21 Reassessing the Theories

I have now considered the evidence concerning what the OBE is like, to whom it occurs, under what circumstances and whether claims of paranormal abilities can be substantiated in the laboratory. Some of the easier questions have now been answered, but we can no longer avoid the harder ones. What happens during an OBE and why? How can we explain these experiences? Is there just one phenomenon requiring one type of explanation or do we need several theories to account for different types of OBE?

So far I have mentioned various theories involving astral projection, theta aspects, ESP, and imagination. It is now time to reevaluate these theories in the light of all the evidence.

Most theories of the OBE either claim that something leaves the physical body, or that it does not. Then within these two major categories there are several different types of explanation, and there is perhaps a last possibility; that any such distinction is meaningless and artificial. For convenience I shall divide them up as follows:

- A. Something leaves the body.
- 1. Physical theories
- 2. Physical astral world theory
- 3. Mental astral world theory
- B. Nothing leaves the body
- 4. Parapsychological theory
- 5. Psychological theories
- C. Other

I shall consider each type of theory in turn and try to assess first of all whether it makes sense; for there is no point in delving into the evidence bearing on a theory if the theory itself is inconsistent or incomprehensible. Inevitably I shall be expressing some of my own confusions and facing my own assumptions, but I hope that in the process I shall be able to show just how great are the problems facing some of these theories of the OBE.

SOMETHING LEAVES THE BODY

1. Physical Theories (a physical double travels in the physical world) First there is the kind of explanation which suggests that we each have a second physical body which can separate from the usual one. You may immediately dismiss this, saying that the double is non-physical; but I shall come to that soon. First it is instructive to see why a 'physical' theory of the OBE makes little sense, for the same arguments must be raised if anything labelled 'non-physical' should turn out to be this kind of model in disguise.

There are two aspects to consider, one being the status and nature of the double which travels, and the other being the status and nature of the world in which it travels. In this first theory both are material and interact with the normal physical world. To make this theory even worth considering it is necessary to assume that this double is composed of some 'finer' or more subtle material that is invisible to the untrained eye.

This kind of idea is sometimes expressed in occult writings. For example the etheric body of the Theosophists described by Besant (6) or Powell (116a, b) is like this and a similar idea appears in that once so popular book *On the Edge of the Etheric* by Arthur Findlay (38). He states 'We must first of all clearly understand that the etheric world is part of this world. That it is all about us. That it is material, though of a substance too fine for our senses normally to appreciate' and he goes on to describe how the etheric body parts from the physical at death, to continue living without it. Yram also expresses something similar when he talks of the 'radio-active essence' or the 'ultra-sensitive atoms' of the higher worlds (159).

Objections to this type of theory are numerous, both logical and empirical. First, what could the double be made of? The possibilities seem to range between a complete solid duplicate of the familiar body, and a kind of misty and insubstantial version. Looking at each in turn we can see that neither is acceptable, though for different reasons.

The idea of a complete duplicate of the body could, at least, be

made to make sense. We could imagine a world in which each person had not one body, but two, and the two could separate and travel independently. Of course the second body would need to have a mechanism for moving it about and a perceptual system and a brain for controlling its behaviour. It would need to be strong, flexible, and complex. Indeed it would need to be much like our usual body and it would certainly be clearly visible and detectable. I say we could imagine such a world, but clearly the world is not like this.

So couldn't the double consist of some sort of gas, fog or mist of particles filling, as it were, the spaces between the grosser parts and being invisible to the untrained eye? I would say no, for several reasons. First of all many ideas which seemed quite plausible 50 or 100 years ago no longer seem so attractive. In 1931 Findlay placed his etheric world in portions of the electromagnetic spectrum not then detectable, but such portions have long since become understood and measurable. Likewise ideas about 'finer atoms' filling the 'spaces' between the normal ones do not have the same appeal in the light of modern physics. Perhaps it is possible that there is a whole realm of undiscovered and undetected material, but this is unlikely. It is not much of a theory to argue that the double is material, and can do all the things required of it, yet is invisible, undetectable, and consists of some kind of matter we know nothing whatever about. This is just evasion, not theory.

Perhaps more important is the difficulty of seeing how any misty shape, or nebulous entity could perform all that was required of it in an OBE. Would it have muscles, nerves, and a brain? If not, how would it move and think? Would it have eyes, ears or a nose? If not, how could it perceive the physical world? If it obtained information from the world then it would surely be easily detectable; we know that it is not. This problem wais pointed out by William Rushton in his letter to the *SPR Journal* in 1976: Rushton, famed for his research on human colour vision, was eminently qualified to state the problem of vision by the double.

We know that all information coming to us normally from the outside is caught by the sense organs and encoded by their nerves. And that a tiny damage to the retina (for instance) or its nerves to the brain, produces such characteristic deficiences in the visual sensation that the site of the damage may usually be correctly inferred. What is this OOB eye that can encode the visual scene exactly as does the real eye, with its hundred million photoreceptors and its million signalling optic nerves? Can you imagine

anything but a replica of the real eye that could manage to do this? But if this floating replica is to see, it must catch light, and hence cannot be transparent, and so must be visible to people in the vicinity.

In fact floating eyes are not observed, nor would this be expected, for they only exist in fantasy [127 p. 412].

Is his argument as damning as it appears? I think it is. Of course there are counter-arguments. Since OB vision is not that good it might use a simpler eye, or one relying on something other than light. Nevertheless, if it is to perceive the physical world in any way at all it must pick up information from it and that would render it detectable. So the problem only reverts to a more complex kind of detection and most possibilities have been tried and failed. I am also tempted to ask why, if there is such a useful, mobile, light and invisible perceiving double, we should bother with all the paraphernalia of eyes, muscles and nerves? The answer, I would say, is that perception is not possible without some such mechanism.

One last problem with this kind of double is its appearance. If we all have a second body why does it appear to some as a blob or globe, to others as a flare, or light, and to yet others as a duplicate of the physical body? And what about its clothes and carriages, handbags and walking sticks all made of this same strange substance? Muldoon and Carrington (97a) wrestled with this problem and more recently so has Tart (146h).

If the notion of a physical double is problematic, the notion that it travels in the physical world is just as much so. I have discussed the problem of obtaining information from the physical world around, but in addition there is plenty of evidence which suggests that what is seen in an OBE is not the physical world at all.

First there are the types of errors made in OB perception. These tend not to be the sort of errors which might arise from a poor perceptual system, but seem often to be fabricated errors, or additions, as well as omissions. People see chimney pots where there are none, or they see places as they expect them rather than as they are at that time. Then sometimes the OB world is responsive to thought, just as in a dream the scenery can change if the person imagines it changing; and lastly, there is the fact that many OBEs merge into other kinds of experience. The OBEer may find himself seeing places such as never were on earth, or he may meet strange monsters, religious figures or caricature animals. All these features of the OBE make it harder to see the OB world as the physical world at all, and

lead one to the conclusion that the OB world is more like a world of thoughts.

Given the nature of the OB world, and the problems presented by seeing how a double could interact with the physical world without being detectable, I can only conclude that this theory must be rejected. The only form in which it could survive would go something like this. There is a second physical body which we all possess but which only some people can see. It can leave the body and travel on its own seeing the world around it, but it cannot be detected because it is made of some kind of matter which is as yet unknown and it travels by some unknown energy and it sees rather poorly using a mechanism about which nothing is known except that it does not use light, or any other readily detectable form of energy.

I would suggest that this theory is of no predictive value whatever and should be dismissed.

2. Physical Astral World Theory (a non-physical double travels in the physical world)

I have been using the terms 'physical' and 'non-physical' as though their meanings were self-evident. In some ways they can be, for it is easy enough, in many contexts, to distinguish the terms 'physical' and 'mental'. Thoughts, feelings, and ideas may still be referred to as 'mental' events by a materialist who believes that they are ultimately totally dependent upon physical events in the body and brain. The dualist, however, believes that mind can exist independently of matter; and when he speaks of mental events or non-physical events he may be referring to some mental world or substance in which the events take place. Many occultists believe there to be a whole range of non-physical worlds of differing qualities and they refer not only to physical and mental events, but to spiritual, casual, and astral ones as well.

Many theories have suggested that the double is not physical but non-physical, even though it travels in the physical world. I have called this a 'physical astral world theory' because one form of it is that the astral body is non-physical, and the astral world includes all the objects of the physical world. So in what sense are these theories using the term non-physical? If what is meant is 'mental' in the sense that thoughts are described as mental, then this sort of theory would make no sense. Thoughts do not travel. If I imagine or dream of going to Peru or plan what to do next weekend, we may say that my

thoughts travelled there; but we do not mean that anything is literally in Peru or in the future. So non-physical must mean more than this.

On the other hand it must not mean physical in disguise otherwise all the problems previously raised will apply. Let us look at some examples of this sort of theory to try to find out what is meant. Tart (146h, k) refers to it as the 'natural' explanation. He describes this theory of the OBE as follows '... in effect there is no need to explain it; it is just what it seems to be. Man has a non-physical soul of some sort that is capable, under certain conditions, of leaving the physical body. This soul, as manifested in what we call the second body, is the seat of consciousness. While it is like an ordinary physical body in some ways, it is not subject to most of the physical laws of space and time and so is able to travel about at will.'

We have already met the 'theta aspect' in connection with detection experiments. Morris *et al* (96) explain that'... the OBE may be more than a special psi-conducive state; that it may in fact be evidence of an aspect of the self which is capable of surviving bodily death. For convenience, such a hypothetical aspect of the self will hereafter be referred to as a Theta Aspect (T.A.).' According to Osis and Mitchell (106) it is possible that'. .. some part of the personality is temporarily out of the body', and many occult theories involve a non-physical astral double rather than a physical one.

Do any of these accounts make sense of what could be meant by non-physical? Osis talks about 'some part of personality' separating, but what is personality? The most productive view of it seems to be that it is a way of describing how a person behaves. People react differently to different situations, they hold various opinions, have different ways of expressing themselves, different hopes and fears and interests. All these go to make up personality. Questionnaires have been developed which try to assess such variables and so categorize people in terms of some theory of personality. Although the theories differ they agree on one point. The personality is an aspect of a physical person. It is the body which behaves; the brain which thinks and controls actions and without a body one cannot fill in questionnaires or choose to go to a party instead of staying at home and reading a book. It therefore makes no sense to talk about a 'part of personality' separating from the body unless one redefines personality.

Another popular view holds that consciousness separates from

the physical body, or becomes located outside of it. But in what sense can consciousness be located anywhere? When I wake up in the morning and become aware of the birds singing outside, the rain dripping from the roof, or the time, is my consciousness 'in' any of these? Is it in my head, my ears, or where? I would say that consciousness is not the kind of thing which has a location at all. Without wishing to discuss theories of consciousness, I would argue that if we are going to say that consciousness leaves the body in an OBE then we need to define consciousness in such a. way that it has a location and is normally to be found 'in the body'. In doing this I think we might find that we were not talking about what we usually mean by consciousness at all.

More generally it has been said that an aspect of the self leaves, but what is the self? Is it a conglomeration of one's personality, one's self-image, one's opinions, ideas, and memories? If so then most, if not all, of it is totally dependent on having a body and therefore cannot, in any meaningful way, be said to leave the body. You may say there is more to the self than this. There is some divine spark, some unchanging inner being or soul. In Tart's terms there may be a 'non-physical soul of some sort'. But what sort?

The problem seems to me to be this. If the 'soul' is to interact with the objects of the physical world so as to perceive them then it should not only be detectable but all the other problems of the previous theory arise. On the other hand, if it does not interact with the physical, then it cannot possibly do what is expected of it on this theory, namely travel in the physical world. I do not think there is any escape from this dilemma. If we do have souls I don't think they are what travels in an OBE. Moreover, there is already the evidence that what is seen in an OBE is not, in any case, the physical world. So we have ample reason to reject this type of theory and turn to the next.

3. Mental Astral World Theory (a non-physical double travels in a non-physical, but 'objective', astral world)

The evidence considered so far points to the conclusion that OBEs do not take place in the physical world at all, but in a thought-created or mental world. Each of the next three types of theory starts from this premise, but they are very different and lead to totally different conceptions of the experience.

A 'mental world' could mean several things. It could mean the

purely private world created by each of us in our thinking. If we mean this then the OBE is essentially an experience of the imagination and this I shall consider in the next chapter. But what else could it mean? One possibility is that there is another world (or worlds) which is mental but is in some sense shared, or objective and in which we can all travel if we attain certain states of consciousness. The important question now becomes whether the OB world is private to each individual, or shared and accessible to all.

Occultists have suggested that there is a shared thought world and there are many other versions of this kind of theory. The pertinent features are that there is a non-physical OB world which is accessible by thought, manipulable by thought, and is the product of more than just one individual's mind.

Tart (146h, k), as one of his five theories of the OBE, suggests what he calls the 'mentally-manipulatable-state explanation'. He raises here the familiar problem of, as he puts it 'where the pajamas come from'. That is, that if the OBE involves the separation of a 'spirit' or 'soul' we have to include the possibility of spiritual dinner jackets and tie pins. Of course any theory which postulates a 'thought created' world solves this problem. Tart therefore suggested that a non-physical second body travels in a non-physical world which is capable of being manipulated or changed by 'the conscious and non-conscious thoughts and desires of the person whose second body is in that space'.

In 1951 Muldoon and Carrington had come to a similar conclusion (97b). Muldoon states '...one thing is clear to me-the clothing of the phantom is *created*, and is not a counterpart of the physical clothing' (97b p. 46). Not through logical argument, but through his observations he came to the conclusion that 'Thought creates in the astral,... In fact the whole astral world is governed by thought.' But he did not mean it was a private world of thoughts.

Also relevant here is the occult notion of thought forms. Theosophists Besant and Leadbeater describe the creation of thought forms by the mental and desire bodies, and their manifestation as floating forms in the mental and astral planes. All physical objects are supposed to have their astral counterparts and so when travelling in the astral one sees a mixture of the astral forms of physical things and thought created, or purely astral, entities.

There are other versions of a similar idea. For example Whiteman questions the 'one-space theory' of OBEs (156c), and Poynton

follows him suggesting '... what is described is not the physical world as actualized by the senses of the physical body, but a copy, more or less exact, of the physical world' (117). Rogo (124d) suggests that the OBE takes place in a non-physical duplicate world which is just as 'real' to the OBEer as our world is to us. He adds that the OBEer might even be able to manipulate 'our' world by manipulating his. This is just the kind of principle which underlies some forms of magical operation. By creating solid enough thought forms one can influence the physical plane and so work magic.

So we can see that there are many versions of this type of theory, but does it make sense? Is it the kind of explanation which allows us to relax and conclude that the problems of the OBE are solved? I think not, and for several reasons.

Fox (44c) mentions one, that we should not be able to see our own physical bodies if we are seeing 'astral counterparts'. Rogo (124d) gets round this by saying that we might be seeing both the physical and astral together, but of course this reintroduces all the problems of how we could possibly see the; physical world at all.

Tart (146k) mentions another. He points out that there is little independent evidence for this manipulable world, psychic ether or whatever; that we are explaining one unknown by invoking another. Perhaps this is admissible. After all science often proceeds by inventing new 'unknowns'. However, those unknowns must be preferable for some reason to the previous ones and must make sense. I would suggest that the idea of a shared thought world, attractive as it is, and as much as I would like to believe in it, makes no sense.

To see why it makes no sense we must first consider just what it entails, and to do this we must see through the various versions to the key features. First, the thought world contains the thoughts of many individuals which join together to form a public, or at least partially objective, world. Second, the thoughts in this world have to persist for some time. It is no good if they disappear when the person who created them stops thinking; about them. And third, these thoughts must be accessible to other people who have OBEs. In other words there has to be interaction between the stored thoughts and new ones. The problems therefore seem to be how the different thoughts are combined in the first place, how they are stored, and how they interact with new thoughts.

First how could the thoughts be combined together to create an

astral world? None of the theories specifies this but we may explore some possibilities. Let us suppose that there is, on the astral - so to speak —a version of my house and that anyone who has an OBE may see it if he travels to the right 'place'. We know that this house will appear much like the real thing but it may have some differences such as having one chimney instead of two, square walls instead of slightly wonky ones, or face due south instead of slightly east of south. This astral version is supposed to have arisen from many thought forms, but how? Why do all the thoughts about my house get combined and not get muddled up with those about my neighbour's house? Do my own thoughts have more effect on the astral form because I live here and know my house better than anyone else does? Do more frequent thoughts have a greater effect and does something like clarity of thought help? If I tried very hard to imagine my house with a pink rose growing over it instead of a wistaria would people who saw it on the astral see one, the other or both? And finally, does the physical house itself have any effect, independent of people's thoughts about it?

I am not suggesting that such questions are unanswerable, only that they are a genuine problem. Partial answers can be found in the occult literature. The principle 'like attracts like' is central. Similar thoughts, emotions and ideas attract each other and so come together in the astral. But what determines similarity? Is my image of my house more similar to my husband's image of it or to my neighbour's? Hundreds of dimensions of similarity could be involved but how do some come to be more important? I would suggest that the very arbitrariness of any decision of this kind shows up the shaky foundations of the whole notion.

The second problem concerns storage. How can thoughts once created persist independently of the brain? The idea that thoughts can do this has been a cornerstone of many occult theories, but also parapsychologists have used a similar idea to try to explain ESP. If one person's thoughts or ideas persist in some way after that person has stopped thinking about them, and if other people can tap this store of ideas then clearly one person can tap another person's thoughts. Telepathy is not only possible but is then seen as the more general form of memory.

When I first became interested in parapsychology this was the idea which attracted me. It seemed to explain so much so simply. I even believed it was new, but I soon learned otherwise. It appeared

in one form in 1939 when H. H. Price, an Oxford philosopher and member of the SPR, described his 'Psychic Ether Hypothesis'. He suggested that thoughts, images, or ideas are created by mental acts, but then tend to persist independently of the person who initiated them. These images can affect the contents of any mind and so telepathy can occur and an 'ether of images' or 'psychic ether' is created. By association with places or buildings the ether can also be responsible for hauntings (118).

In the 1940s Whateley Carington carried out numerous experiments which led him to his 'association theory of telepathy' (16). If two ideas or images are associated in the mind of one person that association is not private to that individual but persists and can be used by others. A related idea is W. G. Roll's notion of the 'psi field' (125a). Every physical object has an associated psi field to which people may respond. In his more recent theory of 'psi structures', Roll has extended this idea (125c).

These are just some of the theories which have related ESP and memory and since then the relationship between the two has been extensively studied (see 9c, 120, 125b). But this idea has exciting implications for memory as well as for ESP. No one knows for sure how memory is stored. There have been electrical, chemical, structural, and holographic models of memory storage but none is universally accepted. Could it be that none of these is right and that memory is stored psychically? I used to think so but my confidence has been forcibly diminished by several years of research into ESP and memory and a good deal of thinking about the problems involved (9b).

As far as storage is concerned, the major question is the substrate on which the information is coded. Information to be stored has to be coded into the form of variations in some physical system. We store music in the form of the structure on the surface of records, or magnetic patterns on tape. In computers memory is coded into binary digits and stored on tape, magnetic discs or even punched cards. Because the disc, tape or record is stable for fairly long periods of time the information is retained. But what is to take on this role in the astral? Do we imagine the information being stored as variations in some non-physical substance? If so we have to remember what this substance must do. It has to interact with the brain so that information processed there can be stored. It must be capable of being altered by the incoming information, and must

retain the information essentially without loss until required. It must retain it in such a way that the right bits of information can be retrieved by the right people (and occasionally by the wrong people). This is surely a tall order for a non-physical substance which is invisible, apparently everywhere, and yet quite undetected as yet.

All this might, with some stretching of the imagination, be possible, but the final problem is one which, I think, provides the worst hurdle for any theory of this kind. That is, how is the information retrieved when wanted? Or if we are talking about the OBE, how do people manage to observe the astral world of thoughts?

Again the occult dictum 'like attracts like' has been held responsible. Taking again the example of 'my house' the theory is that if a person thinks about 'my house', the thought will draw him to other thoughts which are similar. But how? Is the 'thought' of me enough or must he say 'Take me to her house'? Does he perhaps need the address, or the post code? Is a very good image of the house necessary before he is likely to succeed? Apparently not, since people claim to have seen places on the astral which they have never physically seen. Is clarity important, or vividness of the image and can any of these be measured? Again these questions might be answerable but any answers seem largely arbitrary.

The problem is essentially one of coding. We know that when a person remembers something he has first processed the incoming information, thought about it, structured it, and turned it into a manageable form using some sort of code. We presume that it persists in this form until needed when he can use the same coding system to retrieve it and use it. Even if we don't understand the details of how this works, there is in principle no problem for one person because he uses the same system both in storing the material and retrieving it. But if thoughts are stored in the astral world then we have to say that one person can store them there and another get them out. And that other person may have entirely different ways of coding information. So how can these thoughts in the astral possibly make sense to him? I personally can find no reasonable way of tackling this problem and it is largely this which forces me to conclude that such theories do not make sense.

I have now considered all the types of theory which suggest that something leaves the body in an OBE, and found none satisfactory. So let us turn to the three remaining theories.

4. Parapsychological Theory (imagination plus ESP)

If we reject the idea of a shared thought world we are left with a private one; the store of images, memories, or ideas which we each hold but which we cannot directly share with anyone else. The OBE might involve only imaginary travelling in a private imaginary world. According to this type of theory nothing leaves the body in an OBE and so there is nothing to survive the death of that body. The advantage of such a theory is that it avoids all the problems of the previous ones since it involves no astral worlds and other bodies. However, what about the evidence that ESP occurs during OBEs, that people can obtain information from a distance in OBEs?

As we have seen, certain parapsychologists have tried to incorporate this possibility by suggesting that the OBE is 'imagination plus ESP' or PK. For example one of Tart's five theories is the 'hallucination-plus-psi explanation'. According to this 'For those cases of OBEs in which veridical information about distant events is obtained, it is postulated that ESP, which is well proved, works on a nonconscious level, and this information is used by the subconscious mind to arrange the hallucinatory or dream scene so that it corresponds to the reality scene' (146k p. 339). Osis (103d) contrasts his 'ecsomatic hypothesis' with 'travelling fantasy plus ESP' and Morris (96) compares the theory that 'some tangible aspect of self can expand beyond the body' with what he calls the 'psi-favourable state' theory. In parapsychology many states have been thought to be conducive to ESP. They include relaxation, the use of ganzfeld or unpatterned stimulation, and dreaming (63). There are many reasons why an OBE might be thought of as a psi-conducive state. Palmer suggested that it might induce attitudes and expectations consistent with psi, so facilitating its occurrence (110a).

So is this sort of theory satisfactory? I don't think so. It appears to avoid all the previous problems and yet to be able to cope with the paranormal aspects of the experience. But note that I say 'appears to'. Calling the OBE imagination or hallucination tells us very little, and adding the words 'plus ESP' adds nothing. We know little enough about ESP. It is defined negatively, and we cannot stop and start it or control it in any way. Really all we know about it is that if it exists it is very weak.

This brings us back to the 'super-ESP hypothesis'. Some have

argued that the imagination plus ESP theory should be rejected precisely because of the weakness of ESP; because the effects we find in laboratory ESP experiments are so very small compared to what is expected of them outside the lab. under the super-ESP hypothesis. Osis calls it 'that strange invention which shies like a mouse from being tested in the laboratory but, in rampant speculation, acts like a ferocious lion devouring survival evidence' [103g p. 31]. His language is persuasive but in the case of OBEs I do not think the argument is valid. The paranormal effects found during OBEs are terribly small, as I have tried to show. And I think they are little, if any, stronger than typical laboratory ESP.

So we could argue that the OBE is imagination plus ESP, but this is only putting together two catch-all terms, 'imagination' and 'ESP'. It explains nothing. For this reason, and this reason alone, I reject this theory. If we ever came to understand ESP better, we could then test its role in the OBE; and then this theory would be worth consideration. In the meantime, if we say that the OBE involves imagination then we need a psychological theory of the OBE, with or without ESP, and this is what I shall consider in the final chapter.

Other approaches

But before I do so I want to mention briefly that last possibility: that all the distinctions and problems I have been raising are artificial. Should we just admit that mind is neither 'in' nor 'out' of the body? Grosso argues (54b) that perhaps one is always 'out' and in an OBE just becomes conscious of that fact. I have been asking how the information in an OBE is acquired, but should the distinction between normal and paranormal be dropped?

During an OBE one may have what seems a clearer perception of such questions. Dichotomies are transcended intuitively and the experience is felt as natural and comprehensible. I think this direct perception has a value; and the more researchers are able to step into that way of thinking, the richer will be their understanding. However, this intuition does not answer the kinds of question I want to answer and it cannot relate a theory of the OBE to other physical, psychological or parapsychological theories. I am sure I am not alone in that aim. I would argue that the mystical, intuitive or direct perception of the experience is a valuable, and even necessary, approach, but not an alternative theory.

Finally I would like to make one small point. Many theorists have

tried to get round some of the problems by saying that different OBEs require different explanations or fit different models, or that there are gradations of the OBE. However, we should remember that if a theory does not make sense, then nothing is changed by saying that it applies only to some OBEs. I would not for a moment suggest that there can be only one type of OBE, and only one theory; but for me none of the preceding theories works and they work no better for *some* OBEs than for all. Accordingly I shall now turn to the psychological theories of the OBE.



22 A Psychological Approach to the OBE

Our last alternative theory is that all the details of the OBE are to be accounted for in psychological terms. Nothing leaves the body in an OBE. The astral body and astral world are products of the imagination and the OBE itself provides no hope for survival. Osis has called the followers of such theories 'nothing but-ers', reducing the OBE to 'nothing but a psychopathological oddity' (103h); but to me such theories provide the most hopeful, challenging and exciting approach to the OBE.

Among psychological approaches to the OBE there have been psychoanalytic interpretations, analogies between the 'tunnel' and the birth experience; the creation of the double has been seen as an act of narcissism or as a way of denying the inevitable mortality of the human body. Eastman suggested that the cord may symbolize the pull back to the body and the astral body itself may be a symbol of the self to the self (33). Then there have been theories which treat the near-death experience as a form of depersonalization or regression to primitive modes of thinking, and those which treat it as involving an archetype. I have already discussed some of them and shall not criticize them further except to say that none provides a complete account of the OBE. Some may well have a place in a psychological theory of the OBE. For instance an underlying physiological event may be responsible for a change in state of consciousness, and some factor such as narcissism be implicated in the form the experience takes. Therefore I would not dismiss a theory just because its scope is limited. However, if a psychological theory of the OBE is to provide a genuine alternative to the previous types of theory, then it needs to do more than just tackle small parts of the experience.

PALMER'S THEORY

The most complete psychological theory of the OBE so far proposed

is that of John Palmer who used a mixture of psychological and psychoanalytical concepts in his account (110b). Palmer made the crucial point that the OBE is neither potentially nor actually a psychic phenomenon. An OBE may be associated with psychic events but the *experience* itself, just like any other experience, is not the kind of thing which can be either psychic or not.

He went on to suggest that the OBE almost always occurs in a hypnagogic state. Within this state it is triggered by a change in the person's body concept which results from a reduction or other change in proprioceptive stimulation. This change then threatens the *self* concept and the threat activates deep unconscious processes. These processes try to re-establish the person's sense of individual identity as quickly and economically as possible and the way in which they do this follows the laws of the Freudian primary process. According to Palmer it is this attempt to regain identity which constitutes the OBE.

This makes sense of why the experience seems so real at the time, since the unconscious mind has to convince the ego of* the new identity so as to alleviate the threat. On Palmer's theory, the OBE is seen as only one of the ways in which this end can be accomplished. Another might be tp escape altogether by fainting. Which course is taken will depend upon the situation and set. A person who is dying is likely to have a different experience from one who is in a laboratory undergoing an OBE induction procedure.

Since the whole purpose of the OBE is to avoid a threat the person will usually remain unaware of that threat and of the change in body image which precipitated it. However, Palmer adds that it is possible, with practice, to gain ego-control over the primary process activity. Of course the OBE is, at best, only a partial solution to the threat and both ego and primary process strive to regain the normal body concept. As soon as they succeed the OBE ends.

For Palmer any psychic abilities which manifest themselves during an OBE do so more because of the occurrence of the OBE in a hypnagogic state than because anything actually leaves the body. He emphasizes that the theory is neutral as regards the relationship between brain and mind, but an important implication is that the OBE provides no evidence for mind-body separation.

This theory has much in its favour. It has no need of astral bodies or other worlds and so avoids all the problems of the earlier theories. It makes sense of the situations in which the OBE occurs, and-the

way it varies with the situation, and it relates the OBE to other experiences. However, it is not without its own problems. It depends heavily on the idea that the OBE is a means of avoiding a threat to the integrity of the individual and the anxiety which that would arouse. But it is not clear to me that the OBE would not provide an even greater threat than the original change in body concept. In itself, it presents an apparent split between self and body and many people find this acutely threatening and anxiety-provoking. Sometimes they are terrified that they will not be able to 'get back in' and this is surely a threat too. Of course one may argue that the conscious threat of the OBE is quite different to the unconscious threat which provoked it, and that in an OBE the 'self remains in some sense whole even though separated from the body. But I would want to ask just what Freudian psychoanalytic concepts would predict here. Which types of threat are most to be avoided and which solutions most effective? It seems to me that these are just the kinds of predictions which psychoanalysis is characteristically unable to make.

The theory also seems to imply that both primary processes and the ego are goal-directed and strive towards a specific objective. Palmer specifically denies any commitment to teleological thinking and so it would be helpful to know in what sense the primary process strives and the unconscious convinces. Finally Palmer's theory is far from complete. It says nothing about tunnels and sensations of separation, the appearance of the OB world or the physical body or the experiences of flying and floating, although presumably it could be elaborated to account for these in terms of primary process thinking. Since Palmer is intending to present a more detailed version I should not criticize it prematurely, and only add that it has provided a valuable new way of looking at the OBE which should provide much scope for research.

So far I have tried to present the evidence as objectively and fairly as I can, but now I am going to indulge my prejudices, expose my hunches and present my own interpretation of the OBE.

A PSYCHOLOGICAL THEORY

First I should say that I find the evidence for paranormal events during the OBE limited and unconvincing. Others will certainly disagree with me but I think it is possible that all the claims for ESP and PK in OBEs are groundless. You may object and cite the

famous Wilmot case (99b), the Landau case (76) or many others. And it is true, I would have to argue that the witnesses or investigators were lying or mistaken; but I do not think this is impossible, nor do I think there is actually very much evidence which has to be 'explained away' in this fashion.

Could we put this to the test? Could we ever be sure that there was or was not any paranormal aspect to the OBE? We have seen how difficult this seems to be. However, and perhaps paradoxically, I think we may never have to answer the question even though it is theoretically a most important one. It is important because a purely psychological theory of the OBE cannot directly account for paranormal phenomena and if they occur they demand explanation. But I don't think that in the end we shall need to answer it. What I expect to happen is that one theory (or perhaps 'approach' or 'programme of research' would be better words) will begin to seem more productive than others. It will stimulate research which develops rather than going round in circles as some research to date has done. It will lead to new ideas and new relationships with other areas or experiences and people will begin to use it more often in their thinking, discussion, and research. If this happens one approach will become more accepted than others and in this sense will have won, at least for the time being.

This hypothetical approach may have as a crucial part of it the occurrence of paranormal phenomena and it may solve some of the problems thereby presented. Alternatively, it may ignore psi altogether. Whichever is the case we shall no longer ask whether there is ESP in the OBE or not because it will seem obvious. My guess is that it will be the psychological theories which will take on this role and that the question of paranormal phenomena will quietly be dropped. But of course some new discovery may at any time prove me quite wrong.

So what sort of psychological theory have I in mind? I would like to suggest this; that the OBE is best seen as an altered state of consciousness (ASC) and is best understood in relation to other ASCs. Everything perceived in an OBE is a product of memory and imagination, and during the OBE one's own imagination is more vividly experienced than it is in everyday life. In other words the experience is a kind of privileged peek into the contents of one's own mind.

In any ASG ways of thinking and perceiving change. In some,

such as dreams, imagination is vivid but there is no appreciation at the time of what is happening. In this respect dreams differ from OBEs, but other ASCs may be closer and I think many involve this kind of direct experience of one's own imagination. The conditions necessary for such a state to occur may vary, but I would suggest that in the case of the OBE the following are necessary:

- 1. Vivid and detailed imagery;
- 2. Low reality testing so that memories and images may seem 'real';
- 3. Sensory input from the body reduced or not attended to;
- 4. Awareness and logical thinking maintained. (This is like Tart's dimension of 'rationality' (146i, 1).)

However, I should add that other experiences besides the OBE can occur under these conditions.

I shall try to illustrate how these conditions are important for the OBE by taking as an example one way of reaching the OBE: through the use of a hallucinogenic drug. From research with such drugs (e.g. 137a) it is known that in the early stages of intoxication certain types of imagery increase. Tunnels, spirals, and lattices are common; and although they are initially seen as separate from the subject, they gradually start to become more 'real'. Complex images constructed from memory follow, at first seen in a tunnel perspective, but later becoming more realistic and merging with the person. These memory images may take many forms according to the setting and expectations of the subject. Sometimes childhood scenes are reconstructed and, because of the state of consciousness, are experienced as though relived. (This might be most likely when death is thought to be close and looking back is preferred to looking forward.)

At other times and in other situations the subject may enjoy bizarre scenes and dreamlike images, taking a role in fantasy action or observing as though from outside. But in the latter case habits of thought and the vividness of his imagery may prevent him from seeing himself as a disembodied observer. Instead he may take on the fantasy body of a flying bird, or reconstruct his normal body from memory and his body image. As the experience progresses reality testing is almost totally suspended. The images hold the attention completely and any awareness of the physical body is lost.

All this can happen as a result of taking hallucinogenic drugs, but

the question then almost becomes how the subject is to avoid having an OBE. I think the answer is that wliether the experience is labelled 'OBE' or as 'tripping' or 'stoned' or whatever, depends not only on the physiological state the person is in but also on the content of his imagery and the role of his body image. It is only when the imagery is predominantly of ordinary scenes from the everyday world, observed as though from somewhere other than where the physical body is, that the experience takes on the form of an OBE.

An important question now becomes why this particular kind of hallucinatory experience is reasonably stable and discrete. If it is just one form that hallucinations can take; why does it not become inextricably mixed up with other forms, the different experiences drifting into one another? This is important because we know that the OBE does have some stability. It is reported as similar when induced in a variety of ways, and although; it is sometimes associated with other hallucinatory experiences, it is more often separate. It is also discrete in the sense that it can start one moment, go on for some time and then suddenly end. It is these sorts of features which have led to its being given a name and considered something other than an hallucination.

I think the answer is twofold. First, there are cognitive processes constantly operating to maintain the stable body image necessary for co-ordinating skilled behaviour. Not only is the body image strong and complete-that is one imagines accurately and vividly the form of one's own body - but it is also coincident with the actual physical body location. All the sensory stimulation from the body keeps it that way. However, in the situation we are imagining the person seems to be looking at the room in one of the ways it is represented in memory, from a point near the ceiling. Stimulation from the body is absent or ignored and so the body image need not be coincident with the position of the physical body. The person may or may not make himself a new 'body' from the body image, where he is, up on the ceiling. Since that is where he seems to be looking from, this one will naturally seem the more real. Looking down he will 'see' the chair in which he knows he is sitting and so may see himself there too, constructing this picture from the image he has of how other people see him.

Now in this situation I am suggesting, the sight of 'himself may prove too much for the 'new perspective'. Indeed in'training to induce the OBE, this is a major hurdle. Bodily sensations may reassert their hold on the body image and suddenly our astral projector will be 'back in his body' again. However, if imagery is still vivid, reality testing low and so on, the person's identification with the 'new view' will prevail. He will be able to observe an image of himself sitting in the chair and at the same time seem to be himself up on the ceiling. So long as the original inducing conditions prevail, this situation can be maintained.

This gives one reason why the experience is relatively discrete. The transition back to 'normal' requires a cognitive leap. One could compare this jump to the kind of perceptual jumps which are made when an ambiguous figure is seen in first one way and then another (see 9a and Plate 17). It is not possible to see both forms of the figure at once. The same may be so for the OBE. If the two views were experienced together the subject would have to be seeing the room simultaneously from his point on the ceiling and from his body. Apart from the fact that this would be too confusing to be maintained, the 'old' view would always win. Any sensory input attended to, however slight, is on the side of the 'old' position, as are habit and familiarity. Therefore if the two should ever coexist the old always wins and the OBE is terminated. The subject will seem to have shot back into his body. So we can see that the 'new' view is only stable so long as there is no attention given to the 'old' view and it is discrete because any half-way view is extremely short-lived. To this extent it is what Tart would call a 'discrete state of consciousness' (146i, j, 1).

The second reason for discreteness is one of expectation and habit. If our subject's hallucinatory imagery is of his own room then he will expect that outside the room is the corridor and the stairs, and outside the front door is the path and garden. He may be led by his expectations and using his cognitive map, through many 'places' as though he were 'really there' and of course these will have all the characteristics of the cognitive map, as we have seen. If, as I have specified, logical thinking is reasonably intact our subject will not be led off into fantastic scenes or other types of hallucination. And since everything seems so real he will be fascinated with what he sees. Often he will not have the time or inclination to think, 'I could go anywhere, I could change this into another sort of experience*. In the typical spontaneous OBE time is short and something will end the experience before this happens. It is only the longer or repeated experiences which are likely to change or broaden in this way.

So according to my scheme the OBE is a state bounded on one side by the restoration of normal coincidence of body image and sensory input, and on another by the habits of thinking which keep the imagery, at least for a while, associated with the physical scene. Beyond this boundary of habit lie many other types of experience, mystical, religious, fantastic and psychedelic but to reach any of these either the initial conditions must change or a jump in thinking is required and for most people this is difficult. So, once the OBE is established it is, at least temporarily, stable and discrete.

Having outlined the scheme it is now important to see whether it leads to any testable predictions, because it will only be useful if it does. First, simple predictions can be drawn about the induction of an OBE. If essential prerequisites are vivid imagery, suspension of reality testing, logical thinking and a lack of (or lack of attention to) sensory stimulation, then there are many ways of achieving this. All these terms are little more than labels for modes of thinking and anyone who is capable of moving from one to another can free himself from the need for such external aids as drugs, but for most people this is not possible.

For them certain drugs, sensory deprivation or ganzfeld conditions can aid imagery and decrease sensory awareness, but they must be kept alert or the experience will lapse into sleep or day-dream. Also an alternative body image must be built up, whether this is a complete 'double' or just a point elsewhere. A disruption or distortion of the normal body image may help, but is not sufficient. What is needed is a split between the imagined position of the self and the input from the senses. An OBE should not be possible where imagery is poor or vague and especially when co-ordinated input from the different senses confirms the sense of body position.

All this may only confirm what has been learned from induction attempts, but more specific predictions axe possible about the types of people who should be likely to have OBEs and in whom they would be easier to induce.

As we have seen there has been much argument about whether psychological theories predict a relationship between imagery skills and OBEs. Usually general tests of vividness of imagery have been used but I would predict rather specific relationships reflecting the role of imagery in different kinds of OBE, under different circumstances. First of all, the vividness of a person's normal imagery heed not be relevant when the OBE is induced primarily by some hallu-

cinogenic factor such as a drug, illness, or accident. It should only be important in deliberately induced OBEs, or those in which there is no other strong inducement to vivid imagery. In those same types of OBE control of imagery should be important. This could easily be tested by comparing the imagery skills of those who have had spontaneous and induced OBEs. Alternatively, one could try to induce OBEs in high and low imagers with and without techniques designed to induce powerful images.

Second, I see-no reason why being a habitual imager or verbalizer should be important; but capacity for absorption should, as Irwin found. But third, I would also suggest that certain specific imagery and cognitive skills would predispose someone to having an OBE more than vividness of imagery. These are the kinds of skill required to visualize a room from above, or an object from an unfamiliar angle, in other words spatial manipulative skills. This could be tested by comparing the skills of OBEers and non-OBEers, or by trying to induce OBEs in those with good or poor spatial skills. I would predict that these specific skills would relate more closely to OBEs than general vividness of imagery.

Other predictions concern the variability of the experience. If it only requires the time and ability to think to change and control an OBE, then the longer experiences or the multiple cases of adepts and frequent OBEs should be more varied than single short ones. The practised OBEer should be able to jump about in his cognitive map, moving in every way his imagination allows. He may choose to leave this 'physical world' altogether and take off into different 'spaces', mystical experiences, profoundly different views of the world, or anywhere his imagination may lead him. It only needs a jump in thinking to achieve this.

This seems to be just what we find. Oliver Fox and Sylvan Muldoon travelled at the 'speed of thought' from place to place in their OBEs, and Whiteman as well as Fox had frequent experiences which were not in this ordinary world. Rogo (124d) analysed Fox's experiences chronologically and showed that as time went on he had more and more in which he left 'physical reality'. In my own long OBE I learned that all the props of the initial experience were unnecessary; the duplicate body, the comforting connecting cord and the familiar room. After that my experience went on into many different forms and 'places'. All this leads to predictions about the relationship between the length and frequency of OBEs and their

nature. They could be tested against data from surveys or in OBE training programmes and experimental sessions with practised OBEers.

We can also predict from this psychological approach how the OBE should end. If the original conditions continue the experience can change towards mystical or religious experience. If any of them changes it will end rather abruptly. For example, if imagery becomes less vivid the new view will lose its; temporary advantage and the old one reassert itself. If reality testing suddenly reappears the person may think 'this is daft - I am really sitting in my chair'.. Attention switches back to the body and the experience ends that way. If sensory input itself becomes assertive then again the old view will predominate and in all of these cases the change is sudden. There may be a moment between the two views when neither is established and there is nothing in between. This might produce what Crookall refers to as the momentary blanking of consciousness and I think this effect is better explained in cognitive terms than as a sensation produced by the drawing out or return of the astral body.

Finally if logical and clear thinking is lost the experience may lapse into dreaming. According to this way of looking at the OBE, its relationship to lucid dreaming is very close (though we must bear in mind the physiological differences between the two). In ordinary dreaming three of the conditions for the OBE are fulfilled: there are vivid imagery, suspension of reality testing and a near total obliteration of sensory input. What is missing is the clarity of thinking and deliberate control which need to accompany them. So we can see that if a person becomes lucid in a dream, if in Fox's terms the critical faculty is aroused, then all the conditions for an OBE are fulfilled. Of course he may choose to go on experiencing the dream imagery he already had. If this is bizarre in nature he is likely to call the experience a dream. But if it is of the normal environment he may call it an OBE. More specifically if he thinks 'Oh, I am dreaming, I wonder if I could see my own body in bed asleep,' then the experience becomes a typical OBE, bounded again by other experiences and kept in check by habits of thought.

In the case of a lucid dream the person is not likely to drop back into the normal viewpoint because he is asleep and unresponsive to sensory input. This only occurs if he wakes, as sometimes happens from lucid dreams. More likely is that he will lapse back into ordinary dreaming or to a different kind of lucid dream. All this fits

with what we know about lucid dreams and makes sense of their apparently close relationship to the OBE.

I have treated the OBE as though it occupied a 'place' in a multi-dimensional world of imaginary experience, bounded on its different sides by this or that other experience, and having a niche of temporary stability. Although the spatial aspect is only a metaphor, this is what I intended. Starting from a purely materialist foundation, one can see that the nature and structure of our nervous systems makes certain experiences possible and others not so. We can imagine a large number of potential states of this highly complex system but some might be stable while others are 'forbidden' or extremely unstable. In addition some routes between them would be easier than others because of similarities in necessary conditions and the stability or otherwise of the intervening states.

We can see that it might be possible to develop a map of this multi-dimensional space. This is no new idea. Some have seen the I *Ching*, Tarot and Cabbala as examples of cartography of experiential space and many other maps have been tried (39, 91, 146i, 1), but so far no mapping has been achieved which would allow for simple classification of ASCs, or relate them to known and measurable physiological or psychological conditions. I would suggest that to do this we need to identify some crucial variables which form, in the spatial analogy, major dimensions of the space, and then try to find the kinds of thing which make some areas stable while others are not.

This is what I have tried to do for the OBE, albeit rather inadequately. I have suggested four possibly important prerequisites. Although these need defining much more clearly I have shown how they can lead to an altered state of which one form is the semi-stable OBE. I have tried to indicate related states and shown how the experience can change into others when conditions, or ways of thinking, change; and I have indicated how the OBE is expected to end. One advantage of this approach is that it leads to many testable predictions, but only time and much research will show how it copes if they are tested.

Charles Tart suggested in 1972 (146e) the notion of state specific sciences. If scientists could learn to get into and manipulate ASCs we might be able to operate sciences with learning and communication within those states. The future of OBE research may lie in the

attempt to bring subjective experience of this kind into the realm of publicly testable experience.

Of course we would have to learn many new skills, but here the trials of the adepts and the long tradition of occult learning might help us. Looked on as maps of experiential space we may find that these old traditions are better guides than we thought for the modern explorer. The psychological approach may even begin to make sense out of the otherwise rather baffling regions and planes of the 'astral world'. One can see them as reflections of the structure and organization of the brain and its processing systems.

Travelling in the astral may be a process of exploring the contents of your own memory and imagination, brought to life by a new way of thinking in a special state of consciousness. The more mundane representation of the cognitive map may be seen as forming one region of the lower astral, while the monsters and creatures of child-hood fears populate another'. Are the 'higher planes' states of consciousness involving ways of thinking which most of us cannot reach? Many occultists would reject this interpretation but to me it makes a lot of sense and might mean that we could start learning from occult teachings if we tried to integrate them with the psychology of memory, imagination and consciousness.

I would just like to add two more important implications of this psychological approach. First, it suggests that nothing leaves the body in an OBE. Everything seen is from the person's own imagination and this means that psychic events of any kind are not expected during the OBE. This approach is not incompatible with the idea that the OBE is a psi-conducive state but if so, then this is incidental to the theory.

It could be argued that this takes the OBE out of the province of psychical research, or parapsychology; but if so then the loser is parapsychology. Many of the phenomena currently labelled 'paranormal' may turn out to be nothing of the kind but I do not believe that parapsychology should reject them on that score. I hope that parapsychologists will continue to investigate the OBE as an intrinsic part of their field, whichever theory they eventually adopt.

Finally, of course, it says nothing about survival. Nothing leaves the body in an OBE and so there is nothing to survive. I would not say there is no survival; I very much hope chat there is-but according to this theory the OBE itself has no bearing either way on the matter.

Some readers may think this provides a depressing outlook for research on the OBE. I think quite the reverse: that it is tremendously exciting. Here is an altered state of consciousness which we know a little about, which is rather common and which we can readily explore further. I hope that through this psychological approach we shall eventually be able to understand far better than we can now all the experiences I have described in this book, including that one of my own which set me off on this trail in the first place. It is my hope that in years to come we shall have a coherent theory of ASCs, of memory and of imagination, within which the OBE will take its rightful place as one of those private spaces which the human mind, because of its very human brain, can explore.



References

- 1. Alvarado, C. S. 'The Physical Detection of the Astral Body: An Historical Perspective' (1980). *Theta 8*, pp. 4-7.
- 2. Anon. 'A Curious Alleged Attempt to Prove the Existence of a Soul' (Annals of Psychical Science, 1906, 3, pp. 351-2.
- 3. Arnold-Forster, H. O. *Studies in Dreams* (London: Allen and Unwin, 1921).
- 4. Barrett, W. Death-bed Visions (London: Methuen, 1926).
- 5. Beardsworth, T. A Sense of Presence (The Religious Experience Research Unit, Oxford, 1977).
- 6. Besant, A. *Man and his Bodies* (Theosophical Publishing House, Adyar, India, 1971).
- 7. Besant, A. and Leadbeater, C. W. *Thought Forms* (Theosophical Publishing House, Adyar, India, 1901).
- 8a. Black, D. *Ekstasy: Out-of-the-body Experiences* (New York: Berkeley Medallion, 1976).
- 8b. —. 'Psychoanalytic and Psychophysiological Theories About the Out-of-body Experience'. In Rigo, D. S. (Ed) *Mind Beyond the Body* (New York: Penguin, 1978, pp. 323-37).
- 9a. Blackmore, S. J. *Parapsychology and Out-of-the-Body Experiences* (Hove: Transpersonal Books, and London: Society for Psychical Research, 1978).
- 9b. —. 'Is ESP Perceiving or Remembering?' (*Parapsychology Review*, 1979, 10, No. 4, pp. 23-7).
- 9c. —. 'Correlations between ESP and Memory' (European Journal of Parapsychology, 1980, 3, pp. 127-147).
- 9d. —. 'A Survey of OBEs', in *Research in Parapsychology 1980*, ed. W. G. Roll (Metuchen, N. J.: Scarecrow Press, 1981, pp. 105-6).
- 10. Blackwell, H. 'Psychic Photography' (Annals of Psychical Science, 1908, 7, pp. 325-6).
- 11. Bobbett, E. W. 'The Double: A Proposed Method of Demonstrating its Existence' (Annals of Psychical Science, 1908, 7, pp. 579-581).
- 12. Bord, J. Astral Projection (Wellingborough, Northants: Aquarian Press, 1973).
- 13. Bozzano, E. 'Apparitions of Deceased Persons at Death-beds' (Annals of Psychical Science, 1906, 3, pp. 67-100).
- 14. Brennan, J. H. *Astral Doorways* (Wellingborough, Northants: Aquarian Press, 1971).

- 15. Bychowski, G. 'Disorders of the Body-image in the Clinical Pictures of Psychoses' (Journal of Nervous and Mental Disease, 1943, 97, pp. 310—35)
- 16. Carington, W. Telepathy: An Outline of its Facts, Theory and Implications (London: Methuen, 1945).
- 17a. Carrington, H. *The Problems of Psychical Research* (London: Rider & Son, 1914).
- 17b. —. *Modem Psychical Phenomena* (New York: Dodd, Mead & Co., 1919).
- 17c. Higher Psychical Development (London: Kegan Paul, French Trubner & Co., 1920).
- 17d. —. Your Psychic Powers and How to Develop Them (New York: Dodd, Mead & Co., 1923).
- 17e. Laboratory Investigations into Psychic Phenomena (London: Rider, & Co., 1939).
- 18. Carrington, H. and Meader, J. R. Death: its Causes and Phenomena (London: Rider, 1913).
- 19. Castaneda, C. *The Teachings of Don Juan: A Yaqui Way of Knowledge* (University of California Press, 1968, and London: Penguin, 1970).
- 20. Cobbe, F. P. 'The Peak in Darien: The Riddle of Death' {Littell's Living Age and New Quarterly Review, 1877, 134, pp. 374-9).
- 21. Coleman, S. M. 'The Phantom Double: Its Psychological Significance' {British Journal of Medical Psychology 14, pp. 254-273, 1934).
- 22. Colvin, B. 'Autoscopic and Ecsomatic Experiences' (Christian Parapsychologist 1, pp. 117-20 and 139-43, 1977).
- 23. Comper, F. M. M. De Arte Moriendi (The Book of the Craft of Dying, New York: Arno Press, 1977).
- 24. Conway, D. *Magic: An Occult Primer* (London: Jonathan Cape, 1972, and Mayflower Books, St. Albans, 1974).
- 25. Critchley, M. 'The Body Image in Neurology (*The Lancet* 1950, *I*, pp. 335-40).
- 26a. Crookall, R. *The study and practice of astral projection* (London: Aquarian Press, 1961).
- 26b. —. 'Only Psychological Fact?' (Light, 1963, 83, pp. 171-182).
- 26c. —. More Astral Projections (London: Aquarian Press, 1964).
- 26d, —. The Techniques of Astral Projection: Denouement After Fifty Years (London: Aquarian Press, 1964).
- 26e. —. The Interpretation of Cosmic and Mystical Experiences (London: James Clarke & Co., 1969).
- 26f. —. The Mechanisms of Astral Projection: Denouement After Seventy Years (Moradabad, India: Darshana International, 1969).
- 26g. —. The Jung-Jaffe View of Out-of-the-Body Experiences (World Fellowship Press, 1970).
- 26h. —. Out-of-the-Body Experiences (New York: University Books, 1970).
- 26i. —. What Happens When You Die (Gerrards Cross: Colin Smythe, 1978).
- 27. Damas Mora, J. M. R., Jenner, F. A. and Eacott, S. E. 'On Heautoscopy

- or the Phenomenon of the Double: Case Presentation and Review of the Literature {British Journal of Medical Psychology, 53, 1980, pp. 75-83).
- 28. De Mille, R. Castaneda's Journey: the Power and the Allegory (Harmondsworth: Penguin Books).
- 29a. De Rochas, Col. A. 'The Regression of Memory' {Annals of Psychical Science, 1905, 2, pp. 1-52)
- 29b. —. 'New Experiments Relative to the Antral Body and the Magnetic "Rapport" ' {Annals of Psychical Science, 1906, 4, pp. 120-5).
- 29c. —. 'My Experiments with M. de Jodko in 1896' {Annals of Psychical Science, 1908, 7, pp. 80-8).
- 30. De Vesme, C. 'The Sensation of Flying During Sleep' {Annals of Psychical Science, 1906, 4, pp. 325-31).
- 31. Delage, Y. Le Rive (Paris: Les Presses Universitaires de France, 1919).
- 32a. Durville, H. 'Experimental Researches Concerning Phantoms of the Living' [Annals of Psychical Science, 1908, 7, pp. 335-43].
- 32b. —. 'New Experiments with Phantoms of the Living' {Annals of Psychical Science, 1908, 7, pp. 464-70).
- 33. Eastman, M. 'Out-of-the-Body Experiences' {Proceedings of the Society for Psychical Research, 1962,53, pp. 287-309).
- 34. Ehrenwald, J. 'Out-of-the-Body Experiences and the Denial of Death' *[Journal of Nervous and Mental Disease, 1974, 759, pp. 227-33]*.
- 35. Eliade, M. Shamanism (London: Routledge, 1964).
- 36. Enoch, M. D. and Trethowan, W. H. *Uncommon Psychiatric Syndromes* (2nd Ed., Bristol: Wright, 1979).
- 37. Evans-Wente, W. Y. *The Tibetan Book of the Dead* (New York: Oxford University Press, 1960).
- 38. Findlay, A. On the Edge of the Etheric (London: Psychic Press Ltd., 1931).
- 39. Fischer, R. 'Cartography of Inner Space' in Siegel, R. K. and West, L. J. (Eds.) *Hallucinations* (New York: John Wiley & Sons, 1975).
- **40. Flammarion, C.** *Death and its Mystery: II At the Moment of Death* (London: T. Fisher Unwin Ltd., 1922).
- 41. Freedman, A. M., Kaplan, H. I. and Sadock, B. J. *Modern Synopsis of Comprehensive Textbook of Psychiatry II* (Baltimore: Williams & Wilkins Co., 1976).
- 42. Fodor, N. *Encyclopaedia of Psychic Science* (Secausus, N.J.: University Books, 1966).
- 43. Fortune, D. *Psychic Self-Defense* (Wellingborough: Aquarian Press, 1930).
- 44a. Fox, O. "The Pineal Doorway* *{Occult Review, 1920, 31, pp. 256-64}*).
- 44b. —. 'Beyond the Pineal Door* {Occult Review, 1920, 31, pp. 317-27).
- 44c. —. Astral Projection (New York: University Books Inc., 1962).
- 45. Galton, F. Inquiries into Human Faculty (London: Macmillan, 1883).
- 46. Gates, E. 'On the Transparency of the Animal Body to Electric and Light Waves: As a Test of Death and a New Mode of Diagnosis and a Probable New Method of Psychic Research' *Annals of Psychical Science*, 1906, 3, pp. 378-81).

- 47a. Gauld, A. 'The "Super-ESP" Hypothesis' (Proceedings of the Society for Psychical Research, 1961, 53, pp. 226-46).
- 47b. —. *The Founders of Psychical Research* (London: Routledge and Kegan Paul, 1968).
- 48. Glaskin, G. M. Windows of the Mind: The Christos Experience (London: Wildwood, 1974).
- 49a. Green, C. E. 'Spontaneous "Paranormal" Experiences in Relation to Sex and Academic Background' (Journal of the Society for Psychical Research, 1966, 43, pp. 357-63).
- 49b. —. 'Ecsomatic Experiences and Related Phenomena' (Journal of the Society for Psychical Research, 1967, 44, pp. 111-31).
- 49c. Out-of-the-Body Experiences (London: Hamish Hamilton, 1968).
- 49d. —. Lucid Dreams (London: Hamish Hamilton, 1968).
- 50. Greenhouse, H. B. The Astral Journey (New York: Doubleday, 1975).
- 51. Greyson, B. and Stevenson, I. 'A Phenomenological Analysis of Near Death Experiences' in *Research in Parapsychology 1978*, Roll, W. G. ed. (Metuchen, N. J.: Scarecrow Press, 1979, pp. 49-50).
- 52. Grof, S. Realms of the Unconscious: Observations from LSD Research (New York: Viking Press, 1975).
- 53. Grof, S. and Halifax, J. *The Human Encounter with Death* (London: Souvenir Press, 1978).
- 54a. Grosso, M. 'Plato and Out-of-the-Body Experiences' (Journal of the American Society for Psychical Research, 1975, 69, pp. 61-74).
- 54b. —. 'Toward an Explanation of Near-Death Phenomena' (Journal of the American Society for Psychical Research, 1981, 75, pp. 37-60).
- 55. Gurney, E., Myers, F. W. H. and Podmore, F. *Phantasms of the Living* (2 Vols. London: Trubner & Co., 1886).
- 56. Hall, P. F. 'Experiments in Astral Projection' (Journal of the American Society for Psychical Research, 1918, 12, pp. 39-60).
- 57. Haemmerl6, A. 'Experiences of Bilocation' (Annals of Psychical Science, 1906, 4, pp. 113-9).
- 58. Haraldsson, E., Gudmundsdottir, A., Ragnarsson, A., Loftsson, J. and Jonsson, S. 'National survey of Psychical Experiences and Attitudes Towards the Paranormal in Iceland' in *Research in Parapsychology 1976* (Morris, J. D., Roll, W. G. and Morris, R. L. eds. Metuchen, N. J.: Scarecrow Press: 1977, pp. 182-6).
- 59. Harary, S. B. 'A Personal Perspective on Out-of-Body Experiences' in Rogo, D. S., ed. 'Mind beyond the Body' (New York: Penguin, 1978, pp. 260-9).
- 60a. Hart, H. 'ESP Projection: Spontaneous Cases and the Experimental' Method' (*Journal of the American Society for Psychical Research*, 1954, 48, pp. 121-46).
- 60b. —. 'Book Review' (Journal of the American Society for Psychical Research, 1967, 61, pp. 173-8).
- 61. Hartwell, J., Janis, J. and Harary, S. B. 'A Study of the Physiological Variables Associated with Out-of-Body Experiences' in *Research in Parapsychology 1974*, Morris, J. D., Roll, W. G. and Morris, R. L. eds. Metuchen, N. J.: Scarecrow Press, 1975, pp. 127-9).

- **62a.** Heame, K. M. T. Lucid Dreams: An Electrophysiological and Psychological Study (Unpublished PhD thesis, University of Liverpool, 1978).
- 62b. —. 'Lucid Dreams and ESP: An Initial Experiment Using one Subject {Journal of the Society for Psychical Research, 1981,51, pp. 7-11).
- 63. Honorton, C. 'Psi and Internal Attention States' in Wolman, B., ed. *Handbook of Parapsychology* (New York: Van Nostrand, 1977, pp. 435-72).
- 64. Hopper, B. J. 'Enquiry into the Cloud Chamber Method of Studying the "Intra-atomic Quantity" ' (Unpublished paper in the Archives of the Society for Psychical Research, 1935).
- 65a. Irwin, H. J. 'Out of the Body Down Under: Some Cognitive Characteristics of Australian Students Reporting OOBEs' (Journal of the Society for Psychical Research, 1980, 50, pp. 448-59).
- **65b.** —. Letter to the Editor (Journal of the Society for Psychical Research, 1981,5/, pp. 118-20).
- 65c. —. 'Some Psychological Dimensions of the Out-of-Body Experience' (Parapsychology Review, 1981, 12, No. 4, pp. 1-6).
- 66. Isaacs, J. Personal Communication (1981).
- 67. Israel, M. 'Thus Saith the Lord?' (The Christian Parapsychologist, 1977, /, pp. 137-9).
- 68. Janis, J., Hartwell, J., Harary, S. B., Levin, J. and Morris, R. L. 'A description of the Physiological Variables Connected with an Out-of-Body Study' in *Research in Parapsychology 1973*, Roll, W. G., Morris, R. L. and Morris, J. D., eds. (Metuchen, N. J.: Scarecrow Press, 1974, pp. 36-7).
- **69.** Joire, P. *Psychical and Supernormal Phenomena* (London: Rider & Co. 1916).
- 70. Jung, C. G. *Memories, Dreams, Reflections'* (London: Collins-Fontana, 1967).
- 71. Kanthamani, H. 'Psi in Relation to Task Complexity' (Journal of Parapsychology, 1979, 38, pp. 154-62).
- 72. Klotz, I. M. 'The N-ray Affair' (Scientific American, 1980, pp. 122-31)
- 73. Koestler, A. *The Invisible Writing* (London: Collins & Hamish Hamilton, 1954).
- 74. Kohr, R. L. 'A Survey of Psi Experiences Among Members of a Special **Population'** (*Journal of the American Society for Psychical Research*, 1980, 74, pp. 395-411).
- 75. La Barre, W. 'Anthropological Perspectives on Hallucination and Hallucinogens' in Siegel, R. K. and West, L. J. eds. *Hallucinations* (New York: John Wiley & Sons, 1975, pp. 9-52).
- 76. Landau, L. 'An Unusual Out-of-the-Body Experience' (Journal of the Society for Psychical Research, 1963, 42, pp. 126-8).
- 77. Lauwerys, Hopper, B. J. and Watters, R. A. Correspondence (Unpublished, Archives of the Society for Psychical Research).
- 78. Leadbeater, C. W. *The Astral Plane* (London: Theosophical Publishing House).

- 79. Lee, S. G. M. and Mayes, A. R., eds. *Dreams and Dreaming* (Harmondsworth: Penguin, 1973).
- 80. Leonard, G. O. The Last Crossing (London: Cassell, 1937).
- 81. Leonhardt, J. L. 'The Affect (sic) of Out-of-the-Body Experiences on Religious Views' (Paper presented at the International Conference on Christian Parapsychology, London, August 1978).
- 82. Lhermitte, J. 'Visual Hallucination of the Self (British Medical Journal, 1951, 1, pp. 431-4).
- 83. Lippman, C. W. 'Hallucinations of Physical Duality in Migraine (Journal of Nervous and Mental Disease, 1953,117, pp. 345-50).
- 84. Luce, G. C. and Segal, J. Sleep (New York: Coward-McCann, 1966).
- 85. Lukianowicz, N. 'Autoscopic Phenomena' (Archives of Neurology and Psychiatry, 1958, 80, pp. 199-220).
- 86. MacDougall, D. 'Hypothesis Concerning Soul Substance Together with Experimental Evidence of the Existence of Such Substance' (*Journal of the American Society for Psychical Research*, 1907, /, pp. 237-44).
- 87. Marks, D. and Kammann, R. *The Psychology of the Psychic* (New York: Prometheus Books, 1980).
- 88. Masters, R. E. and Houston, J. *The Varieties of Psychedelic Experience* (London: Anthony Blond, 1967).
- 89a. Mcintosh, A. I. 'The "Christos" Phenomenon: A Study of some Induced Altered States of Consciousness' (Unpublished paper, 1976).
- 89b. —. 'Beliefs about Out-of-the-Body Experiences among the Elema, Gulf Kamea and Rigo Peoples of Papua New Guinea' (*Journal of the Society for Psychical Research*, 1980, 50, pp. 460-78).
- 90. Mead, G. R. S. The Doctrine of the Subtle Body in Western Tradition (London: Watkins, 1919).
- 91. Metzner, R. *Maps of Consciousness* (London: Collier-Macmillan Ltd., 1971).
- 92. Mitchell, J. 'Out-of-the-Body vision' (*Psychic*, 1973, 4. Also in Rogo, D. S., ed. *Mind Beyond the Body*, New York: Penguin, 1978, pp. 154-61)
- 93. Monroe. R. A. Journeys Out of the Body (New York: Doubleday, 1971).
- 94. Moody, R. A. Life after Life (Covinda, G. A.: Mockingbird, 1975, and Bantam, 1976).
- 95. Morris, R. L. 'The Use of Detectors for Out-of-Body Experiences' (in *Research in Parapsychology 1973*. Roll, W. G., Morris, R. L. and Morris, J. D. eds. Metuchen, N. J.: Scarecrow Press, 1974, pp. 114—16).
- 96. Morris, R. L., Harary, S. B., Janis, J., Hartwell, J. and Roll, W. G. 'Studies of Communication During Out-of-Body Experiences' (*Journal of the American Society for Psychical Research*, 1978, 72, pp. 1-22).
- 97a. Muldoon, S. and Carrington, H. *The Projection of the Astral Body* (London: Rider & Co., 1929).
- 97b. —. The Phenomena of Astral Projection (London: Rider & Co., 1951).
- 98. Murphy, M. and White, R. A. *The Psychic Side of Sports* (London: Addison-Wesley, 1978).
- 99a. Myers, F. W. H. 'Automatic writing III. Physiological and Patho-

- logical Analogies' {Proceedings of the Society for Psychical Research, 1887, 4, pp. 209-61).
- 99b. —. Human Personality and its Survival of Bodily Death (London: Longmans, Green & Co., 1903).
- 100. Noyes, R. 'The Experience of Dying' {Psychiatry, 1972, 35, pp. 174-84)
- 101a. Noyes, R. and Kletti, R. 'The Experience of Dying from Falls' (Trans. from Helm, A. in *Omega*, 1972, 3, pp. 45-52).
- 101b. —. 'Depersonalisation in the Face oE Life-threatening Danger: A Description' {Psychiatry, 1976, 39, pp. 19-27).
- 102. Ophiel. *The Art and Practice of Astral Projection* (New York: Samuel Weiser, 1961).
- 103a. Osis, K. 'New ASPR Research on Out-of-the-Body Experiences' {American Society for Psychical Research Newsletter. No. 14, 1972).
- 103b. —. 'Toward a Methodology for Experiments on Out-of-the-body Experiences' (in *Research in Parapsychology 1972*. Roll, W. G., Morris, R. L. and Morris, J. D. eds. Metuchen, N. J.: Scarecrow Press, 1973, pp. 78-9).
- 103c. —. 'Perspectives for Out-of-Body Research' (in *Research in Parapsychology 1973*. Roll, W. G., Morris, R. L. and Morris, J. D. eds. Metuchen, N. J.: Scarecrow Press, 1974, pp. 110-13).
- 103d. —. 'Perceptual Experiments on Out-of-Body Experiences' (in *Research in Parapsychology 1974*. Morris, J. D., Roll, W. G. and Morris, R. L. eds. Metuchen, N. J.: Scarecrow Press, 1975, pp. 53-5).
- 103e. —. 'Out-of-Body Research at the American Society for Psychical Research' (in Rogo, D. S. ed. *'Mind Beyond the Body'*. New York: Penguin, 1978, pp. 162-9).
- 103f. —. 'Insiders' Views of the OBE: A Questionnaire Survey' (in *Research in Parapsychology 1978*. Roll, W. G. ed. Metuchen, N. J.: Scarecrow Press, 1979, pp. 50-2).
- 103g. —. 'Research on Near Death Experiences: A new look' (in *Research in Parapsychology 1978*. Roll, W. G. ed. Metuchen, N. J.: Scarecrow Press, 1979, pp. 30-1).
- 103h. —. 'Out-of-the-Body Experiences: A Personal View' {Psi News, 1981, 4, No. 3).
- 104a. Osis K. and Haraldsson, E. 'OBEs in Indian Swamis: Sathya Sai Baba and Dadaji' (in *Research in Parapsychology 1976*. Morris, J. D., Roll, W. G. and Morris, R. L. eds. Metuchen, N. J.: Scarecrow Press, 1977, pp. 147-50).
- 104b. —. At the Hour of Death (New York: Avon, 1977).
- 104c. —. 'Deathbed Observations by Physicians and Nurses: A Cross-cultural Survey' {Journal of the American Society for Psychical Research, 1977, 71, pp. 237-59).
- 105a. Osis, K. and McCormick, D. 'Kinetic Effects at the Ostensible Location of an OB Projection During Perceptual Testing' (in *Research in Parapsychology 1979*. Roll, W. G. ed. Metuchen, N. J.: Scarecrow Press, 1980, pp. 142-5).

- 105b. —. 'Current Research on Out-of-Body Experiences {American Society for Psychical Research Newsletter, 1980, 6).
- 105c. —. 'Kinetic Effects at the Ostensible Location of an Out-of-Body Projection During Perceptual Testing' (Journal of the American Society for Psychical Research, 1980, 74, pp. 319-29).
- 106. Osis, K. and Mitchell, J. L. 'Physiological Correlates of Reported Outof-Body Experiences' (*Journal of the Society for Psychical Research*, 1977, 49, pp. 525-36).
- 107. Osis, K. and Perskari, B. 'Perceptual Tests of the Out-of-Body Hypothesis' (Unpublished paper).
- 108. Ouspensky, P. D. 'On the study of dreams and on Hypnotism' (in *A New Model of the Universe*. London: Routledge & Kegan Paul, 1960, pp. 271-307).
- 109. Oxenham, J. and Oxenham, E. *Out of the Body* (London: Longmans, Green & Co., 1941).
- 110a. Palmer, J. 'Some New Directions for Research' (in *Research in Parapsychology 1973*. Roll, W. G., Morris, R. L. and Morris, J. D. eds. Metuchen, N. J.: Scarecrow Press, 1974, pp. 107-10).
- 110b. —. 'The Out-of-Body Experience: A Psychological Theory' (Parapsychology Review, 1978, 9, pp. 19-22).
- 110c. —. 'ESP and Out-of-Body Experiences: EEG Correlates' (in *Research in Parapsychology 1978.* Roll, W. G. ed. Metuchen, N. J.: Scarecrow Press, 1979, pp. 135-8).
- HOd. —. 'A Community Mail Survey of Psychic Experiences' (Journal of the American Society for Psychical Research, 1979, 73, pp. 221-52).
- UOe. —. 'Letter to the Editor' (Journal of the Society for Psychical Research in Parapsychology 1978. Roll, W. G. ed. Metuchen, N. J.:
- 111. Palmer, J. and Dennis, M. 'A Community Mail Survey of Psychic Experiences' (in *Research in Parapsychology 1974*. Morris, J. D., Roll, W. G. and Morris, R. L. eds. Metuchen, N. J.: Scarecrow Press, 1975, pp. 130-3).
- 112a. Palmer, J. and Lieberman, R. 'ESP and Out-of-Body Experiences: The Effect of Psychological Set' (in *Research in Parapsychology 1974*. Morris, J. D., Roll, W. G. and Morris, R. L. eds. Metuchen, N. J.: Scarecrow Press, 1975, pp. 122-7).
- 112b. —. 'The Influence of Psychological Set on ESP and Out-of-Body Experiences' (Journal of the American Society for Psychical Research, 1975, 69, pp. 193-214).
- 112c. —. 'ESP and Out-of-Body Experiences: A Further Study (in *Research in Parapsychology 1975*. Morris, J. D., Roll, W. G. and Morris, R. L. eds. Metuchen, N. J.: Scarecrow Press, 1976, pp. 102-6).
- 113a. Palmer, J. and Vassar, C. 'Toward Experimental Induction of the Out-of-the-Body Experience' (in *Research in Parapsychology 1973*. Roll, W. G., Morris, R. L. and Morris, J. D. eds. Metuchen, N. J.: Scarecrow Press, 1974, pp. 38-H).
- 113b. —. 'ESP and Out-of-the-Body Experiences: An Exploratory Study' (Journal of the American Society for Psychical Research, 1974, 68, pp. 257-80).

- 114. Parker, A. States of Mind: ESP and Altered States of Consciousness (London: Malaby Press, 1975).
- 115. Perry, M. The Resurrection of Man (London: Mowbrays, 1975).
- 116a. Powell, A. E. *The Etheric Double* (London: Theosophical Publishing House, 1925).
- 116b. —. *The Astral Body* (London: Theosophical Publishing House, 1926).
- 117. Poynton, J. C. 'Results of an Out-of-the-Body Survey' (in *Para-psychology in South Africa*. Poynton, J. C. ed. Johannesburg: South African Society for Psychical Research, 1975).
- 118. Price, H. H. 'Hauntings and the "Psychic Ether" Hypothesis' (*Proceedings of the Society for Psychical Research*, 11939, 45, pp. 307-43).
- 119. Rank, O. *The Double: A Psychoanalytic Study* (Chapel Hill: University of North Carolina Press, 1971).
- 120. Rao, K. R., Morrison, M. and Davis, j. W. 'Paired Associates Recall and ESP: A Study of Memory and Psi Missing' (*Journal of Parapsychology*, 1977, 41, pp. 165-89).
- 121. Rawlings, M. *Beyond Death's Door* (Nashville, Tennessee: Thomas Nelson Co., 1978).
- 122a. Ring, K. 'Further Studies of the Near-Death Experience (*Theta*, 1979, 7, pp. 1-3).
- 122b. —. Life at Death (New York: Coward, McCann & Geoghegan, 1980).
- 123. Ritchie, G. *Return From Tomorrow* (Eastbourne, Sussex: Kingsway Publications, 1978).
- 124a. Rogo, D. S. 'Astral Projection in Tibetan Buddhist Literature' (International Journal of Parapsychology, 1968,10, pp. 277-84).
- 124b. —. 'Aspects of Out-of-the-Body Experiences' (Journal of the Society for Psychical Research, 1976, 48, pp. 329-35).
- 124c. —. 'Research on Deathbed Experiences' (*Parapsychology Review*, 1978, 9, pp. 20-27).
- 124d. —. The Out-of-Body Experience: Some Personal Views and Reflections' (in Rogo, D. S. ed. *Mind Beyond the Body*. New York: Penguin, 1978, pp. 349-65).
- 124e. —. 'Experiments with Blue Harary' (in Rogo, D. S. ed. *Mind Beyond the Body*. New York: Penguin, 1978, pp. 170-92).
- 124f. —. 'Introduction: Analyzing the Phenomenon' (in Rogo, D. S. ed. *Mind Beyond the Body*. New York: Penguin, 1978, pp. 17-34).
- 125a. Roll, W. G. 'The Psi Field' (Paper presented at the Seventh Annual Convention of the Parapsychological Society, Oxford University, September 1964).
- 125b. —. 'ESP and Memory' (International Journal of Neuropsychiatry, 1966, 2, pp. 505-12).
- 125c. —. 'Psi, Memory and Matter' (Journal of Parapsychology, 1979, 43, pp. 59-60 abstract).
- 126. Roll, W. G., Morris, R. L., Harary, S. B., Wells, R. and Hartwell, J. 'Further OOBE Experiments with a Cat as Detector' (in *Research in Parapsychology 1974*. Morris, J. D., Roll, W. G. and Morris, R. L. eds. Mctuchen, N. J.: Scarecrow Press, 1975, pp. 55-6).

- 127. Rushton, W. A. H. 'Letter to the Editor' (Journal of the Society for Psychical Research, 1976,48, pp. 412-3).
- 128. Sabom, M. 'Beyond Death's Door: A Book Review' (Anabiosis, 1979, /, P-9).
- 129. Sabom, M. and Kreutziger, S. A. 'Recollections of Patients While Unconscious and Near Death' (in Research in Parapsychology 1978. Roll, W. G. ed. Metuchen, N; J.: Scarecrow Press, 1979, p. 32).
- 130a. Schatzman, M. The Story of Ruth (London: Duckworth, 1980).
- 130b. —. Personal Communication (1980).
- 131. Schmidt, H. 'Comparison of PK Action on Two Different Random Number Generators' (Journal of Parapsychology, 1974, 38, pp. 47-55). 132. Schoonmaker, F. 'Denver Cardiologist Discloses Findings After 18
- Years of Near-death Research' (Anabiosis, 1979, /, pp. 1-2).
- 133a. Sheehan, P. W. 'A Shortened Version of Betts' Questionnaire Upon Mental Imagery' (Journal of Clinical Psychology, 1967, 23, p. 386).
- 133b. —. The Function and Nature of Imagery (London: Academic Press,
- 134. Sheils, D. 'A Cross-cultural Study of Beliefs in Out-of-the-Body Experiences' (Journal of the Society for Psychical Research, 1978, 49, pp. 697-741).
- 135. Shirley, R. The Mystery of the Human Double (New York: University Books, 1965).
- 136. Sidgwick, H. and Committee. 'Report on the Census of Hallucinations' (Proceedings of the Society for Psychical Research, 1894, 10, pp. 25-422).
- 137a. Siegel, R. K. 'Hallucinations' (Scientific American, 1977, 237, pp. 132-40).
- 137b. —. 'The Psychology of Life After Death' (American Psychologist, 1980, 35, pp. 911-31).
- 137c. —. 'Accounting for "After Life" Experiences' (Psychology Today, 1981, pp. 65-75).
- 138. Smith, P." and Irwin, H. 'Out-of-Body Experiences, Needs and the Experimental Approach: A Laboratory Study' (Parapsychology Review, 1981, 12, No. 3, pp. 1-4).
- 139. Smith, S. The Enigma of Out-of-Body Travel (Garrett Publications, 1965).
- 140. Stanford, R. G. 'Experimental Psychokinesis: A Review from Diverse Perspectives' (in Wolman, B. ed. Handbook of Parapsychology. New York: Van Nostrand, 1977, pp. 324-81).
- 141. Stanton, E. Dreams of the Dead (Boston: Lee and Shepard, 1892).
- 142. Stratton, F. J. M. 'An Out-of-the-Body Experience Combined with ESP' (Journal of the Society for Psychical Research, 1957, 39, pp. 92-7).
- 143. Sudr6 R. Treatise on Parapsychology, trans. Green, C. E. (London: George Allen & Unwin Ltd., 1960).
- 144. Swann, I. To Kiss Earth Goodbye (New York: Hawthorne Books, 1975).
- 145. Targ, R. and Puthoff, H. 'Information Transfer Under Conditions of Sensory Shielding' (Nature, 1974, 251, pp. 602-7).

263

- 146a. Tart, C. T. 'A Second Psychophysiological Study of Out-of-the-Body Experiences in a Gifted Subject' *[International Journal of Parapsychology,* 1967, 9, pp. 251-8).
- 146b. —. 'A Psychophysiological Study of Out-of-the-Body Experiences in a Selected Subject' *{Journal of the American Society for Psychical Research*, 1968, 62, pp. 3-27).
- 146c. On Being Stoned: A Psychological Study of Marijuana Intoxication (Palo Alto, CA.: Science and Behaviour Books, 1971).
- 146d. —. Introduction to *Journeys Out of the Body* by R. A. Monroe (London: Souvenir Press, 1972).
- 146e. —. 'States of Consciousness and State-specific Sciences' {Science, 1972, 176, pp. 1203-10).
- 146f. —. 'The "High" Dream: A New State of Consciousness' (in Tart, C. T. ed. *Altered States of Consciousness*. New York: Anchor, Doubleday, 1972, pp. 171-6).
- 146g. —. 'Some Methodological Problems in OOBE Research' (in *Research in Parapsychology 1973*. Roll, W. G., Morris, R. L. and Morris, J. D. eds. Metuchen, N. J.: Scarecrow Press, 1974, pp. 116-20).
- 146h. —. 'Out-of-the-Body Experiences' (in Mitchell. E. ed. *Psychic Exploration*. New York: G. P. Putnams Sons, 1974, pp. 349-73).
- 146i. —. States of Consciousness (New York: Dutton & Co., 1975).
- 146j. —. 'Discrete States of Consciousness' (in Lee, P. R., Ornstein, R. E., Galin, D., Deikman, A. and Tart, C. T. *Symposium on Consciousness*. New York: Penguin, 1977, pp. 89-175).
- 146k. —. 'Paranormal Theories About the Out-of-Body Experience' (in Rogo, D. S. ed. *Mind Beyond the Body*. New York: Penguin, 1978, pp. 338-45).
- 1461. —. 'A Systems Approach to Altered States of Consciousness' (in Davidson, J. M. and Davidson, R. J. *The Psychobiology of Consciousness*. New York and London: Plenum Press, 1980, pp. 243-69).
- 147. Taylor, R. 'Who is Santa Claus?' {Sunday Times Magazine, December 21st, 1980, pp. 8-17).
- 148. The Mouse That Spins. S.S.O.T.B.M.E.; An Essay on Magic (Redbourne, Herts: The Mouse That Spins, 1975).
- 149. Todd, J. and Dewhurst, K. The Double: Its Psychopathplogy and Psycho-physiology' *{Journal of Nervous and Mental Disease*, 1955, *122*, pp. 47-55).
- 150. Tubby, G. O. and Hyslop, J. H. 'Experience at a Deathbed, Mrs D. H. Baldwin' *{Journal of the American Society for Psychical Research,* 1924, 18, pp. 37-8).
- 151. Turvey, V. N. *The Beginnings of Seerskip* (London: Stead's Publishing House, 1911).
- 152. Twining, H. LaV. *The Physical Theory of the Soul* (Westgate, CA: Press of the Pacific Veteran, 1915).
- 153. Van Eeden, F. 'A Study of Dreams' {Proceedings of the Society for Psychical Research, 1913, 26, pp. 431-61).
- 154. Warrick, F. W. Experiments in Psychics (London: Rider & Co., 1939).
- 155a. Watters, R. A. 'The Intra-Atomic Quantity' (Bulletin of the Dr

- William Johnston Foundation for Psychological Research, Reno, Nevada, 1933).
- 155b. —. 'Phantoms: A Study of the Intra-Atomic Quantity with Illustrations and Diagram' {Journal of the American Society for Psychical Research, 1935, 24).
- 156a. Whiteman, J. H. M. 'The Process of Separation and Return in Experiences Fully "Out-of-the-Body" ' {Proceedings of the Society for Psychical Research, 1956, 50, pp. 240-74).
- 156b. —. The Mystical Life (London: Faber and Faber, 1961).
- 156c. —. 'The Scientific Evaluation of Out-of-the-Body Experiences' (in J. C. Poynton ed. *Parapsychology in South Africa*. Johannesburg: South African Society for Psychical Research, 1975, pp. 95-108).
- 157. Wilson, I. Mind Out of Time (London: Gallancz, 1981).
- 158. Wood, R. W. *Nature*, 1904, 70, pp. 530-1).
- 159. Yram. Practical Astral Projection (New York: Samuel Weiser, 1972).



Abrahams, G., 177, 180 Absorption, 170-1, 248 Accident, 47-9, 131, 142, 145, 148-51, 248 Age, 63-4, 82-3, 86, 92, 140 Alcohol, 96, 104, 157 Altered states of consciousness, 102, 108, 120, 243-4, 250-2 American Society for Psychical Research, 57,127,129, 190, 220 Amphetamine, 174 Anaesthetics, 30,34,47-8,51-3,127, 209-12 Angels, 19,134,137, 138, 148 Animals, 200, 203-5, 208-10,220-2 Annals of Psychical Science, 108, 216 Apparitions, 18, 20, 23, 46-7, 58-9, 68, 171-2,178, 200-12 at death, 134-6 during OBE, 69, 93, 220 of double, 153 Apsey, Mr, 57, 178 Aristotle, 10, 11 Arnold-Forster, H. O., 107, 108 Asomatic experience, 65-6 Astral, aura, 18, 21 cable or cord, see Cord doorways, 95, 103 matter, 17, 207 plane, 27, 43, 232 vision, 22 world, 17-18, 26, 28, 51, 74, 120, 169, 225, 229-34, 240, 251 Aura, 29, 93 astral, see Astral aura in migraine, 160 Autoscopy, 11-12, 153-63, 165, 169, 172	Baraduc, H., 206-7, 213 Barbiturate, 104, 174 Barrett, Lady, 138 Barrett, Sir W., 137, 138, 142 Being of light, 143, 148, 150 Besant, A., 16, 17, 226, 232 Belts, G. H., 164, 171, 196 Bible, 19, 20 Bierman, D., 88 Bilocation, 9, 12 Black, D., 158 Blackmore, S. J., 61, 88 Blackwell, H., 214 Blavatsky, H. P., 16 Blondlot, R., 217-18 Bobbeitt, E. W., 208-9, Body Image, 100, 153, 156, 162, 1(55-7, 244-7) Bozzarto, E., 135 Brain activity, 5, 122, 134, 139-40, 142, 204 Breathing, at death, 204 during lucid dream, 118-19 during OBE, 130-1 in inducing OBE, 98, 101 Brennan, J. H., 95, 103, 114 Buddha, 18 Cabbaila, 1, 103, 250 Capgras syndrome, 154-5 Carington, W., 235 Carrington, H., 21, 28, 34, 47-51, 54, 57, 77-81, 97, 109, 133, 135 178, 206, 208, 210, 214, 219, 228, 232 Catalepsy, 24, 29, 50-1, 63, 64-5, 75, 94 see also Paralysis Chance, 42, 92, 189, 191-2, 193-4,
Balfour, Lord, 180	Chance, 42, 72, 167, 171-2, 173-4, 196 Charpentier, A., 217

Chloroform, 26, 104, 209	de Rochas, A., 108-9, 184-6, 202,
Christianity, 10, 19, 140, 151 Christos technique, 99-100, 166	214 de Vesme, C, 109
Clairvoyance, 20, 46, 47, 72, 136,	Deane, Mrs, 205
182, 194	Death,
see also Travelling clairvoyance	breaking cord in, 19, 54
Clothes of double or phantom, 31,	comparison with OBE or projec-
228, 232	tion, 19, 30, 53, 133, 192
Cloud chamber, 207-11	definition of, 142 denial of, 150
Cobbe, F. P., 138 Cognitive,	fear of, 5, 7, 93, 149, 202
map, 167-9, 176, 246, 25!	survival of, see Survival
processes, 245	Deathbed experience, 138-41
skills, 169, 248	Delage, Y., 107, 110, 112
style, 170	Dennis, M., 85
Coincidence, 92, 135	Depersonalization, L49, 151, 153-4,
Coleman, S. M., 158-9	241 Degreesien 51 157
Colvin, B., 155	Depression, 51, 157
Concentration, 57-9, 94-106 Consciousness, 71, 85, 104, 108, 115,	Derealization, 153-4 Dewhurst, K., 158-9, 161-2, 169
120-2, 230-1, 251	Doppelgdnger, 11, 71
after death, 53, 134	Dostoevsky, F., 12, 158
blanking of, 51, 53, 64-5, 249	Doyle, Lady, 49
centre of, 166	Doyle, Sir A. C, 49
cosmic, 134	Dreams, 23, 36, 37, 39, 46, 58
disembodied, 66	compared with OBE, 7, 14-15, 68,
dual, 24, 27, 38, 39	72-81, 83-1, 93, 121-32, 244 249
during OBE or projection, 18, 31, 34, 36-7, 176	compared with NDE, 149, 228-9
seat of, 48, 230	day-, 2, 122
split, 62	falling, 30, 50, 73, 108-9
survival of, 203	flying, 1,30,38,50 108, 116
transfer of, 97, 99, 101, 172	high, 108
vehicle of, 17, 18	lucid, see Lucid dreams
see also Altered states of con-	of knowledge, 24-6, 28
sciousness	precognitive, 20
Conway, D., 95, 103 Cord, 6, 22, 28-32, 34, 36, 43, 70,	projection, 109 Drugs, 9, 37, 47-8/74, 86-7, 92,
75, 80, 137, 185, 240, 248	103-6, 120, 139-40, 144, 157,
activity range, 29-30, 32, 109	166, 173-6, 247-8
astral, 51	hallucinogenic, 77, 81, 104, 173-5,
breaking in death, 19, 54	244
silver, 3, 7, 19-22, 27, 28, 39, 52-4,	psychoactive, 86
65-7, 76-7, 175 Critabley M. 156	Durville, H, 185-7, 215-16, 219
Critchley, M., 156 Crookall, R., 21, 51-4, 57, 64, 77-81,	Eastman, M., 104, 240
133, 137, 201, 249	Ecsomatic,
Cryptomnesia, 182	experience, 60
,	form, 66
Dadaji, 12-13	hypothesis, 237
Damas Mora, J. M. R., 156-7	state, 65
Danvers, Miss, 200-1	theory, 192-4 Ecstasy, 70, 71
de Maupassant, G., 158-9	Lesiasy, 70, 71

Ectoplasm, 18, 205, 208 Ehrenwald, J., 71, 150, 194 Electricity, 17, 36, 43, 44, 203, 215 Electromagnetic spectrum, 17, 222, 227 Electroencephalograph (EEG), 17, 123-31, 189-90, 199 Eliade, M., 71, 80 Emotion, 5, 17, 96, 168, 234 in depersonalization, 153-4 in lucid dreams, 24, 111	Fox, O., 23-8, 30, 31, 33, 35, 37, 50, 63, 65, 68, 69, 103, 105, 108, 110, 111, 113, 119, 233, 248, 249 Gallon, F., 164 Galvanic skin response, GSR (skin potential), 124-5, 130 Ganzfeld, 197-8, 247 Gates, E., 203, 211-12 Ghosts, 20, 208, 220 Glaskin, G. M., 99-100
in NDEs, 143, 149 in OBE or projection, 30, 69-70 photographing, 206, 213 Schachter's theory of, 198 Epilepsy, 155, 157, 162 ESP projection, 13, 56-9 Ether, 104, 209 Etheric, body, 16-17, 49, 133, 157, 214,	Gordon, R., 171 Green, C. E., 22, 56, 59-69, 84-5, 88,91-2, 107, 110-12, 116, 119, 178-9, 181,201 Greenhouse, H, B., 137 Grof, S., 105, 150 Grosso, M., 151, 238 Gurney, E., 46
double, 16-17, 53 matter, 17, 18, 207 world, 17, 226-7 Evidentiality score (or rating), 57-9, 200 Exteriorization, of mobility or motivity, 183, 215-16 of sensation or sensibility, 183-7,	Halifax, J., 105, 150 Hallucinations, 7, 41, 46-7, 50, 80, 134, 136, 137, 158-76, 237 autoscopic, see Autoscopy census of, 135-6 definition of, 157, 172 compared with NDE, 151 compared with OBE, 14, 81 hypnagogic and hypnopompic, 173 pseudo-, 157
214 Extrasensory perception (ESP), 13, 15, 56, 59, 85, 139, 218, 219-20, 234 definition of, 194, 237 during lucid dreams, 119 during OBEs, 7, 69, 93, 123, 125-7, 177-88, 223, 237-8, 242-3 related to OBEs, 15, 91, 92, 225 Extrasomatic theory or hypothesis, 192,223	Hallucinogenic index, 140 Haraldsson, E., 12-13, 87-8, 92, 139-41, 15 Harary, S. B., 128-31, 195, 197, 220-2 Hart, H., 56-9, 69, 83-4, 88, 104, 178, 192, 200-1 Hartwell, J., 222 Hash, see Marijuana Haemmerte, A., 202 Hearing, during hypnosis, 186
Ezekiel, 19 False awakening, 24-5, 38-9, 108, 110 Father Christmas, 77 Fete A, 11,46, 71 Findlay, A., 17, 208, 226-7 Flammarion, C, 135, 142 Fleetwood, Mrs, 200-1 Fodor.N., 211 Fortune, D., 103	during OBE, 68 Hearne, K. M. T., 115, 117-19 Heart rate, 198 during lucid dreams, 118 during OBE, 124-5, 128, 130-1 in inducing OBE, 98 Heautoscopy, 156 Heaven, 42, 67, 74, 134, 148, 151, 174 Heim, A., 142, 150 Hell, 42, 134, 148, 150, 151, 174

Hope, W., 205 Hopper, B. J., 210-11 Houston, J., 105 Hypnagogic and hypnopompic, hallucination, 173 imagery, 116, 127 state, 50, 115,241 Hypnosis, 47, 51, 57-9, 103-4, 106, 120, 166, 183-7, 202, 214-6, 224	Jung, C. G., 142 Kletti, R., 149-51, 153-4 Klotz, I. M., 218 Klüver, H., 173 Koestler, A., 62 Kohr, R. L., 88-91, 116 Kreutziger, S. A., 148 Kubler-Ross, E., 133, 142, 144
Jekyll and Hyde, 158 Jesus Christ, 18, 19, 148, 150 Jodko, J. de Narkiewicz, 214 Joire, P., 184	Memory, 37, 38, 81, 99 120, 167-8, 202, 231, 237, 243-52 fallibility of, 45, 50, 74, 135, 141, 179-80

of astral projection, 18, 22, 48-9, 52 of OBE, 121 Mescaline, 173-4 Mesmerism, 183 Migraine, 157, 160-1, 162 Mind, 5, 203, 229, 241, 243 Miss Z., 123-5, 128, 189-90 Mitchell, J., 127-9, 190, 230 Monroe, R. A., 40-4, 68, 101-2, 103,	Osis, K., 12-13, 93, 129, 139-41, 150, 190-5, 210, 220, 223, 230, 237, 238, 240 Ouija board, 1-2, 6 Ouspensky, P. D., 107-8, 112-13 Out-of-the-body experience, definition of, 1, 9, 14-15, 56-7, 59, 60, 84, 90, 97, 122, 191-2, 196 Oxenham, J., 141
104, 106, 125-7, 190, 198 Moody, R. A., 133, 142-50 Morphine, 104 Morris, R. L., 192, 220, 224, 230, 237	Palladino, E., 208 Palmer, J., 10, 15, 85-93, 106, 116, 170,181,195-9,201,237, 240-2 Paralysis, 23, 24, 50, 63
Moses, W. S. 213 Motivation, 69, 97-8 Movement, at will, 28, 30, 31, 52, 53, 105,109 by thought, 34, 42-3, 53	in sleep, 118 see also Catalepsy Paranormal, 47, 68-70, 85, 92, 189- 90, 192, 237-8, 251 ability, 172, 225
during OBE or projection, 28, 30, 32, 33-4 of objects, <i>see</i> Objects Muenter, E., 211	phenomena, 243 vision, 50 Parasomatic experience, 65-6 Parker, A., 190
Muldoon, S., 21, 23, 28-32, 33, 35, 47-51, 54, 57, 63, 64, 65, 67, 69 77, 78,80,96-8, 105, 109, 115, 133, 153, 178, 184, 214, 228, 232, 248	Perry. M., 19 Peyote, 57, 173-4 Phantasms of the Living, 46, 47, 58, 135, 200 Phantom, 28, 29, 30, 31, 97, 155,
Mumler, W., 205 Murphy, G., 57 Myers, F. W. H., 46-7, 113-14, 135,	202, 215-16, 219, 220, 224 limb, 162 Photography, 200, 205-11, 213-14,
142, 180, 200-2 Mystical, experience, 9, 36, 51, 92, 247-9 state, 37/39	218, 219 spirit, 205, 213 Physics, 33, 36, 55, 217-19 Physiology, 63, 152, 198, 240, 245, 249, 250
N-rays, 216-19 Narcissism, 159, 161, 240 Near death experience (NDE), 133, 138, 142-52, 153-4, 174-5 Nightmare, 23, 78, 81 Noyes, R., 149-51, 153-4	of lucid dreams, 118-19 of OBEs, 120, 121-32, 189, 195 of sleep, 117-18 Pineal door, 26 Plato, 10 Plotinus, 10 Podmore, F., 46 Pope Clement XIV, 12
Objects, inability to influence, 35, 52, 69, 118, 120,214,216 ^ movement of, 31, 39, 45, 69, 214-16 Ochorowicz, J., 213 Ophiel, 98, 103 105 Opium, 173 Optical image device, 192-5, 223	Powell, A. E, 226 Poynton, J. C, 56, 60-9, 232 Precognition, 20, 50, 119, 194 Price, H. H., 235 Psi conducive (or favourable) state, 230, 237, 251 Psilocybin, 174 Psychic,
Spirous mage device, 172-3, 223	ability, 70, 241

Schoonmaker, F., 144

experiences, 20, 85, 87, 89, 91-2, Sensory deprivation, 173, 247 Sex, 43, 63-4, 82-3, 91, 92, 140, 148 115, 128 Sexual desire, 30, 97, 158, 161 phenomena, 15, 47, 109, 217, 241 'Psychic ether hypothesis', 235 Shamanism, 71-80 Sheils, D., 72-80 Psychical Research Foundation, 129, Shirley, R., 52 220, 224 Shock, 37, 39, 48 Psychoanalysis, 158-9, 161, 175, Siegel, R. K., 151, 167, 173-1 240-2 Smith, P., 199 Psychokinesis (PK), 69, 136, 194, 223-4 237 242 Smith, S., 201 for Psychical Psychology, 6, 17-18, 55, 134, 152, Society Research, SPR, 8, 20, 46, 56, 60-70, 170, 183, 198, 238-52 134-6, 176, 200, 218, 235 Psychopathology, 12, 153-63 archives, 20, 208, 210 Puthoff, H., 13 Journal, 20, 121, 135, 137, 177 Proceedings, 135 Radio-active essence, 33, 226 Soul, 10, 53, 71-9, 109, 200-12, 220, 34-5, 36, 208-9, Radio-activity, 230-1, 232 216-18 Spiral, 33, 34, 48, 53, 106 Rank, O., 158, 161 Rapid eye movement (REM), 117in hallucinations, 173, 244 18, 122, 124, 125-30 in OBE induction, 196 Spiritualism, 1, 207, 213 Rationality, 36, 244 State-specific sciences, 102, 250 Rawlings, M., 150, 151 Stevenson, R. L., 158 Reading, in dreams, 24 Strain gauge, 223 Stratton, F. J. M., 177-80 in hypnosis, 186 Stress, 30, 52, 61-3, 96, 131, 173 Reality testing, 112, 244, 246-7, 249 Relaxation, 33, 61, 63, 94-106, 114, Suggestibility, 198 Suggestion, 183, 184, 187, 216 117, 122, 130-1, 195-6 Religion, 10, 92, 133-4, 140, 144, Suicide, 145, 148 Super ESP hypothesis, 136, 237-8 145, 149, 151, 199 Survival of death, 5, 19, 46, 52, 79, Religious experience, 4, 9, 14, 247, 129, 133-52 200 203-12, 219, 249 Remote viewing, 13 251 Swann, I., 13, 127-8, 190-1, 197, Repercussion, 51, 202 222-3 Rhine, J. B., 56, 187, 218 Ring, K., 145-51 Ritchie. G., 150-1 Tanous, A., 193-5, 223 Rogo, D. S., 11, 59, 66, 138, 195, Targ, R., 13 Tarot cards, 1, 103, 250 233, 248 Tart, C. T., 41-2, 59, 87 88, 102, Roll, W. G. 235 105, 108, 123-7, 189-91, 228, 230-3, 237, 246, 25 Rushton, W. A. H., 121, 227-8 Ruth, 171-2 Taylor, R., 77 Telepathy, 17, 20, 46-7, 136, 194, Sabom, M., 144, 148, 150 206 234-5 Sagee, E., 12 Theosophy, 1, 11, 16-22, 25, 226, Sai Baba, S., 12 St Anthony of Padua, 12 232 St Paul, 19 Theta aspect, 192, 220, 225, 230 Thought, 44, 122, 235 Schachter, S., 198 Schatzman, M., 171-2 -created world, 6, 67, 169, 231-2 Schilder, P., 154 effect on astral, 17, 18, 31-2, 35-6

habits of, 28, 31,244, 247, 249

in lucid dreams, 111, 115 movement by 34, 42-3, 53 photographing, 206, 213, 217 -responsive world, 3, 228 world of, 18, 43, 228-9, 236 Thought forms, 17, 25, 27, 35, 232-4 Tibetan Book of the Dead, 11 Todd, J., 158-9, 161-2, 169 Touch, 43	rates of, 33 Vision, in OBEs, 53, 58, 68, 93, 155, 189-99 Visions, 9, 37,46-7, 58, 81,134,172, 173 Vividness, 39, 68, 70, 121, 181 in dreams, 115, 116 of imagery, see Imagery
Trance, 24, 26, 27,47, 71, 74, 183 Travelling clairvoyance, 13, 59, 103 Tunnel, 33, 38, 53, 64, 65, 103, 143,	Watte TM , R. A., 208, 209-11 Weighing, 200, 203-5, 216 Whirlwind, 33, 74 Whiteman, J. H. M., 36-40, 65, 108, 232, 248 Wilde, O., 158, 159 Wilmot, S. R., 200, 243 Wilson, I., 182
VanEeden, F., 108, 110, 113, 119 Vassar, C, 195-7 Vehicle, of consciousness, 17, 18 of vitality, 17, 52,53 Veridical information, 41, 57, 237 Veridicality, 39, 178 score, 199 test, 57 Vibration, 29, 31, 36, 40, 101, 104, 184, 216 in migraine, 160	Wood, R. W., 217-18 World, astral, see Astral dream, 67, 113, 120 etheric, see Etheric higher, 19, 226 of illusion, 18, 169 OBE, 6, 67-8, 70, 167-9, 228-9, 242 Wraith, 11, 17
in migraine, 160	Yram, 33-6, 39, 208





POSTSCRIPT TO THE AMERICAN EDITION

I am lying back in some yielding, flowing softness. It feels — oh so familiar. I seem to be disintegrating, falling apart into separate pieces and then into nothing at all. Then back together and flying... the softness replaced by a deep blue sky and I am flying home: to my own house. The night is deep blue and the garden dark but the house stands out, glowing with yellow lights. I can look inside and see someone in the kitchen cooking. I close in on the upstairs windows and see the children fast asleep, tucked up in bed.

I had taken 80 milligrams of Ketamine, an anesthetic not often used for adults, though quite common for children. In larger quantities it produces total anesthesia but in this relatively small dose one remains hovering between consciousness and unconsciousness: between having a body and not having one. The body is physically paralyzed, the eyes unable to move. Psychologists such as Ri chard Gregory (17) have taken Ketamine to investigate the fringes of consciousness but it is an experience not to be recommended unless you are really determined to explore those borderline states in which OBEs can occur.

Over the years since I first wrote *Beyond the Body* I have had many such experiences, usually through meditation or OBE induction practices. In this one, as in others, I wanted to find out whether what I saw was accurate or not. Again, frustratingly, it was a curious mixture. There was no one in the kitchen at that time — I later ascertained. But a friend who was with me held up some fingers as a test. I correctly counted them first time but thereafter failed. It could have been chance, couldn't it?

Of course, I was asking again that question which I already argued is unlikely to be answered and probably won't even need answering. In the end research will lead in one direction or the other. Either OB perception

is (or can be) veridical and experiments will find out, or it isn't and we'll develop an increasingly coherent and effective psychological explanation.

That is, I think, what has happened in the ten years since *Beyond the Body* was first published.

On the paranormal, or ecsomatic theories, there has been very little further progress. I tried some exploratory experiments myself. From time to time I meet people who claim to be able to have OBEs at will, or to have them regularly when going to sleep. Several of these [people] agreed to take part in a long-distance, open-ended experiment. It all began when one frequent OBEr visited my home. He chose the test for himself

"Put up a target for me here by the door," he suggested, "I would like a word best and perhaps a five-digit number like Tart used. You could even try some real objects too."

So when he had gone I made out a list of twenty common words and twenty small objects I could pin to his chosen spot on the wall. Each week I used random number tables to select a new number, word and object and there they remained for him to "visit" at any time. Later I changed them only once a month and then even less frequently. Neither he, nor any of the other people who tried this test, was able to correctly identify the targets. One woman partially succeeded but was not able to repeat it. So it was impossible to use this as a basis for finding anything out about OBEs.

There has been little further research on ESP in the OBE. Alvarado (1) reviewed experimental studies and concluded that they generally showed weak and inconsistent results and in his recent book, Irwin (20) argues that the claimed veridicality of OBE content is probably exaggerated.

By contract there has been a lot of progress on psychological approaches. The ever-popular "birth theory" has been tested and found wanting. The astronomer Carl Sagan (26) argued that the universality of imagery in near-death experiences, including OBEs, could only be accounted for by reference to one experience we all share — our birth. Subsequently Becker (3) explained "why birthmodels cannot explain the near-death phenomena". Honegger (18) then made the comparison with OBEs more explicit, likening the tunnel experience to the passage down the birth canal, the vibrations to the contractions of labor and the silver

cord to the umbilicus.

But if birth were the source of the OBE and tunnel then we would expect people born by Caesarean section not to have any tunnel experiences or classical OBEs. In a survey (4) I showed this was just not the case. The people born by Caesarean had just as many such experiences as anyone else. This is not to say that the general idea of birth may not, in some way, mold our experiences, but it does show that an individual's own birth is not "relived" in the OBE.

More positively, most of the predictions I made about OBEs have been tested. For example, the question of imagery has been further explored. It now seems much clearer that vividness of imagery is not especially important for having an OBE but certain spatial imagery skills are. Cook and Irwin (14) showed that although OBErs were no better than non-OBErs at a test of imagery control, they were better at a task using a specially constructed box with an F-shaped block inside. Participants were shown pictures of the block from different positions in the box and asked to identify the position. Those who had had OBEs did better. This may well involve the same skills as using the imagination to "see" things from a different perspective. In two experiments (11) I asked people to imagine viewing either remembered, or present scenes from eye level or from above and to try switching viewpoints from one position to the other. I found that those who had OBEs were better able to make this switch.

This is closely related to a most interesting argument now being pursued. My own theory (8) suggests that OBErs should be those who habitually use "observer" viewpoints in their dreams or imagination. Alternatively, Irwin (20) has proposed his "Synesthetic model of the OBE". He argues that the basis of the OBE is a somaesthetic image of being disembodied. Once the feeling of being disembodied is established, synesthesia (or the translation of one sense into another) takes over and a visual image of a floating sel f is elaborated—hence the OBE. This would not predict that OBErs should use observer perspectives more often in imagery.

Both Irwin (21) and myself (11) have tested the viewpoints which OBErs and others habitually use to recall their dreams and waking life. We both have foundthat OBErs do tend to recall dreams more often as observers (than do non-OBErs) but not waking events, thus partially confirming my prediction; Irwin then argued that the recalled scenes

tended to be static while the dreams were more dynamic and active. Perhaps it was the bodily imagery that was important. He went on to break down his data for OBErs who had another body in their OBEs and those who didn't, showing that it was predominantly the former who used observer perspectives in their dreams. He speculated that it is their skill in somatic, or bodily, imagery which enables them to do this and also to have OBEs.

This is surely an example of science at last tackling a problem effectively. We are far from a complete understanding of OBEs but the research is progressing as research should. Rival theories do exist which share a lot of common ground but differ in specifics. Ane we are doing experiments to see which theory works better. This is precisely the kind of progress which has never been made on the ecsomatic, or astral body, theories of the OBE.

Another prediction I made was that the skills needed for a deliberate OBE are quite different from those needed for a spontaneous one (such as the OBE occurring before or after sleep, or during accidents or I llness). I questioned nearly a hundred people and divided the thirty-six OBErs into those who had had only spontaneous OBEs and those who had managed to induce at least one OBE deliberately (9). As expected it was the latter group who claimed to be able to stop a dream they didn't like or to choose to dream about a specific topic. Every one of this group also reported having lucid dreams. On the other hand, there was an association between having spontaneous OBEs and mystical experiences. It seems, as predicted, that the two kinds of OBE occur to different people. Whether this relates to their imagery skills or not remains to be tested.

It is interesting to compare this with a study by Alvarado (2) in which he used Crookall's classification. Crookall divided OBEs into "natural" and "enforced" on the basis of whether the astral body leaves more or less naturally (see Chapter 6). This is rather a different classification from mine. On this basis Alvarado predicted that the natural OBEs should have more phenomenological characteristics than enforced OBEs and should generally be more pleasant. Neither prediction was confirmed, which seems to show that the classification based on astral projection theory is not, at least in this context, very useful.

I have already mentioned the association between OBEs and lucid dreams. The psychological theories all, more or less strongly, imply a close connection between the two (12). This has now been amply

confirmed in a variety of studies (e.g. 5,6,7,9,19). Irwin (21) has recently reviewed the evidence and concluded that there is a significant but weak association between OBEs and lucid dreams..

For anyone who has OBEs and worries about what this has to say about their mental health or personality, there; is good news from recent research. Gabbard and Twemlow (16) sent questionnaires to about 700 people who had had OBEs. Their most impoitant finding, among many others, was that the people who have OBEs are psychologically very healthy. They are remarkably similar to the average healthy American and show no special signs of mental illness, psychotic thinking or antisocial or deviant characteristics. The relationship with absorption (discussed in Chapter 16) has now been confirmed (23), and Wilson and Barber (27) showed that the small group of highly hypnotizable or "fantasy-prone" subjects (who also show high absorption and extraordinary powers of imagery) relatively often report OBEs.

Nevertheless many people who have OBEs think they must be "going mad" and some psychiatrists even take the occurrence of OBEs as a sign of pathology. To see whether there is any justification for this, I surveyed a group of schizophrenics and a control group of other hospital patients (10). From a preliminary question about OBEs it appeared superficially that far more of the schizophrenics had the experience than the controls (42% as opposed to 13%). However, the questionnaire also asked for a description of the OBE. This showed that many of the schizophrenics were including quite different experiences, such as hallucinations of being on another planet or meeting strange creatures, which were not at all similar to the usual OBE. When only "typical" OBEs were included (those which involved a viewpoint outside the body) the proportion dropped to 14% — almost exactly the same as the normals. And these OBEs sounded very familiar. Here is a rather daunting example which happened:

On stage in the middle of a play at Her Majesty's Theatre, Barrow-in-Furness. It didn't affect my performance in any way at all. I went on acting while my center of consciousness (I) floated about 15 feet above the scene I was in.

In addition, those schizophrenics who reported the other more bizarre experiences were more likely also to report more visual distortions and more symptoms of schizophrenia but those who reported typical OBEs were not. In other words there is no reason to think the typical OBE is associated with schi zophren I a.

It is often thought that children have OBEs more readily than adults and perhaps tend to forget them as they grow older. Indeed, many adults claim to have had OBEs in childhood. If so, it would be most interesting to talk directly to young children about OBEs. Wooffitt, a colleague of mine, went to a primary school and interviewed fifty-two children between the ages of 5 and 12 and asked them about viewpoints in imagery, OBEs and imaginary playmates (28). To make the question comprehensible to young children, and without priming them too much for what was intended, Wooffitt asked questions about floating and then added "Have you ever floated in the air?" Just one eleven-year-old boy said he had, when he was once very ill at the age of nine.

"I was lying down on the bed and I felt as though I was flying around the sky," he said. He saw the ceiling coming closer as he floated up. He seemed to bemoving in a circular pattern and felt some "to-ing" and "froing". He said it lasted "a heck of a long time". But he was the only one out of over fifty children. This very low incidence seems to imply that children do not have as many OBEs as some adults suppose, unless problems with the questions or method concealed further OBEs. This surprising finding is something which deserves further study.

Obviously the OBE has not yielded all its secrets yet — far from it. However, we are working towards a much better understanding of how and why it comes about. At any point in this process of understanding we can speculate a little beyond the established facts. I would like to end by summarizing my speculations about the place of the OBE in a theory of consciousness.

I start with consciousness because it seems to me that consciousness is what it is all about. Above all, having an OBE forces one to ask "How can this altered state seem so real and what is consciousness anyway?"

I would like to make the suggestion that being conscious is what it is like being a mental model. In a now famous paper, the philosopher Thomas Nagel (24) asked "What is it like to be a bat?". He pointed out

that the fact that an organism has conscious experience at all means that there is "something it is like to be" that organism. In other words, there is something it is like to be a bat — or a human being.

But the problem is, we are not really the flesh and blood of our bodies. We are selves. And selves, as we know from psychology, are constructed entities — or models. Really, "we" are mental models of a self. I would say that consciousness is not "what it's like to be" a bat, but to be the bat's mental model of itself. Things cannot be conscious but mental models can. I am conscious because I am a model or representation of myself in the world.

Now if I say there is "something it is like to be" a mental model, then the implication (controversial as it may be) is that all the myriad models constructed by any brain are all conscious. This seems implausible until you realize that "we" are just the "biggest and best" of the models in our own system.

The most obvious thing about humans as model builders is that they mode] themselves. We all build vast mental models of "me, here, now" based on our senses. It is this which provides the core of our consciousness from moment to moment. Because it is stable, coherent and complex it is usually the best model we have. So it seems real. This I call our "model of reality".

The model of reality is sustained by the complex processing of the brain and changes as that processing changes. It is normally totally dependent on the input to our senses: on what we can see and hear and feel and the body image with which we integrate it all. That is "me, now".

But what happens when there is not enough input, or confusing input, or when we are drugged or near death? The normal model of reality begins to break down, of course. But what happens next?

The tunnel is part of the answer. We know that the mapping of visual space onto the brain cortex is such that when random noise sets up waves of activation in the cortex this will appear like a spiral or tunnel (13, 15). The greater number of cells devoted to the central parts of the visual field provide the brighter centre, or the great white light. Any other imagery being produced in the system when this happens will get sucked into the tunnel form. But at the same time, and far more drastic for the system, the normal view of the world is breaking down.

This, I think, provides the answer about OBEs. A sensible system,

losing touch with external reality, uncertain as to what is "out there" and what is imagination, has to make a decision. Only one model of the world can actually represent "out there" and seem real. So which is it? I propose that when this breakdown occurs the most sensible thing the system can do is to ask itself (as it were) "Who am I? Where ami? What is going on?" and so reconstruct, on the basis of memory and imagination, what it thinks should be happening. And what are memory models like? We know from much work in psychology (e.g. 8, 25) that many representations in memory are in bird's eye view.

I propose that if the norma] eye-level model of reality breaks down it can be replaced by a bird's eye model from memory and imagination. If this is the best the system can manage then it will take over as the current "model of reality" and so will seem real. This, then, is the OBE. In a sense it is real — at least just as real as any thing ever is because the OBE is the best representation of the world that the system has.

It is interesting to note that sounds could easily be incorporated into the new view without it breaking down. Since hearing is the last sense to go in unconsciousness, it makes sense that people near death can hear what is going on and seem to see it all from above. Their view is hallucinatory but it is built on valid bits of information.

This theory of the OBE not only fits with much of the evidence collected to date but it also sets the OBE in context. It is, if you like, an illusion of reality. It is a result of the system trying to get back to normal and clinging onto the idea that there must be a world out there. Of course if the system gives up on that attempt then other models or representations will take over and seem real — perhaps models of heaven, of other worlds or other people. These too can seem real if they are the best the system has at the time (as may well be the case near death).

Most OBErs are convinced by their illusion; they are sure that they are seeing the "real world". In this sense OBErs are like dreamers. But just as you can become "lucid" in an dream, and realize that it is all illusory, so you can in an OBE. You can realize the constructed nature of all these images — indeed of the basis of consciousness itself. In this way you can see into the essential emptiness of it all and the connectedness of everything which can be experienced. It is simultaneously total aloneness and complete oneness. This is a key insight

into the mystical experience.

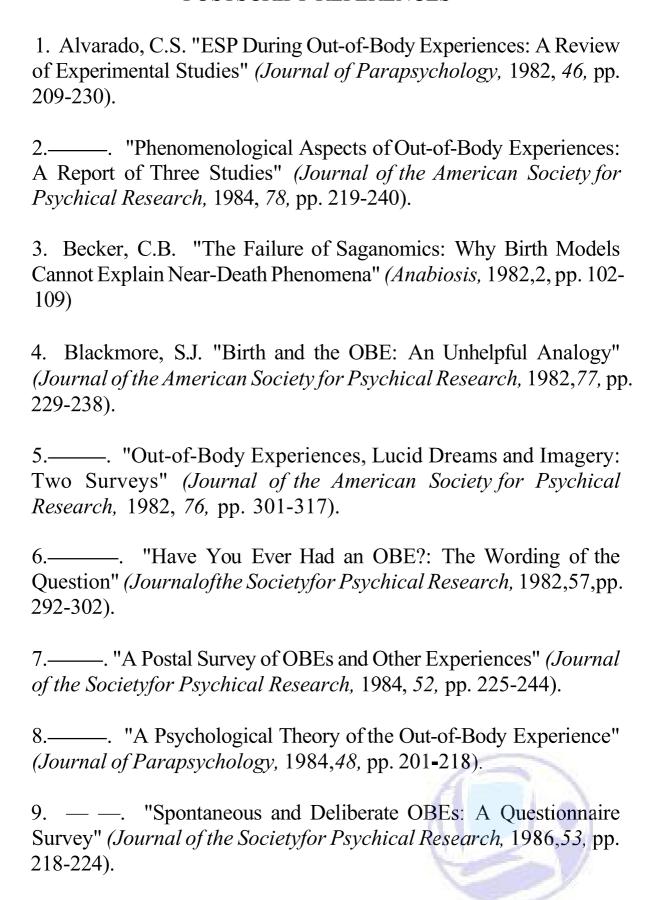
An important implication of this is the artificial or constructed nature of the dichotomy between self and the world: both are just aspects of a useful everyday model of reality. It doesn't have to be like that. This freedom is probably only available when you let go of the clinging to normality, which itself brings about the OBE. So the OBE occurs when a strictly input-based model of the world breaks down but it is still a stage of trying to hang onto our normal view of a self in the world. Like any other stage, it can eventually be transcended. As mystics have long been telling us, an OBE may show that something is afoot, but of itself it is unimportant.

So the mystery begins to look a little different from how we might first have thought. The fact that the tunnel can be accounted for in physiological terms and the OBE in cognitive terms is not a prescription for a meaningless reductionism, but a scientific achievement which in the end might bring mystical insights more clearly into view.

Susan J. Blackmore, 1990



POSTSCRIPT REFERENCES



- 10.—. "Out of Body Experiences in Schizophrenia: A Questionnaire Survey" {Journal of Nervous and Mental Disease, 1986, 174, pp. 615-619).
- 11.—. "Where Am I? Perspectives in Imagery and the Out-of-Body Experience" {Journal of Mental Imagery, 1987, ii, pp. 53-66).
- 12. ——. "A Theory of OBEs and Lucid Dreams" in Gackenbach, J. and LaBerge, S., eds. *Conscious Mind, Sleeping Brain*. (New York: Plenum Press, 1988) pp. 373-387.
- 14. Cook, A.M. and Irwin, H.J. "Visuospatial Skills and the Out-of-Body Experience" *{Journal of Parapsychology,* 1983,47, pp. 23-35).
- 15. Cowan, J.D. "Spontaneous Symmetry Breaking in Large Scale Nervous Activity" *[International Journal of Quantum Chemistry,* 1982, 22, pp. 1059-1082).
- 16. Gabbard, G.O. and Twemlow, S.W. With the Eyes of the Mind. (New York: Praeger, 1984).
- 17. Gregory, R.L. Odd Perceptions (London: Methuen, 1986).
- 18. Honegger, B. "The OBE as a Near-Birth Experience" in Roll, W. G., BeJof, J. and White, R., eds. *Research in Parapsychology 1982* (Metuchen, N.J.: Scarecrow Press, 1983).
- 19. Irwin, H.J. "Migraine, Out-of-Body Experiences, and Lucid Dreams" {Lucidity Letter, 1983, 2 (2), pp. 2-4).
- 21.—..."Perceptual Perspective of Visual Imagery in OBEs, Dreams

- and Reminiscence" (Journal of the Society for Psychical Research, 1986,53, pp. 210-217).
- 22.——. "Out of-the-Body Experiences and Dream Lucidity: Empirical Perspectives", in Gackenbach, J. and LaBerge, S., eds. *op.cit.*, pp. 353-371.
- 23. Myers, S.A., Austrin, H.R., Grisso, J.T. and Nickeson, R.C. "Personality Characteristics as Related to Out-of-Body Experience" (*Journal of Parapsychology*, 1983,47, pp. 131-144).
- 24. Nagel, T. "What Is It Like To Be a Bat?" (*Philosophical Review*, 191 A, 83, pp. 435-450)
- 25. Nigro, G. and Neisser, U. "Point of View in Personal Memories" (*Cognitive Psychology*, 1983, 15, pp. 467-482).
- 26. Sagan, C. Broca 's Brain. (New York: Random House, 1977).
- 27. Wilson, S.C. and Barber, T.X. "The Fantasy-Prone Personality: Implications for Understanding Imagery, Hypnosis, and Parapsychological Phenomena" in Sheikh, A.A., ed. *Imagery: Current Theory, Research and Application*. (New York: John Wiley, 1982).
- 28. Wooffitt, R. and Blackmore, S.J. "Out-of-the-Body Experiences in Young Children" (*Journal of the Society for Psychical Research*, 1990,56.).

