt.D. - 1937-8
THE RIGHT HON G. W. BALFOUR 1906-7	LORD RAYLEIGH, F.R.S. - - 1939-41
MRS HENRY SIDGWICK - - 1908-9	PROFESSOR H. H. PRICE - - 1942-4
H. ARTHUR SMITH - - 1910	DR R. H. THOULESS - - 1945-6
ANDREW LANG - - 1911	G. N. M. TYRRELL - - 1947-8
THE RT REV. BISHOP W. BOYD CARPENTER, D.D. - - 1912	W. H. SALTER - - - 1949-50
PROFESSOR HENRI BERGSON - 1913	PROFESSOR GARDNER MURPHY, Ph.D. - - - 1951
F. C. S. SCHILLER, D.Sc. - - 1914	DR S. G. SOAL - - - 1952
PROFESSOR GILBERT MURRAY, LL.D., Litt.D. - - 1915-16	GILBERT MURRAY, O.M., LL.D., Litt.D., F.B.A. - - 1953-5
L. P. JACKS, LL.D., D.D. - - 1917-18	PROFESSOR F. J. M. STRATTON, D.S.O., F.R.S. - - 1956-8
LORD RAYLEIGH, O.M., F.R.S. - 1919	G. W. LAMBERT, C.B. - - -
W. McDougall, F.R.S., M.Sc., M.B. - - - 1920-1	

As a faithful disciple of Berkeley and Hume,
I find this excellent

JHM

PROCEEDINGS OF THE
SOCIETY FOR PSYCHICAL RESEARCH

VOLUME 52, PART 188, FEBRUARY 1959

DREAMING, AND SOME OF
ITS IMPLICATIONS

PRESIDENTIAL ADDRESS, 1958

BY PROFESSOR C. D. BROAD, LITT.D., F.B.A.

THE Society has chosen for its President this year one who is, or at any rate has been until recently, a philosopher by profession. Though I have been interested since my youth in psychical research and have kept in reasonably close touch with the literature of the subject, I can make no claim to first-hand practical acquaintance with any branch of it. I intend, therefore, to speak to-night as a philosopher and not as a psychical researcher. I am going to discuss, from a philosophical point of view, a familiar normal phenomenon, viz., ordinary dreaming, which seems *prima facie* to be continuous with and relevant to some at least of the ostensibly paranormal phenomena which are investigated by psychical researchers.

Most human beings on first awaking from sleep occasionally have ostensible memories as of certain highly specific and detailed dream-experiences. Speaking for myself, I very often do so. Such ostensible memory-experiences generally fade very quickly and cease to be revivable at will, unless one pays particular attention to them and rehearses them before one's mind's eye at once. But occasionally a vivid ostensible memory of a dream recurs involuntarily, or can be voluntarily revived, over a considerable period. Again, it sometimes happens that some event in waking life or some waking train of thought will evoke a vivid ostensible memory as of a certain incident in a hitherto forgotten dream. Still commoner is the experience of ostensibly remembering *that* one has been dreaming, although one has little or no ostensible recollection of *what* one has been dreaming.

It would, I suppose, be logically possible to take an extremely sceptical view about all such ostensible memory-experiences. They cannot be checked in any of the numerous ways in which we

can often test a person's ostensible memories of his earlier *waking* experiences. It would, therefore, be logically possible to hold that all ostensible memories of dreams are *delusive*, either in principle or in detail. The extreme sceptic might say that we have no good reason to believe that people have *any* experiences while asleep. The more moderate sceptic might say that, although a person probably does have experiences while asleep, we have no good reason to believe that these at all closely resemble what he ostensibly remembers them to have been when he first awakes. Such scepticism cannot be refuted, but I do not see any good reason to accept it. I think it is reasonable to take *any* ostensible memory as probably in the main veridical, unless either it can be shown in detail to be delusive or it has features which are known to be positively correlated with delusiveness. Acting on this principle, I shall assume that the occurrence of ostensible memories of dreams is a good reason for believing that people do dream. And I shall assume that the fact that a person on awaking ostensibly remembers such and such a dream is a good reason for believing that he has recently had a dream more or less of that kind.

Before leaving this question of the evidential value of ostensible memories of dreams, I will add the following two remarks. (1) In view of the very rapid fading in detail of such ostensible memories, I think it is not unreasonable to suppose that a dream may often have been considerably more detailed, and perhaps more coherent, than it is ostensibly remembered as being even on first awaking. (2) I am inclined to think that the ostensible memories of dreams, which a person has on awaking, refer generally, if not invariably, to dreams had *immediately before* that awaking. There seems to be little *direct* evidence for the occurrence of dreams during the interval between falling asleep on one occasion and just before awaking on the next occasion. Of course, it might be argued on grounds of continuity that, since dreams occur at the end of a period of sleep, they probably occur also earlier in such a period. But that would be a precarious argument. For, presumably, when one is just about to awake one's internal state or one's external conditions or both must differ in a characteristic way from what they were in the course of a period of continuous sleep. And it might well be that just those factors which are about to cause awakening are necessary conditions of dreaming. A better ground for arguing that dreams occur at other times than just before awaking is this. A sleeper may give external signs, such as talking in his sleep, striking out with his fists, etc., which in life are expressive of his having certain simultaneous experiences. That, so far as it goes, is presumptive evidence for the occurrence of

dreams in the midst of periods of at any rate *restless* sleep. But I do not know of any satisfactory evidence for the occurrence of dreams in the midst of periods of *peaceful* sleep, and I think it would be somewhat rash to argue from the former to the latter.

(A) LIKENESSES AND UNLIKENESSES BETWEEN DREAMS AND WAKING SENSE-PERCEPTIONS

Dreams are in certain respects very like, and in certain respects very unlike, normal waking sense-perceptions. I shall begin by considering the main similarities and dissimilarities. Each of them can be considered under three heads, viz., likenesses and unlikenesses in (1) *content*, (2) *interconnexion*, and (3) *causal conditions*. It is the combination of great similarity in content with apparently great dissimilarity in interconnexion and in causal conditions, between dreams on the one hand and normal waking sense perceptions on the other, which makes dreams relevant to what may be termed 'the philosophical problem of the external world and of our perception of it'.

(1) *Content*: The *quasi-sensory* content of dreams is exactly the same as the sensory content of ordinary waking perceptions. One's dreams are certainly experiences of colour, sound, tactual qualities, temperature, and kinaesthetic and somatic feelings, just as our waking sense-perceptions are.

But the resemblances go much deeper than this. In a vivid dream one does not experience just isolated patches of colour, isolated sounds, etc. Nor does one experience just undifferentiated coloured fields, auditory fields, etc. On the contrary, exactly as in waking life, the colour-experiences, the touch-experiences, the sound-experiences, and the kinaesthetic and somatic experiences, are of such kinds and are so interconnected with each other that one ostensibly sees, touches, hears, and interacts with, certain external things and persons. Sometimes those ostensibly perceived things and persons seem to the dreamer to be identical with certain things and persons familiar to him in daily life. He may, e.g., have a dream as of being in his room talking to persons whom he knows well and habitually meets. Often, however, the scenery and the persons in a dream seem to the dreamer to be quite unfamiliar, as if he had travelled or had been transported to new surroundings and were meeting strangers.

Again, in many dreams, as in waking life, the dreamer appears to himself, not as a mere passive spectator, but as an active participant. It is for him as if he were doing and suffering, talking and listening, asking questions and receiving answers. These osten-

to be...
binding?

unbound?

L. A. ...

F. ...

comple...
3. B

sible interactions with ostensibly perceived things and persons are often accompanied by feelings and emotions of the same kinds as are felt in waking life. These are often as intense as any that we feel when awake, and are sometimes more so. In my own case, at any rate, a dream is often accompanied too by the same kind of *sotto voce* running commentary and reflexive appraisal as commonly accompanies my waking perceptions and actions. I consider what another person, to whom I seem to myself to be talking, will think of me, and how he will react if I should say so-and-so to him or behave towards him in a certain way. Just as in waking life, I may find his reaction answer to my expectations, or be surprising or embarrassing, and so on.

It will be appropriate at this point to consider the occurrence within dreams of higher intellectual processes, such as reasoning. Speaking for myself, I often reason in my dreams. And the reasoning, as I ostensibly remember it on waking, is often at least as coherent as any that I perform in my waking life. Sometimes in the course of a dream I have been led to consider whether I am (as one generally takes for granted in dreams) awake and perceiving normally with my senses, or am asleep and dreaming. Arguing in the dream from certain features of it, I have sometimes concluded that I am awake and sometimes that I must be asleep and dreaming. Even when the conclusion has been false (*viz.*, that I am awake), the argument that I have used seems to me, when I awake and review it in memory, to have been often quite valid in principle.

More often the dream-reasoning is concerned, not with the question whether one is awake or asleep, but with something that falls altogether within the dream. Not long ago I had a vivid dream, in which I was as it were present at a magical ceremony, conducted by two adepts of some occult order. After undergoing certain treatment by them, I seemed to myself to be levitated and to be flying round and round the room at a height of about 8 feet. In doing so I repeatedly passed a high shelf over a fireplace, and I noted that a pair of heavy glass vases were standing one at each end of this. The experience was interesting and mildly pleasant, but I was in that critical mood which becomes a member of the S.P.R. I said to myself: 'This may well be just a result of hypnotic suggestion, and not genuine levitation'. In order to test this, I decided to catch hold of one of these vases as I passed them in my flight, and to bring it to the floor. I argued that, if it were still there afterwards, the levitation would have been genuine. Soon after I had done this my two adepts decided that I had had as much levitation for one day as was good for a beginner, and they brought me gently to the ground. I was delighted to find that one of the

two heavy vases was lying where I had set it down in the course of my flight. So I concluded that I had been genuinely levitated and not just the victim of a hypnotic hallucination. My conclusion was, indeed, mistaken; for I had neither been levitated nor hypnotized, but had merely been asleep and dreaming. But the critical attitude which I adopted, and the argument which I used in my dream, would surely have done no discredit to the late Mr Podmore or the living Dr West in their most wakeful moments.

So much for the main *likenesses* in content. It is plain that they are very far-reaching. Let us now consider the main *unlikenesses* in this respect. In many dreams the scenes and persons ostensibly perceived are not identifiable with any that the dreamer has perceived or heard tell of in his waking life. They do, indeed, fall under the same general categories, e.g., inorganic material things, plants, animals, men, etc., but in detail they may be very different from anything that the dreamer has ever met with or heard of when awake. Again, even if he identifies the things and persons that he is ostensibly perceiving with certain things and persons familiar to him in waking life, there are often strange differences, and these may strike him forcibly while he is still dreaming. One may find oneself in a dream taking for granted without hesitation that a certain dream-person, with whom one is ostensibly talking, is so-and-so, whom one knows well. And yet at that very moment it may strike one that he does not look or talk in the least like so-and-so. I have quite often had this experience, and I can remember puzzling over it in the dream. In a similar way, what one takes to be a certain familiar scene or room often seems to one at the time to look strangely unlike itself.

Another curious difference between dream-experience and waking-experience, which I have sometimes noticed, is this. In waking life one perceives things from one and only one point of view at any one moment, and that is always located within one's own body. One is aware of oneself and of one's own doings and sufferings, and of no-one else's, from *within*, and of other men and their doings from *without* as an external spectator. (If it be pointed out to me that some distinguished contemporary philosophers have said things which appear to be intended as a denial of this obvious fact, I can only comment that some people will say anything but their prayers.) Now it does seem to me that sometimes in dreams I am aware of what I then take to be my body and of its doings and sufferings, both in the ordinary way from within it, and also simultaneously from without it as an external spectator. Moreover, I believe (though with rather less conviction) that I sometimes have in my dreams an experience which might be described

as complementary to this. I seem to remember, on subsequent reflexion when awake, that in my dream I was ostensibly perceiving another person's body and its behaviour in the ordinary way from my own point of view outside it; and yet that I was at the same time ostensibly aware of his doings and sufferings from *within* his body, as if I were literally in his skin. This curious experience, of being at once a self-conscious actor and an external spectator of the agent and his doings and sufferings, is frequent in my dreams. I do not think that I have ever had anything like it in my normal waking life. Unless I am peculiar in this respect, it is an important dissimilarity between waking experiences and some dreams. *Wunden Christi*

(2) *Interconnexion*: I pass now to likenesses and unlikenesses of interconnexion, in the case of dreams on the one hand and waking experiences on the other. Under that head we may first consider the connexions between various phases of what the dreamer takes to be a single dream; those between what he takes to be different dreams during a single spell of sleep; and those between his dreams during different spells of sleep with a waking interval between them.

Within a single dream the connexions between successive phases are often like those within a short stretch of normal waking perception. But they are often very unlike. In particular, transitions often take place without the intermediate links which would exist in a course of events perceived during a continuous stretch of waking life. In a dream it often happens, e.g., that one seems to be inside a certain room for a while and then to be elsewhere, without any consciousness of moving or being moved from the one place to the other and of observing a set of objects which spatially separate and interconnect the two places.

It is little more than a platitude to remark that the discontinuity between different dreams within a single spell of sleep is even more complete. For presumably such profound discontinuity is part of our criterion for speaking of two successive dreams rather than two successive phases in a single dream.

It is more important to notice the contrast between the *inter*-connexions of what a person perceives just before going to sleep and just after waking again, and the *dis*connexion of (say) his last dream on one night and his first dream on the next night. In general one's body is not moved during sleep and one's surroundings do not greatly change. So what one perceives on awaking is easily identified with what one perceived just before going to sleep. There may be, and generally are, certain differences in detail, e.g., ashes in the grate instead of a fire burning, the sun

shining instead of the moon, and so on. But these fit in with the assumption that certain changes have been going on while one was asleep in the ways in which one has often perceived them to do while awake. Similar remarks apply to minor changes of detail in one's bodily feelings, as, e.g., when one goes to sleep feeling replete and wakes up feeling hungry.

Now it is extremely rare for any such connexions to be noted, either at the time or on subsequent waking reflexion, between the last dream of one night and the first dream of the next night. Scarcely ever does one dream on Tuesday night of a scene and of persons which seem to be the same in outline as those which one dreamed of on Monday night, with only such variations in detail as might reasonably be expected on the supposition that the changes which one ostensibly perceived to be taking place in the former dream had continued in the normal way during the interval of waking life between it and the latter dream.

To this should be added the well known fact that the duration of a dream, as measured by objective physical tests, may be very short, although the dreamer himself has ostensibly been perceiving a sequence of events which seemed to him to take a long time, and which would in fact have done so if they had happened in the world which we perceive in normal waking life. It may happen, e.g., that one wakes up and looks at one's watch, then dozes off, and is awakened in a few minutes or even seconds by someone knocking at the door or pulling up the blinds. During those few minutes or seconds one may have dreamed of a sequence of events which would have taken hours, if undergone or perceived in waking life. And one may seem to oneself to have been occupied for hours. I think that this fact tends to reinforce my earlier contention that it would be rash to assume that one's memories of dream-experiences on first awaking are good evidence for the occurrence of dreams *long before* waking.

So far I have been speaking of connexions and disconnexions between *successive* waking experiences and between *successive* dream-experiences of *the same person*. We must now consider *simultaneous* experiences of *different persons*.

If two waking persons are near together in space, and are not separated by opaque screens, etc., their visual and auditory perceptions at any given moment are generally very much alike, and the differences in detail between them are correlated in a familiar way with the differences in position and orientation of their bodies. We may say that both perceive substantially the same set of material things and physical events from slightly different points of view. But, if two persons sleep in the same room and both

dream simultaneously, there is in general no such correlation between the contents of their dreams. Nor is there any such correlation between the dreams of either of them and the simultaneous sense-perceptions of a third person who is awake in the room in which they are asleep.

(3) *Causal Conditions* : This brings us to the likenesses and unlikenesses between the causal conditions of dreams and of waking sense-perception.

If a waking person is to have a normal visual perception, it is necessary that the objects around him should be either emitting or reflecting light to his eyes ; that his eyes shall be open to receive that light ; and that his retina, optic nerve, and brain shall be intact. But a sleeping person has vivid experiences of ostensible seeing in his dreams, when his eyes are shut and the room in which he is sleeping is quite dark. Indeed these negative conditions, which exclude normal waking vision, are almost necessary conditions of dreaming.

The objects seen by a waking person at any moment are those and only those from which his eyes are then receiving light. If we exclude very distant objects, such as the heavenly bodies, we may say that the things which a waking person sees at any moment are confined to those which were still existing just before then. (These may, of course have existed for long before, and they may continue to exist for long afterwards.) Again, at any moment he sees those objects in the states in which they were just before then. (Such states may, of course, be transitory or of long duration.) But in a dream one often ostensibly sees persons who have long been dead and things which have long ceased to exist ; and one often ostensibly sees persons and things which do still exist, in states in which they have long ceased to be.

Dreams are determined by a person's past experiences and the traces left by these, in a way and to a degree in which waking sense-perceptions are not. What a waking person sees at any moment is, no doubt, greatly dependent on the *general* fact that he has been having perceptual experiences of various kinds since infancy, that these have occurred in certain oft-repeated patterns of co-existence and of sequence, and that traces have been left and have become interwoven into complex dispositions. But this determines mainly the *general principles* in accordance with which a waking grown person interprets his present sensations in terms of physical things and events. Again, it is no doubt true that the *details* of what a waking person sees at any moment are in part determined, not only by habitual associations, but also by such expectations, desires, and emotions as happen to be prevalent in him at the time.

These may lead him to ignore certain details within his field of vision, to concentrate attention on certain others, and perhaps even to seem to see certain details which are not really present. But, granting all this, it is true to say that what a waking person sees at any moment is largely independent of *any particular* past experience, and of his desires and emotions at the time.

Now contrast this with the case of dreams. It is obvious that, in many if not in all dreams, the *quasi*-sensory raw materials are reproductions of the contents of many waking experiences. These are dissociated from their original contexts, and then re-synthesised in a particular pattern for the occasion. In the case of many dreams it is obvious too that the synthesis takes place around the memory of some fairly recent waking experience, and under the influence of a certain desire or emotion. It is reasonable to suppose that this is often so, even where it is not apparent to the dreamer himself on subsequent reflexion.

I think that it is important, however, to note at this point the following contrasts between dreaming and the occurrence in waking life of *imagery* originating in past sense-perception. In the first place, the images which arise sporadically or are called up voluntarily in waking life are, in most people and at most times, feeble in intensity and vividness as compared with actual sensations. Moreover, they usually occur in relative isolation, and are very vaguely located in a kind of private 'image-space'. In these respects they are utterly unlike the elaborately organised and highly differentiated contents of the visual field of ordinary waking perception. Now the *quasi*-sensory contents of dreams resemble waking sensations, and are quite unlike ordinary waking imagery, in their vividness, their elaborate *quasi*-spatial arrangement, and their complete independence of one's conscious volitions. The dreamer is, as it were, faced with scenes and actors, and himself takes part in transactions, which are as vivid, and seem as much thrust on him from without, as anything that he perceives and interacts with in his waking life. He appears to himself, and they appear to him, as having a place and a date in the public space of nature and the public time of history. If, in some sense, all this be due to oneself, one can only marvel on subsequent reflexion at the dramatic and plastic powers of what Tyrrell called the 'producer' and the 'stage-carpenter' within one, whose designs and whose methods of staging them are utterly hidden both from one's waking and one's dreaming self.

(B) APPLICATION TO THE PROBLEM OF THE EXTERNAL WORLD AND OUR PERCEPTION OF IT

I have now spent as much time as I can afford in describing the main likenesses and unlikenesses between waking sense-perception and dreaming. I want next to consider the application of this to the philosophical problem of the external world and our perception of it.

Suppose that at a certain moment in my waking life I am seeing a certain external body at a certain place and in a certain state. To simplify the discussion I will suppose that it is a self-luminous object, such as an electric-light bulb which is glowing because a current is passing through it.

There is an enormous mass of inter-connected evidence for the following propositions. I should not have been seeing that object at that moment and in that state unless light, emitted from it a little earlier, had entered my eye; unless this had set up a disturbance of a characteristic kind in my optic nerve; unless this had travelled up the nerve to a certain part of my brain; and unless it had there and then set up a certain kind of disturbance. When I do see the object, I see it as being in the place which it occupied and in the state in which it was at the moment when the light by which I am now seeing it *was emitted from it*. That position and that state may, of course, be different respectively from the place which it occupies and the state in which it is *now*, when the light is entering my eye and the disturbance is reaching the optic centre of my brain. Owing to the very great velocity of light, these differences will in general be very small unless the seen object be very distant. But they may be very great when the object is a remote heavenly body.

So much for the *physical and physiological conditions* of normal waking visual perception. I pass now to what I will call its *phenomenological characteristics*. Such an experience, e.g., seeing a certain electric-light bulb glowing, is an experience as of being directly presented with a certain particular existent, which presents itself to one as having a certain colour, extension, shape, position, etc., and as standing in certain spatial relations to one's own body and to other such particular existents which are simultaneously being presented to one in the same kind of way. I shall express this fact by describing such an experience as *phenomenologically prehensive*. Moreover, any normal person after the age of infancy, who has such an experience, takes for granted at the time that *what* is being directly presented to him in it is part of the surface of a certain three-dimensional object, e.g., a certain

electric-light bulb. He takes for granted that this has approximately the colour, shape, position, etc., which it presents itself to him as having. And he takes for granted that it existed before he began to see it and will continue to exist after he ceases to see it, and that at such times it has colour, shape, position, etc., in *precisely the same literal sense* in which it presents itself to him as having them while he is seeing it.

We may summarize this as follows. While a person is having a normal waking visual perception he automatically takes it to be *prehensive of the physical object which he would be said to be seeing*, and of certain of its states, qualities, and relationships, which he would be said to *be seeing it as having*. He takes for granted, in fact, that the function of normal visual perception is to present him directly with *the surfaces of independently existing material objects*, and with certain of the qualities, relationships, and states which such things possess independently of him and of any processes in his body or his mind which may be essential to his perceiving them.

Now the average percipient does not know, or when occupied in perceiving and acting does not bear in mind, the mass of inter-related facts which I summarized above about the physical and physiological conditions of normal waking visual perception. But it is the business of a philosopher to view synoptically the facts about the causal conditions and the facts about the phenomenological characteristics of normal waking perception, and to try to formulate a theory which shall do justice to both. When we attempt this, two very different types of theory seem *prima facie* possible. One is the theory that normal waking sense-perception *is in fact prehensive of the external body perceived and of the state in which that body is perceived as being*. The other is that, whether or not normal waking sense-perception be actually prehensive of *something or other*, it is certainly *not* prehensive of the external body perceived or of the state in which that body is perceived as being. It is, in fact, only *representative* of these. I shall call these two alternatives respectively 'the *Prehensive Theory*' and 'the *Representative Theory*'. I shall now say something about each in turn.

(1) *The Prehensive Theory*: The essence of the Prehensive Theory is to accept as literally true those propositions which, as I said in my account of the phenomenological characteristics of normal waking sense-perception, are instinctively and uncritically taken for granted by everyone while engaged in perceiving and acting. The problem, then, is to reconcile these propositions with the established facts about the physical and physiological conditions for visual perception.

In order to do this, we should, I think, have to suppose that the function of these processes is somewhat as follows. We should have to argue that the brain-state, which is the final outcome in the percipient's body of the process of emission, transmission, and reception of light, and of the transmission of a disturbance from the retina through the optic nerve to the brain, has a purely *evocative* and *directive* function, and not in any way a generative or creative one. Its sole function must be to evoke and maintain in the percipient's mind a state of prehension or direct acquaintance, whose immediate object is a certain part of the surface of the remote body which has emitted the light that is now entering his eye and setting up this disturbance in the optic centre of his brain. And that state of prehension must be a direct revelation to him of certain of the qualities and relationships of that remote body, as they were at the time when the light in question was emitted from it.

We must now notice some logical implications of such a theory. (a) Suppose that at a certain moment there were to occur, through purely *internal* causes, a disturbance in the optic centre of a person's brain, precisely similar to that which would normally be caused by a certain body in a certain state and in a certain place having emitted light to his eye. And suppose that in fact there had been *no* such body in that place at that time. (This is a supposition which is certainly *logically* possible, even if it is most unlikely ever to be fulfilled in practice.) Then, it seems to me that, on the present theory, we should have to hold that *no* experience as of seeing such an object in such a state would occur in that person's mind. For, if the experience which would be evoked in the normal case is essentially one of direct acquaintance with the emitting body, in the state in which it was when it emitted the relevant light, no such experience could conceivably occur unless there were such an external body, at the appropriate time and place, to serve as the immediate object of it. Either *no* experience at all would occur in the case supposed, or it would be an experience *without any kind of object*, and therefore an experience of a wholly different kind.

(b) Suppose that light *were* emitted at a certain moment from a certain body at a certain place and in a certain state. But suppose that, for some reason, it *failed* to reach a certain person's eye, or, having done so, *failed* to set up a corresponding disturbance in the optic centre of his brain. And suppose that, at the moment when such a disturbance *would* have been set up in his brain, *if* the physical and physiological processes had proceeded normally, a precisely similar disturbance should happen to occur in it from

purely *internal* causes. (This, again, is a supposition which is *logically* possible, even if it should never be precisely fulfilled in practice.) Then, I ask: 'What should a supporter of the present theory expect to happen in the way of experience?' I think that he might take either of the following alternative views:

(i) It might be argued that the person in question *would* see that external body at the place and in the state in which it was at the time when it emitted the light which somehow failed to evoke the normal disturbance in his brain. For, it might be said, the brain-state necessary for evoking a suitably directed and selectively prehensive experience has in fact been set up, though from purely internal causes. And the external body appropriate to be its immediate object was in fact existing at the appropriate place and in the appropriate state at the appropriate time. What more, it might be asked, is needed, on the present theory, to evoke an experience of seeing that body at that place and in that state?

(ii) A supporter of the Prehensive Theory might, however, shrink from this very startling conclusion. He might allege that an experience of seeing the external body would arise *only* if the disturbance in the optic centre were produced in the *normal way*, viz., by light emitted from that body entering the percipient's eye and initiating a process in his optic nerve which travels to his brain.

We may sum all this up as follows. On the view that waking visual perception is actually prehensive of the external body seen, there are certainly *two* conditions, each of which is *necessary* in order that a person may at a certain moment have an experience as of seeing a certain body at a certain place and in a certain state. (1) There must actually have existed at that place a body of that kind in that state, at a moment preceding that at which the perception occurs by the period needed for light to traverse the distance from that place to the percipient's eye and for the disturbance to travel thence up his optic nerve to his brain. (2) There must be occurring in the optic centre of his brain, at the moment of perception, such a disturbance as would normally be caused by light from such a body in such a state entering his eye and initiating a process of transmission in his optic nerve.

The difference between alternatives (i) and (ii) above is as to whether these two conditions are *jointly sufficient* for the occurrence of such an experience, or whether a *further* condition needs to be fulfilled. According to (i) they *are* jointly sufficient. According to (ii) they are *not*; for it is *also* a necessary condition that light should actually have been emitted from the external body and received by the person's eye, and that the disturbance in the optic centre of his brain *should in fact have been caused in that way*.

(2) *The Representative Theory* : The theory which I have just been trying to state is, of course, *not* accepted by any physicist or physiologist. Nor has it been accepted by most philosophers, though there have been and still are occasional attempts to defend something like it.

Its rival, the Representative Theory, may be stated as follows. The immediate effect, on the mental side, of the disturbance in the optic centre of the brain, *however* that disturbance may have been produced, is to call forth an experience which we will term a 'visual sensation'. This has a subjective and an objective aspect. In respect of the former it is an event or process with a date, duration, and context in the mental history of the person concerned. In respect of the latter it is a sensation of a colour-expanse of such and such a hue and extensity, sensible duration, and sensible depth. When a person, who has had many such experiences of various kinds, which have formed associations and left complex traces, now has a visual sensation, he automatically tends to take the colour-expanse, of which it is a sensation, to be a certain part of the surface of a certain independently existing external body. And he takes the colour to be quite literally present on the surface of that body, and to be presented to him quite directly in the experience. But this instinctive belief or *quasi*-belief, which is *phenomenologically* an essential factor in the experience called 'seeing a body', is mistaken. At the very best, the external body which he sees, is the locus of one cause-factor in a rather remote causal ancestor of the visual sensation which is the other essential factor in that experience. There is no good reason to believe that it has the colour which is presented to him in that sensation (or indeed any other colour), in the literal sense in which he instinctively takes it to do so. For there is no good reason to think that colour is anything but a characteristic feature of those experiences called 'visual sensations', in their objective aspect.

This Representative Theory of Perception can, of course, be worked out in detail in many alternative ways. It has been and is a frequent object of philosophical hooting ; but it is much easier to decry it than to refute it or to suggest any alternative to it which is plausible in view of all the admitted relevant facts.

Now an essential difference between the representative and the prehensive theories of perception, from the logical point of view, is this. Both agree that a *necessary* condition for the occurrence of a normal waking perception at any moment is that a certain kind of disturbance should then be occurring in a certain part of the percipient's brain, and that this should simultaneously excite a certain organized pattern of traces left in his brain by his past experiences

and their associations with each other. According to the *representative* theory, this condition is not only necessary but also *sufficient*, on the bodily side, for the occurrence of such an experience. But, according to the *prehensive* theory, as we have seen, it is *not sufficient*, even on the bodily side. For, on that theory, at least one other independently necessary condition is that there should actually have existed, at the appropriately earlier moment, a body of the kind perceived and in the state in which it is perceived as being, in the place at which it is perceived as located. For, otherwise, there would be nothing for this allegedly prehensive experience to be prehensive of.

'*Veridicality*' and '*Delusiveness*' : Having stated the two types of theory about normal waking sense-perception, and having pointed out some important differences in the implications of the two, I will now introduce a notion which is in itself quite independent of, and neutral between, them. This is the notion of a perceptual or *quasi*-perceptual experience being *veridical* or *delusive*, and of the criteria for deciding between these two alternatives.

What is *meant* by calling such an experience 'veridical' is roughly this. It means that there did in fact exist, at the appropriate time, a certain entity in a certain state, correlated in a certain unique way with that experience ; and that that entity would have existed and would have been in that state at that time, whether or not there had happened to be a percipient, with appropriate sensory and intellectual equipment for having the experience in question, at the place where the percipient was at the time when he had the experience. If this condition be fulfilled in the main, but breaks down in certain minor points of detail, we say that the experience is in the main veridical, but is delusive in certain minor respects. If it breaks down so far that there was no independent entity at the time in question, correlated with the experience in anything like the way in question, we should say that the experience is predominantly or totally delusive.

So much for the *meaning* of 'veridicality' ; now for the *criteria* for it. As to these, there is no difference of opinion between holders of the two types of theory, or between either of them and plain men with no explicit epistemological theories. The criteria for veridicality is the fulfilment of all that mass of inter-connected conditions which can be very briefly summarized as follows. If a person is having a *veridical* perceptual experience, he can generally see the same thing successively from various points of view, and differences in its appearances are generally correlated systematically with differences in his point of view. He can usually, under appropriately varied conditions, perceive the same object with different

senses; e.g., he can see and touch a bell and can hear sounds coming from it. Often he can see the same thing on various occasions, with intervals between them during which he is not seeing it, because his eyes have been shut or his head turned away or it has been hidden by some opaque intervening object. If it looks different on a later occasion from the same point of view, the difference is often such as would have arisen if it had been changing during the interval in a way in which he has often perceived other such objects to change while under continuous observation. Again, several persons may simultaneously perceive the same object from their several points of view, and some of them can observe it during intervals when others of them are not doing so. They can compare notes, and on the whole, if the experiences are veridical, they will cohere systematically with each other.

All these criteria are logically quite independent of whether we hold the theory that normal waking sense-perception is actually prehensive of external things and events, or the representative theory. They are, indeed, stated in language appropriate to and suggestive of the *prehensive* theory. That is convenient; because this is the language of ordinary life, and, as such, fitted for the purposes of ordinary life. To try to express these criteria otherwise would certainly be intolerably long-winded, and it might well prove to be impracticable. But that has, in my opinion, no significance as evidence for the one theory rather than the other.

These criteria all boil down in the end to the presence or absence of certain systematic correlations among the simultaneous or successive perceptual experiences of the same individual, and among those of a number of different individuals, under conditions which can themselves be specified in terms of perceptual experiences. A supporter of either theory can interpret the fulfilment of these criteria in the way appropriate to the theory which he holds. An adherent of the prehensive theory will say that, when these criteria are fulfilled, the perceptual experiences are *actual prehensions* of certain external bodies, and of certain of their states, qualities, and relationships. An adherent of the representative theory will say, under the same circumstances, that the perceptual experiences are *causal descendants* of processes in independent existents, and that the various characteristic features in the sensations, considered in their objective aspect, are *systematically correlated with* various states, qualities, and relationships of these independent sources of emitted influence.

Relevance of Dreaming to the two Theories: We are now in a position to consider what bearing, if any, the occurrence of

experiences having the characteristic peculiarities of dreams has on the two alternative theories of normal waking perception. It has been alleged that the fact of dreaming makes the prehensive theory of normal waking perception almost incredible, and almost forces us to accept some form or other of the representative theory. Let us consider how the argument would run, and whether it is cogent.

I think that the argument may be put as follows. Dreams and normal waking perceptions are extremely alike in content. They are exactly alike in the fact that the experient at the time takes himself to be prehending contemporary things and persons and events, which exist or occur independently of him; and toprehend them as having qualities, relations, and states which they would possess, in the same quite literal sense, whether he happened to be perceiving them or not. Now it is incredible that experiences, which are so fundamentally alike from a phenomenological point of view, should be radically different from an epistemological point of view. Either *both* are actually prehensive of independently existing things and persons, and of certain of their qualities, relationships, and states, or *neither* is so. But the features which distinguish dreams from normal waking perceptions make it certain that dreams are *not* actually prehensive of independently existing things and persons, and of their states, qualities, and relationships. Therefore we must conclude that normal waking sense-perceptions are not so either.

Now I accept as reasonable the contention that normal waking sense-perceptions and dreams cannot be radically dissimilar from an epistemological point of view. So the question that remains for me is whether the features which are peculiar to dreams make it impossible to regard them as actually prehensive of external things and persons and of certain states and properties of these.

For our present purpose, the fundamental fact about ordinary dreams is this. Notwithstanding their striking resemblances in all other respects to normal waking sense-perceptions, they fail completely to answer to the accepted tests for *veridicality*. The conclusion immediately to be drawn is the following. There is no good reason to believe, with regard to ordinary dreams, *either* that they are prehensive of things, persons, and events external to and independent of the dreamer, *or* that they are remote causal descendants of such things, persons, or events, structurally correlated in their details with the qualities, relationships, and states of the latter.

But we need not rest content with that conclusion. We must notice that the view that normal waking sense-perception is actually prehensive is plausible *only* as regards perceptual ex-

periences which answer fully or approximately to all the tests for veridicality. As perceptual or *quasi*-perceptual experiences depart further and further from fulfilling those tests, it becomes harder and harder to fit them into the prehensive theory in any plausible way. The difficulty is at its greatest in the case of such *quasi*-perceptual experiences as ordinary dreams.

Now the representative theory, on the other hand, has no particular difficulty in dealing with *quasi*-perceptual experiences of any degree of delusiveness. According to it, the *immediate* necessary and sufficient condition, on the bodily side, for a person to have such an experience at a given moment is of essentially the same kind, whether the experience be veridical or delusive. If and only if there should then occur a certain kind of disturbance in a certain part of his brain, and if this should simultaneously excite a certain organised pattern of traces left in his brain and nervous system by his past perceptual experiences and their associations with each other, he will thereupon have a perceptual or *quasi*-perceptual experience, whose details are completely determined by that brain-disturbance and the associations which it excites. On this view, the question whether that experience will be veridical or delusive depends primarily on the way in which this disturbance in his brain has been generated, and secondarily on the traces which it excites. If it has arisen in the normal way, through physical influences from without acting on the appropriate receptor organs and setting up transmissive processes in the sensory nerves connecting these with the brain, and if it excites the normal associations, the experience will be wholly or mainly veridical. If it has been generated by causes which are wholly within the experient's body, or if it has excited an unusual selection of traces in his brain, it will in general be completely or predominantly delusive.

We may sum up the situation as follows. We can find instances of perceptual or *quasi*-perceptual experiences, forming a more or less continuous scale from the most veridical cases of normal waking sense-perception to the most delusive cases of *quasi*-perception, such as dreams, hypnotic hallucinations, experiences under hallucinogenic drugs, and so on. All are fundamentally alike in their sensory or *quasi*-sensory content and its internal organisation, and in being for the experient at the time when they occur *ostensibly prehensive* of independent things, persons, and events. The differences between experiences at the two ends of this scale lie in their coherence or lack of coherence, respectively, in accordance with certain elaborate patterns, with other such experiences, simultaneous or successive, had by the same in-

dividual or by a number of different individuals. The representative theory offers a unitary account of all the experiences in such a scale. It explains the *likeness* between all of them by the fundamental similarity in their *immediate* necessary and sufficient conditions on the bodily side. And it explains the *unlikeness* between those at opposite ends of the scale by differences in the *causal ancestry* of their immediate necessary and sufficient bodily conditions. On the other hand, the theory of the actual prehensiveness of normal waking sense-perception can, so far as I can see, offer no plausible account of *quasi*-perceptual experiences, such as dreams, at the *non-veridical* end of the scale.

Now it seems most unlikely that fundamentally different epistemological analyses can be applicable to intrinsically similar experiences at opposite ends of such a continuous scale. Moreover, the only ground for preferring the prehensive account, as regards normal waking sense-perceptions, is that it accords with the phenomenological fact that the experient instinctively takes them to be prehensive of external things, persons, and events, while he is having them. But precisely the same kind of ostensible prehensiveness is characteristic of the *quasi*-perceptual experiences of dreaming. *There* it is almost certainly misleading; so its mere occurrence is *nowhere* a guarantee of its validity.

It is seldom or never possible to give a 'knock-down' proof or disproof of a philosophical theory. But I will go so far as to offer to eat my hat, if the prehensive theory of normal waking sense-perception should be true, and if some form of the representative theory should not be at any rate a first approximation to the truth. I do this with the more confidence, in view of the extreme unlikelihood of being faced in practice with a choice between eating my hat or my words.

(C) CERTAIN PARANORMAL PHENOMENA CONSIDERED IN THE LIGHT OF OUR CONCLUSIONS

I will conclude my address by considering, in the light of the foregoing discussion, two of the phenomena investigated by psychical researchers, viz., (1) Telepathy and Clairvoyance, and (2) 'Out-of-the-Body' Experiences.

(1) *Telepathy and Clairvoyance* : Having come down heavily on the side of the Representative Theory, I wish to point out that it in no way excludes the possibility of *quasi*-perceptual experiences, which are in the main veridical, but are telepathic or clairvoyant.

The features of the representative theory which are relevant to

this-question are the following. According to it, the occurrence of a certain state of the experient's brain is the immediate necessary and sufficient condition, on the *bodily* side, for any *normal* perceptual or *quasi*-perceptual experience, whether veridical or delusive. If that experience be a *normal veridical sense-perception*, this brain-state will be a causal descendant of a physical process in the body perceived. The intermediate links will be physical processes of a transmissive kind (e.g., light-waves or sound-waves) in a physical medium between that body and the percipient's body, followed by physiological processes in one of his receptor organs (e.g., his eye or his ear) and in the afferent nerves connecting this with his brain.

Now, for the present purpose, the essential features of a telepathic or clairvoyant experience are these. On the one hand, it is *quasi*-perceptual and veridical, corresponding in its details, like a normal sense-perception, with the more or less simultaneous state of a certain one remote thing or person. On the other hand, its *causal ancestry* seems to be quite unlike that of a normal veridical sense-perception. For here there is *no* evidence for any chain of physical events, starting in the perceived object, traversing a physical medium between it and the experient's body, affecting one of his receptor organs, and thus initiating a physiological process in a nerve connecting such an organ with his brain. The fundamental difficulty, then, is to account for that correspondence between the details of the experience, on the one hand, and the more or less contemporary state of a certain external thing or person, on the other, which makes the experience count as *veridical*.

Now that difficulty, so far as I can see, is no greater for those who hold the representative theory than for those who hold the prehensive theory as regards normal veridical sense-perception. Holders of the prehensive theory would admit that the occurrence of a certain state of the experient's brain is at any rate an immediate *necessary* condition for his then perceiving a certain external body as in a certain state. They would admit too that such a brain-state is normally the end-result of a chain of physical and physiological events initiated by physical events in the perceived body. They differ from holders of the representative theory only in maintaining that the function of this brain-state is to evoke in the experient a state of prehension or direct acquaintance, whose immediate object is *the remote body itself*, which emitted the radiation, *in the state in which it was when it did so*.

The occurrence of telepathy and clairvoyance presents both parties with problems which are simply variations on a single

theme, viz., that of *causation*. The fundamental problem, common to both, can be stated as follows. A *quasi*-perceptual experience occurs at a certain time in a certain individual. It corresponds in detail with a certain more or less contemporary state of a certain one person or thing, in the kind of way in which a normal veridical sense-perception corresponds with its object. But the physical and physiological linkage, which, in the case of normal veridical sense-perception, exists between the perceived object, in its perceived state, and the percipient's brain, is in fact absent. Moreover, if the telepathic or clairvoyant experience should be *pre-cognitive*, it is in principle *impossible* that anything in the least like the normal linkage should exist. How, then, are we to account for the correspondence in detail between this particular *quasi*-perceptual experience and a certain more or less contemporary state of a certain particular person or thing? That is the essential problem. It is not fundamentally different, whether we hold that in normal veridical sense-perception one literally *prehends* or *is directly acquainted with* the remote object which is affecting one's senses, in the state in which it was when it emitted the relevant physical influence; or whether we hold that one's perceptual experience is at best a *rather remote transcript* of the latter into a fundamentally different medium.

Each party, so far as I can see, has the same two alternatives open to it. To begin with, they can either keep or drop the assumption that a telepathic or clairvoyant experience resembles a normal perceptual or *quasi*-perceptual experience in having as an immediate necessary condition a certain specific modification of the experient's *brain*. If they keep that assumption, the problem for both of them is to explain the causal connexion between, on the one hand, that particular state of a certain remote thing or person which the experient clairvoyantly or telepathically cognizes, and, on the other hand, the occurrence at just that time in the experient's brain of that particular modification on which his telepathic or clairvoyant experience depends.

Suppose, on the other hand, that they drop this assumption, and hold that a telepathic or clairvoyant experience (unlike a normal perception or *quasi*-perception) is *not* immediately conditioned by any specific modification of the experient's brain. Then, again, both will be faced with a problem of causation, though now of a different kind. They will now have to suppose that such an experience is in some way caused *directly*, without the mediation of any physical or nervous transmissive process or of any consequent modification of the experient's brain, either by the remote perceived event *itself* (in the case of pure clairvoyance) or by the

remote telepathic agent's awareness of it (in the case of telepathy). This is an extremely difficult notion even to entertain, and still more to envisage in detail. Yet, in view of the complete lack of evidence for any process of physical and nervous transmission in such cases, and in view of the extreme difficulty of conceiving any hypothetical mechanism that would fit the facts, it would be unwise to ignore it altogether.

(2) *'Out-of-the-Body' Experiences*: We may approach this topic by raising the following general question. Would it be possible to hold, in spite of their failure to pass the ordinary tests for veridicality, that dreams are in the main veridical experiences? And, if that be possible, is there any reason to believe it?

I think that some of the peculiarities of dreams could be reconciled with the view that they are in the main veridical perceptions of independently existing things, persons, and events, provided we were to make sufficiently sweeping supplementary hypotheses.

Consider, e.g., the lack of connexion between successive dreams had by the same person. This could easily be paralleled in waking life, if the following conditions were often fulfilled. Suppose that, whenever a person went to sleep, his body were moved without his knowledge, so that he always woke up in different surroundings from those in which he fell asleep. Or suppose that, without his body being moved, there were always radical changes in his surroundings while he lay asleep. Then his successive waking experiences would be as discontinuous with each other as his successive dreams now are. This discontinuity would be still greater, if we were to suppose that some drug were administered to him on each occasion, which profoundly changed the background of organic sensation arising from the processes within his body.

Let us apply this analogy from what is clearly possible in waking life to the case of dreams. Let us suppose, for the sake of argument, that a person has two bodies, of different kinds, viz., the one that is normally perceptible to himself and others in waking life, and a so-called 'astral body', which is not normally perceptible in waking life. Suppose that, so long as he is awake, he reacts mainly to stimuli affecting his normal body, and perceives external things from a point of view determined by its position and orientation. Suppose that, when he is asleep, he reacts mainly to stimuli affecting his 'astral body', and perceives other things (including, it may be, his own normal body) from a point of view determined by its position and orientation. Suppose, finally, that while he is awake his 'astral body' moves about without his knowledge, so that

in successive dreams it is in different surroundings without his being aware of the transitions from one to another. Then, even if his successive dreams were in the main veridical perceptual experiences, they would be as disconnected with each other and with his waking perceptions as we in fact find them to be.

I think, however, that we should have to go a good deal further than this, if we wished to defend the possibility that dreams are in the main veridical perceptions of contemporary things, persons, and events. No doubt some of the things and persons which are ostensibly perceived in dreams might be located at the time somewhere or other in the world which is perceptible in normal waking life. A dream to-night in Cambridge might, e.g., conceivably be a veridical perception of certain contemporary persons, and things, and events in Timbuctoo. That suggestion might be as impossible to refute as it would be to verify.

But one often dreams of persons or things which have existed in the ordinary wake-a-day world, but no longer do so. Again, one often dreams of persons (including oneself) or things, which do still exist in that world; but one ostensibly perceives them in states or in situations in which they are not and perhaps never have been or will be, or as performing actions which they are not doing and perhaps never have done or will do. If we are to regard such dreams as mainly veridical perceptions of contemporary things, persons, and events, I think we shall have to postulate so-called 'astral doubles' of ordinary inorganic bodies, in addition to an 'astral double' of each individual's ordinary body. I think we should have to assume that a large proportion of the things which are perceived in dreams are *not* things which could be perceived by our senses in normal waking life, but are 'astral doubles' of such things.

Suppose, e.g., that in a dream I ostensibly perceive my mother, whose body was in fact cremated in 1939, when she died as a very old lady. And suppose that I ostensibly perceive her as she was when I was a small child, in my nursery in a house which has long since been pulled down. Then, if that dream is a mainly veridical perception of contemporary independent persons and things (as it undoubtedly is taken by the dreamer to be), those objects cannot be identical with anything that now forms part of the ordinary physical world. They must be persistent 'astral doubles' of my mother's body as it was when I was young, of my nursery and its contents when these existed, and so on.

I take it that the hypothesis which I have been outlining is substantially the view which most primitive people have taken from time immemorial about dreams. I do not consider that to

be any conclusive objection to it. It must be judged on its merits, without regard to whether it was held by primitive men or not. We know that something like it is held to-day by many unsophisticated Spiritualists, and by a few experienced and critical psychical researchers.

Now it seems to me that it would be completely gratuitous to accept such a theory in the case of ordinary every-night dreams. If there be any evidence for it, it must come, I think, from what are called 'out-of-the-body experiences'. Quite a number of persons have had such an experience once or twice in their lives. Some few, e.g., Mr Oliver Fox and Mr Sylvan Muldoon, have had them repeatedly and have carefully noted and recorded their main phenomenological features. It may be remarked that both these writers have described them as seeming to them at the time and on subsequent reflexion markedly *unlike* their ordinary dreams.

A feature common to many of these experiences is that the experient seems to himself to be animating a body, rather like his ordinary body in outline and normally located within the latter, which seems to him to separate from his normal body but in many cases to remain attached to it by a kind of extensible cord. Let us for brevity, and without thereby committing ourselves to any theory, call this the 'ostensible astral double'. During such a period he seems to himself to be seeing his normal body and other normal bodies from a point of view located within his ostensible astral double, whilst he is aware of the latter from within, just as one is aware of one's normal body in normal waking life.

So far there is perhaps no need to suppose that these experiences are anything more than dreams of a very peculiar kind. But in some cases it is alleged that the experient has reported incidents concerning his own normal body and other bodies in its neighbourhood, which he observed from the point of view of his astral double at the time, and which it would have been physically impossible for him to have observed from the position then occupied by his normal body. (An interesting recent report of such a case will be found in *S.P.R. Journal*, Vol. 39, No. 692, to which it was contributed by Professor Stratton.) It is obviously very difficult, as a rule, to test such statements. Even if sometimes they can be tested, and should be found to be true, it might be hard to be sure that anything more was needed to account for this than memory, association, unconscious inference, and lucky guessing on the part of the dreaming subject. But, if there should ever be a number of such cases which stood up to critical investigation, we might have to begin to consider seriously the hypothesis

of an 'astral double', at any rate to the normal body of a human individual.

That hypothesis would be strengthened, if there were a number of well authenticated cases of a certain kind of *collective* hallucination, viz., cases where several persons together in a room ostensibly perceive, each from his own point of view, the body of a certain individual as present in that room, although his normal body is in fact at a distance. It would be still further strengthened, if there were a number of well authenticated cases in which the hallucination was not only collective but also *reciprocal*. Suppose, e.g., that the individual, whose body these persons all ostensibly perceived as in that room, were to report that he had had at the time an experience as of being present there, and were to make verifiable statements as to its contents, the appearance and behaviour of its occupants, and so on. Then, I think, one would have to begin to take rather seriously something like the astral-double theory.

There are, in fact, a certain number of respectably attested cases of collective hallucination, and a few such cases of reciprocal hallucination. Their implications were the subject of controversy between Gurney and Myers in the very early days of the S.P.R., and the contributions of both parties are still very well worth reading. They will be found in Chapters XVII and XVIII of *Phantasms of the Living* and in the *Note on a Suggested Mode of Psychological Interaction* contributed by Myers to that work. I have discussed this controversy in my paper *Phantasms of the Living and of the Dead* in the *S.P.R. Proceedings*, Vol. 50, Pt. 183. The latest discussion of the whole subject is the paper entitled *Six Theories about Apparitions*, by Professor Hornell Hart and others, in the same volume of *Proceedings*, Pt. 185.

I doubt, myself, whether the number of such cases, their evidential quality, and in particular the amount of verifiable information as to relevant minute details, suffices to justify one at present in drawing with confidence any theoretical conclusion from them. Undoubtedly each kind of case severally could be accounted for without postulating an 'astral double'; and, with enough ingenuity and elaboration, this could probably be done for all of them taken collectively.

Taking the best reported cases, for the sake of argument, at their face-value, I feel that an explanation in terms of nothing but 'telepathy' and 'clairvoyance' would tend to become extremely complex and artificial, and would moreover have to stretch the meaning and application of those terms far beyond anything for which we have independent evidence. If really well attested cases of these kinds were to accumulate, I think we might be compelled

to take some form of the hypothesis of an 'astral double' to the normal human body as much the simplest working hypothesis. I do not think that the evidence at present available is such as to force anyone to that decision, but I do consider that it might even now be a working hypothesis worth serious consideration by sane and critical psychical researchers.

Any well-attested information bearing on subjects within the Society's field of interest will be gratefully received, whether from Members or Associates or from persons unconnected with the Society.

*PROCEEDINGS of the
Society for Psychical Research*

CONTENTS OF PARTS 182-186

VOLUME 50

- PART 182. January 1953. Price 2s. 6d. (\$0.50).
Survival and the Idea of 'Another World'.
By PROFESSOR H. H. PRICE 1
Psychology and Psychical Research.
By PROFESSOR GARDNER MURPHY 26
- PART 183. May 1953. Price 5s. (\$1.00).
Phantasms of the Living and of the Dead. 51
By PROFESSOR C. D. BROAD
My Thirty Years of Psychical Research.
By DR S. G. SOAL 67
Biology and Psychical Research.
By PROFESSOR A. C. HARDY, F.R.S. 96
- PART 184. January 1954. Price 2s. (\$0.50).
Psychical Research—A Lifelong Interest.
Presidential Address. By Professor F. J. M. STRATTON,
D.S.O., F.R.S. 135
- PART 185. May 1956. Price 10s. 6d. (\$1.50).
Six Theories about Apparitions.
A Co-operative Report by PROFESSOR HORNE LL HART and
associated collaborators in the International Project for
Research on ESP Projection 153
The Process of Separation and Return in Experiences fully
'Out of the Body'.
By J. H. M. WHITEMAN, Ph.D. 240
The Use of Evidence in Psychical Research.
Presidential Address. By G. W. LAMBERT, C.B. 275

VOLUME 51

- PART 186. January 1956. Price 10s. 6d. (\$1.50).
The Haunting of Borley Rectory: a critical survey of the
evidence.
By ERIC J. DINGWALL, KATHLEEN M. GOLDNEY and
TREVOR H. HALL

VOLUME 52

- PART 187. October 1958. Price 5s. (\$1.00).
F. W. H. Myers's Posthumous Message
By W. H. SALTER 1
A Cosmological Approach to a Theory of Mental Images
By C. C. L. GREGORY and ANITA KOHSEN 33

Bound copies of nearly all the past Volumes of the Society's *Proceedings*, or any Part separately, can be obtained through any bookseller or from the Secretary, Society for Psychical Research, 1 Adam & Eve Mews, London, W.8, from whom a contents sheet with English and American prices can be obtained. Members and Associates can purchase them at half-price on application to the Secretary,

The agents for the United States are the F. W. Faxon Co., 83 Francis Street, Back Bay, Boston 15, Mass., U.S.A.

S.P.R. PUBLICATIONS

PROCEEDINGS OF THE SOCIETY FOR PSYCHICAL RESEARCH.

Published irregularly in Parts, from 1882 to date. Price from 1s. 6d. to 18s. per Part. A list of all Parts published since 1882, with contents and prices, will be sent on application.

JOURNAL OF THE SOCIETY FOR PSYCHICAL RESEARCH.

Circulated privately to members until July 1949 ; available to the public from September 1949. Six issues per year, 1949-54 ; quarterly from 1955. Price 3s. 6d. a copy (75 cents) ; annual subscription 15s. (\$3.00).

A list of the principal contents from September 1949 may be obtained on application.

THE SOCIETY FOR PSYCHICAL RESEARCH. By G. N. M. Tyrrell.

What it is, what it has accomplished, and why its work is important.

6d.

TELEPATHY AND ALLIED PHENOMENA. By Rosalind Heywood, with a Section on Quantitative Experiments by S. G. Soal.

1s. 0d.

THE SOCIETY FOR PSYCHICAL RESEARCH : AN OUTLINE OF ITS HISTORY. By W. H. Salter.

2s 0d.

TESTS FOR EXTRASENSORY PERCEPTION : AN INTRODUCTORY GUIDE. By D. J. WEST, M.B., D.P.M. Revised edition 1954.

1s. 6d.

THE FREDERIC W. H. MYERS MEMORIAL LECTURES

SUPERNORMAL ASPECTS OF ENERGY AND MATTER. By Dr Eugène Osty. 1933.

2s. 0d.

THE MEANING OF ' SURVIVAL '. By W. Whately Carington. 1935.

1s. 0d.

SUPERNORMAL FACULTY AND THE STRUCTURE OF THE MIND. By C. A. Mace. 1937.

1s. 0d.

PSYCHICAL RESEARCH AND THEOLOGY. By W. R. Matthews, D.D. 1940.

2s. 0d.

APPARITIONS. By G. N. M. Tyrrell. 1943. New edition (cloth), with Preface by H. H. Price, 1953. (Published by Duckworth.)

12s. 6d.

PSYCHICAL RESEARCH : WHERE DO WE STAND? By Mrs W. H. Salter. 1945.

1s. 0d.

THE EXPERIMENTAL SITUATION IN PSYCHICAL RESEARCH. By S. G. Soal, D.Sc. 1948.

2s. 0d.

TELEPATHY AND HUMAN PERSONALITY. By J. B. Rhine. 1951.

1s. 6d.

PSYCHICAL RESEARCH PAST AND PRESENT. By Robert H. Thouless, Ph.D. 1952.

1s. 0d.

THE INFLUENCE OF PSYCHIC PHENOMENA ON MY PHILO- SOPHY. By Gabriel Marcel, 1955.

1s. 0d.

PERSONAL IDENTITY AND SURVIVAL. By C. D. Broad, 1958.

2s. 0d.

Obtainable from

THE SOCIETY FOR PSYCHICAL RESEARCH

1 Adam & Eve Mews, London, W.8

(Telephone: WEStern 8984)

The agents for the United States, for publications issued by the Society and for membership subscriptions, are The F. W. Faxon Co., 83 Francis Street, Boston, Mass.