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OUT-OF-BODY EXPERIENCES

As noted in the previous chapter, in some NDEs the experiencer has the impression that consciousness is outside the physical body. This impression, termed an *out-of-body experience*, or OBE, is not confined to near-death circumstances: it may arise in a variety of other situations as is illustrated by the following account from my case collection (Irwin, 1985a, p. 1).

This event occurred some years ago when I was in my twenties. I was in bed and about to fall asleep when I had the distinct impression that “I” was at ceiling level looking down on my body in the bed. I was very startled and frightened; immediately I felt that, I was consciously back in the bed again.

The out-of-body experience may be defined as one in which the center of awareness appears to the experiencer to occupy temporarily a position which is spatially remote from his or her body. As with the NDE the OBE is defined as an experience, not as a literal event. That the OBE entails a literal separation of consciousness from the body is a theoretical interpretation of the experience rather than a definition of it.

The OBE clearly overlaps the phenomenon of the NDE and many experiences could appropriately be designated by either term. The two phenomena, however, are not equivalent: there are OBEs that occur in circumstances that are not life-threatening and there are NDEs that do not incorporate the impression of the self being exterior to the body. It may strike you as curious that research on the NDE has to a large degree proceeded independently of that on the OBE, but there are two main factors contributing to this situation. First,

NDE research evolved primarily in a medical setting and even now a large proportion of NDE researchers are medical professionals; the OBE on the other hand has been more a focus of attention among parapsychologists *per se*. At least in the early phase of work on the NDE researchers in fact took care to avoid any reference to the OBE literature for fear of being regarded by colleagues as “occultists.” Second, the distinctive theoretical orientation to each phenomenon has been facilitated by different styles of definition: whereas the NDE is defined *contextually* or in relation to its circumstances of occurrence, the OBE is defined *phenomenologically* or in relation to its impression upon experiencers themselves.

Defining the OBE in experiential or phenomenological terms raises some difficulties. For example, if a psychotic patient reported an OBE, should this experience be categorized as a real OBE or as a psychopathological delusion? Under the above definition it would be admitted as an instance of an OBE because at the time, the experiencer had the impression of being outside the body. With further research we may be in a position to discriminate the OBEs of psychotics from those of otherwise normal people, but at this stage a distinction between a “real” OBE and a hallucinatory one would be presumptuous. The same applies to OBEs that can be shown to include nonveridical information.

You may recall the story of Hélène Smith’s out-of-body excursions to the planet Mars (Chapter 2). That Smith’s account of the Martian landscape is at odds with data from space probes does not negate the fact that during the experience Smith believed her “spirit” to be outside her body, and her account thereby qualifies as an OBE report. Veridical and nonveridical OBEs may prove to have different correlates, but this dimension can not properly be used as a criterion for accepting or rejecting OBE reports: veridical experiences might have the same bases as nonveridical ones.

In other cases people report seeing an apparition of a living individual and assert that the latter was having an OBE. Again, unless the individual concerned had an impression of being out of the body at the time, such a case would not qualify as an OBE under the adopted definition.

Data on OBEs rely heavily on retrospective reports. Thus considerable use is made of OBE case collections, surveys of experiencers (OBErs) and nonexperiencers (nonOBErs), and self-observations by so-called OBE adepts who reportedly can induce the experience virtually at will. Irwin (1985a, Ch. 2) reviews the advantages and the limitations of these sources of data; in this regard it is important to note that some of the information on OBEs is available only from the above sources.

Efforts nevertheless have been directed to the development of experimental methods of OBE induction, the objective being to facilitate laboratory investigation of the experience. At the beginning of this century French researchers pioneered hypnotic suggestion as an OBE induction procedure, but that method now is rarely used because of its strong demand characteristics;

that is, because the subject merely may produce verbal responses in compliance with the hypnotist's suggestions the hypnotic performance might not be comparable experientially to a spontaneous OBE.

More recently Palmer (1978c) has sought to induce experimental OBES by simulating conditions under which spontaneous experiences occur. His most successful techniques to date involve three fundamental elements. The first is bodily relaxation, usually promoted through a recorded exercise in progressive muscle relaxation. The second involves manipulation of the subject's sensory environment by way of either sensory bombardment or severe sensory restriction and homogeneity; this procedure seems to facilitate the individual's dissociation from exteroceptive processing and to encourage high absorption in mentation. Finally there is an element of expectancy or "mental set" whereby the participant is encouraged to want an OBE and to believe one can occur (Palmer & Lieberman, 1975).

In my own use of Palmer's techniques I have found the induced experiences to be rather insipid in comparison to spontaneous OBES, often marked by little more than a vague dissociative feeling. Demand characteristics may be substantial here too. Experimental procedures in OBE research, therefore, are very much in their infancy.

PHENOMENOLOGICAL CHARACTERISTICS OF THE OUT-OF-BODY EXPERIENCE

The following review of OBE phenomenology is based upon my earlier collation (Irwin, 1985a, Ch. 3) of data from surveys, case collections, and adepts' self-observation.

Sensations at Onset and Termination

Between 20 and 40 percent of survey respondents report having specific sensations at the onset of the OBE (Irwin, 1985a, pp. 81–82; Poynton, 1975, p. 116). Four main types of experience are cited. There may be percussive noises; that is, the OBE may hear a buzz, roar, click or crack on "leaving" the body. Vibrations in the physical body may be experienced; these vary from shivering to violent shaking, and from a single jolt to a series of vibrations. Catalepsy sometimes is reported; this state is described as a lack of bodily sensation or a lack of bodily control, with complete rigidity. The start of the experience may be signaled also by a momentary blackout or short period of "mental darkness," after which the experient has the impression of being exteriorized. Some of these onset phenomena are instanced in the following case (Irwin, 1985a, p. 81).

My first experience was when I was 13 years old. I do not recall anything out of the ordinary at the time nor remember anything that might have led up to it. As I was sleeping I had a strange falling sensation. In my ears and head I had a noise, it went boom boom boom etc. very loudly and quickly. I guess it would be likened to a noise a plane makes but it throbbed more or vibrated. I tried to wake but I felt frozen. I felt my whole body just pinned there.

Onset sensations have been found to correlate with the impression of control during the experience (Irwin, 1985a, p. 84). That is, people who experience these phenomena tend to report that they had greater control over the way in which the OBE subsequently unfolded.

It must be emphasized, however, that onset sensations are found among a minority of cases. In most OBES the experient suddenly has the impression of being in an exteriorized state, as in the following experience (Irwin, 1985a, p. 81).

I was sitting in the bath when I became aware that I was in the ceiling corner of the room looking down at myself in the bath. I watched myself quietly for a while, aware of the light and looking down. Then suddenly I felt frightened and the scene was rapidly lost — I was back once again at ground level, in the bath.

This case also terminated instantaneously, as do the majority of OBES. Nevertheless up to 40 percent of survey respondents claim to have had definite sensations upon “returning” to the body. These phenomena are much the same as for the onset of the experience: a momentary blackout, noises, vibrations in the physical body, and a sense of immobility or catalepsy. If return to the body is rapid it may be described as a sudden jolt (Alvarado & Zingrone, 1997b).

The OBE may be terminated by an emotional reaction: in two of the cases presented above fear produced an immediate end to the experience. Other cases cite annoyance, mirth, and “consuming love” as having cut short the OBE. The sight of the physical body from the outside may terminate the experience, in many instances apparently because of the emotional response (fear, contempt, revulsion) this sight evokes, but also perhaps because attention is diverted back to the body. Another factor commonly bringing an end to the OBE is the physical body’s being touched by someone. Also the experient may “return” to the body by a conscious effort to do so. The OBE therefore may end when attention is drawn to bodily processes or when dissociation from such processes begins to lapse.

Content of the Experience

In the typical OBE experients find themselves instantaneously exteriorized in the immediate vicinity of the physical body, looking down on the environment

and perceiving it in an apparently realistic fashion. “Astral flights” to far-off lands and to other planets tend to be the province of the adept, although it is feasible that survey respondents may be less willing to reveal such experiences.

Most OBEs report having seen their own body from the remote location. This is a feature of 50 to 80 percent of survey cases (Gabbard & Twemlow, 1984, p. 19; Irwin, 1985a, p. 88). The appearance of the physical body during an OBE is of interest in the following regard. There is a psychotic condition known as *autoscopy* in which the individual has a hallucination of coming face to face with their own double. A few psychiatrists want to equate the OBE with autoscopy, despite marked phenomenological differences: for example, in autoscopy the individual realizes the vision is hallucinatory and regards consciousness still to be “in” the physical body. Nevertheless one curious aspect of autoscopy is that the hallucinated double usually is a mirror image of the body, that is, it appears laterally reversed (with hair parted on the opposite side, wedding ring on the wrong hand, etc.). Perhaps our mental image of ourselves tends to be laterally reversed because the most common full-length three-dimensional experience of ourselves is in a mirror. If the OBE is a hallucinated image a perceptual-like experience of the physical body from the outside therefore might be expected to be laterally reversed. I have not been successful in obtaining definitive data on this point, although if OBEs do note the appearance of their physical body from the exteriorized perspective their comments usually are not of the form, “that’s just how I look in the mirror,” but rather, “so that’s how I look to other people.”

The out-of-body perception of the environment is described as visually realistic in over 80 percent of cases (Green, 1968a, p. 71). Occasionally some odd effects occur, including wide-angle vision, seeing through objects, and seeing in the dark, but these are uncommon. On the other hand, some OBE accounts do imply a lack of realism in certain respects. For example, an experient may report seeing the physical body as if from a height of 30 feet (9 meters) or more, yet this would have entailed seeing through the roof and the ceiling of the house.

Other less common features are associated particularly with OBEs in life-threatening circumstances (Gabbard, Twemlow & Jones, 1981). Passage through a dark tunnel is reported by up to a quarter of survey respondents (Gabbard & Twemlow, 1984, p. 19; Irwin, 1985a, pp. 93–94); this seems to mark a transitional process, for example, between the body and the exteriorized state or between a naturalistic and a transcendental setting. Experiences of a bright light, discarnate entities, and music also are mentioned in a small minority of OBEs.

Sensory Modalities

Over 90 percent of OBEs are visual (Green, 1968a, pp. 67–68), often exclusively so. The involvement of other sensory modalities tends to parallel that of

normal perceptual experience, or alternatively it could be said to be consistent with imagery generated so as to provide a maximally convincing representation of the normal environment.

Very occasionally an *asensory* OBE is reported, that is, the experient feels exteriorized but has no perceptual-like impression of any environment. In over 300 OBE cases obtained in a British survey Green (1968a, p. 69) found only “a few” asensory experiences. In my own collection of over a hundred OBE case reports there is only one in which there was an absence of any perceptual-like awareness of the environment.

Vividness

The vividness or clarity of the perceptual-like experience is striking, according to survey respondents. Again there may be some variation in this respect as vividness usually is low in experimentally induced OBEs.

Control

Some OBEs report having been able to control the content of their experience in some way. In one of my surveys (Irwin, 1985a, p. 100) 46 percent of experiencers made this claim. There is a general consensus among survey respondents and adepts that such control is purely cognitive: it is a matter of directing attention to a desired state of affairs rather than of exerting “physical” effort. Most often control is exercised in relation to the place the exteriorized self wishes to be; according to some accounts the experience may be directed to a person whose location was unknown at the time. Some OBEs mention that the nature and the very existence of objects can be manipulated in the out-of-body state. Females tend to report more control over OBE content than do males (Irwin, 1985a, p. 101).

Aspects other than content are subject to control. These include the termination of the experience and the activities of the out-of-body or *parasomatic* form. Again it should be noted that many OBEs are so brief and so disconcerting that the idea of control is not even entertained.

Naturalism

About 80 percent of OBEs are purely naturalistic. Possibly this figure partly reflects a response bias: an OBE with a transcendental setting is more easily dismissed by the experient as fantasy and thus not reported.

There is some suggestion that naturalistic cases tend to relate to the world as conceived rather than as perceived. Thus people with sensory deficits often report these not to exist in an OBE (Green, 1968a, pp. 32–33; Irwin, 1987c).

As mentioned earlier transcendental experiences tend to occur more often under life-threatening circumstances (Gabbard et al., 1981).

Veridicality

Experients typically present their naturalistic OBES as being completely veridical. The accuracy of out-of-body perception, however, often is assumed rather than proven: if the experience matched the individual's memory of the real-life setting then it is held to have been veridical.

One means of investigating the veridicality of OBES is to see if a person in an out-of-body state can obtain sensorially inaccessible information. In a survey by Palmer (1979) about 15 percent of OBEs claimed to have acquired information in this fashion. During induced OBES in experimental tests (e.g., Palmer & Lieberman, 1975) subjects have been able to identify remote targets to a statistically significant degree. This might be attributable to the use of ESP, although in a study conducted by one of my students (Smith & Irwin, 1981) a correlation was found between veridicality and independently judged "OBE-ness"; that is, the more the induced experience was like a spontaneous OBE the more accurate was the subject's description of a remote target. There is, therefore, some indication that OBES can be veridical to a degree that mere fantasy could not. Further research on this point is warranted.

In some OBES nonveridical elements nevertheless do occur. One case (Crookall, 1972, pp. 89–90) included mention of nonexistent bars on the bedroom window; these bars seemed to have some symbolic significance for the experient in preventing him from "leaving" his room.

The Astral Body and the Astral Cord

Some OBEs report their exteriorized self to have had a definite form. In occult literature this is termed the "astral body"; in parapsychological work it is known also as the *parasomatic* form. Estimates of the incidence of parasomatic forms vary widely, from 15 to 84 percent of experiences (Irwin, 1985a, p. 114), but the trend is for the slight majority of OBES to be parasomatic. Further, even in allegedly *asomatic* experiences the OBE may imply that the formless exteriorized self had spatial dimensions. For example, the exteriorized self may be said to have had to "squeeze" through a small space or to have been "standing."

The parasomatic form most commonly is a replica of the physical body. A few older experients have depicted their astral body as the image of themselves when they were at their physical peak. Occasionally the parasomatic form is localized as a point or a small sphere, while in other cases its dimensions are more vague, being described as a cloud, a mist, or a band of light.

In about 20 percent of survey cases (Irwin, 1985a, p. 125) the parasomatic

form is linked to the physical body by a cord-like structure. This so-called *astral cord* is more common in those case collections in which respondents of a spiritualist persuasion are frequent; here the structure tends to be known as “the silver cord.” It is much less common in contemporary cases and is very rare in laboratory induced experiences.

The cord reportedly may join the physical body at either the forehead or in the region of the solar plexus; its connection to the astral body often is on the back. Where experiencers do report having had an astral cord it usually is on the basis of having seen it, but sometimes it is evidenced merely as a sensation of being tugged toward the physical body. Many experiencers have the impression that if the cord were broken death would be inevitable.

Psychological Processes During the Experience

Experiencers tend to characterize their psychological state in an OBE as one of relaxed alertness, mental clarity, and effortless concentration. In cognitive terms the OBE is marked by a resistance to distraction and total involvement, the state known as psychological absorption. This recalls the earlier suggestion that the experience may be terminated by a loss or disruption of attention. Note, however, that this absorbed state during the OBE typically is achieved and maintained in an effortless manner. Thus, experiencers depict the OBE’s cognitive processes not in terms of internally focused attention (Maitz & Pekala, 1991) but rather as an engrossing, externally oriented or perceptual-like experience.

Emotionally the experiencer seems to be calm, peaceful, and even emotionally detached during the experience, even in otherwise arousing circumstances. It seems that any emotion with strong bodily concomitants tends to terminate the experience.

CIRCUMSTANCES OF OCCURRENCE

Other research on the OBE is more explicitly process-oriented, seeking to illuminate factors underlying the experience. Two major foci for this work have been the OBE’s circumstances of occurrence and the sorts of people who are prone to the experience.

Under what circumstances does the OBE take place? For convenience of discussion the experiencer’s mental state and physical state will be considered separately; it is not assumed, however, that these aspects are independent.

Pre-Experience Mental State

In about 60 percent of survey cases the pre-OBE mental state is described as quiescent or calm, rather like the OBE itself. On the other hand the experience

also can arise in emotionally arousing circumstances such as confrontation with death; this is found in 25 to 40 percent of cases (Irwin, 1985a, pp. 144–145).

It would seem then that the OBE may occur under a wide range of mental states, but in fact we can be more specific than this. Irwin (1985a, p. 146) asked a group of OBEs to rate their pre-OBE mental state on a ten point scale. Fifteen rated their emotional arousal as having been low (1, 2, or 3); nine rated it as high (8, 9, or 10); and only two respondents chose intermediate ratings. This trend towards extremes of arousal is statistically significant. On these grounds it may be proposed that the OBE occurs when the level of cortical arousal is extreme (either high or low), perhaps unusually extreme for the experient.

At this point it is appropriate to enter a caveat on past OBE research methodology. Much of the phenomenological research into OBES has relied on cases that have occurred under a variety of states of consciousness. Stanford (1987b) has cautioned that the correlates of OBE phenomenology may well vary with the state of consciousness in which the experience occurs. Additionally, Blackmore (1986b) and Irwin (1986a) signal that deliberately induced and spontaneous experiences may have slightly different phenomenology and correlates. Experimental work by Glicksohn (1991) suggests that the subjective qualities of induced anomalous experiences are codetermined by aspects of the subject's personality and the sensory environment. Future research might usefully give closer attention to the nature of these more complex interaction effects (see also Alvarado, 1997).

Pre-Experience Physical State

Many OBES occur when sensory input is minimal or under conditions approximating sensory deprivation. Lying on the bed or meditating are common contexts for the experience. At the other extreme the experience also may be precipitated by sensory bombardment or overload, as in the trance states associated with the rhythms of native drums and the dances of the whirling dervishes; in one case in my collection the experient was listening to very loud rock music. Again it is probable that these physical states have their effect by way of cortical arousal.

At the same time the factor of physical inactivity warrants closer scrutiny. Over 90 percent of OBES (Green, 1968a, p. 50) occur when the individual is physically inactive (lying down, sitting, etc.). This suggests that a lack of somatic (kinesthetic and proprioceptive) stimulation is an important condition for the OBE. In other words the person must be out of touch with bodily processes. This also accords with the indication that attention to bodily processes brings the experience to an end. Of the 5 to 10 percent of cases in which the experient was physically active at the time of the OBE the considerable majority of activities were automatic (e.g., walking) or so highly practiced

as to be automatic for the individual concerned (e.g., a professional musician playing an instrument, a minister reading a sermon). In cognitive terms these automatic activities require a negligible amount of attention, that is, the individual may perform them while dissociating from bodily processes.

Induction Processes

Many commentators on mystical experiences have published detailed programs for the deliberate self-induction of the OBE (Rogo, 1983). Although most of these have not been put to rigorous scientific investigation they are worthy of consideration as a source of *hypotheses* about the factors critical to the occurrence of the experience.

At first glance there are as many proposed OBE induction techniques as there are commentators, but once the esoteric rigmarole is stripped away some consistencies can be identified (Irwin, 1985a, pp. 155–170). Physical and mental relaxation are given particular emphasis, reinforcing some of the suggestions made above. The use of mental imagery is a common feature; whether this is important for its own sake or as a focus for one's attention is not clear. Certainly attention or absorption is seen as a fundamental factor: many programs include directions for focusing attention upon a particular thought or object, and some even promote some preparatory training in total absorption. The other characteristic general to all techniques, either implicitly or explicitly, is that of expectation: the individual who follows any proposed induction program is to expect an OBE to happen.

THE EXPERIENT

Further insight into the nature of the OBE may be gained by determining the sorts of people who have these experiences.

Incidence

There have been few surveys of OBES among the general population, but estimates of their incidence here range from 8 to 15 percent (Blackmore, 1984a; Palmer, 1979).

The most frequent target population has been that of university students. In my own studies (Irwin, 1985a, p. 174) I have found 20 to 48 percent of Australian undergraduate psychology students to have had the experience. These figures are comparable to data from other countries. The higher incidence of reported OBES among university students may reflect various factors such as better memory, higher capacity for self-observation, recency of experience, more willingness to acknowledge "odd" experiences, greater sympathy with

academics' surveys, and more frequent experimentation with psychotropic drugs.

Surveys also indicate that the majority of experiencers have had more than one OBE (e.g., Palmer, 1979). While the experience may not be an everyday one for the individual it nevertheless seems to be a remarkably familiar one on a population basis.

Age

The OBE evidently can occur at any time of life, although current data are not adequate to indicate if the experience is more common at a given phase of life. Although 12-year-old children readily acknowledge OBES (Glicksohn, 1990), it seems that few reported cases occurred when the experiencer was less than five years old (Irwin, 1985a, p. 179; Blackmore & Wooffitt, 1990). On the other hand, there are difficulties of recall for this period (how many experiences can you recall from your pre-school years?) and direct questioning of very young children is fraught with such methodological problems as response bias and lack of comprehension.

Gender

In case collections there are more accounts from female experiencers than from males. Judging from survey data, however, gender does not seem to be a major factor in the incidence of the experience (Irwin, 1985a, p. 181), although it may be linked with the circumstances under which the OBE arises: for example, OBES under marijuana intoxication are more likely for males presumably because males on average are heavier users of marijuana (Tart, 1971, p. 105).

Other Demographic Variables

The OBE evidently is independent of level of education, marital status, social class and income. Religiosity does not influence either the occurrence of the OBE or the incidence of any specific aspects of OBE content (Irwin, 1985a, pp. 186–189).

There are few data upon which to assess the possible role of race and culture in the OBE. There are differences across cultures in *belief* in the possibility of an OBE, the sorts of people who are thought capable of having an OBE, and the circumstances under which an OBE is held to occur (Sheils, 1978). Some qualitative evidence does suggest that culture may affect OBE content. For example, when shamans of certain primitive tribes have a "magical flight" their parasomatic body often is said to take the form of the tribe's totemic animal.

Prior Knowledge

Certainly the OBE can occur without the experient's prior knowledge of the phenomenon. About 50 to 60 percent of survey cases occurred without such knowledge. Further, prior knowledge does not seem to influence the incidence of the various elements of the experience, including sensations at onset and at termination, the possession of an astral body, and the impression of having control over the experience (Irwin, 1985a, pp. 192–196).

Personality

Several studies have investigated the personality of the OBER. Gabbard and Twemlow (1984, p. 32) found experients to be comparatively low in "danger seeking," but the control group for their investigation makes this result ambiguous. I did not find this tendency among student experients (Irwin, 1980c).

Gackenbach (1978/1979) reports that people who have a high number of OBES are more unrestrained, imaginative, radical, and bohemian. Similarly, McCreery (1997) found OBERS to be inclined to engage in a type of magical thinking that was not maladjustive. This "unconventional" profile of the OBER may be misleading. People who are comparatively bohemian may have more OBES not because they are inherently more susceptible to the experience but because they are more likely to delve into occultism and thus to experiment with OBE induction techniques.

Using the *Jackson Personality Inventory*, Myers, Austrin, Grisso, and Nickerson (1983) found OBERS had a greater breadth of interest and taste for complexity than did nonexperients. The population they investigated, however, comprised students of a Jesuit college. It is feasible their data say more about nonOBEing Jesuit college students than they do about the personality of the OBER. Comparison of the data to college student norms supports this view.

Irwin (1985a, p. 201) did not identify any differences between experients and nonexperients on either the Extraversion or the Neuroticism scales of the *Eysenck Personality Inventory*. Tobacyk and Mitchell (1987a) also report no association between the OBE and measures of avoidant defense styles, narcissism and social desirability.

Cognitive Skills

Imagery skills of OBERS warrant some scrutiny. It might be expected that if the OBE is an imaginal experience it would require some dexterity of imagery skills to conjure up a vivid image of how one's physical body and the immediate environment would appear if observed from a point near the ceiling.

Several parapsychologists have examined the ability to generate vivid visual images and to control or manipulate such images. No differences between

experients and nonexperients have been established with questionnaire measures (see Irwin, 1985a, pp. 260–277 for a review). Some performance measures of visual imagery ability, however, have yielded significant results. Cook and Irwin (1983) ascertained that OBERS are comparatively adept in judging how an object would appear from various perspectives, and Hunt, Gervais, Shearing-Johns, and Travis (1992) report a relationship between OBES and the performance of block designs and embedded figures tests.

In addition to the involvement of general visual imagery skills I have found that kinesthetic and somaesthetic imagery is correlated with experients' impression of control over their OBE (Irwin, 1985a, pp. 272–273). This suggests that in order for the exteriorized self to appear to be doing one thing while the physical body is doing another, some skill in somatic imagery is necessary.

Phenomenological analyses of OBES, as well as the OBE's association with lucid dreams (Green, 1968a,b; Irwin, 1988a), meditation (Palmer, 1979), and hypnotic susceptibility (Palmer & Lieberman, 1976), raise the possible significance of attentional factors in the OBE. One aspect of this is that during the OBE the individual is out of touch with or dissociating from bodily processes. It therefore may be asked if this is specific to the experience or is a habitual tendency of experients. This issue has not been researched thoroughly but in a questionnaire study I did not find experients to have a permanently low level of "body consciousness" (Irwin, 1985a, pp. 279–280).

Another attentional aspect of the OBE is that of absorption. The nature of the experience suggests that OBERS may have a capacity for resisting distraction. That this is not specific to the period of the OBE is suggested by experients' greater inclination toward lucid dreams and meditation and their superior susceptibility to hypnosis. Irwin (1980c, 1981b, 1985a) has established a substantial advantage of experients over nonexperients in capacity for having absorbing experiences. This result has been confirmed by Myers et al. (1983) in America and by Glicksohn (1990) in Israel. Further, people who have high Absorption scores are more open to an experimental OBE induction technique (Irwin, 1981b). Thus the dissociative factor of psychological absorption seems to play a major role in the OBE. There are indications too that experients with high absorption capacity are more likely to report a parasomatic form and sensations at termination of their spontaneous OBES (Irwin, 1985a, pp. 287–288).

Fantasy proneness, a factor strongly related to absorption capacity, reportedly is higher among OBERS than nonOBERS (Hunt et al., 1992; Myers et al., 1983; Wilson & Barber, 1983). Stanford (1987b) reports further that various types of fantasy during childhood may correlate differentially with the circumstances in which the individual's OBE arises, although this finding was not replicated in a subsequent study (Stanford, 1994).

Psychological absorption and fantasy proneness are dissociative phenomena. The role of dissociative processes in the OBE therefore warrants

scrutiny. As yet the empirical literature on this issue is meager, but recently Alvarado and Zingrone (1997a) reported that the OBE correlates with various pathological (depersonalization) and nonpathological (absorption) components of the dissociative domain. Given that dissociative tendencies may be exacerbated by childhood trauma (Irwin, 1994c) the role of dissociative processes in the OBE would also account for a reported association between the experience and a history of childhood trauma (Irwin, 1996).

Needs

The content of many OBES suggests that the experience may serve some social need, such as the need to be with a particular person. On the other hand there are so many other cases in which social motives are lacking that it is likely such motives affect the content rather than the actual occurrence of the OBE.

One psychoanalytic view of the OBE (e.g., Rank, 1971) is that the experience reflects narcissism, that is, experiencers have a need to step outside their physical body and admire it as everyone else can. In one of my surveys, however, experiencers did not exhibit a greater obsession with their body than did nonexperiencers (Irwin, 1985a, pp. 296–297). Tobacyk and Mitchell (1987a) also observed no difference between OBERS and nonOBERS on the *Narcissistic Personality Inventory*. Thus the need for a narcissistic fantasy does not seem a likely factor in the OBE.

In a more broadly based investigation of the manifest needs of OBERS Irwin (1981a) found these people to have a higher need for Intraception: this entails a concern with and attention to one's mental processes. This finding accords with the earlier result that experiencers have a high capacity for absorption. To explore this link further the items of the Absorption questionnaire were reworded to address the respondent's *need* for absorbing experiences rather than the capacity for such experiences. Again OBERS were shown in two studies (Irwin, 1985a, p. 303; Irwin, 1985b) to have a substantially higher need for absorption.

Neurophysiological Correlates

A few studies have recorded neurophysiological data while a subject had an OBE in the laboratory (for a review see Irwin, 1985a, pp. 207–210). For obvious reasons most of these investigations employed adepts as subjects. In general terms the only correlates of the out-of-body state are for the adept to exhibit the neurophysiological signs of being deeply relaxed and of attending to something. These findings have yet to be replicated with unselected subjects.

The Impact of the Experience

An OBE can affect some of the experient's attitudes. The fear of death is reduced in many OBEs (Irwin, 1988b; Osis, 1979). Those OBEs occurring under life-threatening circumstances particularly are associated with a tendency to view death as leading to an afterlife of reward and justification (Irwin, 1988b). The experience will likely be interpreted in spiritual terms if the individual previously was religious or if the OBE occurred in near-death circumstances (Gabbard et al., 1981); however, the OBE generally does not inspire religious conversion in atheists (Irwin, 1985a, pp. 215–216; Palmer, 1979, p. 245). Many experiencers become interested in psychic phenomena and do some reading in this field (Gabbard & Twemlow, 1984, p. 22; Osis, 1979). Most feel the experience to have been beneficial, providing a better understanding of oneself and increasing awareness of altered states of consciousness and of the possibility of "other realities" (Gabbard & Twemlow, 1984, p. 23; Irwin, 1988b; Osis, 1979). The majority of experiencers, therefore, would be happy to have another OBE.

THEORIES OF THE OUT-OF-BODY EXPERIENCE

How are OBEs and their correlates to be explained? Broadly speaking theories of the OBE fall into two categories. First there are the *ecsomatic theories*; they propose that in an OBE a nonphysical element of existence literally separates from the body and subsequently returns to it. Opposed to this approach are the *imaginal theories* that see the OBE as imaginal or hallucinatory (in a nonpejorative sense), a product of purely psychological or physiological factors. Instances of each type of theory will be described and critically reviewed.

Ecsomatic Theories

According to Crookall (1970) we each possess a "superphysical soul body" that in the OBE separates from the physical body and passes through the objectively real worlds of earth, paradise, and hades. Many aspects of Crookall's theory can be criticized but one of the major difficulties for this type of theory springs from the assumption that the soul body exteriorizes into the physical world. If this is the case why do some OBEs report distortions in reality (e.g., bars on the bedroom window), and how are some experiencers able to manipulate the nature and existence of objects in the out-of-body environment by an effort of will?

Other ecsomatic theorists such as Yram (c.1926/1974) maintain that the out-of-body world is constructed from memory and imagination but is every bit as "real" as the physical world. The out-of-body environment is a world of *thought forms* that can be manipulated by mental processes. But while the

out-of-body world is imaginary the OBE is not: the experient's entry into and existence within this world are held to be as real as one's existence in the physical world. You may be uneasy with this interpretation of what is real and what is imaginary. The notion of a world created from memory and imagination nevertheless does accommodate the fact that the OBE may relate to the physical world as the experient conceives it yet also feature some fantasized distortions of the real world.

A source of inconvenience for this approach is that in some OBES it would seem that experients can acquire information about sensorially inaccessible events of which they previously were ignorant. If the out-of-body world is a product of memory and imagination how is this possible? Some theorists in this camp simply deny that such experiences occur. Others such as Yram resort to introducing another conceptual realm, a "clairvoyant dimension," that during an OBE is accessible in much the same way that the thought world is entered. The latter notion seems little else than an assumption of what is to be explained.

Whiteman (1961) and some other ecsomatic theorists propose that there exists an astral world that has varying degrees of correspondence with the physical world. An OBE consists of the soul's movement into this "astral" world. These theorists would appear to be hedging their bets. If an OBE is veridical, that is because the astral and physical worlds corresponded. If the experience is distorted then the two worlds were not quite in correspondence after all. Unless there is an independent measure of the level of correspondence this notion remains *ad hoc* and contrived.

In general terms the ecsomatic approach is intuitively plausible (especially to people who have had an OBE) and at least at first blush it is conceptually parsimonious. The impression of being outside the body, the perceptual-like awareness of the environment in an out-of-body perspective, and the apparent possession of a parasomatic form linked to the body by a cord, all are explained by one basic and simple notion, that the OBE is literally as it seems to be. But the parsimony of the ecsomatic theory is deceptive. As far as making a minimum of conceptual assumptions is concerned it is just as simple to assert that all out-of-body phenomena are hallucinatory.

On closer inspection the ecsomatic approach is seen not to constitute a very good scientific theory. It tends to provide *post hoc* explanations rather than testable implications. For example, under this theory what sorts of people are susceptible to OBES? No specific indications are forthcoming; but if it is mentioned that lucid dreamers are more open to the experience this is "explained" by declaring such people to have inherently "loose" astral entities. Similarly the circumstances of the OBE's occurrence are not explained by the theory but merely cited to be the circumstances under which an OBE might be evoked.

This is not to say that there have been no attempts to test the theory. Some researchers have placed various physical detectors in a target location to see if

the subject's exteriorized self can be detected there (for reviews see Alvarado, 1982; Irwin, 1985a, pp. 61–66). Most such studies have yielded null results although in a couple of experiments (e.g., Osis & McCormick, 1980) some unusual recordings from the detectors have been reported. The ecsomatic theory is so pliable, however, that it could accommodate any outcome of a detector study. Null data may be explained on the basis that the exteriorized self is nonphysical and hence would not interact with a physical detector. Positive signals from the instruments may be said to be due to certain "semiphysical" properties of the exteriorized self. On the other hand, critics could attribute such signals to subconscious psychokinetic effects rather than to the presence of any exteriorized entity.

Osis (1974, 1975; Osis & Perskari, 1975) conducted another sort of test of the ecsomatic approach. His experimental task requires a subject to exteriorize to a sensorially inaccessible location and to "look" at a target placed there. Now extra-chance success in such a task potentially could be due either to an OBE or to ESP, so Osis sought to arrange the experimental task in such a way as to provide a test between these rival interpretations. In an attempt to show that exteriorization was possible Osis devised the following method to rule out target identification by ESP.

The target image was generated inside a box and was visible only through a small viewing window on one side of the box. The target had three independent dimensions: shape, background color, and location in one of four segments of the viewing window. Each of these various dimensions was enacted by a different optical mechanism. Thus, argued Osis, the composite image was not in one single place within the box and could not be "scanned" by ESP; it could be apprehended only through the viewing window, either by normal sight or by "exteriorized sight." Using this device Osis claimed that a few subjects gave responses that suggested they could get either the composite image or nothing at all, a finding he construed as supportive of the ecsomatic hypothesis.

That the result could not have been due to clairvoyance, however, is moot. Osis assumed that clairvoyance relates only to physical objects; that is, in this context he held that clairvoyance may be applied to the individual physical components within the box but not to the physical (visual) stimuli emitted through the viewing window. Since parapsychologists do not know the limits of ESP Osis's view of the way in which ESP operates is presumptuous and on these grounds his test of the ecsomatic hypothesis must be deemed inconclusive.

If Osis's work achieved anything at all it was to show how very difficult the ecsomatic theory is to subject to scientific evaluation. Proponents of the approach would respond that this highlights the extent to which a materialistically oriented science is ill-suited to the study of nonphysical phenomena. The problems of ecsomatic theories, however, are more deep-seated than this

response would allow. It is not simply a matter of the adequacy of scientific method but whether the ecsomatic hypothesis can predict new relationships and accommodate known relationships without resorting to *ad hoc* assumptions. That ecsomatic theorists in principle can construct a model with these features has yet to be demonstrated.

Imaginal Theories

Probably the majority of psychologists and psychiatrists regard the OBE as hallucinatory (Alvarado, 1992). This may very well prove to be the case but in itself it hardly constitutes a sufficient explanation of the experience. The latter demands some consideration of the origins and bases of the out-of-body hallucination, and it is to theories with this level of specificity that we now turn. As with the NDE, imaginal theories of the OBE may be categorized as either predominantly physiological or predominantly psychological.

Physiological theories. An American parapsychologist, Barbara Honegger (1979), attributes the OBE to a mechanism of biological homeostasis. Homeostasis involves a regulatory response to a sudden shift in physiological state in order to preserve biological integrity. According to Honegger, in certain circumstances such as sensory deprivation, sensory overload, and trauma the human organism loses its biological sense of self and the impression of the existence of self independent of the physical body is created to restore integrity. If the possession of a body is an indispensable part of the individual's sense of self a parasomatic form also will be incorporated in the out-of-body imagery.

Munro and Persinger (1992) have proposed that OBES may originate as sudden intrusions of right-hemisphere processes into the left hemisphere of the brain. That is, when such intrusions occur, the left hemisphere may become aware of two separate "selves": one of these comprises a disembodied sense of self and the other, awareness of the physical body. Munro and Persinger claim support for their theory in observations of an association between a sense of bodily detachment and hemispheric mismatch in temporal-lobe theta activity.

Other physiological theories of the OBE are essentially the same as those listed in Chapter 11 for the NDE. The "temporal lobe paroxysm" hypothesis has some adherents (Eastman, 1962; Persinger, 1983).

The criticisms of the physiological models of the NDE apply equally to the equivalent depictions of the OBE and need not be reiterated. Account also needs to be taken to the fact that OBES do not occur only under life-threatening circumstances. For example, Siegel's (1980) theory of "massive cortical disinhibition" is based on the assumption of high cortical arousal and as noted previously there appear to be some OBES that arise under conditions of very low cortical arousal.

Psychological theories. An old theory of the OBE is that it represents a schizophrenic hallucination (Rawcliffe, 1959). Some objections to this view

were mentioned in the context of the NDE. Personality test scores of OBERS and nonOBERS offer little support for this approach, and it is hard to imagine a quarter to a third of undergraduate psychology students being subject to schizophrenic hallucinations. Perhaps a less extreme formulation of the theory, namely that the OBE is associated with the more widely distributed schizophrenia-like trait of schizotypy, would have greater viability (McCreery, 1997).

The depersonalization model of the NDE has been extrapolated to the OBE by Whitlock (1978). Consistent with this view, Alvarado and Zingrone (1997a) found that the OBE is related to various facets of dissociation, including depersonalization. For the vast majority of experiencers however, the OBE is a very fleeting instance of depersonalization, one which has been found not to entail the pathological connotations of the severe forms of depersonalization evident in some psychiatric patients (Jacobs & Bovasso, 1996). It is possible therefore that OBES involve some process that is akin to depersonalization but is nonetheless qualitatively distinct from pathological depersonalization. Further research on this point is called for. Nonetheless, simply labeling the OBE as an instance of depersonalization is insufficient as an explanation of the experience.

Previously mentioned was Rank's (1971) psychoanalytical theory of the OBE centered on the concept of narcissism. That experiencers are not preoccupied with their physical appearance (Irwin, 1985a, pp. 296–297) and do not score highly on a measure of narcissistic tendencies (Tobacyk & Mitchell, 1987a) leaves this theory without an empirical base.

A psychiatrist, Jan Ehrenwald (1974), has described the OBE as an imaginal confirmation of the question for immortality, a delusory attempt to assure ourselves that we possess a soul that exists independently of the physical body. Two main lines of evidence speak against Ehrenwald's theory. First, neither the occurrence of the OBE nor the incidence of transcendental elements in it are correlated with religiosity (Irwin, 1985a, pp. 186–189). Second, concern with the existence of an afterlife was not found to affect susceptibility to an experimental OBE induction procedure (Smith & Irwin, 1981).

In some older texts (e.g., Tyrrell, 1942/1963) the OBE is termed traveling clairvoyance or *ESP projection*. Thus it is possible that the perceptual-like content of OBES is based on ESP, and to provide oneself with a sense of orientation to the remote location a fantasy of mentally traveling to that point is integrated with the extrasensory information. This theory accounts for both veridical and distorted OBES, although like many other theories it has difficulty in accounting for some phenomenological elements such as onset sensations and the tunnel effect. According to Blackmore (1982, p. 237) the ESP theory also might not be open to being disproved: this would require a test in which an OBE must be elicited when the possibility of ESP is ruled out, and parapsychologists do not know how to engineer the latter conditions. On the other hand it is possible in principle to establish if the properties of the OBE differ from those of ESP and hence the ESP theory could be testable in these terms.

One of the more detailed psychological accounts of the OBE has been formulated by Palmer (1978b). In some respects Palmer's theory is similar to a homeostatic approach. Palmer proposes that in certain situations a lack of proprioceptive feedback threatens the individual's sense of self and the OBE then occurs as an imaginal attempt to re-establish this sense of self and to ensure that the ego has not been destroyed. The perceptual-like aspect of the OBE actually is hypnagogic imagery, according to Palmer; any extrasensory content of the experience in a sense is incidental, reflecting hypnagogic imagery's conduciveness to ESP. The postulated involvement of hypnagogic imagery, however, is open to question. Such imagery tends to be bizarre, disconnected, rapidly changing, not subject to volitional control, most common in childhood, and not about oneself (Schacter, 1976); these features are not typical of the OBE. Nevertheless Palmer's notion of being sensorially out of touch with the body does accord with suggestions made earlier in this review of the OBE.

More recently Blackmore (1984b) has offered a cognitive theory of the OBE. She proposes that at any given time the cognitive system is generating many different models of reality and one is chosen on the basis of its compatibility with current sensory input. In certain circumstances such as stress, sensory information processing is not efficacious and the cognitive system then is more inclined to select a model of reality compiled from information in memory and imagination. Some of these memorial representations of the environment incorporate a bird's-eye view. The OBE entails the experient's acceptance of one of these models as "reality." Blackmore's theory is consistent with the finding by Cook and Irwin (1983) that OBEs are better than nonOBEs in imagining a given scene from a different viewpoint. Blackmore also predicts higher imagery skills among people who deliberately induce OBEs than among spontaneous experiencers; imagery performance data have yet to confirm this. Research by Irwin (1986a) suggests that Blackmore's theory might have to take cognizance of the distinction between parasomatic and asomatic OBEs; the disposition to construct bird's-eye models of reality could vary across this dimension.

The principal shortcoming in these imaginal theories of the OBE is that they have tended to focus almost exclusively on explaining why the experient feels that the self literally is exteriorized. The diverse phenomenological elements of the OBE all too often have been neglected. An attempt to formulate a more comprehensive theory of the OBE was undertaken by Irwin (1985a, Ch. 8).

Irwin's model is termed the *synesthetic theory* because synesthesia or "cross-modal experiencing" is deemed to play a key role in the OBE. Nonetheless it should be appreciated that synesthesia is essentially a type of dissociative process, and thus the model also incorporates other facets of dissociation such as somatoform dissociation and psychological absorption (nonpathological dissociation). The synesthetic model is more complex than most, in part

a consequence of its comprehensiveness, but in essence the theory seeks to identify the specific dissociative and other processes underlying each phenomenological element of the OBE. A slightly updated version of the model now will be outlined.

The origins of the OBE are hypothesized to lie in a confluence of dissociative factors. Circumstances associated with extreme (either high or low) levels of cortical arousal evoke a state of strong absorption, particularly in the case of a person with a requisite level of absorption capacity and need for absorbing experiences. Alternatively, high absorption may be induced deliberately by the experient. If this state of absorbed mentation is paralleled by a dissociation from somatic (somaesthetic and kinesthetic) stimuli an OBE may occur. People who are prone to this type of somatoform dissociation (Nijenhuis, Spinhoven, van Dyck, van der Hart & Vanderlinden, 1996) may be said to have tendencies toward depersonalization. There may nevertheless be various pathological and nonpathological factors underlying this propensity (Jacobs & Bovasso, 1996) and the OBE therefore should not automatically be diagnosed as a pathological symptom.

In instances where the development of the state of somatic dissociation is gradual the imminent cognitive loss of all somatic contact may be signaled by certain innate biological warning signals, the so-called OBE onset sensations.

The continued orientation of attention away from both exteroceptive and somatic stimuli effectively suspends support for the socially conditioned assumption that the perceiving self is "in" the physical body, fostering the impression that consciousness no longer is tied spatially to the body. This abstract, nonverbal idea of a disembodied consciousness is coded by the cognitive processing system into a passive, generalized somaesthetic image of a static floating self. Consciousness of that image corresponds to the so-called asensory OBE. By means of the dissociative process of synesthesia the somaesthetic image also may be transformed into a visual image, given a basic level of visuospatial skills in the experient.

Strong absorption in this image is a basis for the OBE's perceptual realism. The somaesthetic image also may be transformed into a more dynamic, kinesthetic form and the experient will have the impression of being able to move in the imaginal out-of-body environment. The somatic imagery entailed in this transformation is held to underlie the phenomenon of the parasomatic form. A drawing of attention back to the physical body's state also may be expressed synesthetically by way of the image of the astral cord.

The perceived content of the out-of-body environment is governed by short-term needs. A life-threatening situation for example, may prompt imagery about a paradisaical environment; the nature of the latter is held to be a product of social conditioning, although the precise sources of these paradisaical stereotypes have yet to be identified fully (see Irwin, 1987b). Because dissociation is psi-conducive it is possible that the out-of-body imagery could

incorporate extrasensory information and thereby feature a degree of veridicality not expected of mere fantasy; evidence of extrasensory elements in spontaneous OBES, however, is not yet convincing. Eventual dissipation of somatic dissociation or diversion of attention to somatic or exteroceptive processes brings the individual's OBE to an end.

It can fairly be said that parapsychologists' recent empirical and theoretical investigations of the OBE have substantially enhanced scientific understanding of the experience. Although ecsomatic theories have not been conclusively discounted the OBE currently does not look a promising source of support for the survival hypothesis. Even if the experience were shown to involve a literal separation of a nonphysical element of existence from the physical body there is no certainty that this element could survive the biological death of the body. Notwithstanding that fact, the OBE remains a rewarding topic of scientific study.

Key Terms and Concepts

out-of-body experience (OBE)	ecsomatic theories
out-of-body experients (OBERS)	Crookall
asensory	Osis
asomatic	imaginal theories
parasomatic	homeostasis
onset sensations	narcissism
autoscopy	ESP projection
astral cord	Palmer
cortical arousal	Blackmore
somatic imagery	Irwin
somaesthetic	synesthetic model
kinesthetic	synesthesia
psychological absorption	somatoform dissociation

Study Questions

1. Describe a typical OBE and list the principal features of the phenomenon.
2. What are the major methods for researching the OBE? Consider the advantages and disadvantages of each approach.
3. Some OBES include elements that do not correspond to physical reality. For example, one experient noted that in her OBE the color and pattern of the bedroom wallpaper had changed. Do these cases demonstrate that the OBE is pure fantasy?

4. Many experiencers describe their OBES as completely realistic. If the OBE is not a process of literal exteriorization of perceptual functions how can this impression be explained?

5. On the basis of the phenomenology of the OBE what factors emerge as of potential significance in the explanation of the experience?

6. Under what circumstances do OBES occur? What do these circumstances suggest about the nature of the experience?

7. There has been some investigation into the sorts of people who have OBES. Has this research indicated anything about the underlying processes of the experience?

8. Outline the major theories of the OBE and discuss their viability.

9. Sit in a comfortable chair in a quiet location, close your eyes and perform the following exercise. Imagine that you can transfer your point of observation to a corner of the ceiling and that you can look down into the room and see yourself seated in the chair.

How difficult was this exercise? What does it suggest about the cognitive skills necessary for an OBE if the imaginal hypothesis is valid? Assuming that you did not feel "out of the body" during the exercise, how then can the OBE be claimed to be an imaginal experience of this sort?