THE SKEPTICAL INTELLIGENCER.

VOL 3 ISSUE No. 4 April 2001

The Magazine of ASKE



ASSOCIATION for SKEPTICAL ENQUIRY



CONTENTS	
Editorial	2
Articles	
Non-conscious movements and the paranormal by Mike Heap	2
Sigmund Freud's investigation of astrology by Nick Campion	6
Skepticism in the twenty-first century by Wayne Spencer	10
Some stories about hypnosis by Mike Heap	29
Book Reviews	
'Recovered Memories and False Memories' by Mike Heap	36
'Religion: A Humanistic Interpretation' by Barry Thorpe	38

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Authors of contributions to the *Skeptical Intelligencer* should be take care to ensure that texts are temperate in tone and free of vituperation. They should also ensure that arguments are either supported by express evidence/arguments or identified as speculative. "Do not pretend conclusions are certain that are not demonstrated or demonstrable." (T. H. Huxley).

Before being accepted for publication, submitted texts will be reviewed by the Editor and any appropriate advisors. Where improvements or changes are desirable, the editorial team will work with authors and make constructive suggestions as to amendments.

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- Books: Naranjo, X. 1902. The End of the Road. London: University of London.
- Chapters: Griff, P. 1978. Creationism. In D. Greengage (ed). Pseudoscience. Boston: Chapman Publishers.
- Electronic material: Driscoe, E. Another look at Uri Geller. http://www.etc.org. Accessed 21 April 1997.

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EDITORIAL

Mike Heap

This is the final issue of the Skeptical Intelligencer in its original conception as a quarterly periodical. The next issue will be in Autumn 2001 and will be mark the change to an annual

periodical. I shall organize the editing with the informal assistance of advisers as and when needed.

ARTICLES

NON-CONSCIOUS MOVEMENTS AND THE PARANORMAL

Michael Heap

Michael Heap is a chartered clinical psychologist in Sheffield, President of the British Society of Experimental and Clinical Hypnosis, and Chairman of ASKE. This paper was presented at a conference organized by ASKE on Friday 13 November 1998 at the Manchester Metropolitan University.

When I was about the age of 14 I went with my family to visit some relatives in Ireland. At least two things stand out in my mind; the first is the crossing, for which nothing in my life up until then had prepared me, and the second is Uncle Paddy's special gift. Although Uncle Paddy was an ordinary labourer, he and Auntie Alice had a large garden with a well at the bottom which Uncle Paddy had dug himself. His special gift was that he was a water diviner or dowser and he was able to demonstrate this for us in his garden. He used an ordinary forked twig, holding a shaft of the twig in each hand in the dip between his forefinger and thumb, each forefinger being above the shafts and walked along with the twig held horizontally, with the third shaft pointing forward. When he came to some water, for example over his well, the forward shaft of the twig would suddenly lift up, forcing his hands backwards. He gave me the twig to try, but it did not work, although I politely said, "I felt something".

At that time I believed Uncle Paddy and I didn't believe him. This is the nature of one's belief in unusual things; people may believe in, say, flying saucers or ghosts in certain circumstances when it is useful or interesting to do so, whilst at other times it is not at all convenient for them to believe in them and they will act accordingly.

This presentation is about non-conscious movements or, as they are also known, ideomotor movements - i.e. movements that happen in response to the idea or expectation of their occurrence.

It is easy to demonstrate these kinds of movements and they are of interest to psychologists, and of particular relevance to the field of suggestion and hypnosis. Anybody can do simple experiments on this theme. For example, ask a person or group of people to extend their arms forward at shoulder height with the palms facing upwards. Now ask them to imagine that on their preferred hand they have a large weight such as a big dictionary. Ask them to imagine that the

weight of the dictionary is pressing down on that hand, making the hand and arm feel heavy and tired. Keep repeating the expressions "tired and heavy, more and more tired, more and more heavy...". Eventually, with many people the arm will tend to move down whereas the other arm and hand will stay in the same position. This suggestion is taken from the Creative Imagination Scale by Wilson & Barber (1978).

Another demonstration is to ask people again to extend their arms forward at shoulder height but this time with the palms facing. Suggest that they imagine that in each hand they are holding a powerful magnet, with north and south poles facing. There is thus a tremendous force of attraction between the hands which is drawing them closer and closer together. Repeat the suggestions "closer and closer....nearer and nearer....etc.". Eventually a high proportion of people will finish the exercise with their hands nearer together, sometimes even touching.

Finally (and one can only do this on one person), ask a volunteer to stand in front of you (facing towards or away - it does not matter). I generally ask people to keep their eyes open for this. Ask the person to think about his body and to notice that the body is tending to sway a little, backwards and forwards, in order to maintain the upright position (by correcting for slight changes in the centre of gravity). Then say to the person that as he becomes aware of this so he will tend to sway more and more, backwards and forwards. Repeat the suggestions "backwards and forwards.....backwards and forwards....etc.". You can then suggest that he imagine that there is a powerful gust of wind that is blowing him towards you. Repeat appropriate suggestions and a good proportion of people will tend to sway more, and more towards you, sometimes to such a degree that the person may actual fall and you have to support him or her. (Give reassurances beforehand that you will do this.) The last exercise is known as the "postural sway test".

Incidentally, when I went to my first teenage party we played a game whereby one person went out of the room and the rest of the people in the room chose one of the remaining people whom they were going to think about. The first person then re-entered the room and we stood in a circle round this person, who had to keep his or her eyes open. We then concentrated on the chosen friend and the expectation was created that the person in the middle would fall towards the person we had chosen. This worked every time. I leave it to you to devise a rational explanation.

These and other kinds of ideomotor suggestion constitute authentic phenomena for scientific investigation. The subject's responses can be measured in various ways and it will be found that in general if a person responds well to one particular ideomotor suggestion then he or she will also respond well to a different one. This is an attribute which has been called "primary suggestibility" (Eysenck and Furneaux, 1945). It is interesting to speculate on why some people respond so well and yet others do not respond at all and one can ask questions such as "Does this attribute correlate with any other aspects of personality or cognitive style", "Are there sex/ age differences?", "Do the effects depend on the perceived characteristics of the experimenter?" and so on.

People who respond well to the ideomotor suggestions described above are often very surprised. (One of the most surprising is the pendulum demonstration described below.) You will find that enough people will say that they are not consciously moving their arm or their body and they are seeming to respond to your suggestions in an automatic fashion, which may feel quite "weird". "Weird" experiences call for explanations, and often explanations are chosen which themselves are "weird".

However, back to dowsing. When one is dowsing it is not necessary to use a twig. One may use divining rods of the sort which can be manufactured from wire coat-hangers. Take two such coat-hanger, straighten each one out and cut them down to an appropriate size with wire cutters. Then bend each one at a right angle near one end so the small shaft fits comfortably into the hand. Hold one in each hand at about shoulder height

with the long shafts parallel and horizontal, pointing ahead of you. As you process round the room, at some stage the long shafts will start swinging towards, or sometimes away, from one another. One can use just one of these rods and the same movement will be observed.

One can dowse for more than just water; in fact one can dowse for anything, such as various minerals, buried bodies, ley lines, pregnancy, sex of an unborn baby, and various ailments. Some dowsers dowse from a map, say in order to locate a missing person or a valuable object that has been lost or stolen.

I recommend that you make your own dowsing rod and play around with it. It is not too difficult to discern what causes the movement. I shall not say what this is but it has something to do with the way a system behaves in unstable equilibrium. Incidentally, I have heard some highly respected dowsers claim that they put the short end of the dowsing rod in a sleeve, such as that from an old biro, so that their hand does not actually make contact with the dowsing rod, and this proves that they are not covertly causing the rod to move. Once you work out the reason for its movements you realise that this precaution is completely irrelevant. I can't believe that dowsers are unaware of this.

Having done all this, you may wish to conclude that there is a simple and rational explanation as to why a dowsing rod moves when the dowser knows or believes that the rod is over water or whatever is the relevant material. On the other hand you may wish to create a mystery about the whole thing. You might, for instance, maintain that the movement is due to some intangible, paranormal energy or force.

If you feel so inclined, you might do this experiment. Find one cornfield. Using one stick, one plank and some rope, flatten the corn into a circle. Retreat to a safe spot and wait. Soon you will begin to witness a rich and interesting variety of human activity and beliefs. People will arrive, go down on all fours, and inspect the corn with great excitement. Others will pray and chant, or sit down and meditate. Others will dangle pendulums.

Dowsing rods will swing about in all directions. It will be announced that some ancient paranormal energy has been at work or that alien beings have visited the planet.

Moving on from dowsing, but still on the same theme, you might like to do this experiment. Arrange for several people to rest their hands around the perimeter of a circular table mounted on wheels. Create the idea and expectation that the table will move in a rotational manner. In due course it will indeed probably move. Now if you wish, make a mystery of this. Claim that the table has been moved by the spirits of dead people who wish to communicate with those present.

Alternatively, ask some people to put their forefingers on an upturned glass tumbler in the centre of a circle of cards, each card bearing a letter of the alphabet. Create the idea and expectation that the tumbler will move. Usually the tumbler will eventually move. Now, if you wish, make a mystery of this. Once more claim that it is an invisible force which moves the tumbler, again the spirit of a dead person. Thus the tumbler will spell out messages from the departed one, although only if the letters are visible to the participants.

Perhaps this is just good fun, but consider this. Imagine a person with autism or perhaps someone with a profound learning disability. The parents and family will naturally do everything they can to ensure that the person attain his or her full potential as a human being. They will go to great lengths to ensure this, because, for one thing, they know their loved one better than anybody else and have seen how other people, such as teachers and doctors, may be inclined to underestimate what he or she is really capable of achieving.

So now imagine that this person is sitting at the keyboard of a computer. An assistant or "facilitator" supports the person's hand, which not only finds its way to the keyboard, but types out messages of relatively considerable complexity on the screen. This procedure, known as "facilitated communication", became popular in America over the last decade. (See Mulick, Jacobson & Kabe, 1993, and Dillon, 1993, for sceptical expositions of this.)

Again, we have a mystery: the assisted person seemingly possesses abilities and knowledge far in excess of what was previously believed, moreover without any formal teaching.

It is not too difficult, however, to demonstrate that the messages come, not from the assisted person, but from the person who doing the assisting. When the facilitator is given false biographical information about the assisted person, it is that which is revealed on the visual display, not the true account of the person's life (Jacobson, Mulick & Schwartz, 1995; Burgess et al., 1998).

The behaviour of pendulums has not only been of interest to physicists and applied mathematicians. Try the following demonstration. Ask a person to dangle a pendulum, holding the thread between the thumb and forefinger. Create for the subject the idea and expectation that the pendulum will swing in a particular direction (say left to right). More likely than not it will do so. Now suggest that it will move in a different direction, say forward and backwards. Again it will probably do so. One might also suggest a diagonal swing or a circular (clockwise and anti-clockwise) movement.

Having established this, let us now create a mystery, namely an invisible yet extraordinary, all-seeing, all-knowing source of intelligence. The unconscious mind.

So, now let us proceed. Suggest to the person that his or her unconscious mind is thinking of the message, "yes". Further suggest that as the unconscious mind is thinking of "yes" then it will choose to communicate that message by swinging the pendulum in a particular direction (left to right, forwards-backwards, etc.). Keep repeating "yes...yes...yes". In due course the pendulum will probably move, even very slightly, at which point place on the floor underneath the pendulum a sheet of paper and on it draw an arrow indicating the chosen direction, labelling it "yes". Now suggest that the unconscious mind is thinking of the message "no". Keep repeating this and eventually the pendulum will move in another direction, which again you can mark on the paper, labelling it "no". If you want to be more elaborate you may likewise

elicit the messages "I don't know", and/or "I don't want to say".

Now ask the unconscious mind questions about the subject. 'I am now asking John's unconscious mind, "Is John married?" ("Has John been to America?", "Does John have a brother", etc.)' and wait for the answer. You can ask a series of mundane questions like this to begin with and then you may want to move on to more profound matters: "Does John like sausages?"; "Does John love his wife?"; "Did something happen to John as a boy which is still troubling him?"; "Will John fulfil his ambition of becoming a vet?", etc. This can be quite a striking demonstration for the subject and a "weird" experience.

There are numerous ways we can take this further. I witnessed one of these at an exhibition of alternative medicine. Take a circular tray and around the circumference place small phials containing different nutritional substances such as vitamins and minerals. (The "patient" does not know the identity of the substances in each phial as they are not labelled.) The patient dangles a pendulum over the centre. Tell the patient's unconscious mind to indicate in which of the substances his or her body is deficient. pendulum will swing as instructed. Finally suggest that the person's hand is now moving towards his or her purse or wallet to extract a £5 note.

In reality there is no such thing or entity as "the unconscious mind" or for that matter the "conscious mind". There is brain activity which is or is not in a form which is experienced at a conscious level. It is also arguable that what determines whether the kinds of acts we have been considering are conscious or unconscious is not a matter of neurological hardware. Rather, it is at a level of introspective judgement or attribution, informed by the demands, expectancies and explanations that are provided by the context (Kirsch, 1998)

Summary

Science represents our need to solve mysteries by explaining them in terms we already understand. The paranormal and much of pseudo-

science represents our need to perpetuate mysteries and create more of them.

The belief in mysterious and powerful, yet intangible phenomena has the capacity to generate an unbounded and extraordinary range of human ideas and behaviour - witness for example, religion and unorthodox healing practices. Nevertheless if we study, and not simply judge, we shall find that much about human life is revealed in its absurdities.

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SIGMUND FREUD'S INVESTIGATION OF ASTROLOGY

Nicholas Campion

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ABSTRACT: Following the First World War there was an increase in the use of psychics and clairvoyants as the bereaved attempted to contact their dead relations. Sigmund Freud saw this as a dangerous development and in 1921 set out to study it. As part of this he considered the visit of one of his patients to an astrologer, placing the incident in its historical context, looking at the causes and possible consequences of the occult boom.

Freud's study of one of his patients' visit to an astrologer was written in August 1921 and was included as part of a study of prophetic phenomena, written in the context of recent attacks on him by Jung and Adler. It appears to have been presented to a meeting of his closest followers (Abraham, Eitington, Ferenczi, Rank, Sachs and Ernest Jones) in September 1921, and was published in 1941 as 'Psychoanalyse und Telepathie'.¹

Freud opened his discussion by setting the historical context. In particular he attributed what he identified as a rapidly growing interest in the occult to the political turmoil, economic collapse and social dislocation which followed the First World War. He argued that 'Nor is there much doubt as to the origin of this trend. It is a part expression of the loss of value by which everything has been affected since the catastrophe of the Great War, a part of the tentative approach to the great revolution towards which we are heading and of whose extent we can form no estimate; but no doubt it is also an attempt at compensation, at making up in another, a supermundane, sphere for the attractions which have been lost by life on this earth'.²

Freud also thought that recent scientific discoveries and theories were stimulating public interest in the occult by confusing publicly accepted beliefs on the nature of the universe, or by undermining belief in the objective trustworthiness of science. He cited the discovery of radium and the theory of relativity as two examples.³

In his introduction Freud considered possible connections and co-operation between occultists and psychoanalysts in view of the fact that science considered both disreputable; psychoanalysis was widely considered to be mysticism, and he had recently been asked to contribute to three occult journals. He pursued this line of thought, writing that 'It does not follow as a matter of course that an intensified interest in occultism must involve a danger to psycho-analysis. We should, on the contrary, be prepared to find reciprocal sympathy between them. They have both experienced the same contemptuous and arrogant treatment by official science. To this day psychoanalysis is regarded as savouring of mysticism, and

its unconscious is looked upon as one of the things between heaven and earth which philosophy refuses to dream of...Alliance and co-operation between analysts and occultists might thus appear both plausible and promising'.⁴

However, he found problems with this approach, arguing that whereas occultists are believers, driven by the need only to find evidence to support their faith, analysts are scientists, committed to a dispassionate appraisal of the facts. Worse still, if evidence were to be found to support any one occult phenomenon, then occultists might use it to proclaim the truth of all occult phenomena. The results, in Freud's opinion, would be disastrous. He predicted that occultists 'will be hailed as liberators from the burden of intellectual bondage, they will be joyfully acclaimed by all the credulity lying ready to hand since the infancy of the human race and the childhood of the individual. There may follow a fearful collapse of critical thought, of determinist standard and of mechanistic science'.5

He feared that analysis would also suffer, for if occultists were able to provide all the answers then there would be no interest in its laborious procedures. Freud considered that these risks were so profound that, even though he felt obliged to study the occult, he believed that his discussion of it should be withheld from the wider public. Thus, while he saw the resurgence of interest in the occult as a historical phenomenon, defined by the collapse of Europe in 1918-1919, the very study of this phenomenon might have significant and damaging historical consequences. In words reminiscent of his earlier call on Jung to join him in forming a 'bulwark against...the black tide of occultism', he wrote that even his own enemies, Jung and Adler, were threatened.6

However, in spite of his 'unenthusiastic and ambivalent' attitude to the material, he believed that his scientific approach rendered it exempt from 'the uncertainties and doubts to which most of the observations of occultists are prone'.⁷

Freud's discussion of astrology centered on the account of a visit by one of his patients to an astrologer in Munich. The astrologer was not named, but was clearly well-known. Freud wrote that she 'enjoyed a great reputation. The Bavarian princes used to visit her when they had any undertaking in mind. All that she required was to be supplied with a date'. Freud remarked that he had not inquired whether she also required a year, or indeed a time, the data required for the casting of a full horoscope.

Freud's concern was not with astrology's veracity, but with its mechanism and function. He reported that the astrological incident was one of two 'prophecies made by professional fortune tellers which did *not* come true. In spite of this, these prophecies made an extraordinary impression on the people to whom they were announced, so that their relation to the future cannot be their essential point. Anything that may contribute to their explanation, as well as anything that throws doubt on their evidential force, will be extremely welcome to me'.⁹

The astrologer's exact prophecy was that Freud's patient's brother-in-law would die of crayfish or oyster poisoning in the following July or August. The patient described this forecast as 'wonderful' because the event in question had in fact occurred in the previous August. However, Freud considered a forecast of such precision beyond astrology's technical capacity, arguing that 'you will no doubt agree with me in offering the most obstinate resistance to the possibility that so detailed an event as falling ill of crayfish poisoning could be inferred from the date of the subject's birth by help of any tables of formulae whatever. Do not forget how many people are born on the same day. Is it credible that the similarity of the futures of people born on the same day can be carried down to such details as this? I therefore venture to exclude the entirely astrological calculations from discussion: I believe the fortune teller might have adopted some other procedure without affecting the outcome of the interrogation'. 10 This does not mean, though, that the astrologer was practicing deliberate deception: 'Accordingly, we can also so it seems to me, leave the fortune teller (or, as we may say straight out, the 'medium') quite out of account as a possible source of deception'.11

Freud's explanation, though, depended not on the normal models of the mechanistic science which he saw as the basis of analysis, but another occult phenomenon: 'And we at once find - and this is the case with the majority of these phenomena that its explanation on an occult basis is remarkably adequate and covers what has to be explained completely, except that it is so unsatisfying in itself. It is impossible that the knowledge that this man born on the day in question - had had an attack of crayfish-poisoning could have been present in the fortune teller's mind; nor can she have arrived at that knowledge from her tables and calculations. It was, however, present in the mind of her questioner. The event becomes completely explicable if we are ready to assume that the knowledge was transferred from him to the supposed prophetess - by some unknown method which excluded the means of communication familiar to us. That is to say, we must draw the inference that there is such a thing as thought-The fortune-teller's astrological transference. activities would in that case have performed the function of diverting her own psychical forces and occupying them in a harmless way, so that she could have become receptive and accessible to the effects upon her of her client's thoughts - so that she could become a true 'medium'.12

Thus Freud explained one inexplicable phenomenon, the 'wonderful' astrological forecast, by another, thought-transference. He does not appear to have believed that thought transference provided a preferable explanation of the prophecy to astrology, for both were occult. However, he thought it more likely that thought transference could explain the precision of the forecast better than astrology. In addition, both astrologer and client were involved in bringing the prophecy into existence: the patient actually wished that his brother-in-law would die with such intensity that his memory of the previous incident was picked up by the astrologer. It was his wish that the brother-inlaw would die that converted the memory to the prophecy uttered by the astrologer. Thus the astrologer could not have uttered any meaningful statement without the client's presence. Although

Freud didn't state this explicitly, this is evidence against the existence of any independent astrological 'effect'.

However, Freud argued that his evidence for thought-transference as an explanation for astrology and other prophetic experiences should not be used to support other occult phenomena but nevertheless opened the door to a substantial scientific breakthrough. He wrote that 'I have nothing to say about all the other miracles that are claimed by occultism. My own life, as I have already openly admitted, has been particularly poor in an occult sense. Perhaps the problem of thought transference may seem very trivial to you in comparison with the great magical world of the occult. But consider what a momentous step beyond what we have hitherto believed would be involved in this hypothesis alone'. 13

Thus, although Freud saw the increasing interest in the occult, including astrology, as partly a psychological compensation for the material disruption of the First World War, and as a profound threat to science and civilisation, he believed that some occult phenomena might be genuine, and that their explanation could lead, if carefully handled, to an intellectual revolution.

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- 1. Sigmund Freud, 'Psychoanalysis and Telepathy', 1921, in James Strachey (trans.) *The Complete Psychological Works of Sigmund Freud*, Vol. XVIII, London, 1955, pp 177-194.
- 2. ibid. p 177.

- 3. ibid. p 178. Freud's sentiments were echoed by Richard Dawkins in 1998: 'Quantum uncertainty and chaos theory have had deplorable effects upon popular culture...Both are regularly exploited by those with a bent for abusing science and shanghaiing its wonder', *Unweaving the Rainbow*, London, 1998, p 188.
- 4. Freud, 'Telepathy', p 178.
- 5. ibid. p 180.
- 6. ibid. p 117, 19. C.G.Jung, *Memories, Dreams, Reflections*, London, 1963, p 173. See also Frank McGillion, 'The Influence of Wilhelm Fliess' Cosmology on Sigmund Freud', *Culture and Cosmos*, Vol. 2 no 1, p 36.
- 7. Freud, 'Telepathy', p 181.
- 8. ibid. p 182.
- 9. ibid. p 181.
- 10. ibid. p 182.
- 11. ibid. p 184.
- 12. ibid. p 184.
- 13. ibid. p 193.

SKEPTICISM IN THE TWENTY-FIRST CENTURY

Facing up to Old Shortcomings and New Challenges

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Paper presented at the 9th European Skeptics Congress, Maastricht University, Holland, 17-19 September 1999. Revised text.

ABSTRACT This article argues that the content, form and style of skeptical discourse should be reformed in the twenty-first century. In terms of content, it is argued that greater attention should be given to complex paranormal claims. It is also argued that skeptics should go beyond pseudoscience and the paranormal to analyze all collective and social myths. In terms of form, I contend that the skeptics should develop evidence-based communication strategies and avoid circumstances that are likely to lead to messages being evaluated on a superficial basis. Finally, on the matter of style, I suggest that skeptics should learn from the many mistakes made by the anti-cult movement and adopt a restraint, empathy and tolerance befitting the role of a critic in modern pluralistic society.

Complex claims

In several areas the claims that confront contemporary skeptics are the subjects of large literatures and complex arguments. For example, in the case of parapsychology, the body of published work extends to hundreds, if not thousands, of academic journal articles, books and chapters (for recent reviews, see Radin, 1997; Stokes, 1997; and Irwin, 1999), while the number of randomised controlled trials on complementary therapies has recently been estimated to be some 8,000 (Vickers, 1998). As the twenty-first century wears on, the simple passage of time, combined with the tendency towards professionalization in areas such as homoeopathy and chiropractic (Cant and Sharma, 1999; Saks, 1999), is likely to lead to more and more academic publications on matters that are already complicated to begin with. These trends are also likely to produce ever more areas where arcane experiments and high-flown arguments are the standard items of evidence and debate.

the response of skeptics to present, Αt sophisticated claims often seems to be poor. If you examine the back issues of a publication such as the Journal of Scientific Exploration, you will find that many of the arguments raised within its pages have gone unanswered. Similarly, if you consider just the central lines of experimental evidence relied upon by those parapsychologists who consider that convincing proof of paranormal powers has now emerged (see, for example, Radin, 1997), it appears that there has been relatively little substantial analysis by skeptics in the last few years (for some exceptions, see French, 1996; Wiseman and Schiltz, 1997; Wiseman and Milton, 1998, 1999a, 1999b; and Jeffers, in press). One extreme example of inattention to data and arguments can be found in the text What is a Skeptic which is

printed at the beginning of each issue of the American Skeptic magazine. According to this text:

"Some claims, such as...ESP...have been tested (and failed the tests) often enough that we can provisionally conclude that they are not valid."

As a reply to the case presented by parapsychologists (cf. Radin, 1997), this is painfully unconvincing.

In another extreme instance of a failure properly to address a complex issue, Mike Hardwidge (1999), writing in the British magazine The Skeptic, recently discussed the greater levels of religious belief amongst women than men. The question of whether there are gender differences in religious belief, and, if so, what the explanations are, has been much researched and debated psychologists and sociologists (see Beit-Hallahmi and Argyle, 1997: 139-147; Francis, 1997; and Walter and Davie, 1998). Hardwidge seems unaware of the literature and addresses not a single contribution to it. The result is embarrassing and all too likely to bring the skeptical movement into disrepute amongst the knowledgeable. Other failures to keep abreast of the literature could be cited. I shall restrict myself to mentioning that it appears that the mainstream skeptical publications have fallen a long way behind the academic debate about homoeopathy, and relatively few of several recent reviews, meta-analyses and discussions (e.g. Boissel at al, 1996; Barnes and Ernst, 1997; Linde et al, 1997; Ernst, 1998; Ernst and Barnes, 1998: Ernst and Pittler, 1998: International, 1998; Ernst, 1999; and Linde et al, 1999) have generally been noticed in such publications.

It may perhaps be thought that the complicated arguments formulated by academic proponents need not be discussed because they have little impact on the general public. In my view, complex claims cannot simply be ignored in favour of the more simple items that circulate in the popular

media. Even if we set aside the matter of whether it is intellectually honest to address only the least substantial subjects within our chosen realm, it should be noted that professional and academic proponents of dubious claims possess a status that may allow them to exercise influence in important industrial, clinical, governmental and other institutional circles. For this reason, they have the potential to have real consequences for social life. Whether this is equally true of the lurid tales that from time to time capture the passing interest of the entertainment media seems open to doubt.

Unfortunately, the proper evaluation of large bodies of complex arguments and experimental data requires detailed, fastidious scholarship and the use of concepts and tools unfamiliar to the general public. For instance, within the social sciences, parapsychology, and medicine, the tool of meta-analysis¹ is being used with increasing frequency (see, for example, Radin, 1997 and Linde et al, 1997). Everyday skills and knowledge are impotent in the face of such analyses. Without some understanding of the evolving techniques of meta-analysis and the justifications offered for them (Sutton et al, 1999), the skeptic simply cannot offer a credible commentary on these lines of argument.

This and similar challenges posed by the professionalization of paranormal proponents raise serious problems for the skeptical movement. With some justice, Brian Siano (1995) has characterised CSICOP as "not so much a scientific organisation as it is a science club...that practices a form of investigative journalism"; and much the same can apparently be said of other national and local skeptical groups. Such clubs seem poorly equipped for the task of responding frequently and effectively to complex issues. If skeptical perspectives on advanced claims are to be offered more than occasionally, skeptical organisations must attract more academics into the movement than they currently do or at least encourage such persons to do more to address the claims that are of interest and concern to skeptics. Moreover, if sophisticated analyses of complex issues are to be effectively

communicated to the public, something more than the populist strategies seemingly preferred for much skeptical discourse must be used. Technical terminology and procedures can and should be explained in terms accessible to the layman, and every effort surely needs to be made to explain complex issues in as simple a manner as possible. Nonetheless, it has to be recognised that careful discussions of complex bodies of evidence and argument necessarily involve hard and sustained thought and perspectives that the general public must be taught to understand. Such discussions cannot be accommodated within articles seemingly composed for persons with vanishingly short attention spans and an addiction to frequent humorous interjections. They also cannot adequately be expressed within the confines of chat shows or, indeed, other television programmes.

Television

It is my impression that television is regarded by many skeptics as an important vehicle for the dissemination of skeptical ideas. But is this favourable attitude to televised skepticism warranted? I would suggest that several lines of research conducted into the reception of television programmes, and especially that relating to television news programmes (for extended reviews, see Gunter, 1987, 1991), are discouraging. Research indicates that viewers who are not forewarned to expect a test of their memory remember very little of the content of a news programme they have just watched (Gunter, 1987: 41-45 and 93-107). Other studies indicate that news programmes foster awareness of the personalities involved in events but do little to produce understanding of the more substantive aspects (such as the underlying causes of events) or technical elements of abstract issues (Gunter, 1987: 26, 41 and 191-2; see also Findahl and Hoijer, 1972 and Iyengar, 1991). Perhaps worse still, an Israeli study of the effects of economic news found that although viewers subjectively felt that their understanding of such concepts as the balance of payments, gross national product, valueadded tax, and the cost of living index was better for watching news programmes, there was almost no evidence that television produced objective improvements in comprehension (Adoni and Cohen, 1978). A similar pattern has been found in relation to weather forecasts: contrary to viewer's subjective perceptions, retention of the information given in forecasts, and even understanding of the symbols used in the broadcasts, is not good (Gunter, 1991: 231).

But what about actual skeptical television programmes? Research here appears to be limited. To date, two series have been studied. The first was a series of five programmes produced by the Italian skeptic Piero Angela in 1978 and broadcast by the Italian state broadcasting company, the RAI. The effects of this series were examined by means of questionnaires sent to a representative sample of the viewing audience by the RAI office before and after the series. The results generally indicated that levels of paranormal belief fell amongst viewers of the series, and that a substantial part of these falls persisted two months later (Angela, 1996). Unfortunately, the paper on this study I have seen does not give details of the changes in paranormal belief amongst people who did not watch the series. Whether the changes may have been due to something other than the series is thus not entirely clear, at least to me. It is also unfortunate that a longer term follow-up study was not carried out. A study by Thomas Gray into the effects of a critical university course on the paranormal found that a substantial part of the reductions in paranormal belief that had been found immediately after the course had been lost one year later (see Grey, 1985 and 1995). It would have been interesting to compare the results for Angela's television series at the same one-year stage.

The second series studied was called James Randi: Psychic Investigator, and the six episodes that made it up were broadcast in the United Kingdom in 1991 by a national commercial network (see Randi, 1991 for the book of the series). The Independent Broadcasting Authority's Research Department included items on the supernatural in

questionnaires given to a national panel of viewers before and after the Randi programmes. The results suggested that Randi's broadcasts had no effects on the levels of supernatural beliefs and experiences amongst viewers (Wober, 1992).

A third study used short extracts from actual programmes in an experimental setting (Sparks, Pellechia and Irvine, 1998). This compared the effects of two film clips. The first was about the Roswell incident and included no critical commentary. The second concerned a UFO captured on film. This clip showed that a computer enhancement by scientists had revealed that the UFO was a conventional jet aircraft. The results of the study indicated that the second, debunking, film reduced levels of belief in UFOs, while the first film did not.

Thus, the data available on the effects of skeptical broadcasts on levels of paranormal belief is somewhat limited and mixed. However, even had the evidence been stronger, I have grave doubts as to whether at least some kinds of television programmes are suitable vehicles for skeptics.

Elaboration likelihood model of persuasion

In my submission, the essence of skepticism is critical thinking; that is, seeking and having reasons for beliefs (see Siegel, 1997 for extended definitions and discussions of critical thinking). Mere persuasion is not our goal, and skeptical communication should reflect this. Methods that tend to minimise the likelihood of critical thought in the audience should be regarded as unethical and consequently avoided.

In this connection, I think it would be useful to consider the 'elaboration likelihood model' of persuasion developed by Richard Petty and various colleagues (for recent reviews, see Petty, 1994; Petty and Priester, 1994; Chaiken, Wood and Eagly, 1996; Petty, Wegener and Fabrigar, 1997; and Petty and Wegener, 1999). The elaboration likelihood model proposes that there are two routes

to persuasion. To quote from Petty and Priester (1994):

"The first, or 'central route,' to persuasion involves effortful cognitive activity whereby the person draws upon prior experience and knowledge in order to carefully scrutinize all of the information relevant to determining the central merits of the position ... In stark contrast to the central route to persuasion, the ELM holds that attitude change does not always require effortful evaluation of the persuasive communication. Instead, when a person's motivation or ability to process the issuerelevant information is low, persuasion can occur by a 'peripheral route' in which simple cues in the persuasion context influence attitudes." (pp. 98-99 and 101)

The cues that may be used in peripheral route persuasion include such things as the status or attractiveness of the person giving the message; the mood of the person receiving the message; the number and length of the arguments used; and the reactions of other people (Petty and Priester, 1994: 106).

The so-called central route to persuasion is not the same thing as critical thinking, for central route processing can be biased (Petty, Wegener and Fabrigar, 1997: 616-618). However, while central route processing is not sufficient for skeptical enquiry, I would suggest that it is necessary: critical thinking simply cannot exist in the absence of careful consideration of the objective merits of an argument. Peripheral route processing, on the other hand, is antipathetic to skeptical inquiry.

It follows, in my view, that skeptics should consider whether or not their communications will tend to trigger central route or peripheral processing. This is a complicated issue that I do not have time to address comprehensively here (see above references for discussions). However, I should like briefly to address the sort of shouting match.

audience-participation discussion programmes that appear to be a forum in which at least English and American skeptics often appear. According to the elaboration likelihood model, peripheral processing occurs where individuals lack the motivation or ability to examine arguments carefully. In the case of chat shows featuring groups of emotional individuals shouting at each other, it seems plausible to suggest that viewers are motivated more by a desire for entertainment than a wish to carefully evaluate evidence and argument. It also seems likely that viewers of programmes in which fragments of vanishingly short arguments swirl around in a cacophony of competing voices are not in a position carefully to evaluate the merits of the speakers' cases. Indeed, evidence suggests that the presence of distractions is one factor that conduces to peripheral processing (see, for example, Petty, Wells and Block, 1976). Given this, it seems fair to conjecture that the elaboration likelihood model predicts that viewers of this type of programme would generally engage in peripheral processing that bears no resemblance to the paradigm of skeptical enquiry. Until this prediction has been decisively falsified by specific evidence. I would suggest that skeptics should refrain as a matter of principle from appearing on such programmes.

In general, as we enter the twenty-first century, I would suggest that skeptics need to pay greater attention to the bodies of scientific research on communication and persuasion. For example, it seems to be widely thought that it is a good idea to use humour and other techniques to keep an audience in a good mood. But is this view a sound one? A number of studies have examined the effects of mood on persuasion processes. As one review recently stated:

The most well-replicated effect of mood states is that positive mood is associated with decreased systematic processing while negative is associated with increased systematic processing; as a consequence, postmessage attitudes expressed by

recipients in neutral or negative moods, compared to those in positive moods, have been shown to be more influenced by the quality of persuasive argumentation. In contrast, positive mood recipients' attitudes have been shown to be more influenced by heuristic cues..." (Chaiken, Wood and Eagly, 1996: 721).

This conclusion may only hold where there is nothing in the persuasion situation to predetermine the level of message elaboration; it may also be restricted to instances where it is easier to maintain a positive mood by not processing the persuasive message in depth (see Wegener and Petty, 1996). Nonetheless, it suggests that the common sense view about the benefits of inculcating a positive mood in one's audience is by no means invariably true.

Even those skeptics who consider that television is appropriate medium for skeptical communications would be well advised to take into consideration the research that has been conducted into the effects of various structural features of television programmes on audience reception. This research addresses the impact of such features as highly arousing but irrelevant footage; maps; headlines; and cutting between pictures (see Gunter, 1987 and 1991 for reviews); and it suggests that common production techniques actually impair viewers' memory and comprehension. Skeptical programmes should avoid these pitfalls. In addition, skeptics should not only be guided by the research that already exists, but conduct and encourage more research into the effects of their own communications. We should not need to speculate about what works and how it does so. Both the form and the content of our communications should be evidence-based.

Broadening the skeptical view

As well as giving greater attention to sophisticated claims within our traditional areas of interest, and refining the forms of our communications in general,

it is my view that the skeptical movement should broaden its outlook in the new millennium. In recent years, the movement has looked beyond paranormal claims and has analysed other issues (see Frazier, 1993 for a partial list)². Unfortunately, the criteria for deciding what is and is not an appropriate subject for discussion within the movement are rather vague. At times, the boundary appears to have more to do with a conservative ideological stance than any defensible objective criteria. For example, the environmentalist myth about Chief Seattle has been debunked (Abruzzi, 1999), but there has been little or no critical examination of the far more influential mythical Wild West of Hollywood and American folklore (on which, see, for example, Murdoch, 2000), or indeed of many of the other historical myths and errors that circulate within mainstream society and are sometimes even taught in the education system (see, for example, Ferron, 1984; Berghahn and Schissler, 1987; Shenkman, 1989; Loewen, 1995; Toplin, 1996; Kim, 1997; Nash, Crabtree and Dunn, 1997).

In my contention, the skeptical movement should become a movement for the analysis and exposure of all individual, social and official myths. In an age in which gender and racial stereotypes remain widespread within society, why should skeptics not look beyond issues such as superstitious thinking or feminist and Afrocentric pseudoscience and explain to the public the psychology and science of prejudice and stereotyping as well (see, for example, Bem, 1994; Burn, 1995; Lott and Maluso, 1995; Jones, 1996; Montagu, 1997; Swann, Langlois and Gilbert, 1999; and Valian, 1999)? At a time when destructive ethnic conflicts subsist in various parts of the globe, why should skeptics not address such general matters as the psychology of ethnonationalism (Kecmanovic, 1996) or such particular issues as the ethnic bias manifested by prominent psychiatrists in Serbia (Kecmanovic, 1999)? Why should we not point out to the constituents of the new Scottish national assembly that the kilt was an invention of an eighteenth century English industrialist and that the clan

tartans were created and promulgated in the nineteenth century through the efforts of cloth manufacturers, Scottish Romantics and two bogus pretenders to the Stuart throne (Trevor-Roper, 1983)? Why should we not rehearse the historical evidence that questions the very notion of a Celtic identity (Hawcroft, 1999; James, 1999; Pittock, 1999). Why, indeed, should we not direct our critical attention on invented national traditions, other national myths in general (on which see, for example, Hobsbawm and Ranger, 1983; Anderson, 1991; Porter, 1992; Hosking and Schöpflin, 1997), or such central questions of the day as the economic and social efficacy of free markets (see Kuttner, 1997)?

If we can examine hi-fi pseudoscience (Davis, 1991) and food defrosting trays (Wolke, 1997), I can see no rational grounds for ignoring issues such as sexism, racism, nationalism and the quasimystical worship of free markets. These belief systems are all susceptible to scientific examination to some degree; they all have social consequences; and they all seem to be poorly understood by the public and poorly argued in the mass media. By summarising and popularising relevant work by social and other scientists, the skeptical movement could help bring much-needed clarity to social debates shrouded in common sense speculation and prejudice. We would also extract ourselves from what I can only regard as the dead-end in which we have placed ourselves. A concentration on the paranormal and pseudoscience too often confines the skeptical movement to the semiserious borderlands of the world of mass entertainment, and no amount of inflated apocalyptic rhetoric (Siano, 1995) can disguise the triviality and inconsequentiality of much of what we deal with.

It is my suggestion that in the twenty-first century the skeptical movement should promote the use of critical thinking generally and challenge unfounded claims emanating from both dominant institutions and fringe movements. At present, it appears, there has emerged a huge gulf between the knowledge

acquired within the academy and that which circulates amongst the general public. Such mass ignorance is hardly consistent with the notion of an active and responsible citizenry (See Wildavsky, 1995: 395 et seq.). Nor is it a source of comfort to anyone who considers it important that individuals should know themselves and their world. The skeptical movement should take it upon itself to promote the skills and the motivations needed to pursue reliable information in an age where almost every issue is the subject of a professional research literature. That is, we should both teach appropriate research strategies and seek to promote what were once called a love of learning and an appreciation of the life of the mind, but are now perhaps known by psychologists as a need for cognition (see Cacioppo et al, 1996 for a review of the literature on this concept). We should also criticise social phenomena that encourage mindlessness, uncritical thought or just excessive distraction from the pursuit of knowledge. These phenomena surely go beyond bad science education and the onesided promotion of the paranormal. For example, I would speculate that they may include:

- a superficiality of mind (or at least the alternative priorities) promoted by an economy (and especially a media) that requires the constant replacement of high volumes of goods, services, stories and thoughts;
- the cognitive styles fostered by television (Postman, 1985);
- 3) a hierarchical economic structure that at least in places discourages critical thinking on the part of subordinates;
- a possible inclination towards mindless leisure created by the increasing amount of time spent on intellectual matters by information workers during working time; and

the family care responsibilities placed on women.

Proper and improper criticism in a pluralist society

Whether or not we do decide to broaden our horizons in the new millennium, I think it is important that we take care in the coming years to ensure that our criticism is expressed in a form consistent with the requirements of a pluralist society. To illustrate how critics can promote their perspectives in ways that erode individual freedoms and the tolerant and peaceful operation of civil society, I should like to conclude this paper by looking at the anti-cult movement.

The anti-cult movement arose at the end of the 1960s and start of the 1970s. During these years the numbers of new religious movements appearing in Western Europe and North America increased sharply (Wuthnow, 1988; Beckford and Lavasseur, 1988). Various groups such as the Unification Church (or "Moonies") and the International Society for Krishna Consciousness (ISKON or the "Hare Krishna movement") expanded rapidly (see, for example, Bromley and Shupe, 1979; Bromley and Shinn, 1989). Many of the new converts were middle-class and well-educated young people, who abandoned the pursuit of higher education and social success for cloistered lives of intense religious devotion in unfamiliar and collectivist religious groups. Confronted with this deviation from socially-accepted life paths, and the consequent reduction or loss of filial contact, the parents of some converts grew concerned and fearful. As apprehensive parents slowly banded together, the first anti-cult groups were formed. Later, the increasing involvement of clinical psychologists and other third parties led to the professionalization of aspects of the movement (for further details, see Shupe and Bromley, 1980, 1994; Bromley and Shupe, 1993; 1995; Introvigne, 1995; Chryssides, 1999). In more recent years, the North American anti-cult movement has suffered a series of setbacks. For example, a number of legal

judgements have rendered more difficult several legal strategies pursued by anti-cult activists (Anthony and Robbins, 1995; Richardson, 1996; Ginsburg and Richardson, 1998; Melton, 1999). In addition, the Cult Awareness Network, one of the key anti-cult organisations, was recently destroyed when it was held legally liable for damages arising out of a kidnapping facilitated by one of its officers (CESNUR, 1999; Melton, 1999). In Europe, however, anti-cult groups remain active and influential in various countries (Introvigne, 1998; Melton, 1999). Around the globe, moreover, individuals and small groups of individuals of diverse views continue to be active in attacks upon certain new religious movements (see Introvigne, 1999 on some of the more extreme activists).

Central to many of the critiques of "cults"3 offered from within the anti-cult movement is the notion of "brainwashing". Rob Nanninga brainwashing at the 9th European Skeptics Congress, and I do not propose to go over the same ground here (for other critiques, see Bromley and Richardson, 1983; Barker, 1984; Anthony, 1990; Richardson, 1993a; Anthony and Robbins. 1994; Ginsburg and Richardson, 1998; Dawson, 1998: 102-127). Suffice it to say that this pseudoscientific concept appears originally to have been applied to the conversion and retention of "cult" members out of a sense of bewilderment and alarm at how well-positioned members of mainstream society could enter into profound commitments to deviant and demanding religions (Shupe and Bromley, 1979; Beckford, 1981). This should serve as a warning to us to us. Skeptics have often enough argued that paranormal beliefs arise from attempts to explain seemingly anomalous experiences (see, for example, Alcock, 1981; Hines, 1988; Beyerstein, 1996; Lange and Houran, 1998). We should be careful not to allow our own incomprehension in the face of strange and seemingly irrational beliefs to serve as springboard into pseudoscience. The parapsychologist Henry Irwin (1999: 287) has pointed out that skeptical researchers are inclined to explain paranormal beliefs in terms of cognitive

deficits, and my own observations and discussions suggest that many skeptics' accounts of the psychology of paranormal belief begin and end with the word 'gullible'. Such attitudes may follow the pre-scientific anti-religious and anti-superstitious sentiments of various Enlightenment figures (see Stark, 1999). However, despite the confidence with which the claim that paranormal believers lack critical thinking skills is propounded, this hypothesis is far from being securely supported by evidence (Roe, 1999). Furthermore, skeptics seem little inclined to think in terms of paranormal believers being more creative than non-believers, despite evidence consistent with this view (see Thalbourne, 1995 for one study and additional references). Perhaps we are here being led astray by our prejudices and our inability to enter into an empathetic and sensitive understanding of the attractions of belief systems that are alien and perhaps abhorrent to us personally.

In tandem with invoking questionable concepts of brainwashing, elements of the anti-cult movement have also sought to interpret the process of conversion and commitment to a so-called cult as involving psychiatric disorders (for discussions, see: Kilbourne and Richardson, 1984; Flinn. 1987; Anthony, 1990; Post, 1992: Richardson, 1993c; and Anthony and Robbins. 1995). These interpretations of cult adherence are almost wholly unsupported by evidence (for reviews of the evidence relating to the mental health of "cult" members, see: Richardson, 1985, 1995; Rochford, Purvis and Eastman, 1989; Saliba, 1993; Galanter. 1999; and Lilliston and Shepherd, 1999; for a recent study, see Peters et al, 1999). Instead, newly invented diagnoses that lack both clarity and substantiation, or existing disorders, are discerned amongst "cult" adherents on the basis of biased samples and a priori assumptions derived from little more than a rationalist distaste for the beliefs propounded by "cults". To avoid repeating such dubious exercises in psychiatric pseudoscience. skeptics should be slow to move from a finding that beliefs are questionable to the conclusion that the holders of extraordinary beliefs are

psychopathological. Adherence to deviant religious and paranormal beliefs should not be medicalized or explained by extraordinary cognitive or influence processes for which there is no evidence independent of that supposedly offered by the beliefs themselves. Extraordinary beliefs do not necessarily require extraordinary causes. In addition, ordinary processes of social influence and social cognition should not be carelessly construed so as to conform to stereotypes about fraudulent and manipulative leaders or groups and passive, foolish or victimised members (for example, by ignoring the active cognition of the believer: on which see Chaiken, Wood and Eagly, 1996). These processes do not become sinister agents of zombification or coercion just because they are found at work within the walls of a new religious or other unusual group.

As another arm of its campaign, the anti-cult movement has promoted or instigated legislative measures aimed against groups regarded as "cults". Amongst other things, the proposed measures have sought to inhibit the use of recruiting practices considered to be deceptive, coercive or otherwise unacceptable. Alternatively, to give just one example, they would permit civil actions for damages against groups who, for example, hold themselves out as providing psychological benefits, and require a fee or contribution, yet do not have the assistance of a licensed psychiatrist or psychologist (see Flinn, 1987: Table 2 for summaries of various bills proposed before American state legislatures; plus Gutman, 1985; Richardson, 1986; and Bromley and Robbins, 1993).

I think that these legislative proposals raise considerations to which the skeptical movement has so far given too little notice, perhaps because sections of the movement have subscribed too unthinkingly to a consumer protection model of skepticism (on which see, for example, Carlson and Masche, 1989). One of these considerations is the extent to which the state can legitimately impose the requirements of secular contractualism on

religions. As David Bromley and Bruce Busching (1988) have pointed out, religion generally involves covenantal and not contractual social relations. Contractual social relations pursue the goals of mutual agreement and exchange. They operate through mechanisms of rational and prudent negotiation. They are controlled by laws that impose penalties for failures to perform in accordance with the agreed exchange. By contrast, covenantal relations have as their objective mutual commitment. Such relations proceed by means of processes of bonding and the display of solidarity. Infractions are considered to occur where unity is lost or disrupted, and the resumption of connectedness is sought through penance and "eliminating individual 'willfulness' and surrendering to and uniting with divine purpose" (Bromley and Busching, 1988: 23S. See that article for a much fuller account of contractual and covenantal social relations). The legislative attacks on "cults" I have mentioned are often based on a contractual model and the rationalist presuppositions that inform it. In some instances, they conceive of the relationship between a religious group and an adherent as being fundamentally the same as that between a professional provider of clinical services and a In others, they presuppose those client. expectations of full, immediate and accurate disclosure of information (about doctrine etc.); careful, deliberate and self-interested reflection by the parties; and expressly and rationally-informed consent that are normative in the negotiation of contracts. The enactment of such anti-cult bills would, therefore, impose on religions what is in effect an official state model, drawn from an alien secular tradition, of legitimate religious belief and conduct.

I would suggest that, apart for serious criminal acts and the protection of certain rights of minors, it is not for the State to define which forms of religious life are appropriate for its citizens and which are not. Freedom of religion is seriously abridged if citizens are restrained at penalty of law from acts of faith and commitment that are rash, unjustified, reckless or even downright senseless to the wider

society. Freedom of religion is also harmed whenever the state assesses the truth of religious beliefs and hinders those it regards unacceptable or illegitimate. For these reasons, skeptics should not, in my view, promote or initiate legal proceedings or changes that impose penalties on religious groups that fail to satisfy rational standards of proof for their claims (including claims for healing) or that operate according to a logic of faith or commitment that is at variance with secular contractualism. This is not to say that we may not criticise the epistemology or claims of such groups. It is just that we should be cautious of imposing rationalism by legislative fiat.

If we do elect to criticise new religious movements, or indeed any other group or individual, I would suggest that it is important that we do so in a restrained and temperate manner. Several lines of evidence suggest that the public hold extremely negative attitudes towards so-called "cults" and view "cults" through the lenses of a distorted and distorting stereotype (see, for example, Bromley and Breschel, 1992; Ogloff and Pfeifer, 1992; Pfeifer, 1992; Richardson 1992). The siege of the Branch Davidian compound in Waco shows what results these fearful misapprehensions can have. During the siege (and, indeed, before), the authorities appear to have subscribed to the anticult movement stereotype. The Branch Davidians sincere and far from intrinsically violent religious convictions and perspectives were ignored, and the group was viewed in terms of slavish followers and abusive and conniving leaders. Seemingly as a result, the authorities failed adequately to explore the possibility of negotiating a solution that would conform with the Branch Davidians's religious worldview and would not require the group to renounce its fundamental convictions. In addition, the authorities eventually launched the final, fatal assault in order to prevent dangers that appear to have existing only in the imaginations of the authorities and the anti-cult activists who advised them (see Wright, 1995). Other incidents, such as that of the mass suicide/murder in Jonestown (Hall, 1987), show that clamorous oppositional

movements that threaten the very survival of the group can serve as an important factor in precipitating vulnerable groups into violence (see also: Reader, 1996; Hall and Schuyler, 1998; Hall et al, 2000; Wessinger, 1999, 2000). In the case of despised and deviant minorities, we should take every possible precaution against igniting or supporting moral panics about them (see Goode and Ben-Yehuda, 1994 and Victor, 1998 on moral panics). If nothing else, we should bear in mind that violent or intemperate external criticism can be selfdefeating. Criticism of a religious belief system that forms an important component of a person's selfconcept is likely to produce a defensive informationprocessing strategy by the believer (Chaiken, Giner-Sorolla and Chen, 1996; Chaiken, Wood and Eagly, 1996: 714-6). A manifestly hostile and derogatory stance on the part of the critic will only facilitate the easy dismissal of his or her arguments as biased and lacking in merit and insight. In the extreme, the critic's actions may actually serve to increase the strength of adherents' commitment to a group and persuade the wavering not to leave (Barker, 1983).

I should like to finish by suggesting that not only should we be careful in our criticism of new religious movements or other perspectives we consider to be questionable, we should also on occasions actively defend the proponents of these views. Groups labelled as "cults" continue to be attacked in various parts of Europe and the rest of the world. Some of these attacks take the form of unsubstantiated legal accusations of child-abuse (Palmer, 1998, 1999; Richardson, 1999); others appear in statesponsored reports that embody unfounded allegations misdemeanours. of The official European reports produced on "cults" vary in dubiousness (see Introvigne, 1998 and Richardson and Introvigne, 1999 for recent discussions of reports published in Europe; see also Boyle and Sheen, 1997 for information on religious freedom generally). The most worrying type of report has appeared in Belgium, France and the Swiss canton of Geneva (Introvigne, 1998 and Richardson and Introvigne, 1999). These reports feature four elements that together make them distinctive and of

particular concern to social scientists and civil libertarians:

- A denial that various minority religious are religions.
- An acceptance of brainwashing and mind control models.
- An excessive reliance on the testimony of small numbers of disgruntled exmembers turned public critics.
- An excessive reliance on anti-cult groups in preference to scholars (Introvigne, 1998 and Richardson and Introvigne, 1999).

In these and other reports we clearly find science being abused or ignored in the service of social repression and intolerance. Why, then, have skeptics been so very silent on this matter? Indeed, why has the skeptical movement done so little in the preceding 30 years to combat the pseudoscience promulgated by the anti-cult movement? Why did the use of the pseudoscientific concept of brainwashing to justify the forcible kidnapping (or "deprogramming") of many hundreds of people (Bromley and Richardson, 1983; Bromley, 1988) attract no response from skeptics? The answers to these questions, I would suggest, throw some of our limitations into stark relief at the dawn of the new millennium. We are blinder than we think we are and than we should be.

Conclusion

In summary, it is my contention that in the twenty-first century skeptical discourse should be both extended and refined. We should look beyond our traditional frontiers and subject individual, collective and official myths of all kinds to skeptical scrutiny. When doing so, we should give proper consideration to complex arguments and seek to supply to the general public the tools and motivations they need to negotiate the cluttered

information environment of the new millennium. We should also aim to exemplify the virtues of diversity and pluralism, defending despised minorities subjected to pseudoscientific and unwarranted attacks, and declining to demonise or pathologise those of radically different epistemologies or belief systems from our own.

Notes

- in the context of clinical trials, a metaanalysis has been defined as "a statistical analysis that combines or integrates the results of several independent clinical trials considered by the analyst to be 'combinable" (Huque, 1988). For details of the methods, justifications, and shortcomings of metaanalysis, see Akers (1985); Bailar (1997a, 1997b); the six-part series published in the British Medical Journal (Egger and Smith, 1997, 1998; Egger, Smith and Phillips, 1997; Smith, Egger and Phillips, 1997; Egger, Shneider and Smith, 1998; Smith and Egger, 1998); the series of articles in the 13 September 1997 special issue of the British Medical Journal; and Sutton et al (1999). For a straightforward guide on how to critically evaluate a meta-analysis, see Greenhalgh (1997).
- 2 Some skeptical publications have diversified further than others. The American journal *Skeptic*, for example, has addressed quite a number of socially contentious non-paranormal claims. Not all of what I have to say in the following paragraphs applies to that periodical or others of similar scope.
- 3 The term "cult" is widely regarded by scholars as a pejorative social weapon unacceptable within scientific discourse. When the term is used, it is often given a technical meaning. See Richardson (1993b) and Dillon and Richardson (1994) for discussions.

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SOME STORIES ABOUT HYPNOSIS

Michael Heap

This paper is based on a talk given by the author at the tri-annual congress of the European Society for Hypnosis in August 1998, The Netherlands.

I swear that I shall tell the truth, the whole truth and nothing but the truth.

I am going to tell you some stories about a number of events, or as I would prefer to call them, dramas, in which I was allocated a fairly minor role. They are all true stories, inasmuch as it is possible for any story to be true. The first stories are about stage hypnosis.

In recent years I have been involved in a number of cases of alleged harm brought against stage hypnotists. Let me first give you some of the background. In Britain organisers of stage hypnosis shows in places of public entertainment must apply for a licence from the local council. This is enshrined in the 1952 Hypnotism Act. The Act arose from some concern about the safety of stage hypnosis. Here is the part of the Act that defines hypnosis.

"Hypnotism" includes hypnotism, mesmerism and any similar act or process which produces or is intended to produce in any person any form of induced sleep or trance in which the susceptibility of the mind of that person to suggestion or direction is increased or intended to be increased but does not include hypnotism, mesmerism or any such similar act or process which is self-induced.

Remember that legal definitions are not the same as scientific definitions.

In the late 1980s unsuccessful attempts were made to restrict the use of hypnosis to certain professional groups. However, the British Home Office drew up guidelines for the conduct of stage hypnosis to be attached to licences with a view to protecting the participants.

In 1993 a young woman died during the night after taking part in a stage hypnosis show. The verdict of the inquest was death by natural causes. However, the mother of the deceased understandably felt that her having participated in stage hypnosis was a necessary element in the story of her daughter's death. She and others mounted a campaign to have stage hypnosis prohibited. Eventually she was allowed leave to appeal against the coroner's verdict. Her lawyer constructed a story in the form of a mass of documents that they presented to the Royal Courts. However, the judge did not consider that the original story should be changed.

As a result of all the publicity stimulated by the campaign against stage hypnosis other people came forward with stories about how they too had been harmed by participating in stage hypnosis shows. Some attracted the attention of the media and were rather bizarre, such as the story of a man who completed and submitted a lost property form after being told that his brain had gone missing.

Also at that time, but independent of these proceedings, a lady successfully sued a theatre in Glasgow after breaking her leg when she fell off the stage during a stage hypnosis show. Meanwhile, a student sued a stage hypnotist when he fell over while running away from an imaginary army of giant

mice. In his story he claimed to have a phobia of mice. His case was unsuccessful.

I first started to be interested in hypnosis in the late I soon became aware of the fact that mainstream social and cognitive psychologists were offering more parsimonious stories than the more traditional ones usually told by medics and lay practitioners, which revolved around the concept of the trance state. Notwithstanding this, the expediencies of clinical practice means that such disagreements are usually not particularly crucial and we can all work amicably together. However, when I listened to my colleagues talking about the dangers of stage hypnosis and the case for outlawing it, I was struck by the following thought. Supposing that one day a case was brought to court; then the two stories would be represented on opposing sides. This is so because, whilst social and cognitive theories do not contradict the claim that stage hypnosis can be harmful, a more compelling case emerges when we portray the stage hypnotist as someone who puts the participants in a state of trance. Therefore the story of the trance would be favoured by the claimant's lawyers, and the other story by the defence (that is the stage hypnotist's side). This has a certain irony. Stage hypnosis attracts the audience's fascination owing the ideas that the participants are in some special mental state of mind and not just acting the part.

I did not make a record of my prediction, but let's see what has happened since.

As a result of the campaign against stage hypnosis, at least four cases were brought against stage hypnotists by alleged victims. One of these never reached trial, owing to the claimant's failure to cooperate with the defence. One came to trial but the trial collapsed and I shall talk about this in a moment. A third also reached the Court and the defendant won. Again I shall mention this in a moment. A fourth one has yet to be resolved. In all cases the Statements of Claim by the claimant's side alleged that the stage hypnotist places his

participants in a state of trance. For example, in the first of the aforementioned cases it was averred that hypnosis "involves the interference with the conscious will of the subject(s)"; also "they are induced to perform acts that would be embarrassing and/or distasteful to them if fully conscious".

The case in which I was most involved I shall call Norman versus Byrnes. Mr. Norman's story is that on Wednesday June 30th 1993, he took part in Mr. Byrnes's stage hypnosis show at a hotel At some point in the show Mr. Byrnes offered to help him give up smoking. Amongst other things, he gave him a post-hypnotic suggestion that from now on cigarettes would taste foul. Towards the end of the performance Mr. Byrnes suggested to his volunteers that as they were sitting in their chairs they would feel more and more sexy. He then hit his microphone repeatedly calling out "10 times more sexy", "20 times more sexy".....and so on. Mr. Norman seemed to become carried away; he stood up and made thrusting movements at the chair. Mr. Byrnes then suggested to the participants that when they went to bed that night they would feel even 50 times more sexy than they did then.

Mr. and Mrs. Norman both confirmed that when they went to bed that night, as soon as Mr. Norman laid down on the mattress he started shaking violently and bouncing up and down. Mr. Norman claimed that he was having sexual intercourse with the mattress and that indeed he did find the mattress sexually attractive. Thus he continued simulating intercourse with the mattress and the other contents of his bed, with the exception of his wife.

At some point Mrs. Norman decided to have a cigarette. When she lit it her husband immediately felt sick and ran to the bathroom, coughing violently. After some time he returned and resumed his sexual activity. Throughout the night Mrs. Norman could only subdue him by blowing cigarette smoke at him, whereupon he would rush to the bathroom and be sick. They both agreed that all this went on

unceasingly from 1 a.m. to 5 a.m. after which he slept until 10.00 a.m. and was fine that day.

For the next three days Mr. Norman was relatively well during the day and spent the evenings drinking at the same hotel. However, during the nights his behaviour continued to be disturbed and he had the same uncontrollable urge to have sexual intercourse with his furniture and domestic appliances. Specific articles that were allegedly the objects of his copulatory interest included, as well as the contents of his bed, the bedroom ceiling, an armchair, his bath, a tumble dryer (at least while it was tumbling), and, if thought if not in deed, various ornaments, and the ambulance that came to take him away.

On Monday, five days after her husband's stage hypnosis experience, Mrs. Norman went to see a lawyer; on Wednesday Mr. Norman went to see his doctor. He was prescribed antidepressants and several days later his doctor "performed hypnotherapy on him to remove the post-hypnotic suggestion" and this appeared to be successful. However, about three weeks later he was referred to a psychiatrist, Dr. Thomas, with "depression and delusions" and violent behaviour.

Dr. Thomas saw Mr. Norman on October 18th. Several days earlier Mr. Norman had been the subject of an exorcism in a local church. This was actually conducted by his doctor. In his report Dr. Thomas states that Mr Norman's exorcism was successful and, at the time of his seeing him he had returned to normal. In his story, Dr. Thomas ascribed Mr. Norman's problems to Mr. Byrnes's failure to take him "out of the hypnotic trance". He considered that the exorcism had been successful because (I quote) "the counter-suggestibility of the proceedings in Church sufficed to take him out of the hypnotic state into which he had been put on the 30th of June 1993".

Things appeared to go quiet, and Mr. Norman did not receive any medication or treatment for these problems until four months later. Here I would like mention, without further comment, the fact that around that time considerable media attention was being given to a number of stories concerning the adverse effects of stage hypnosis. From then on, for the next 3½ years Mr. Norman continued to present with a bewildering array of mental symptoms variously diagnosed as a dissociative state, hypomania, hysteria, Ganser's syndrome, major depression, post-traumatic stress disorder, paranoid psychosis and schizo-affective disorder.

Mr. Norman's solicitors obtained further expert witness testimony from Dr. James, a consultant psychiatrist and former official of the British Society of Medical and Dental Hypnosis. Dr. James did not see Mr. Norman, or his wife, but relied on medical reports and on witness statements by Mr. and Mrs. Norman. Dr. James made several allegations of negligence against Mr. Byrnes, two of which I shall describe here.

In response to an Answerphone message from Mrs. Norman soon after the stage hypnosis show, Mr. Byrnes telephoned Mr. Norman and reassured him in some general way that he was no longer hypnotised and he would feel better. Then, on July 3rd, at the suggestion of Mr Norman's family and staff of the Casualty Department, Mr. Byrnes visited Mr Norman at his home. He attempted to reassure him and to remove the alleged ill-effects of his stage hypnosis experience by further hypnotic suggestion.

Dr. James's charge against Mr. Byrnes was this: He did not take enough trouble to establish what the exact counter-suggestion should have been to dispel the post-hypnotic suggestion under which Mr. Norman was presumed to be behaving when having sex with his furniture and domestic appliances. He considered that Mr. Byrnes used too "non-specific" a kind of suggestion.

Dr. James also implies that because Mr. Norman did not trust Mr. Byrnes himself, Mr. Byrnes was negligent in not summoning a person trusted by Mr. Norman, such as his doctor, to attend the 'wiping out of the suggestion ceremony'. The assumption

here is that the presence of somebody like Mr. Norman's doctor would in some way assuage his suspicion and render the counter-suggestion more potent. Thus Mr. Norman would have been spared a four years of mental illness.

When I consider these serious allegations against Mr. Byrnes, I cannot help hearing in my mind the music 'The Sorcerer's Apprentice'. Dr. James casts Mr. Byrnes is in the role of an inept would-be wizard whose task, under the stern eye of a properly qualified master wizard, is to discover the best counter-spell or incantation that would lift the evil curse with which he had previously inadvertently bewitched Mr. Norman.

This case came to trial in September 1997. I sat in court every day, but on the fifth day, long before the defence had opened its case, the trial collapsed. Mr. Norman's financial backer withdrew, his legal aid having already been withdrawn. The reason for this is as follows: had Mr. Norman won his case, the compensation that he would have received would have been claimed back by the state to offset the considerable welfare and sickness benefits he had received while indisposed. Thus he would have been financially no better off and legal aid is not granted when such is the case.

The most high profile case, which I was not directly involved in, has been Gates versus McKenna. The defendant, Paul McKenna is a very well known stage hypnotist who used to have a show on television. He was sued by Christopher Gates who claimed that after participating in one of his shows in 1994, he developed a schizophrenic illness. In accordance with my prediction, in constructing their story, the claimant's side felt it necessary to go some length to try to convince the judge that Mr. Gates had been put into a state of trance by Mr. McKenna. The mantle of the expert witness for the defence naturally fell on Dr Graham Wagstaff, the leading non-state theorist of hypnosis in Britain. Mr. McKenna won the case. At least some media reports of his performance in the witness box were very favourable. In his summing-up, the judge, Mr.

Justice Toulson, stated this: "By taking part in the show the plaintiff consented to participating in what were no more than a series of silly sketches, harmless in themselves".

Thus Mr. McKenna emerged the unlikely public champion of socio-cognitive theory in Britain. But I should mention that a few stage hypnotists have rediscovered the original findings of Professor TX Barber, replicated by social and cognitive psychologists since, on the true role of the hypnotic induction. So if the local authority refuses to grant licences for stage hypnosis then they can still do their show but without using hypnosis.

Before either of these cases reached court, the British Home Office had already set up a Panel of Experts to study evidence for the alleged dangers of stage hypnosis. The members of this group were two psychologists and two psychiatrists who had no particular expertise in hypnosis and therefore no prejudices either way. Evidence was invited from anyone with an interest in the debate. The report and recommendations of this panel were announced in October 1995. It concluded that stage hypnosis does not pose a significant mental health risk that would warrant its prohibition. I did not say to my colleagues at that time "I told you so". But I could have done. After consulting a wide range of people the Panel brought out a revised set of Model Conditions for the conduct of stage hypnosis.

The cases that I have so far talked about have been civil actions. I have been involved in a number of criminal cases concerning stories of assaults during hypnosis. This is one such case. The complainant was a woman who invited a lay hypnotist, a man with no qualifications at all, into her bedroom. She lay on the bed and, with just a candle for illumination, he hypnotised her to stop smoking. The allegation was that during these proceedings he indecently assaulted her.

What story do we tell that helps us explain the following anomalies: she knew what was going on

and was repulsed by what the hypnotist was doing; she felt paralysed and could not stop him, either physically or verbally yet she was able to check the more advanced probing of his hands by squeezing her thighs tightly together; she was not responding to his suggestions to relax or to forget what was happening, she responded to his instruction that once it was all over she would give him a kiss on his cheek; she was unable to re-join her husband downstairs afterwards, but could only give vent to her distress once she had fled to her neighbour's house.

One story requires us to consider the subtle interplay of a range of influences that are part of the study of human psychology. But such a story may leave some people feeling dissatisfied and needing something a bit more special. Thus we can engage in the tautological exercise of inventing something called a hypnotic trance and conveniently endowing it with all the properties necessary to explain whatever we find incongruous or puzzling.

The story that this woman was hypnotised would, I dare say, be the one she and her husband preferred as they struggled to make sense of it all; and it was certainly the explanation preferred by the newspapers. I did not attend the trial but I read the newspaper account in which the judge, while sentencing the culprit, was quoted as saying that he was "dangerously good at hypnosis".

Criminal cases are different from civil cases as far as the submission of expert evidence is concerned. In Britain, as in some other countries, criminal cases are argued in court on extreme adversarial lines. That is, experts are summoned by both sides and, unless the testimony happens to be favourable to his or her client, the role of the opposing barrister is to discredit the evidence of the other side by foul means or fair. Such has been the case for civil actions until some very recent reforms in which the sides are urged to have one agreed expert. (Goodness knows what will happen next time there is one involving hypnosis.) In the case of civil actions the expert witness is able to prepare a

lengthy report that the judge will study in order to arrive at a decision. With criminal cases the jury do not see the expert witness's report, but they listen to his or her evidence from the witness box. Hence it is in the interests of the side the expert witness is representing that the evidence is kept fairly simple - at least not unnecessarily complicated.

In a recent case a gynaecologist of some eminence had over a dozen charges of indecent assault and one of rape brought against him by some of his female patients. He was using hypnosis with them, sometimes during internal examinations, without the presence of a third person. I was instructed by the defence to provide two reports. In my first report I was asked to answer a long series of questions such as "What is the nature of hypnosis?", "What are commonly used induction procedures?" "How does hypnosis differ from relaxation?", "Do subjects of hypnosis lose their will power?" and "How is memory affected by hypnosis?, In the second report I was asked to consider each complainant's charge in turn and discuss what might have happened if the charge were false. Naturally my two reports were of considerable length and complexity.

After submitting them I was invited to a conference of the defence lawyers and their client. This was in an historic part of London known as Temple where lawyers have plied their trade for centuries. We all sat round a table on which I could see my two reports - monuments of learned knowledge and meticulous scholarship.

"We shan't be using these", the barrister said. Summoning all my assertive skills I looked him in the eye and said "OK, fine." However I agreed to look at a summary of my first report and, after having made some minor corrections, it was disclosed to the prosecution. I was also asked to attend some of the trial to give advice to the defence and possibly to appear in the witness box.

During the three days that I attended the trial I was virtually ignored and at the end of the third day, the

prosecution case having been completed, I was told by the defence barrister that I was surplus to requirements. What he actually said was "Well, unless something goes horribly wrong we won't be calling you". In fact the only witness he did call was the defendant himself. What seemed to be happening was this. In his cross-examination of the complainants, the defence lawyer put great emphasis on the fact that the assaults in question happened many years ago and their memory was now likely to be very unreliable. Indeed their memories did at times prove to be inconsistent with such recorded facts as their hospital attendances and treatment. The expert witness brought by the prosecution was a lay hypnotherapist who was coaxed by the defending barrister into saying that people's memory for things that happen during hypnosis is poor and people can have false memories for what happens during hypnosis. This is all the defence needed and the jury were spared any further instruction on the factual details of hypnosis.

But it was all to no avail; the defendant was found guilty on eight counts of indecent assault, though on the charge of rape he was pronounced not guilty. He received a sentence: six years imprisonment, a severe punishment.

When giving evidence in court we swear to tell the truth, the whole truth and nothing but the truth. Now in real life people obviously tell lies and in some of my stories some people have certainly lied. But can the truth, the whole truth, ever be told. Instead, do we not tell stories that are, to a greater or lesser extent, only based on real events? Stories about stories, and stories about stories about stories, and so on. Let us not forget also the stories that we tell ourselves in order to make acceptable sense of our lives and our world. Our capacity to tell the truth is inevitably constrained, not just by our knowledge. memory and language, but by the scripts or templates that are available to us and that suit our purpose. And this is also the case with the listeners who, even as we speak, are constructing their own story of our story.

I am telling you my stories with certain themes in mind that suit my own self-centred purposes: the tale of the prophet, unheeded in his own country; the humble scholar, clinging to the rock of unassuming truth.

Now for someone else's story, one that I find very interesting. It is told by Dr. Kleinhauz and Dr. Beran in the International Journal of Clinical and Experimental Hypnosis in 1981. It concerns a teenager who was admitted to hospital after participating in a stage hypnosis show. She had fallen into a deep stupor and could not be roused. Neurological and other medical investigations were negative whereupon a number of psychiatric diagnoses were made without reference to her stage hypnosis experience. She was like this for six days and the staff were begin to grow weary of her. She was then seen by the main author, a psychiatrist and expert in hypnosis, who recognised that she was in a pathological post-hypnotic state. He then began the gradual process of establishing rapport and dehypnotising her. After four hours the patient had recovered. She then underwent several months of psychotherapy. Follow-up over the years disclosed that she was reintegrated into the community and was preparing for marriage. This case was instrumental in assisting the banning of stage hypnosis in Israel.

No disrespect, no criticism of any kind, and no trivialising of these events are intended now, but may I be permitted to be just a little provocative? We can all recognise this as a traditional story about good triumphing over evil. There is the villain who, incompetently and uncaringly humiliates the young girl, the victim, causing her to fall into a deep stupor. When everything and everyone else has given up on her, comes the hero who restores her with his great wisdom, skill and kindness. She lives happily ever after. There is a moral to this story and the wicked villain and his kind are banished from the land.

Now, as in many good stories, towards the end of the tale, when everything seems to be going well, and the young lady has not seen her therapist for some months there is a crisis. She is suddenly back in hospital once more in a deep stupor. Has she fallen foul of a stage hypnotist again? No. There is no obvious villain this time. How then is the story to be resolved? Is the theme of good triumphing over evil to be rescued? Yes. This girl is engaging in manipulation. This time her state of entrancement is self-induced in order to control and punish her therapist for what she sees is his rejection of her, and an attempt to regain his special attention. All turns out well again but clearly this is not the story of Snow White. And clearly, while the moral of the tale requires villains, victims and heroes, heroines are dispensable.

Now another of my own stories. Mr. Jones is a teacher at a residential school. In 1997 he was visited by the police and advised that they were investigating allegations of sexual abuse. These had been made by two young men who had been pupils at the school some years previously. appears that at least one of the complainants had a grudge against Mr. Jones. It was alleged that Mr. Jones was known to have practised witchcraft in the past and on a number of occasions he had, unbeknownst to them, bewitched the complainants when they were young boys and cast magic spells upon them. One magic spell had made them believe that they were homosexual and that homosexual activity was normal behaviour. Another magic spell was that they believed that they had been rendered invisible. In this way Mr. Jones was able to persuade them to take off their clothes while he photographed them in the nude.

The last time I spoke to Mr. Jones he had yet to be charged with anything, but he was still suspended from his job as a teacher. He was by then out-of-pocket by £10,000 because of lost income and fees for legal proceedings. I contributed to his rebuttal evidence in support of his efforts to forestall charges

How is it that, as we approach the 21st century, our law enforcement agencies could accept such a story? I have changed some key words. For 'witchcraft' read 'hypnotism'; for 'bewitched' read 'put into a trance'; and for magic spell', read 'hypnotic suggestion'. In fact, wisely for them the police withheld those allegations pertaining to hypnosis and Mr. Jones was sent to prison.

What lessons might we draw from all of this? I suppose it depends on the way the stories are told. My way of telling them suggests this. We may not be able to tell the truth, but some stories may be more truthful accounts than others. That is, the ideas we have, the language that we use, and the stories that we tell can be governed by and be accountable to agreed rules of logic that are applied to shared observations. This is the way of science, but it is also the way we regularly think and communicate effectively in everyday life. And science has the capacity to correct and improve the stories that it tells.

Now, there are certain ideas that are so overvalued and endowed with such authority, that, particularly when they are undisciplined and ungoverned by such rules, may be put to whatever purpose the user wishes. Such concepts include hypnosis and the hypnotic trance, the unconscious mind and, more recently, ego states and the right brain. In this way, the stories that they are allowed to tell quickly run to absurdity, occasionally in exponential fashion. Thus we have the false memory disaster. ritual Satanic abuse conspiracy, mass abductions by extra-terrestrial beings, and the epidemic of multiple personality disorder, something to which, mercifully, British people have shown a commendable immunity, popular preference running heavily in favour of possessing just one personality at the very most. But all that is another story.

BOOK REVIEWS

Martin A. Conway (ed.). Recovered Memories and False Memories. Oxford: Oxford University Press. 1997. ISBN 0 19 852387 4 (Hbk.); 0 19 852386 6 (Pbk.). 301 + xi pages.

Reviewed by Michael Heap

Contents: Introduction: What are Memories?. The Troublesome Unknowns about Trauma and Recovered Memories. Events Spoken and Unspoken: Implications of Language and Memory Development for the Recovered Memory Debate. The Recovered Memories Debate: A Cognitive Neurosciences Perspective. Suffering from Reminiscences; Exhumed Memory, Implicit Memory and the Return of the Repressed. Recovery of True and False Memories: Paradoxical Effects of Repeated Testing. Past and Present: Recovered Memories and False Memories. Reasoning about Repression: Inferences from Clinical and Experimental Data. Delayed Memories of Child Sexual Abuse: Critique of the Controversy and Clinical Guidelines. Remembering and Forgetting Traumatic Experiences: A Matter of Survival. Taking the Middle Line: Can we Accommodate both Fabricated and Recovered Memories of Sexual Abuse?.

The debate between sceptics and advocates of irrational or paranormal beliefs and ideas is not, for the most part, conducted with the intention of arriving at some consensus or compromise position. Sceptics see no reason to depart from a standpoint of outright rejection of the fundamental claims of UFOlogists, creationists, mediums, clairvoyants, dowsers, homeopaths, cereologists, astrologists, and so on. But does this apply to the 'recovered memory' debate?

This controversy involves a number of claims and counter-claims. A pivotal claim by advocates of 'recovered memory therapy' is that people may suppress from conscious awareness distressing and painful memories of extensive and appalling acts of sexual and physical abuse by their parents, events which one would normally expect to be 'unforgettable', and later, during psychotherapy, be able to recall these in a manner which is ultimately beneficial to their psychological well-being. The counter-claim by opponents of such therapy (one not necessarily disputed by adherents of the foregoing assertion) is that psychotherapy may be

conducted in such a way as to encourage clients to fantasise and accept as authentic, false memories which they believe both lie at the root of their problems and have been 'repressed'.

In recent years there have been a number of publications (e.g. Ofshe & Watters, 1994; Showalter, 1997) which have exposed the more notorious examples of recovered memory therapy. In many such cases the 'memories' recovered were often so extensive and concerned such horrific and indeed often bizarre activities that it is incomprehensible that the person could have suppressed all memory of them. Moreover, no evidence was obtainable for the alleged offences other than the 'recovered memories' of the claimant.

Simply relying on individual cases such as these, one would reasonably conclude that the claim in favour of repressed and recovered memories has not been demonstrated, while the counter-claim in favour of the creation of false memories undoubtedly has. Clearly, one must gather

information and data from a much broader field in order to make authoritative statements about the validity of the hypothesis of repressed and recovered memories and the range circumstances in which false memories are induced. This is the purpose of Recovered Memories and False Memories, a collection of chapters authored mainly by psychologists from the USA, Great Britain, Sweden and New Zealand, on the broader theme of human memory. The editor, Martin Conway is a lecturer in psychology at the University of Bristol who specialises in the study of human memory, notably autobiographical memory (memory for personal information and life events).

The reader of this book will be informed of the following. There is good reason for believing that memories of trauma are different from memories for other experiences, but much more needs to be learnt about this. Mechanisms exist that inhibit full conscious access to threatening memories, even if they are not 'forgotten', but it is unlikely, in the case of trauma, that this can be investigated in an ecologically valid way in a laboratory, and more careful case studies are required. There is nevertheless good evidence from experimental studies for more general inhibitory memory mechanisms. There are also adaptive mechanisms which prioritise access to traumatic memories. Apparently forgotten memories may be retrieved. False memories can be created and some of our memories that we are convinced are true are actual fantasies. Children have more accurate long-term memory than previously believed. What Freud had to say about human memory is important, useful and relevant.

The reader will also be informed of current knowledge concerning topics of significance to the recovered/false memory debate such as the recall of events that occurred in pre-linguistic stages of development, the effect on memory of talking about and not talking about the events concerned, and the influence on memory of repeated recall without feedback. There is also a chapter on the contribution of cognitive neuroscience.

Some examples of psychogenic amnesia and of the re-emergence of previously 'forgotten' traumatic memories are provided in chapters by Christianson & Engelberg and Schooler, Bendiksen & Ambadar. The impression is given (and stated explicitly elsewhere in the book) that amnesia for traumatic memories is rare. Case examples are given involving the re-emergence of memories in natural contexts as opposed to the therapist's office. Schooler et al. review mechanisms and influences involved in the encoding, storing and retrieving of memories and ask whether special processes are involved in 'recovered memories' (which the authors tend to favour) or whether 'normal processes' are sufficient. (I am immediately reminded of the similar debates concerning hypnosis.) mechanisms include rehearsal (or in the context of the recovered memory debate, a lack of it), cueing, and re-interpretation.

An example from my own clinical experience may help here. A man in his late 30s was referred to me many years ago. He had no immediate mental health problems but he had asked to see a psychologist for the following reason. He had been reading accounts of child sexual abuse (the relevant cue) when he suddenly recalled that when he was a boy his stepfather had a habit of coming into his bedroom at night and intimately fondling him. He had difficulty understanding this at the time and had never spoken to anybody about it (limited rehearsal) but on recalling it he experienced a sense of shock and some anger (re-interpretation from an adult perspective). Actually he asked to see someone because he was homosexual and wondered if his stepfather's interference had some bearing on this.

Probably we do not need 'special processes' to account for this 'recovered memory', but what would we conclude if the recalled events involved more extensive abuse, or re-emerged in the form of frightening 'flashback' experiences?. (In this man's case I had access to his childhood medical file. In his teens he had been referred to some kind of school counsellor with emotional problems.

Interestingly he had no memory of these problems when I discussed the matter with him.)

Several authors (op.cit.) have done great service by exposing the grotesque practices associated with recovered memory therapy and the terrible consequences inflicted by practitioners of such methods. The serious student needs to go beyond these accounts and for him or her Recovered Memories and False Memories is required reading.

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Sir Raymond Firth. Religion: A Humanist Interpretation. Routledge 1996

Reviewed by Barry Thorpe

I was asked by Wayne to review this book bearing in mind the question, "What insights does Firth's work yield into contemporary paranormal beliefs?" I will draw my conclusions later, but for now I will say that although I was interested in the author's standpoint, I found the book often tedious to read with its constipated phraseology and rather too many lapses in English usage. The quotations used here are not examples of the worst of these tendencies.

Firth, the blurb tells us, is a renowned anthropologist who did a lot of work in Malaysia, particularly among the Tikopia people. He treats religion as an art form, a human construct, capable of complex manipulation to serve human interests. His approach is unhysterical, as objective as possible, and devoid of the sort religion-bashing that one might expect from some unbelievers; in any case, it would be out of place in a work such as this.

He points out that most anthropological surveys so far have concentrated on ritual, which seems more enduring than belief systems. The present book concentrates on beliefs.

He assumes that "religious beliefs are related ... to the attempts of individuals to secure coherence in their universe of relations both physical and social," [p. 14] and are not simple passive mental furniture but a mode of action. Such

beliefs are always culturally defined with a firmly-held nucleus, a number of ancillary beliefs that are less stable and more personal and vague. [pp 16,17].

The anthropologist relates the concepts being examined to human needs, desires and emotions, so that spirit powers, for example, can be seen as socialised projections of the believer's own wishes and needs. Even in monotheistic religions social relations, desirable behaviour and sanctions are formulated as transcendental principles. [p. 21] Although these constructions may be supported by intellectual argument, the prime validating proofs are emotional, as Schleiermacher, a German theologian, demonstrated. [p30] What is important is the feeling of dependence on God, given the powerlessness of the individual against random events. "Over the whole range of religious beliefs, stress upon the personal relation of God to man is a marked feature. It helps to satisfy the desire for personal recognition and personal assertion which is germinal in every one of us." [p. 41] "(Religious belief) is an instrument in the maintenance of personal integration, not simply of social integration, and ... must fit into a personal intellectual system, not only into an emotional system." [p. 42]

In another section [p. 45] Firth qualifies these remarks by saying that they are more closely applicable to the simpler than to the more highly

complex societies in which religion often leads to sectionalism. In that case in what class does he place medieval Europe? For only a page later, in a passage on religious belief as an outlet for creativity (Bach, Michaelangelo), he says: "For nearly a thousand years Christendom controlled in Western Europe the intellectual forces which would otherwise have rebounded on society. It thus acted as a shock-absorber for thought. It would seem that as societies develop ... institutions other than religions must arise to allow of the exercise of the creative imagination. Otherwise this might burst religion itself apart." But the Church in its heyday would not have allowed other institutions to arise. [1] Hence, as Firth says, Bach & Michaelangelo expressed their creativity through the means open to them at the time, i.e. the Church.

Two chapters are devoted to discussion ritual among the Kelantan (Malaysia), mediumship and magic, together with the beliefs behind them. Firth remarks on the attitude of an experienced fisherman and seaman, uneasy about the contradictions between his expertise and the requirements of the local beliefs derived from Islam and tribal magic. He is still unwilling to give up the beliefs.

A later chapter examines paradoxes in religions. Firth remarks: "The existence of so much paradox .. calls for some explanation. One element is that paradoxes often fit the beliefs of ordinary folk;" ... he then draws attention to the stark contrast with ordinary events, e.g. the bodily assumption of Mary, the visit of Mohammed to heaven on the beast Buraq, which marks off the sacred character of the beings involved and is taken as proof. "The mundanely impossible, absurd, is embraced as a counter to a pragmatic, materialist world." [p 208]

Only one passage seems to have a direct bearing on Wayne's question: In a passage about Toynbee on the growth of civilisation and decline in spiritual forces Firth remarks that "recent work ... on precognition and ESP attracts attention for its religious bearing rather than for its scientific interest," since such work casts doubt on the (misperceived) certainties of science and its denial of the supernatural and therefore of religion. [p. 39]

To return to Wayne's question: behind it is another question: is belief in the reality of paranormal events, including sightings of ET spacecraft and abduction by their crews, similar in kind to belief in a god and the associated religious dogma?

In both cases visions and apparitions seem to be important. What is seen by a subject depends on the expectations of the subject's culture. For the Pythian priestess perched on a tripod in Apollo's cave in a state of literal "enthusiasm" (god in her), the golden-haired hunk with quiver and bow; for one of Firth's Tikopi, a vegetation spirit; for an ignorant medieval peasant girl, a demon incubus pressing on her in her sleep; for an Irish Catholic, St Michael or the Virgin Mary; for an ill-educated modern of mixed or little religious upbringing, Hollywood's aliens. [2]

The causes of these visions are sometimes obvious - deliberate self-inducement of an ecstasy in the case of the Pythian and ergotism or even starvation in some medieval cases. Recent research [3] seems to indicate a neurological explanation for some religious or paranormal experiences - higher electrical activity in the temporal lobes of susceptible persons. One stimulus for such activity may be the piezo-electrical effect generated by slowly shifting rocks on fault lines, which seem to evidence more sightings of UFOs than other areas [4]. The effect generates not only physical lights in the sky, but is likely to affect the brain by inducing feelings of weird expectation or even hallucinations.

Believers of both kinds are able to listen to systematic undermining of their arguments with belief unchanged or even strengthened. In a passage on the circular reasoning used by paranormal adherents, Nicholas Humphrey [5] writes; "Imagine that in childhood, before you thought of questioning it, you were told as a fact that Jesus performed miracles and therefore was the son of God, and not until later in life did it occur to you that the miracles might not be genuine. By that time, you might find that your critical faculties had been hijacked. For how could you possibly entertain such doubts about the works of a man

whose works had already proved he was never to be doubted." Hence, Humphrey goes on, the reverence of Diana Spencer long after her feet of clay were revealed, hence Houdini could not convince Conan Doyle that his act was just that, an act. He suggests that James Randi, in exposing particular examples of psychic phenomena as fakes, in effect merely drew people's attention to the possibility that other examples could be genuine. After all, if this example is a fake, it must be the fake of something genuine, mustn't it?

In both cases the belief fills a need - the need to believe that death is not the end, that God or Aliens can in some way undo the awful mess we are in, that the future, if not exactly assured, is somehow knowable. So Nostradamus and the Bible Code are attractive, so aliens are keeping a bulging eye on destructive humanity.

If we can accept that religious belief and belief in the paranormal overlap so much that they probably the same psycho-neurological phenomenon, then we can argue along these lines: Human beings are driven in self-defence to make sense of a huge number of random events and appearances that make up their daily lives and surroundings. The brain, as a pattern-recognition device, is also a pattern-making device, and will fill in any gaps in perception as well as it can. erroneously or otherwise. For the conscious human being, this means explaining the unexplained and unexplainable, even though the system of thought that results may contain contradictions and paradoxes. As Nicholas Humphrey points out, circular arguments are not easily recognised when the constituent parts have been formulated separately over many years.

The religious belief system is comforting, lays down order for society, and is adaptable from generation to generation. Paranormal beliefs are also comforting and in less defined ways imply order for society, and are adapted according to current fashions of thought. In their daily lives most people will not find themselves in situations where the contradictions in their belief system are brought forcibly to their attention. When they are, the

discomfort they feel is often enough to postpone any clear thinking on the subject.

We should also bear in mind that rational habits of thought are still rare for most people, and the few who try to keep the habit are not always successful. For many, the easy acceptance of precognition, poltergeist and Neptune in square with Mars will always be preferable to ten minutes of careful thought, or actually listening to somebody who really knows.

The current fashion for the paranormal, in spite of all the evidence against it, has something of - in Nicholas Humphrey's phrase - "...the comfort and joy of being allowed to have one's soul back from science."

References

- 1 Keith Roberts in his SF novel *Pavane*, 1968 (Penguin 1984), an episodic alternative history (Elizabeth I was assassinated by the Catholics), examines this very point.
- This phenomenon has been remarked on by many; for a detailed study see Hilary Evans: Visions, Apparitions, Alien Visitors, Thorsons, 1984
- 3 "Everyman" BBC1 May 1998
 www.paranormal.o.se./book/neuropsycholo
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- 4 Paul Devereux: Earthlights, Turnstone Press 1982, and Earthlights Revleation, Blandford, 1990; Channel Four Equinox: Identified Flying Objects, 1996, featuring Michael Persinger, geologist and neurologist (!), of Laurentian University and Dr. John Derr, Head of the Global Seismological Survey, and produced by Paul Devereux.

www.laurentian.ca/www/neurosci/tectonice dit.htm

5 Nicholas Humphrey: Soul Searching: human nature and supernatural belief, Chatto & Windus

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