

Os resultados do estudo sustentam a idéia de que as alegações de visão de aura estão relacionadas às alegações de imaginação visual vívida e fantasia além de outras experiências imaginativas, como também a uma variedade de outras experiências relacionadas a psi e algumas experiências não relacionadas a psi. Argumenta-se que mais estudos da visão da aura poderiam vantajosamente focalizar correlatos imaginativos, neurofisiológicos e perceptivos da experiência assim como integrar crenças ocultas, religiosas e populares sobre a experiência com resultados de pesquisa fenomenológicas e correlacionais.

#### Différences individuelles dans la vision de l'aura: Leurs relations avec l'imagerie visuelle et les expériences de fantaisie imaginative

**Résumé:** La vision de l'aura, ou prétention à percevoir des lumières, halos, ou champs d'énergie autour du corps d'une personne, a été étudiée en relation avec des variables d'imagination et des revendications d'autres expériences. Dix-neuf individus ayant rapporté des expériences de vision d'aura ont été comparé à un nombre égal de sujets contrôles qui n'ont pas vu d'aura. Les deux groupes sont équivalents par le sexe et l'âge. Les participants ont rempli le Questionnaire sur les Auras et Autres Expériences (QAOE), le Questionnaire de Vivacité de l'Imagerie Visuelle (VVIQ), et l'Inventaire des Souvenirs et Imaginaire de l'Enfance: Version pour Enfants (ICMIC). On a prédit que le groupe Aura revendiquerait plus de vivacité dans l'imagerie visuelle et d'expériences imaginatives et de fantaisie que le groupe contrôle. Les prédictions ont été confirmées à la fois pour le VVIQ (groupe Aura: Moyenne = 27, groupe contrôle: Moyenne = 38,  $t(36) = -2.72$ ,  $p$ [unilatéral] = .005 [les scores plus bas indiquent une vivacité plus élevée]) et pour le ICMIC (groupe Aura: Moyenne = 21, groupe contrôle: Moyenne = 14,  $t(36) = 3.85$ ,  $p$ [unilatéral] = .0002). Le ICMIC a été significativement corrélé avec le niveau d'aptitude à voir l'aura à volonté ( $r_s = .60$ ,  $p < .001$ , bilatéral) bien que les scores moyens aient été basés uniquement sur le sous-ensemble des items ICMIC qui ne posait pas de question sur des expériences liées au psi. En outre, le groupe Aura a eu une fréquence significativement plus élevée de revendications telles que les apparitions ( $p = .00006$ ), l'ESP dans les rêves ( $p = .008$ ), les expériences mystiques ( $p = .01$ ), les expériences hors-du-corps ( $p = .00002$ ), et voir avec les yeux fermés ( $p = .004$ ) que n'a eue le groupe contrôle. De plus, le groupe Aura a rapporté une pratique plus fréquente de la méditation que le groupe contrôle ( $p = .008$ ).

Les résultats de cette étude soutiennent l'idée que les revendications de vision de l'aura sont liées à celles de l'imagerie visuelle vivace et des expériences de fantaisie et autres imaginations aussi bien qu'à une variété d'autres expériences liées au psi et à certaines expériences non liées au psi. On argumente que davantage d'études sur la vision de l'aura pourraient se focaliser de façon profitable sur les corrélats imaginatifs, neuropsychologiques et perceptifs de cette expérience, et pourraient aussi bien intégrer les croyances occultes, religieuses et populaires sur cette expérience à des découvertes de la recherche corrélacionnelle et phénoménologique.

## Modelling the Stratagems of Psychic Fraud

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**Abstract:** A thorough understanding of psychic fraud is essential for parapsychologists who wish to assess 'psychic claimants' (i.e. individuals who claim strong psychic ability). One of the most productive ways to gain such understanding would be through the formation of a cognitive model of psychic fraud that describes the deceptive strategies employed by pseudo-psychics. This paper outlines the beginnings of such a model, noting how a pseudo-psychic deceives an observer into misframing a fake demonstration as genuine, hinders the observer's development of 'normal' explanations, deceives the observer into rejecting 'normal' explanations as implausible, negotiates 'fraud conducive' conditions for a demonstration, exploits ineffective controls, and prepares 'outs' to explain away a failed demonstration or evidence of fraud. Finally, the paper notes that the model presented represents only a starting point for this endeavour, but that such modelling has real advantages for social psychology, cognitive psychology and parapsychology.

### Introduction

Many individuals claim to possess psychic ability. Faith healers and psychic surgeons state that they are able to psychically cure illness. Law enforcement agencies are approached by individuals offering 'psychic tips' that they feel might help solve a crime (see Lyons & Truzzi, 1991). Alleged psychics have also been used within industrial settings, being asked, for example, to use their abilities to divine productive sites for mineral extraction (see Couttie, 1988).

Some parapsychologists are concerned with the assessment of such 'psychic claimants', believing that this line of inquiry is vital to parapsychology (see, e.g., Braude, 1986; Stevenson, 1990). These writers have stressed that such abilities are, to some individuals (including most of the general public), more convincing proof of psi than evidence derived from experimental parapsychology. Braude has also argued that human abilities are best studied *in extremis*, and in the environment in which they natu-

rally occur; he asserts that these criteria are more likely to be fulfilled by the assessment of psychic claimants, rather than by more experimentally based studies.

However, the testing of psychic claimants has been hindered both by actual subject fraud and allegations of cheating (see, e.g., Hansen, 1990; Rush, 1986). It is therefore vital that parapsychologists are able to counter trickery during an investigation. Unfortunately, most of the previous literature on psychic fraud has tended to concentrate upon the tactics of such trickery, usually taking the form of case studies of individual pseudo-psychics (i.e., individuals who consciously fabricate psychic ability), or 'cookbooks' of methods for fabricating psi. Only a very small number of theorists have started to outline some of the more general principles (or 'stratagems') of pseudo-psychic trickery (see, e.g., Hansen, 1990; Morris, 1986a, b).

This emphasis is unfortunate because experimenters interested in countering psychic fraud may find it more helpful to

know about the stratagems of psychic fraud, as opposed to its tactics. This is, in part, because although there are only a limited number of stratagems involved in the fabrication of psi, there are an enormous number of tactics used to implement these stratagems. Trying to detect these tactics may be problematic. First, the literature of magic and psychic fraud is not well organised, and it may be difficult for an individual to discover all the ways in which an ostensible psychic phenomenon can be fabricated. Second, both magicians, and pseudo-psychics are continually inventing new tactics by which to fabricate psi. It would be problematic to discover the nature of these innovations, especially as some of this information is not widely disseminated, even within certain sections of the magical and pseudo-psychic communities.

Cognitive psychologists attempt to understand how individuals attend to, perceive, comprehend and store information. In addition, they are concerned with how this information is recalled and utilised during thinking and problem solving (see Matlin, 1983). The tools of cognitive psychology could be used to further our understanding of psychic fraud. A cognitive model could be formed to describe the way in which an individual's observation and judgement are disrupted by the pseudo-psychic, to fool that individual into believing that the pseudo-psychic possesses genuine psychic ability.

This type of modelling is particularly germane to the analysis of psychic fraud for many reasons. First, psychic fraud is clearly complex and occurs in the 'real world'. Several theorists (e.g., Brewer & Treyners, 1981; Neisser, 1978) have noted that cognitive models aim to account for such 'naturalistic' phenomena. Second, psychic fraud exploits human bias. Again, most cognitive models aim to account for bias in human cognitive processing (see, for example, Alba & Hasher, 1983; Hewstone, 1989; Nisbett & Ross, 1980). Third, much of the material used to construct the model (e.g., case studies of pseudo-psychics, theoretical ideas developed by pseudo-psychics

themselves) would clearly fall into the category of 'folk psychology'. Although some theorists (e.g., Churchland, 1984, Nisbett & Wilson, 1977) have advocated the view that such material may often be incomplete and inaccurate, other theorists recommend that such lay knowledge should be taken very seriously by psychologists, and can form a useful starting point for the construction of formal theories (see, e.g., Flanagan, 1984; Heider, 1958; Joynson, 1974).

This paper outlines the beginnings of a cognitive model that identifies the main stratagems of psychic fraud. This model has been constructed from literature within sociology, social cognition, cognitive psychology, psychical research, parapsychology, conjuring, and psychic fraud. The model briefly outlines some of the different stratagems involved when an individual is fooled by a pseudo-psychic. Any pseudo-psychic demonstration can be construed as communication from performer to audience, or pseudo-psychic to observer. The pseudo-psychic attempts to send the message 'I am psychic', to the observer. As with any other communication system, a sender must encode and present the message in ways that will be properly decoded and understood by the receiver. Thus the pseudo-psychic needs a full understanding of how the observer organises and interprets perceived events. This may involve learning about the observer's natural inclinations, so that they can be taken into account; or it may involve deliberate manipulations of them, to fit the available resources of the pseudo-psychic.

### Misframing

Sociologists use the term 'frame' to refer to abstract structures that individuals use to define situations in a certain way (Goffman, 1974). Many situations can be framed in different ways. For example, a demonstration of ostensible psi could be perceived as a pseudo-psychic hoax or as a display of genuine psychic ability (see Nardi, 1984).

The framing of a demonstration will influence how the individual assesses that demonstration. For example, a person who believes that a demonstration is going to contain conjuring may go to great lengths to detect such trickery during and after that demonstration. This point has been noted by several writers. For example, Dingwall (1921) writes:

...the frame of mind in which a person goes to see magic and to a medium cannot be compared. In one case he goes either purely for amusement or possibly with the idea of discovering 'how it was done', whilst in the other he usually goes with the thought that it is possible that he will come into direct contact with the other world (p. 211).

The framing of a demonstration will also influence the meaning that an individual attributes to any ostensible psi produced during that demonstration. For example, the person may have framed the demonstration as a pseudo-psychic hoax. If this is the case, the individual may decide that any ostensible psi phenomena are the result of trickery. Alternatively, they may have framed a demonstration as a genuine psychic demonstration. If this is the case, the individual may decide that such phenomena represent genuine psi.

There are many ways in which a pseudo-psychic can manipulate people into misframing a fake demonstration as genuine.

### Appear incapable of fraud

Pseudo-psychics realise that an individual may be unwilling to frame him as a trickster if they appear incapable of fraud. For this reason pseudo-psychics may, for example, deliberately conceal any manual dexterity they possess. Fuller (1975), when advising pseudo-psychics how to behave in the company of those they aim to deceive, notes:

Don't act like a magician...Act clumsy with your hands...You can do a double

lift and some easy coin moves, but never let anybody know that you can do any sleight of hand (p.11).

For the same reason, pseudo-psychics may conceal previous evidence, or accusations, of trickery. Hansen (1990) describes how Steve Shaw (one of the pseudo-psychics involved in Project Alpha) had been accused of trickery prior to Project Alpha (see McBurney & Greenberg, 1980), yet did not mention this to investigators at the McDonnell Parapsychology Laboratory. A pseudo-psychic may also conceal the true extent of his knowledge of conjuring. For example, 'Tim', the pseudo-psychic investigated by Delaney (1987), was a member of the International Brotherhood of Magicians, but failed to mention this while being investigated.

### Appear to have no motivation for fraud

Pseudo-psychics realise that an observer may be less likely to view him as fraudulent if they do not appear to have any motivation for cheating. To exploit such bias, pseudo-psychics may conceal evidence that suggests that they have any motivation to cheat. For example, fake faith healers may assure an individual that they never accept payment for their services, insinuating that they have no motive to deceive. However, as noted by Thomas (1989):

Apparent lack of financial inducements is no guarantee against fraudulent practice. Randi reports that 'psychic surgeons' did not charge a fee for their services: they received a registration fee and donations (p. 382).

Also, an observer may not realise the range of factors that motivate a pseudo-psychic to deceive. For example, various authors have suggested that some individuals deceive simply for enjoyment (e.g., Ekman, 1985; Moss, 1977). It has been suggested that this, in part, may account for the success enjoyed by the two girls who fabricated the Cottingley 'fairies' (see, e.g.,

Cooper, 1990; Randi, 1982). Randi notes how some people believed that:

The two girls had no stake in the deception that could have brought them money...The assumption made is that only money and notoriety are plausible motives. Ego and just plain fun are not thought to be sufficient (p. 37).

In addition, Morris (1986b) has noted how observers may fail to realise that pseudo-psychics can be motivated by a wish for personal fame, raised self-esteem, increased personal power, or a desire to be socially helpful.

#### *Appear to be unwilling to engage in fraud*

Pseudo-psychics may also convince individuals that they would not engage in psychic fraud, even if capable of it and motivated to do so. This may be achieved, in part, by the pseudo-psychic presenting himself or herself as having an honest, sincere, and friendly personality. For example, Fuller (1980), in his manual of pseudo-psychic trickery, advises:

...when you're being tested by a parapsychologist, you'll catch him doing something stupid - like leaving unguarded a sealed envelope with a target drawing. When this happens, bawl the hell out of him. It will impress him no end with your honesty. It will prove to him you can't be a charlatan (p.68).

Also, Delanoy (1987), when writing about her work with one pseudo-psychic, notes that 'I felt I had come to know Tim [the pseudo-psychic] fairly well. We had established what appeared to be an honest, friendly and trusting rapport' (p. 252).

#### *Create a 'believable' claim*

The pseudo-psychic may deliberately claim to produce the type of psi that the individual finds believable. For example, an individual may believe that PK can

rarely be used to produce very large physical effects. As such, the pseudo-psychic may only fake effects that appear (when compared to those of the magician) fairly trivial. For example, the pseudo-psychic may cause an object to simply move a small distance along a table top, as opposed to making it levitate above the table. As noted by Truzzi (1983), '...it is perhaps actually the very triviality of such an action that lends it plausibility' (p. 18).

Also, when being formally assessed, a sophisticated pseudo-psychic might discover trends in previous investigations of psi, and conform to those patterns. Randi (1986) has noted that part of the success of Project Alpha rested upon the two pseudo-psychics discovering, and then conforming to, their investigators' notions about psi. For example, Randi notes how:

Steve and Mike [the two pseudo-psychics] complained about the electronic equipment putting out 'bad vibes...to satisfy this established bit of mythology....Also, they were careful to mention that in early childhood both had experienced electric shocks, after which they had become aware of their psychic powers (p. 164).

The pseudo-psychic may state that his or her psychic ability is only elicited under the conditions that the observer associates with the production of genuine psi. Thus, many pseudo-psychic manuals advise their readers to seek out and conform to the conditions under which an individual believes genuine psi might occur. For example, *Innovation* (a magazine devoted mainly to bizarre magic<sup>1</sup>) contained articles that advised its readers on how to fabricate rituals that some individuals (e.g., those interested in occultism) may find particularly convincing (e.g., Karnak, 1977; Kirke, 1977).

<sup>1</sup> It should be noted that many of the articles in this magazine amount to little more than literary exercises, as they are never performed.

#### *Produce a claim that the individual 'wants' to believe*

The pseudo-psychic may exploit people's physical and emotional needs. An individual may have a serious illness and thus a strong need to recover. A pseudo-psychic may therefore claim to possess psychic healing powers, in the hope that the individual will be strongly motivated to frame the demonstration as genuine. Also, if an individual has recently suffered a bereavement, he or she may be exploited by a fake medium who promises some form of communication with deceased friends and relatives. Two additional points should be noted. First, the flexible pseudo-psychic may modify his claim to satisfy the needs of a particular person or set of individuals. Second, parapsychologists may not be immune from such forms of manipulation. For example, Delanoy (1987), after working with pseudo-psychic 'Tim', noted:

We are all familiar with the difficulties arising from the so-called 'elusive nature of psi'. In short, we cannot study a phenomenon unless we can first produce it. Thus, Tim's claims, that he could produce macro PK at will, suggested exciting possibilities. I wanted his claims to be true and this desire may have influenced my evaluation of his performance [Emphasis ours] (p. 256).

#### *Hinder the Development of 'Normal' Explanations*

Obviously, pseudo-psychics need to prevent an individual from developing the hypothesis that correctly accounts for the trickery involved in a demonstration. This can be achieved in several ways.

#### *Do not state a specific claim in advance of the demonstration*

The pseudo-psychic may not state the specific details of his or her psychic claim in advance of the demonstration. Without such information it is difficult for an individual to develop, and therefore counter,

normal explanations. This strategy may also help the pseudo-psychic, should a demonstration not go according to plan. This point was clearly noted by Robert-Houdin (1878):

However skilful the performer may be, and however complete his preparations for a given trick, it is still possible that some unforeseen accident may cause a failure. The only way to get out of such a difficulty is to finish the trick in another manner. But to be able to do this, the performer must have strictly complied with this important rule: *never announce beforehand the nature of the effect which you intend to produce* [Emphasis ours] (p. 33).

This strategy is also utilised by magicians. For example, Henri Decremps (1785), noting the first of his 'general principles' of conjuring, writes, 'Never acquaint the company before-hand with the particulars of the feat you are about to perform' (p.123).

To make this stratagem seem more believable, the pseudo-psychic may claim to have little control over his or her psychic ability, and therefore cannot predict the phenomena that might occur.

#### *Exploit the individual's ideas concerning methods of trickery*

An individual's notion of how fake psychics operate are often incomplete or inaccurate. A pseudo-psychic may be aware of, and thus be able to capitalise on them. For example, pseudo-psychics use 'gimmicks' or small pieces of apparatus of which observers are usually unaware. As Harold Kelley (1980) has noted:

...some of the gimmicks of the magic art are interesting because they are difficult to imagine. In a sense they are unthinkable. This property seems to derive from there being a sharp incongruity between the audience's conception of a particular object and a property it is constructed actually to have, as is the case with a folding coin or hollow dice (p.31).

Alternatively, the individual may be unaware of the esoteric means by which a PK target can be influenced. To exploit this, pseudo-psychics employ many esoteric scientific, medical, and mathematical principles during their demonstrations. For example, individuals may be unaware that pseudo-psychics can cause the pulse in their left wrist to cease by placing a small ball under their left armpit and pressing their left arm against the ball (Fisher, 1979).

In addition, to prevent people improving their knowledge of trickery, pseudo-psychics have many techniques for ensuring that the secrets of psychic fraud remain clandestine.

#### Manipulate an Individual into Incorrectly Believing Normal Explanations Implausible

Even if the individual develops the correct hypothesis, a pseudo-psychic may be able to manipulate that person into erroneously rejecting the hypothesis as implausible. This section will discuss how such a stratagem may be achieved.

#### Appear incapable of carrying out the trickery required by a normal explanation

An individual may assess a normal explanation in terms of whether the claimant is capable of carrying out the trickery required by that hypothesis. This may involve, for example, assessing the physical strength, dexterity or knowledge of conjuring that would be required to perform a certain type of trickery. The individual would then compare this 'required capability' with the actual capability of the claimant. An explanation would be seen as implausible if it entailed the claimant engaging in trickery of which he or she is incapable.

This being the case, a pseudo-psychic may deceive an individual in two ways. First, the individual may be deceived into underestimating the claimant's capability of engaging in deception. For example, the individual may correctly assume that a claimant would have to possess great man-

time...the weak points of one performance are ruled out because they were clearly not present during other performances. The bundle of sticks is stronger than any single stick (p.572).

As noted by Tamariz (1988), the success of this strategy rests on the fact that some individuals erroneously assume that 'the same causes produce the same effects', and not that a single effect may be produced by many, quite different, methods.

A pseudo-psychic may use several stratagems to manipulate an individual into expecting a certain method. For example, when investigating an alleged psychic, the individual may watch the claimant perform during several informal pilot studies. On these occasions, the pseudo-psychic may fabricate phenomena using the same method (provided this repetition did not significantly increase the risk of being caught). In this way, should the individual become suspicious of this method (and thus guard against it during a formal experiment) the pseudo-psychic can switch to a novel type of trickery. Alternatively, the pseudo-psychic may discover the normal explanations that have been developed by the individual, and then select a method accordingly. For this strategy to be successful, the pseudo-psychic must have feedback from the individual as to the methodology that individual expects the claimant to employ. For example, Dingwall (1926), in his investigation of Mina Crandon, notes that certain conditions had to be agreed upon before the investigation could commence. One condition entailed that:

The investigator shall supply the doctor [Mina Crandon's husband] with a signed copy of his notes of each seance, before he attends the next seance (p.88).

As noted by Dingwall, this meant that, if Mina Crandon was fraudulent, she would have access to the investigators' thoughts concerning possible trickery.

Alternatively, the pseudo-psychic may inspect the controls employed by an individual, figure out the methods that are being countered, and then select a different method. Several magicians have written about some of the techniques involved in this 'improvisational', or 'jazz' magic (see, e.g., Hopkins, 1940; Lang, 1981).

#### Exploit Ineffective Controls

One main pseudo-psychic stratagem involves deceiving the individual into believing that controls (i.e., measures designed to detect or prevent deception) will be effective safeguards against deception when, in reality, this is not the case. This section will outline the ways in which this stratagem may be implemented.

#### Exploit controls applied at inappropriate times

The individual may apply controls at an inappropriate moment in time. For example, an individual may not expect the pseudo-psychic to engage in deception before the start of the trick. Yet Fuller (1975) notes how it is usually possible to be able to gain access to target objects before the start of a demonstration, especially when pseudo-psychics work on television. These objects may be left lying around, although the individual watching the television show may not suspect that this is the case. Alternatively, an observer can be deceived by a fake claimant engaging in deception after a demonstration has apparently terminated. Fitzkee (1945) has referred to this as 'premature consummation', noting that, 'the critical thing is done after the attention has relaxed' (p. 165).

For example, after a pseudo-psychic has faked the materialisation of a small object, the individual may assume that the demonstration has finished, and relax his or her vigilance. This may then give the pseudo-psychic an opportunity to secretly obtain a larger object that can suddenly be produced moments later.

#### Do not use the same method to fabricate the same phenomenon

An individual may reject a normal explanation as implausible if it does not entail the type of trickery that the claimant had used, or had been accused of using, during previous demonstrations.

A pseudo-psychic may exploit this assumption by developing a number of ways of fabricating a certain type of psi, and then switching methods both within and between demonstrations. For example, many texts on magic and pseudo-psychic trickery contain several different methods for achieving just one effect. Tamariz (1988) has described 18 methods for performing the 'oil and water' card effect, while Harris (1985) explains a whole range of methods that may be employed to fabricate PK metal bending. The pseudo-psychic may then be able to manipulate the individual into being suspicious of just one of these methods, thus rejecting as implausible the method that the pseudo-psychic intends to employ. This strategy can be very effective. As noted by Leech (1960):

Nothing can be more bewildering than the repetition of an effect three or four times, each repetition dependent upon a different principle. This is psychological misdirection of the highest order (p. 7).

Diaconis (1985), labels this approach the 'bundle of sticks phenomenon', noting:

An effect is produced several times under different circumstances with the use of a different technique each

*Exploit ineffective or removable controls*

Morris (1986a) has outlined many ways in which experimental controls can be made ineffective by a competent pseudo-psychic. For example, the pseudo-psychic might be able to remove such counter measures. When describing some of the trickery involved in Project Alpha, Randi (1986) claims how:

During one type of telepathy test, a subject would be given a sealed envelope containing a picture drawn from a target pool. Left alone with the envelope, the subject would subsequently surrender the envelope to an experimenter, who would examine it for signs of tampering. The subject would then announce his selection from the target pool. This series of tests was quite successful...The method was easy. Since the envelopes were sealed only with a few staples, they [the pseudo-psychics] removed them, peeked, then replaced the staples through the original holes (pp. 159-160).

Pseudo-psychics may also be able to remove or lessen the individual's attention. Pseudo-psychics employ a wide range of techniques to achieve this. For example, Fuller (1975) advises pseudo-psychics to take a long time before attempting any form of trickery. This large time lag is designed, in part, to lower an individual's overall vigilance. Fitzkee (1945) has labelled this strategy 'monotony'. Second, a pseudo-psychic may manipulate the direction of an individual's attention, steering it away from areas in which the individual is likely to detect trickery. Fitzkee (1945) has presented a good overview of some of the techniques used to misdirect an individual's attention. For example, Fitzkee notes the use of 'confusion', in which:

...so many varied individual interests are presented for the spectator's observation that it is impossible for him, in the limited time available, to select the significant from the insignificant (p. 166).

Fuller (1975) recommends the use of this technique in his manual of pseudo-psychic trickery, noting:

When you're working for a group, keep talking and moving fast. Create maximum chaos. Flit from one task to another. Fail on one thing, put it aside, try something else, then go back and try again, and so on (p.15).

In addition, pseudo-psychics may not perform any trickery until they are quite sure that they will not be caught doing so. For example, when discussing the magician Max Malini, Vernon (1975) noted:

One of Malini's greatest secrets is contained in a statement he made to Charlie Miller. Miller asked him,

'Suppose you have a card palmed and you see that a spectator is keeping his eye on the hand that holds the card. What do you do Max?'

'Wait' was the answer.

'How long do you wait?' Charles said.

'A week!' was the answer.

In other words, Malini would not make a move until he knew his misdirection was covering any secret action the mechanics of a trick forced him to make (p. 151).

*Exploit the Conditions Apparently Needed to Elicit Psi*

Psychic claimants often state that their ability only manifests itself under certain psychological and/or physical conditions. A pseudo-psychic can exploit this concept by insisting upon working under conditions that are favourable to fraud. For example, Randi (1986) describes how in Project Alpha, the two pseudo-psychics complained about electronic equipment putting out 'bad vibes', preventing the researchers from being able to videotape the demonstrations. In addition, Eugene Burger (1986) outlines how fake mediums insist that all of the sitters must link hands during a seance. The fake medium may state that this is necessary to bring forth spirit communication. In reality it is

designed to prevent curious sitters from reaching out into the seance room, and possibly discovering various forms of trickery (such as reaching-rods and accomplices).

*Have 'Outs' Ready in Case Something Goes Wrong*

Pseudo-psychics have developed many types of 'outs' to escape or minimise the damage caused by something not going according to plan during their performance. For example, should the planned method of trickery prove problematic, the skilled pseudo-psychic may be forced to switch methods during a demonstration. For this reason, pseudo-psychics often consider the ways in which a trick may go wrong, and develop various ways to switch the method of that trick to salvage the demonstration. These are referred to as 'outs' and, as noted by magician Jerry Mentzer, 'If the performer knows enough outs, he will never fail to bring a trick to successful conclusion' (Cited in Whaley, 1989, p.489).

During a demonstration a pseudo-psychic may find that he or she is unable to fabricate psi (e.g., the controls imposed may prevent the intended type of trickery). If this is the case, the pseudo-psychic may attempt to explain away such failure by stating that the conditions of the demonstration were not psi conducive. For example, Burger (1986) notes that, if a fake medium is unable to fabricate phenomena, he or she can state:

'Well, my friends, conditions sometimes are just not right for this sort of thing'. You see...there's always an 'out' — a non-humiliating, non-embarrassing, perfectly reasonable (given the folk-accepted assumptions about seances and how they 'work'), perfectly acceptable out for a failure (p. 107).

Alternatively, the individual may have discovered evidence of possible fraud. The competent pseudo-psychic may have anticipated such a problem, and created

excuses to 'explain away' such evidence. For example, Baggally, Johnson, Feilding, Taylor & Lobb (1906) report how, during a seance given by the pseudo-medium Christopher Chambers, a false moustache (used to fabricate materialisations of spirits) was discovered in the seance room. Chambers attempted to explain away such evidence by telling sitters that it was difficult to materialise whiskers and moustaches, so the 'guide' had made a false moustache, and left it as a souvenir! Indeed, the pseudo-psychic may make such excuses part of the 'lore' that governs his or her psychic ability. For example, Randi (1982) has reported that one researcher, Dr Lincoln (a specialist in blood group serology and forensic medicine at London Hospital Medical College) investigated the claims being made by Philippino psychic surgeons. Lincoln surreptitiously obtained some of the apparently 'bad tissue' removed from a patient, by an alleged psychic surgeon, and analyzed it. Lincoln discovered that the blood sample was from a cow, and that the 'tumour' was a piece of chicken intestine. However, the surgeons attempted to explain away this evidence stating that it was a well known fact that 'supernatural forces' convert the tumours into innocuous substances once they have left the patient's body.

*Conclusion*

This paper first noted that a further understanding of psychic fraud is essential for those who wish to assess psychic claimants. It then argued that one of the most productive ways to gain such understanding would be through the formation of a cognitive model of psychic fraud. This model would aim to describe the way in which an individual's observation and judgement is disrupted by the pseudo-psychic. The paper then outlined the beginnings of such a model, noting how a pseudo-psychic deceives an individual into misframing a fake demonstration as genuine, hinders the development of 'normal' explanations, deceives the individual into rejecting 'normal' explanations as implau-

sible, negotiates 'fraud conducive' conditions for a demonstration, exploits ineffective controls, and prepares 'outs' to explain away a failed demonstration or evidence of fraud.

The model presented in this paper represents only a starting point for this type of endeavour. A full and thorough modelling of psychic fraud would have advantages for both cognitive psychology and parapsychology.

For cognitive psychology, research into certain sections of the model may reveal novel types of bias and, as with the study of optical illusions (e.g. Coren & Girgus, 1978) provides important new insights into the weaknesses of human information processing. Also, the further analysis of psychic fraud may allow cognitive psychologists to undertake research into novel areas of inquiry that are recognised as important but, up to this point in time, have proved problematic to investigate. For example, Norman (1980), in his discussion of new directions that should be taken by cognitive psychologists, lists the investigation of belief systems as one of 'a core group of issues along which we must proceed if our field is to make substantive progress' (p. 323). Clearly, an examination of psychic fraud may prove helpful to such an enterprise, given that pseudo-psychics frequently manipulate and exploit an individual's belief system. Finally, various writers (e.g., Rumelhart, 1980; Thorndyke & Yekovich, 1980), have noted that cognitive models are often phrased in very general terms. This, in turn, makes the formulation and testing of specific hypotheses problematic. To help overcome this problem, Thorndyke (1984) has recommended that theorists apply the models to 'real world' problem areas involving cognition. The application of cognitive models to the study of psychic fraud may further help develop and sharpen those models for use within cognitive psychology.

For parapsychologists, a more detailed understanding of the stratagems of psychic fraud may help develop recommendations

for the assessment of psychic claimants<sup>2</sup> (see Wiseman & Morris, in press). By such development, the parapsychological testing of single claimants might make the type of methodological advances that dedicated and honest researchers and subjects, both past and present, fully deserve.

#### References

- Alba, J.W. & Hasher, L. (1983) Is memory schematic? *Psychology Bulletin*, 93, 203-223.
- Baggally, W.W., Johnson, A., Feilding, E., Taylor M. & Lobb, J. (1906) Sittings with Mr Chambers. *Journal of the Society for Psychical Research*, 12, 197-203.
- Braude, S. (1986) *The Limits Of Influence*. NY: Routledge & Kegan Paul.
- Brewer, W.F. & Treyners, J.C. (1981) Roles of schemata in memory for places. *Cognitive Psychology*, 13, 207-230.
- Burger, E. (1986) *Spirit Theater*. NY: Kaufman & Greenberg.
- Churchland, P. (1984) *Matter and Consciousness*. Cambridge, MA: MIT Press.
- Cooper, J. (1990) *The Case of the Cottingley Fairies*. London: Robert Hale.
- Coren, S. & Girgus, J.S. (1978) *Seeing is Deceiving: The Psychology of Visual Illusions*. NJ: Lawrence Erlbaum Associates.
- Coutic, B. (1988) *Forbidden Knowledge*. Cambridge: Lutterworth Press.
- Decremps, H. (1985) *Testament de Jeremie Sharp*. Paris.
- Delaney, D.L. (1987) Work with a fraudulent PK metal-bending subject. *Journal of the Society for Psychical Research*, 54, 247-256.
- Diaconis, P. (1985) Statistical problems in ESP research. In P. Kurtz (Ed), *A Skeptics Handbook of Parapsychology*, pp. 569-584. Buffalo, NY: Prometheus Books.
- Dingwall, E. (1921) Magic and mediumship. *Psychic Science Quarterly*, 1, 206-219.
- Dingwall, E. (1926) *How to Go to a Medium*. London: Routledge Kegan & Paul.
- Ekman, P. (1985) *Telling Lies: Clues to Deceit in the Marketplace, Politics and Marriage*. NY: W.W. Norton & Co.

<sup>2</sup> However, in this type of research it is especially true that a little knowledge is a dangerous thing. Some of the easiest individuals to fool are those who are very confident of their ability to detect deception.

- Flanagan, O.J. (1984) *The Science of the Mind*. Cambridge, MA: MIT Press.
- Fisher, J. (1979) *Body Magic*. NY: Stein & Day.
- Fitzkee, D. (1945) *Magic by Misdirection*. Oakland, CA: Magic Limited.
- Fuller, U. [Martin Gardner] (1975) *Confessions of a Psychic*. Teaneck, NJ: Karl Fulves.
- Fuller, U. [Martin Gardner] (1980) *Further Confessions of a Psychic*. Teaneck, NJ: Karl Fulves.
- Goffman, E. (1974) *Frame Analysis*. Boston: Northeastern University Press.
- Hansen, G.P. (1990) Deception by subjects in psi research. *Journal of the American Society for Psychical Research*, 84, 25-80.
- Harris, B. (1985) *Gellerism Revealed*. Calgary: Micky Hades International.
- Heider, F. (1958) *The Psychology of Interpersonal Relations*. NY: Wiley.
- Hewstone, M. (1989) *Causal Attribution*. Oxford: Blackwell.
- Hopkins, C.H. (1940) 'Outs', *Precautions and Challenges*. USA.
- Joynson, R.B. (1974) *Psychology and Common Sense*. London: Routledge, Kegan & Paul.
- Karnak, K. (1977) Basic ritual implements. *Invocation*, 11, 173-177.
- Kelley, H. (1980) Magic tricks: The management of causal attributions. In D. Gorlitz (Ed.), *Perspectives on Attribution Research and Theory*, pp. 19-36. Massachusetts: Ballinger Publishing Company.
- Kirke. (1977) Thoughts on ritual magic. *Irruocation*, 13, 230-233.
- Lang, K. (1981) Some notes on extemporisation. *AbraCadabra*, 72, 212-214.
- Leech, A. (1960) *Don't Look Now: The Smart Slant on Misdirection*. Chicago: Magic Inc.
- Lyons, A. & Truzzi, M. (1991) *The Blue Sense: Psychic Detectives and Crime*. NY: Mysterious Press.
- Matlin, M.W. (1983) *Cognition*. NY: Holt, Rinehart & Winston, Inc.
- McBurney, D.H. & Greenberg, J.K. (1980) Downfall of a would-be psychic. *Skeptical Inquirer*, 5(1), 61-62.
- Morris, R.L. (1986a) What psi is not: The necessity for experiments. In H.L. Edge, R.L. Morris, J.H. Rush & J. Palmer, *Foundations of Parapsychology: Exploring the Boundaries of Human Capability*, pp 70-110. Boston: Routledge & Kegan Paul.
- Morris, R.L. (1986b) Minimizing subject fraud in parapsychology laboratories. *European Journal of Parapsychology*, 6, 137-149.
- Moss, N. (1977) *The Pleasures of Deception*. London: Cox & Wyman Ltd.
- Nardi, P.M. (1984) Towards a social psychology of entertainment magic. *Symbolic Interaction*, 7, 25-42.
- Neisser, U. (1978) Memory: What are the important questions? In M.M. Gruneberg, P. E. Morris & R.N. Sykes (Eds), *Practical Aspects of Memory*. NY: Academic Press.
- Nisbett, R. & Ross, L. (1980) *Human Inference: Strategies and Shortcomings of Social Judgment*. NJ: Prentice Hall Inc.
- Nisbett, R.E. & Wilson, T.D. (1977) Telling more than we can know: Verbal reports on mental processes. *Psychological Review*, 84, 231-259.
- Norman, D.A. (1980) Twelve issues for cognitive science. *Cognitive Science*, 4, 1-33.
- Randi, J. (1982) *Flim-Flam*. Buffalo, NY: Prometheus Books.
- Randi, J. (1986) The Project Alpha Experiment: Part 1. The first two years. In K. Frazier (Ed.), *Science Confronts the Paranormal*, pp. 158-165. Buffalo, NY: Prometheus Books.
- Robert-Houdin, J.E. (1878) *The Secrets of Conjuring and Magic*. [Translated and edited with notes by Professor Hoffmann.] London.
- Rumelhart, D.E. (1980) Schemata: The building blocks of cognition. In R.J. Spiro, B.C. Bruce & W.F. Brewer (Eds), *Theoretical Issues in Reading Comprehension: Perspectives From Cognitive Psychology, Linguistics, Artificial Intelligence, and Education*, pp. 115-137. NJ: Erlbaum.
- Rush, J.H. (1986) Parapsychology: A historical perspective. In H.L. Edge, R.L. Morris, J.H. Rush & J. Palmer, *Foundations of Parapsychology: Exploring the Boundaries of Human Capability*, pp. 9-44. Boston: Routledge & Kegan Paul.
- Stevenson, I. (1990) Thoughts on the decline of major paranormal phenomena. *Proceedings of the Society for Psychical Research*, 57, 149-162.
- Tamariz, J. (1988) *The Magic Way*. Madrid: Frakson Magic Books.
- Thomas, C.M. (1989) God men, myths, materializations and the kalās of immortality. *Journal of the Society for Psychical Research*, 55, 377-403.
- Thorndyke, P.W. (1984) Applications of schema theory in cognitive research. In J.R. Anderson & S.M. Kosslyn (Eds), *Tutorials in Learning and Memory*, pp. 167-192. San Francisco: W.H. Freeman.

- Thorndyke, P.W. & Yekovich, F.R. (1980) A critique of schema based theories of human reasoning. *Poetics*, 9, 23-49.
- Truzzi, M. (1983) *Reflections on Conjuring and Psychological Research*. Unpublished manuscript, working draft June 1983.
- Vernon, D. (1975) Vernon on Malini [Edited by Bruce Elliott & George Starck]. In *Stars of Magic*, pp. 150-152. NY: Lewis Tannon.
- Whaley, B. (1989) *Encyclopedic Dictionary of Magic*. Oakland, CA: Jeff Busby Magic Inc.
- Wiseman, R. & Morris, R.L. (in press) *Guidelines for Testing Psychic Claimants*. Manuscript to be published in 1994.
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#### Ein Modell paranormaler Betrugsstrategien

**Zusammenfassung:** Dieser Artikel betont, daß für Parapsychologen, die 'paranormale Behauptungen' (vorgebracht von Personen, die angeben, über starke paranormale Fähigkeiten zu verfügen) beurteilen wollen, ein gründliches Verständnis des sog. paranormalen Betrages unentbehrlich ist. Er argumentiert des weiteren dafür, daß eine der ergiebigsten Arten zum Erwerb dieses Verständnisses die Konstruktion eines kognitiven Modells paranormalen Betrages sei. Ein solches Modell müßte darauf abzielen, die Täuschungsstrategien für ein solches Modell, beschreiben. Der Artikel skizziert im folgenden mögliche Grundlegungen für ein solches Modell, indem er darlegt, wie ein Pseudo-Medium einen Beobachter dazu bringt, eine betrügerische Vorführung fälschlicherweise als echt einzustufen, wie es die Entwicklung 'normaler' Erklärungen durch den Beobachter behindert, wie es einen Beobachter dazu verleitet, 'normale' Erklärungen als unplausibel zu verwerfen, wie es 'täuschungsförderliche' Versuchsbedingungen aushandelt, unwirksame Kontrollmaßnahmen ausnutzt und sich 'Hintertüren' für fehlschlagende Demonstrationen oder Betrugsanzeichen öffnet. Der Artikel betont abschließend, daß das vorgestellte Modell zwar nur einen Ausgangspunkt für solch ein Vorhaben darstellt, daß die Konstruktion eines Modells paranormaler Betrugsstrategien aber sowohl für die Kognitive Psychologie als auch für die Parapsychologie greifbare Vorteile bietet.

#### Model voor strategieën van frauderende paranormale begaafden

**Samenvatting:** Als parapsychologen een oordeel willen vellen over personen die beweren sterk paranormaal begaafd te zijn, dan is een grondig inzicht in fraudetechnieken onmisbaar. Een van de produktiefste methoden daarvoor is de ontwikkeling van een cognitief model van fraudetechnieken dat de bedrogstrategieën beschrijft. Dit artikel geeft een eerste aanzet. Het beschrijft hoe een pseudo-begaafde: een waarnemer laat geloven dat een nepverschijnsel echt is, verhindert dat die waarnemer "normale" verklaringen ontwikkelt, zorgt dat de waarnemer "normale" verklaringen als onwaarschijnlijk verwerpt, condities eist die fraude makkelijker maken, slechte controlemaatregelen uitbuit en uitvluchten voorbereidt om mislukkingen of bewijzen van fraude te kunnen verklaren. Ten slotte geven de auteurs aan dat hun model weliswaar slechts een vertrekpunt is, maar dat een cognitief model voor fraude zowel de cognitieve psychologie als de parapsychologie grote voordelen biedt.

#### Strutturare un modello degli espedienti di frode nella sensitività

**Sommario:** Questo articolo sottolinea che una profonda comprensione della frode nel campo della sensitività è essenziale per i parapsicologi che vogliono definire i "sedicenti sensitivi" (cioè gli individui che affermano di avere forti doti psichiche). Si sostiene che uno dei modi più produttivi per acquisire questa comprensione sarebbe attraverso la formazione di un modello cognitivo della frode nella sensitività. Questo modello avrebbe lo scopo di descrivere le strategie di inganno impiegate dagli pseudo-sensitivi. Il lavoro esprime poi la possibile formulazione iniziale di un tale modello, notando come uno pseudo-sensitivo: inganna un osservatore reinterpretando una falsa dimostrazione come genuina, contrasta la formulazione di spiegazioni "normali" da parte dell'osservatore, inganna l'osservatore rifiutando come implausibili le spiegazioni "normali", contratta per avere nelle sue prove condizioni "che consentono la frode", approfitta dei controlli inefficaci e si prepara "vie d'uscita" per accantonare una dimostrazione fallita o una dimostrazione di inganno. Infine, l'articolo sottolinea come il modello presentato in questo lavoro sia solo un punto di partenza per questo tipo di ricerca, ma che formare un modello della frode nel campo della sensitività ha vantaggi reali sia per la psicologia cognitiva che per la parapsicologia.

#### Modelando las Estratagemas del Fraude Psíquico

**Resúmen:** Este artículo nota que un entendimiento detallado del fraude psíquico es esencial para los parapsicólogos que quieren poner a prueba a los que alegan ser psíquicos (esto es, los individuos que alegan tener una gran habilidad psíquica). Se discute que una de las formas más productivas para obtener este entendimiento es através de la formación de modelos cognoscitivos del fraude psíquico. Este modelo debe tratar de describir las estrategias de decepción empleadas por pseudo-psíquicos. El artículo presenta un posible comienzo de tal modelo, notando como un pseudo-psíquico: engaña a un observador haciéndolo conceptualizar erróneamente una demostración fraudulenta como genuina, impide el desarrollo de explicaciones "normales" de parte del observador, lleva al observador a rechazar explicaciones "normales" como improbables, negocia condiciones "propicias al fraude" para una demostración, explota controles poco efectivos y prepara "excusas" para justificar una demostración fallida o la evidencia de fraude. Finalmente, el artículo discute que el modelo presentado representa solo el comienzo de este trabajo, pero que el modelaje del fraude psíquico tiene ventajas reales tanto para la psicología cognoscitiva como para la parapsicología.

#### Modelando os Estratagemas da Fraude Psíquica

**Resumo:** Este trabalho registra que uma compreensão cuidadosa é essencial para parapsicólogos que querem avaliar os que 'se dizem paranormais' (isto é, pessoas que dizem ter uma forte habilidade psíquica). Argumenta-se que um dos mais produtivos modos de se obter tal compreensão seria através da formação de um modelo cognitivo de fraude psíquica. Esse modelo ajudaria a descrever as estratégias enganosas empregadas por pseudo-paranormais. O trabalho esboça os possíveis princípios de tal modelo, registrando como um pseudo-paranormal: engana um observador forjando uma demonstração fraudulenta como genuína, impendendo o desenvolvimento do observador de explicações 'normais'; engana o observador rejeitando explicações 'normais' como não plausíveis; negocia condições 'condutoras de fraude' para uma demonstração; explora controles ineficazes e prepara 'saídas' para invalidar por meio de explicações uma demonstração falha ou a evidência de fraude. Finalmente, o trabalho mostra que o modelo apresentado representa apenas um ponto de partida para esse tipo de esforço, mas que o reconhecimento de padrões da fraude psíquica tem vantagens reais tanto para a Psicologia Cognitiva quanto para a Parapsicologia.