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The cold reading technique

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Summary. For many people, belief in the paranormal derives from personal experience of face-to-face interviews with astrologers, palm readers, aura and Tarot readers, and spirit mediums. These encounters typically involve cold reading, a process in which a reader makes calculated guesses about a client's background and problems and, depending on the reaction, elaborates a reading which seems to the client so uniquely appropriate that it carries with it the illusion of having been produced by paranormal means. The cold reading process is shown to depend initially on the Barnum effect, the tendency for people to embrace generalized personality descriptions as idiosyncratically their own. Psychological research into the Barnum effect is critically reviewed, and uses of the effect by a professional magician are described. This is followed by detailed analysis of the cold reading performances of a spirit medium. Future research should investigate the degree to which cold readers may have convinced themselves that they actually possess psychic or paranormal abilities.

Key words. Barnum effect; cold reading; psychic reading; astrology; paranormal reading; palmistry; spirit mediums.

The Barnum effect

That there is a sucker born every minute is the cynical slogan most often attributed to the great nineteenth century circus entrepreneur Phineas Taylor Barnum. Though there is in fact no record that he ever made such a remark, Barnum did claim that his success depended on providing in his shows 'a little something for everybody'. Both the cynicism and his recipe for success are relevant to understanding the persistent tendency for people to embrace fake personality descriptions as uniquely their own. This in turn gives a particular aptness to Paul Meehl's phrase, the Barnum effect, to describe the phenomenon¹⁹.

Modern interest in the Barnum effect among psychologists dates from Forer's classic experiment in which a group of 39 undergraduate psychology students were given the Diagnostic Interest Blank⁷. A week later every student was provided with the same personality description, but was led to believe that each description was uniquely different, having been derived from the test results. The students were then asked to rate the accuracy of their 'individual' personality descriptions on a scale of 0 (poor) to 5 (perfect). Of the 39 students, only 5 rated it below 4, and no one rated it below 2 (average). The average rating was 4.3.

Forer's initial concern was with personality theory and assessment⁸, and the relevance of this effect to understanding 'psychic' and apparently paranormal effects was not, to begin with, widely recognized. As late as 1962, P. A. Marks and W. Seeman were calling for the term 'Barnum effect' to be restricted to test-derived clinical personality descriptions of patients which are so general (and trivial) that they apply to everybody¹⁸. But the fact that Forer had obtained his generalized personality description not from standard texts in personality theory but from a newsstand astrology book indicated that the Barnum effect might be significant in contexts far beyond the clinical.

Forer's original personality description is perfectly serviceable even today. It was presented as numbered sentences; here it is as a continuous paragraph: 'You have a great need for other people to like and admire you. You have a tendency to be critical of yourself. You have a great deal of unused capacity which you have not turned to your advantage. While you have some personality weaknesses, you are generally able to compensate for them. Your sexual adjustment has presented some problems for you. Disciplined and self-controlled outside, you tend to be worrisome and insecure inside. At times you have serious doubts as to whether you have made the right decision or done the right thing. You prefer a certain amount of change and variety and become dissatisfied when hemmed in by restrictions and limitations. You pride yourself as an independent thinker and do not accept others' statements without satisfactory proof. You have found it unwise to be too frank in revealing yourself to others. At times you are extroverted, affable, sociable, while at other times you are introverted, wary, reserved. Some of your aspirations tend to be pretty unrealistic. Security is one of your major goals in life.' Parts of Forer's phraseology – 'sexual adjustment' – might be effectively put in more contemporary language, and there are current preoccupations which could be used to make the description even more immediately appealing to contemporary readers. But this is a description designed to be given to young people of both sexes, and it is remarkable how well it wears after almost 40 years. Slight variations on the original Forer description have been used in numerous studies in the 1950s, 1960s, and 1970s, all in one form or another replicating the remarkable susceptibility of subjects to the Barnum effect^{3, 4, 6, 14}. There has been less agreement, however, on exactly why the Barnum effect works as well as it does. The most charitable interpretation would be to say that Barnum descriptions

are simply true of most people: that in endorsing the applicability of Barnum descriptions subjects simply recognize facts⁷.

But this account of the situation hardly captures the point of essential interest in Barnum descriptions. If the consistent endorsement by subjects of Barnum descriptions were merely a matter of recognizing their nearly universal applicability, subjects would not then be so prone to treat such descriptions as uniquely describing their own idiosyncrasies. Subjects, from Forer's original experiment to the present time, would then presumably be more willing to term such descriptions 'average' in applying to their own personalities. Nor would subjects be typically so eager to praise Barnum descriptions in the ways quoted by Ulrich et al.: 'On the nose! Very good. I wish you had said more'; 'Applies to me individually, as there are too many facets which fit me too well to be a generalization'; 'Surprisingly accurate and specific in description'³⁰.

There are two major aspects of Barnum descriptions which affect the degree of acceptance by subjects. The first is the perceived source of the description, and the second is its actual content. With respect to the question of source, the research of C. R. Snyder and various colleagues has been among the most significant since the original Forer experiment^{23, 24}. Snyder and Larson found that subjects were more inclined to accept Barnum descriptions of themselves if such descriptions are presented as derived uniquely for them, rather than just given as a general description said to be true for most people⁹. This crucial function played by the illusion of uniqueness in the acceptance of Barnum descriptions was decisively demonstrated in a later experiment conducted by Snyder and Shenkel^{27, 28}.

Snyder and Shenkel had bogus student 'astrologers' prepare horoscopes, which were actually uniform Barnum descriptions, for a group of subjects. The horoscopes were to be rated by the subjects on a 5 point scale: 1, very poor; 2, poor; 3, average; 4, good; 5, excellent. Some of the subjects gave the 'astrologer' no birth information at all, members of a second group were required to provide their month of birth, while a third group gave the exact year, month, and day of birth. When asked how closely the horoscope resembled their own personalities, the three groups of students differed significantly. Those who had given no birth information averaged an approval rating of 3.24. Those who had given only the month of birth found the Barnum description on average to rate 3.76, while for those who had revealed their exact date of birth, the approval average shot up to 4.38.

Another experiment which revealed the importance of the perceived source of the description was carried out by Silverman²². He presented subjects who possessed a minimal familiarity with astrology with twelve sun-sign personality descriptions. They were asked to choose the four that best suited themselves. When the personality descriptions were presented merely numbered, subjects had no tendency to choose the one derived from their own sun sign more often than chance would dictate. But when the descriptions were correctly labelled according to the astrological sign, there was a marked tendency for subjects to choose their own sign. While these experiments show quite conclusively that a Barnum description is more striking when it is believed to be derived from a credible source, they also indicate that people are often likely to be impressed by Barnum descriptions which involve some sort of arcane 'mumbo-jumbo'^{11, 12, 16, 21}. In other words, while a Barnum description may gain in believability when it is thought to be derived from a 'credible' source, such as a professional psychologist, it may have even more charm for a subject if it is thought to be derived from a mystical or 'incredible' source, such as the lines on the palm of the hand, or the order of cards from a Tarot deck. Much depends here on the prior beliefs and

predispositions the subject brings to his or her encounter with the description.

There is another aspect to the question of source. One of Snyder's studies showed that projective tests produced greater belief in a Barnum description than either interview by a psychologist or (with the lowest belief rating of all) objective tests²⁶. The reason given by Snyder for the differential effects is that projective tests, and to a lesser degree diagnostic interviews, are surrounded by an air of 'mystery.' But there is a further point at stake: a projective test would seem to the subject to involve a more creative manifestation of self than ticking off letters on a multiple-choice objective test. In a projective test, I create my own 'unique' interpretations of, say, an inkblot. Though from a professional viewpoint the results of any projective test may be utterly conventional and typical for a group of subjects, to the naive subject the test will very likely be thought of as something which yields a unique product of his or her creative personality. This, compounded by the fact that the interpretation of the projective test is presumably a subtle and mysterious process, leaves the subject in most cases more than willing to validate the result, if it is to his or her liking.

This brings us to the second major factor in determining the acceptability of the Barnum description: its content. Naturally, people are eager for praise, and the more flattering the description, the more likely it is to succeed. This has long been recognized by paranormal practitioners – few astrologers would say to a client, for example, 'Let's face it, as a Libra, you're undersexed and you lie a lot.' Yet so-called negative information can have an important place in the overall functioning of the Barnum effect. This is, however, a very difficult matter to deal with quantitatively, and the psychologists' studies which have hitherto been undertaken are not especially helpful in understanding it. Dmitruk et al.⁵ came to the general conclusion that subjects were nearly equally as likely to accept negative as positive Barnum descriptions of themselves. Yet the negative Barnum description employed in the Dmitruk et al. experiment tends merely to stress the insecurity of the subject; it is not 'negative' in the stronger sense, say, that it describes the subject as morally worthless or as an individual personally disagreeable to others. Other later investigators have concluded that subjects are indeed more inclined to accept positive than negative Barnum statements about themselves^{1, 10, 31}. But in considering this point, one is faced with subtle questions of connotations of terms and context of usage. It is crucially important to understand exactly what 'negative' words form part of a Barnum description, and exactly how they are used in the general context of the descriptions in order to evaluate any particular study.

The original Forer description was not unqualifiedly flattering in content, and in fact reason would suggest that pure flattery would not necessarily be the best way to enhance the appeal of a Barnum description. It is not simply a matter of undesirable descriptions being tolerated if they are presented in a generally flattering context: they can even add to the credibility of a Barnum description, by giving it a greater sense of realism than mere flattery could have. Subjects in general are not unwilling to admit that they have problems and faults; the most successful Barnum description is often one which allows this, but does so in the context of generally telling the subject that in the final analysis he or she is really a splendid person. Though this is a point of dispute among professional psychologists, it is well recognized in practice by paranormal 'professionals' who make use of the Barnum effect in pedaling their horoscopes and psychic readings.

But even where there are negative or undesirable elements in a Barnum description, subjects have in any event a strong tendency to notice and remember only a percentage of available items. This is selectivity of attention. Given the consid-

erable number of elements in any Barnum description, there will be a wide latitude of response and agreement from any individual, accompanied by a marked inclination to notice items that seem to fit more than items that seem inappropriate. Confirmations are remembered, often quite vividly, whereas less plausible aspects of the description are paid correspondingly less attention¹⁶. And since the point of a Barnum description is that it be general enough to apply to almost anyone, the subject will be hard pressed to identify any item in the description which is plainly wrong. Selectivity of attention also means that where a group of subjects receives the same Barnum description, it will be read differently by everyone, each subject concentrating attention on those aspects of the description which seem best to fit a prior self-image.

Moreover, the Barnum description is supposed to 'fit' a human personality, and it should not surprise that something as uncertain and amorphous, yet exceedingly complex, as the human personality should be subject to a large number of nearly equally plausible descriptions⁹. Young people in particular – the most frequent subjects of psychologists' studies of the Barnum effect – often have a 'soft' or nebulous sense of the qualities of self which they share with others or which distinguish them as individuals. Hence, they easily succumb to the charms of a well-devised Barnum description. And the uncertainty felt by many people, young or old, about their own personalities also explains the possibly self-fulfilling character of such Barnum phenomena as horoscopes. An impressionable person with an immature sense of self may be quickly suckered by a vivid and flattering description of, say, the Aquarian personality as 'humanitarian, independent, friendly, willing, a progressive outlook, original, inventive, a reforming spirit, faithful, loyal, idealistic, intellectually inclined'. Indeed, such a description can be influential in building the person's self-image, encouraging, for example, loyalty or intellectual pursuits².

Cold reading

Cold reading is the term of art used in the magician's trade to describe the practical use of the Barnum effect in the give-and-take of an interview situation. Though interest in the technique by professional psychologists dates from the late 1940s, it has long been put to profitable use by fortune-tellers, clairvoyants, tarot card readers, astrologers, tea leaf readers, spirit mediums, and others who wish to convey the impression that they possess paranormal insight into the client's personality, current life situation, and future. But it would be a mistake to imagine that cold reading has in all cases been carried out naively, without any theoretical insight. Some paranormal practitioners understand full well the nature and character of the cold reading technique, and indeed the very best work on this subject produced by professional psychologists has been carried out by scholars such as Marks¹⁶ and Hyman^{11, 12} who have an independent interest in conjuring. One professional magician who has written eloquently of cold reading is William W. Larsen, Sr.¹³ Larsen never claimed in his writings – published privately in the 1930s and 1940s and distributed only for use by professional conjurers – that he possessed any paranormal abilities. What he did possess was a superb skill in leaving an individual or audience with the illusion that he had such abilities. His standard cold reading description is his so-called Life Span Reading, which can be used 'straight or with a crystal ball', or can be 'given while seemingly reading the subject's palm, laying out the cards, toying with numbers, or gazing at tea leaves in a cup'. It is a one-size-fits-all reading which can be delivered to 'any adult person of either sex'. As Larsen puts it, it is 'based upon events which occur in the vast majority of human lives yet, adroitly stated, the reading will

become personalized and the person receiving the reading will be willing to believe that the seer has correctly told the past and probably foreseen the future'. Every word is the purest Barnum: a clever account of the subject's life and personality up to the present time in terms of six 'life cycles' of vague length (some last 'but a few days', while others 'may endure for years'). There was in childhood a close brush with death 'by you or someone close to you'. There were trials and many changes, the loss of someone close, and an illness or 'bad accident.' Along with the predictable Barnum personality attributes (including, on the negative side, 'a note of stubbornness'), there are forecasts of financial gain, perhaps having to do with real estate or 'property changing hands'.

A nightclub act which Larsen describes also relies on the Barnum effect in an amusing manner. The 'psychic' stands blindfolded on the stage, while his assistant – he recommends an attractive 'girl' – goes among members of the audience, holding her hands over individuals. She says, 'I have here a young lady', a 'very nice man', or some such, and the magician proceeds to deliver, presumably from some deep, mystic source, significant personal messages to the designated audience members. He tells a woman that she is making a mistake right now trying to reason her way to a decision – she should rely on her intuition and hunches: 'If you do, the right course will always be presented to you, and that includes the little problem that's puzzling you right now'. For a young man, he hears the ringing of a bell – or is it a ring 'such as might be worn on the finger? I leave the answer to you'. For another woman, Larsen sees 'blue sky – or blue water? ... And somewhere, far in the distance, I hear a voice calling, 'Yes, I am here.' I see for you good fortune'.

Many in the audience find the messages highly meaningful, proof that some sort of paranormal powers are being employed. Yet the statements are memorized spiel, delivered according to a code from the assistant to identify the sex and age of each subject: 'a young lady' means a female 20–30 years old, 'a lady' means 30–55, and 'a very nice lady' means 55 and over, and similarly with men. From these six crude categories, the appropriate cold reading of up to 150 words is delivered. The emphasis is frequently the same in similar categories, though no two readings are exactly alike: for young women there is often mention of romance and travel, for young men, success with ambitions. For 'ladies', perhaps an important letter that was recently received (to which attention must be paid) or there may be artistic talents that have not been utilized. For middle-aged men, the stress is on making money, while for 'very nice ladies' happiness and family ties. The blindfold, as it turns out, is no impediment at all. Larsen explains to his magician readers that the procedure works so well because the cold reading 'you will give is the one that will pretty generally fit any person of that sex and age group. Only occasionally will you miss entirely and even then you will be a miracle man to the majority. For example, in a room of 50 people you read for one and happen to hit, you are 100% a mental genius. But, should you wholly fail, you are still a psychic wonder to 49 other people'. However, he continues, you will find that you will not miss often: 'The average person will accept anything you tell him or her, and apply it personally. In other words, they'll make your reading fit themselves. People want to believe you, as a psychic'.

In the cool pages of a scholarly journal it is easy to forget just how effective a good magician can be in proving to an audience his 'psychic' powers. As Larsen is quick to insist, this has even less to do with the consummate skill of the performer than with the eagerness of most subjects to hear themselves 'insightfully' described by a superior or mystic authority. Allied to this is the creative web of imagination itself, which weaves a bogus relevance for the cold reading, so that in the end it seems certain that it was meant especially

for you. In this sense, a condition for gullibility is often a profound and overweening interest in the self. Astrology, to cite but one example, is frequently cast in the role of an outmoded competitor to modern astronomy. This is a misunderstanding of the function that astrology plays in people's lives. Astronomy is about planets, stars, and galaxies; astrology, however, is about *me*, and the special place I have in the grand cosmic scheme. It explains *my* unique personality, my special hopes and desires. From astronomy I learn that I am but an insignificant creature in some minor corner of the universe; astrology tells me I am someone unique and important. In this respect, astrology does not function as an alternative to scientific astronomy, but as a rival to the personal support provided by religion.

It is regrettable that academic psychology has not paid more attention to the cold reading technique, inasmuch as the widespread practice of successful cold reading forms the basis for much of the belief in paranormal powers to be found in society today. With rare exceptions – such as the research of Hyman¹¹, Marks and Kammann¹⁶, and Tyson²⁹ – explorations by academic psychologists in this area have been limited almost exclusively to aspects of the Barnum effect, investigated via tests administered to the usual classes of undergraduates. In my view, what is needed now is analysis of the actual techniques and methods used by proficient cold readers^{20, 29}.

This interaction is, however, an extremely complex one. A cold reading conventionally begins with Barnum statements appropriate to the client in question. These may involve personality assessments, but might well be a description of the client's situation: 'You've been going through a period of change [or uncertainty, difficult decisions, personal dilemmas, etc.] lately, haven't you? As the client is already listening to the cold reader with a set of expectations, these will color his interpretation of the initial remarks. The client's response, which will include overt verbal information as well as subtle facial expressions, will in turn modify the development of the reading. The reader can be expected to exploit and elaborate on obvious 'hits', while downplaying or reinterpreting 'misses'. Understanding the nuances of this interplay calls for skills more like those employed in the analysis of a literary text than those used in a statistical account of multiple-choice responses. It also requires unhindered access to a cold reader. In this respect, I was given a rare opportunity to hear and record a long series of cold readings given by a practicing spirit medium on radio.

A spirit medium in action

For two years, a national radio network employed the services of a spirit medium on nighttime talk-back radio. Listeners were encouraged to telephone during the program in order to obtain advice and messages from deceased relatives and friends. With interruptions for news broadcasts and commercial advertisements, the spirit medium, whom we shall call 'Betty', was able to deal with between eight and fourteen callers per one-hour programme. Here was a situation to hear a professional cold reader in action over an extended period of time and under remarkably controlled conditions. The control consisted in the fact that, unlike face-to-face psychic reading situations, there were no visual cues or clues which Betty could pick up on. All of the information she had available about callers was equally accessible to any listener. Although it would have been possible for accomplices to call Betty, and for her on such occasions to display 'astounding' paranormal cognitive or clairvoyant abilities, I do not believe her readings ever involved such deception. I incline to this belief because in the months that I studied her, Betty never once seemed to have information about any caller, or the deceased relatives of any caller,

which was not perfectly consistent with viewing her performances as unaided cold reading.

Moreover, as a virtuoso cold reader she had little need for such subterfuge. A dazzling technician of her profession, the grandmotherly Betty was able simply on the basis of publicly broadcast telephone conversations to convince many callers and listeners alike that she could communicate with the dead. However, as with a pianist gifted at improvisation, her readings were constructed from a large, but not unlimited, set of elements, or 'bag of tricks'. In listening to her, it was possible in the first hour or two to be very much impressed by her skills. Progressively, however, one began to notice repetition. The readings were all different, but more and more began to resemble one another, especially when they were readings directed at the same sort of caller. The use of a tape recorder greatly facilitated the analysis of her patterns of response. As a reader with many years of wide experience, it was possible for Betty to catch subtle clues to a caller's situation and concerns much more quickly than most listeners. Again, the tape recorder was very helpful in understanding this. A typical reading, in this actual case from a caller named Maureen, might proceed as follows:

'Good evening, Betty.'

'Good evening, Maureen.'

Do you hear anything from my Mum?

[Though Maureen has spoken but ten words, Betty – or any listener – can already surmise that she is upwards of 55 years old, might have been raised in Ireland, and is a generally jovial person or at least tonight is in a happy mood. As distinct from other categories of caller, she does not sound recently bereaved, or as though she is seeking advice on a personal problem.]

'Yes, I can, [Betty is enthusiastic] because I have the most smiling lady here beside me! You know, Maureen, she used to put her hands together in glee, didn't she?'

'Yes.' [A note of hesitation.]

'And she almost jumped up and down!'

'That's right.' [With more confidence.]

'That's what she's doing at the moment! [Betty's voice reaches a peak of excitement, and then becomes more serious.] Now, just as I was saying that, she was giving me a feeling – in the abdomen, not in the stomach – and it's all tight. It feels emaciated but blown up. And she's having trouble breathing – it must have been that way at the end.'

'That's right.' [Betty's spirits usually identify themselves by recounting their deathbed symptoms: vague complaints in the thorax region, difficulties in breathing, weakness, and occasionally head pains. Auto accident victims tell of 'chest pains'.]

'Yes, yes, I was overseas when she died at home.' [It is now clearer that Maureen is Irish and closer perhaps to 65 or 70 years old.]

'Gosh, there is a crowd of people around her!'

'Is there? [Maureen is astonished.] Is Mum's sister with her?'

'Yes, exactly.' [Betty replies with casual confidence.]

'And my father?' [Maureen almost shouts with excitement.]

'Yes, he's there too.'

'And is my brother there?' [The eager client supplies the reader with all the material required.]

'Yes, your brother is there too. And look [Betty's voice is almost embarrassed.], I know this sounds funny, but there are *five* grandparents here! [Betty often suggests a family friend, aunt, or uncle who was important in childhood.]

'Oh... [Maureen hesitates.] Oh! That could be my Mum's English friend!'

'And going back to that time, can we talk about a donkey cart?'

'Oh, yes!' [A donkey cart would be a memorable feature for almost any person of Maureen's age and Irish childhood.]

Such a reference exemplifies Betty's broad knowledge of ethnic associations and general population stereotypes; but note the caution – not 'your family's' cart, but just 'a donkey cart'. It is left to Maureen to remember which particular cart Betty must 'mean'.]

'And the times that were associated with it – you can really feel the pleasure of that time.'

'That's right.' [Maureen is emphatic.]

'Now look – I'm being shown a row of houses, and they're apartment houses.'

'Yes ...' [Maureen hesitates.]

'And there are about four of them ...'

[Silence from Maureen, indicating puzzlement.]

'Now bear with me here – and I've got a sort of red brick.'

[Longer silence – it must come as a surprise that an elderly Irish lady cannot relate some memory to a description of common brick row houses, but even the best utilized population stereotypes will occasionally fail.]

'Now, Maureen, this isn't where you lived!' [Betty speaks firmly.]

'No ... no, it's not.' [Of course it isn't; but an awkward miss is being cleverly converted to a hit.]

'But it's where ... ah ... [Betty is groping.] ... ah ... a dear friend lived! Can you understand that?'

'Yes.' [Maureen speaks without conviction: she is trying to figure who the friend might be. Betty quickly changes the subject.]

'Also, I'm being handed a little posy of flowers. They're almost like forget-me-nots, but I'm not sure that they are – and she's handing those to you.'

'My mother?'

'Yes, it is your mother.'

'Oh, how nice!'

'And you know, Maureen, there's an anniversary coming up soon – a time of memory. It was somebody's birthday.'

[With Maureen's many relatives, somebody, living or dead, must have a birthday soon.]

'Oh, yes ...'

'And that one sends their love to you too.' [The ungrammatical 'their' doubles the possibilities of either 'his' or 'her', but this hardly seems necessary, as by now it is clear that Maureen will accept anything that Betty says, making, as Larsen so aptly put it, the reading fit herself.]

'And my brother [Maureen's voice takes on a melancholy tone], is he happy?'

'He's happy now, he's telling me, and he's stressing the word *now*. He says, "She'll know – you don't have to ask me more – she'll know".'

'Oh. I know ... I know.' [Maureen sighs.]

'I'm having trouble keeping up with all of them here – they're all crowding in – and they're all happy.'

'Here's one – a prickly one. Is my mother-in-law about?'

'Yes, she is.'

'Is *she* happy?'

'Yes, she is. She was a little bit of a discontented lady, she tells me.' [To the contrary, it was Maureen who told her that with the 'prickly' characterization.]

'Yes! [Amazed.] That's right!'

'But she says, "Well, you've got to learn contentment, and there's no reason we can't have contentment here, because we have everything we need".'

'Isn't that marvelous!'

Marvelous indeed, as the spirit medium proceeds to pass on further messages from relatives, until the professional radio announcer/host calls the reading to a close to move on to a musical advertisement for, appropriately, cold lunch meats. Every cold reader will have a personal style. Betty's ghosts, besides identifying themselves with gruesome details of their last hours, are given to conveying visual images from the

past. Invoking that great emblem of the middle class, Betty says, 'I'm being shown a manicured lawn – somebody must have kept that lawn as though it was trimmed with scissors', and the caller gasps in recognition. Deceased ladies are prone to reveal themselves, sleeves rolled up, working in the kitchen. They also have a pronounced tendency to use their precious moments with Betty in order to give out a wide variety of baking tips: 'She's telling me that you have to soak the fruit before it's baked these days, Louise.' Sometimes ordinary cold reading remarks are transformed into weighty symbols: 'Dad was interested in sports, wasn't he, Owen? Yes, he's showing me a set of starting blocks, and he's saying he had many false starts in life.'

In all of this, Betty shows a mastery of the uses of indirection. The vagueness of many of her descriptions might be thought of as a liability; more often it is a marked asset, allowing the client to 'discover' a meaning or connection for himself. Good teachers everywhere know that it is more effective to set up a situation where students think through to a correct answer for themselves, than simply to hand out information. Similarly, good cold readers know that the trick is to appear as though they are providing definite information, and yet provide only strategically vague suggestions which can be imaginatively interpreted by the client according to his or her idiosyncratic situation: the cold reader supplies the hints, letting the client do all the actual work. For example, Betty will typically tell a young woman nothing more than that she 'is being shown a good-sized open suitcase'. If the caller has traveled anywhere recently, or is planning to go somewhere, or is even just thinking about the prospect, Betty will have scored a hit, and the caller can be expected delightedly to report to friends the next day, 'She somehow knew I had just come back from overseas!' (Such embroidery by satisfied clients is an inevitable feature of personal re-tellings of cold readings.) On one occasion when not even any of these possibilities seemed to fit, Betty explained to the puzzled caller that the suitcase meant that her mother thought she ought to take a trip.

Betty manages throughout always to observe Hyman's celebrated rules for successful cold reading¹¹: she seems invariably to know more than she actually says, is ever modest about her abilities, and puts to effective use a thorough knowledge of population stereotypes. She is not adverse to asking a caller straight out for personal information, but seldom has to because of her acute listening abilities. She exudes great self-confidence and is always willing to flatter her client, or the client's relatives. (Once, for an apparently well-educated woman caller, she raised the spirit of the lady's late uncle. Not implausibly, Betty saw him engaged in research in a study surrounded by hundreds of books. The caller was suspicious of this flattering picture. 'That's strange,' she said. 'He certainly wasn't a learned man.' 'Well, there you are, Luv,' Betty responded. 'He's making up for it now.')

Above all, Betty follows Hyman's 'golden rule': she tells clients what they want to hear. The dead are quite happy and contented on the 'other side', feeling pain no longer, and enjoying the companionship of other deceased friends and relatives. This much is perhaps innocuous: though one may disapprove of any practice which promotes superstition and false belief, at the same time it must be recognized that Betty was capable of providing real succor for the bereaved. More disturbing, however, was the advice which she was also prone to deliver: Peggy is told by her grandmother not to compromise her plans, Cynthia is warned that she might not be getting the right legal advice, and Robert's father wants to know, 'Why are you hesitating? – it's time to act, he says!' Fiona should go ahead with her plans for a career change, Pam's Mum is asking her not to change her mind, and Jill should be drinking an extract from the flax bush, or at least

that's what Dad says. As for the elderly Margaret, her late husband tells her to stop 'stuffing herself' with those 'artificial pills', and instead take a 'natural' cure. While her physician might be appalled, it is quite possible that Margaret will more gladly follow her husband's advice. And herein lay the most troubling problem with Betty's cold reading performances: it is not that Betty herself offered advice, but that she claimed to convey advice from callers' dead relatives. Many callers to Betty's program were merely curious, but there was a persistent minority of callers desperately in need of help with deep personal difficulties. These people were never allowed to discuss the actual particulars of their problems on the air; they were merely to accept that the 'guidance' given was from their loved ones. To many of these people, Betty's words – which were, after all, 'Dad's' or 'Nana's' or 'Mom's' words – had a power and authority perhaps greater than those of anyone else. This may be part of the reason why, despite excellent listener ratings, she was finally taken off the air.

Though Betty's broadcast performances provided relatively spectacular illustrations of the cold reading process in action, they were not in essential substance different from more modest forms of cold reading. Communication with the dead may have been the ostensible point, but her practice still involved the complex of an eager and perhaps troubled client, predisposed to belief; initial 'Barnum' guesses derived from population stereotypes; and elaboration and development of the reading based on hits and misses indicated by the client's reactions. In other cold reading practices only the gimmick changes – a tarot deck, the lines of the palm, a crystal ball, and so forth.

And many cold reading gimmicks will be subject to the whims of fashion: tea leaves and crystal balls are out of favor at present, while 'aura' reading has become very popular. Astrology can always be expected to maintain currency because it is so complicated to the uninitiated and seems to relate the individual to vast cosmic forces. Palmistry similarly will have continued appeal because the intimacy of personal contact involved in the reading. Beyond these standbys, we can expect to see new techniques promoted as 'break-throughs', mimicking, as paranormal claims so often do, the appearance and jargon of legitimate scientific disciplines. The only constant element will be the patterns of interplay between reader and client described here.

A suggestion for future research

One issue which inevitably arises in connection with cold reading is the question of sincerity. It is unquestionably the case that many cold readers cynically exploit their clients with self-consciously fraudulent intent. Yet there may be many more who actually believe their cold reading techniques are based in a scientifically valid process and achieve objectively beneficial results for the client. A large number of paranormal practitioners who make use of cold reading did not begin their activities with the intention of fooling or exploiting anyone. An excellent example is provided by the case of a much-respected professional scientist who is now a member of the New Zealand Committee for the Scientific Investigation of Claims of the Paranormal. As a postgraduate student in pursuit of a scientific career, he became intrigued with astrology. Though during this period he had nagging doubts about the physical basis of astrology, he was encouraged to continue with it by his many satisfied clients, who invariably found his readings 'amazingly accurate' in describing their personal situations and problems. Not until he had one day obtained such a gratifying reaction to a horoscope which, he realized later, he had cast completely incorrectly, did he begin slowly to understand the real nature of his activity: his great success as an astrologer had nothing

whatsoever to do with the validity of astrology as a science. He had become, in fact, a proficient cold reader, one who sincerely believed in the power of astrology under the constant reinforcement of his clients. He was fooling them, of course, but only after falling for the illusion himself.

While such changes of mind by a cold reader about the true nature of some parascience are possible (and Hyman tells a similar tale about his own flirtation with palmistry), they are probably very rare. Most cold readers could not be expected to possess the personal honesty, critical sensibilities, or academic training of our erstwhile astrologer. Most important, however, is the influence of clients in validating the activities of the cold reader. Few cold readers can resist the praise they receive from their customers. When a method – Tarot reading, palm reading, astrology, etc. – seems so effectively to work for the client, it is difficult for the reader not to come equally to believe in the 'gimmick' itself, without knowing just why it succeeds so well. (After all, a cold reader might argue, doctors prescribe drugs without knowing the specific biochemistry of why they work.)

There is a further aspect of cold reading which might in some instances contribute to its ingenuous practice. As Marks has suggested, anywhere between 1% and 5% of the population regularly experience 'eidetic' or pseudo-hallucinatory images in an uncontrolled manner¹⁵. Not only might eidetic imagery explain much apparently paranormal phenomena, for example out-of-body experiences or the seeing of ghosts; it also might explain how, for instance, an aura reader could with all sincerity 'see' a brightly colored aura around a client and find in it the personality and problems of the client¹⁷. Whether eidetic imagery phenomena could be extended to impute sincerity to some spirit mediums is an open and controversial question, but it is certainly one which for some individual cases needs consideration. In general, there has perhaps been too great a tendency for skeptical investigators to impute fraudulent motives to cold readers. Without doubt, such an attitude is in many instances justified, but there are other situations where a complex dynamic of self-delusion is perpetuated by an uncontrolled imagination combined with the very process of cold reading itself. How this dynamic is established and supported clearly needs further systematic investigation.

A final note: this discussion has presented cold reading as it flourishes in the domain of the paranormal. Yet it must be allowed that professionals who use counselling in their work depend on practices which are in some respects near or distant relatives of cold reading. Thus cold reading extends beyond astrology and fortune telling through fringe medicine and into psychotherapy and even legitimate physical medicine. The psychiatrist, for example, who is faced with a patient displaying vague psychological symptoms may, in ways not wholly alien to the astrologer, present an 'explanation' of the disorder in terms of an impressive theory. The authority of the psychiatrist may persuade the patient that the correct explanation for his disorder has been found; indeed, he or she may eagerly embrace the psychiatrist's diagnostic narrative as 'amazingly accurate'. Psychiatrists have many satisfied clients in situations where both doctor and patient firmly believe that it is the empirical content of the theory according to which they were treated which has given benefit – when in fact any of a number of alternative theories might have worked as well. Thus the line that divides effective legitimate counselling from delusive cold reading may be less clear than some might wish to believe.

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The psychology of paranormal beliefs

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Summary. Investigation of paranormal claims has failed to find any repeatable paranormal phenomena, yet beliefs in such phenomena are extremely prevalent. Some of the psychological mechanisms which support these beliefs are described. Mental imagery, subjective validation, coincidence, hidden causes, and fraud all contribute to the folklore in this field. Magical thinking is as evident today as it ever has been. Recent research suggests that increased skepticism concerning paranormal claims can result from special educational procedures which emphasize critical thinking rather than learning scientific facts.

Key words. Psychology; paranormal beliefs; motivation; mental imagery; coincidence; hidden causes; subjective validation; fraud; education; hoax-dehoax procedure.

Introduction

After a century of serious research, investigations of the paranormal have failed to produce a single repeatable finding. Thousands of articles and books have described evidence of all levels of quality ranging from the purely anecdotal to elaborately designed laboratory experiments. Not a single claim of the paranormal has been confirmed by independent, impartial investigators. Even more disillusioning is the fact that the field is rife with fraud, trickery, illusion and error. Yet beliefs in the reality of paranormal phenomena continue to be a popular and a central theme in our cultural ethos even among the highly educated, academics and scientists. How can the widespread belief in the paranormal, on

the one hand, and the dearth of scientific evidence, on the other, be reconciled? Apart from the obvious cultural transmission of paranormal beliefs, to what extent do the less obvious factors of self-deception, fraud, illusion, and error contribute to the formation of such beliefs?

Firstly, how prevalent are paranormal beliefs? Wagner and Monnet³⁰ reported that 65% of U.S. professors believe that ESP is a likely possibility or established fact. Significant differences were apparent between disciplines however²¹. Positive response rates to the questions 'Do you consider ESP a likely possibility?' or 'Do you consider ESP an established fact?' were as follows: humanities, arts, education,