

Again this result can be explained by:

- a. psi does not exist.
- b. psychological reasons like the extra pressure on the subjects and
- c. a deeper theoretical notion such as that developed by von Lucadou.

Happily enough there is the triple blind experimenter prediction which may be concretised as follows:

2. If one has found reasonably well established correlation between psi scores and for example a personality variable, then this correlation tends to decrease or disappear upon replication if the personality measurement is made before the psi test. However the correlation remains if the personality assessment is made after the psi test.

Therefore, rather than selecting groups as suggested by Marilyn Schlitz, I would advocate research using set-ups that either enable or disable the use of the correlation for signal transfer.

SUBJECTS' EVALUATIONS OF A TAROT READING

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Abstract

In this paper it is argued that, in many ways, the psychic reading constitutes an ideal environment for the action of the Barnum Effect, as it incorporates factors of relevance and mysteriousness which have been found to increase acceptance. It is also suggested that the traditional characterisation of the Barnum acceptor, coined as the *gullibility hypothesis*, may be less valuable than one derived from the *cognitive processing artifact hypothesis*. These models were tested by presenting Barnum statements via a computer link and under the guise of a Tarot card reading, to 46 Ss. The accuracy of the reading was rated statement by statement. After a delay to allow memory decay, Ss were given a surprise recall task. Recollections were rated by independent judges for the accuracy with which Ss remembered the detail of the reading. Acceptance did not covary significantly with measures of need for approval or locus of control [$r_s = 0.065$ and 0.231 respectively], thus failing to support the *gullibility hypothesis*. Although there was no significant difference between gross recall for accepted items versus rejected items [$\chi^2 = 1.427$], there was a tendency for greater levels of initial acceptance to be associated with greater distortion in recall [$r_s = -.115$, $p < .01$, 1-tail], as predicted by the *cognitive processing artifact hypothesis*. The author suggests that this latter represents a promising model through which to understand the acceptance of general statements as feedback from psychic readings.

Introduction

(1) acceptance of the content of psychic readings

There is little evidence to support the view that psychic readers have paranormal access to information about their clients. In the most recent and most extensive review of quantitative studies evaluating material produced during ostensibly psychic readings, Schouten (1991) concluded that "there is little reason to expect mediums more often to make correct statements about matters unknown at the time than ... can be expected by chance" (p.356).

Yet this does not accord with public opinion, with surveys consistently finding that belief in the paranormal - and in psychic readings in particular - is widespread (cf. Aplek & Tobin, 1989; Haraldsson, 1985). How can we reconcile the experimental evidence with the beliefs of the many individuals who hold a high regard for mental mediums, and who have been impressed by their performance during readings they have solicited? The stock skeptical response has revolved around claims of deception on the part of the reader and gullibility or special needfulness on the part of the client (eg Dutton, 1988).

Deception by the reader can span the range from an unconscious response to non-verbal cues emanating from the client through to the wholly deliberate use of "cold reading" (see Hyman, 1977). Recently, attempts have been made to characterise cold reading in terms of a hierarchy of processes, the different levels of which require different degrees of interaction with the client for their success (Roe, 1991). One result of such

discovery that even in situations where quite sophisticated deceptive practices could be used, a significant proportion of the reading would still necessarily be in the form of general statements. This somewhat unexpected finding suggests that the perceived success of such a reading would depend in no small part upon the client's willingness to accept vague or ambiguous information as accurately reflecting their circumstances.

(ii) *Psychic readers and the Barnum Effect*

Unethical acceptance of general feedback is well-known in the clinical literature, where it has been described in terms of susceptibility to the Barnum Effect. Research into the nature and causes of this phenomenon has generated a substantial literature, and to date has been the subject of three comprehensive reviews (Dickson & Kelly, 1985; Furnham & Schofield, 1987; Snyder et al. 1977), which can be regarded as concentrating on three broad factors: characteristics of the subject, characteristics of the feedback items, and characteristics of the context within which feedback is given. Underpinning this work is the assumption (made explicitly or implicitly) that Ss accept general feedback *at face value* as uniquely accurate, apparently unaware that the description could apply equally well to others. Only if this is the case does it become reasonable to account for Ss' naïveté solely in terms of trait or situational factors. This work is very briefly reviewed in the following section:

(a) *characteristics of the subject*

From the earliest studies of the phenomenon, susceptibility to the Barnum effect has been portrayed as an expression of some generally-defined, negatively-oriented personality dimension akin to gullibility. Forer's (1949) original investigation was alternatively titled 'a Classroom Demonstration of Gullibility', and this characterisation has been easily adopted by others (eg Lattal & Lattal, 1967). Persistent attempts have been made to identify personality correlates of acceptance which could conceivably reflect a general gullibility trait. The more robust findings resulting from this search have characterised Barnum acceptors as high on need for approval (eg Mosher, 1965; Snyder & Larson, 1972), and as tending to the external on locus of control (eg Orpen & Jamotte, 1975; Snyder & Larson, 1972), although for both of these variables the effect sizes are small to medium (after Howell, 1987, p. 198).

(b) *characteristics of the feedback items*

Many studies have demonstrated that general personality profiles are judged by Ss to be accurate descriptions of themselves (eg Carrier, 1963; Snyder, 1974). Indeed, it has even been found that Ss perceive a 'fake' generalised interpretation as more accurate than interpretations actually derived from their personality tests (Merrens & Richards, 1970). Similarly, perceived favourability of items has been found to influence the degree to which a personality sketch will be accepted, with favourable descriptions being regarded as more accurate (eg Collins et al, 1977).

(c) *characteristics of the feedback context*

Richards & Merrens (1971) reported that Ss who completed an abbreviated Rorschach test subsequently rated their feedback more highly than others who believed the same feedback to be derived from their responses on Q & A measures. They account for these results in terms of the perceived ambiguity or 'mysteriousness' of the assessment measure: whereas objective tests could appear relatively transparent in their action, and thus easily faked by the S, these other measures are more difficult to understand, such that Ss feel less in control of the information they are revealing about themselves. Interestingly, Snyder et al (1976) discovered that similarly high acceptance levels were elicited when the mysterious assessment device was a graphologically-based test, or an astrologically-based test.

A second situational factor is the degree to which the protocol implies that the feedback given to Ss was derived *specifically* for them (Snyder and Larson, 1972). Direct manipulation of feedback relevance, simply by telling Ss either that the personality interpretation was specifically derived for them or was generally true of people, caused greater acceptance when relevance was high (Collins et al, 1977). When presented thus, the effect is

undoubtedly trivial. However, in more naturalistic settings it has also been found that increasing the level of specificity of information upon which a reading is ostensibly based, leads to greater acceptance of subsequent feedback (Snyder & Shenkel, 1975).

(iii) *characteristics of the psychic reading context*

It is interesting to note that, on the basis of the findings noted above, the pseudopsychic reading situation could be regarded in a number of ways as approximating an 'ideal' Barnum context. With regard to so-called general gullibility, it has been suggested (eg Alcock, 1980) that believers in psi phenomena exhibit deficient reasoning skills compared with non-believers. This account has received some empirical support (Alcock & Otis, 1981; Gray & Mill, 1990; but see also Irwin, 1991). On the basis of survey data, Tyson (1982) has characterised clients who consult diviners (in this case astrologers) as being particularly successful and having an external locus of control. Pseudopsychics have long advocated general and favourable statements during readings (eg Jones, 1989), and sample statements drawn from such sources have been shown to exhibit similar acceptance patterns to Barnum statements when presented using a conventional Barnum protocol (Roe, unpublished).

The psychic reading offers an assessment device which is characteristically mysterious, since its method of action is typically described in terms of paranormal processes which are poorly understood (even by the initiate). Much of the ceremony associated with readings acts to reinforce the obscurity of the forces at work, and to emphasise the reader's privileged position as a vehicle for its expression. At the same time, however, the client usually plays a direct role in the divination process, heightening the relevance of the process to them; this may be as involved as using their own hand as the source of a palministry reading through to merely shuffling a Tarot card deck prior to producing a spread of cards to be interpreted.

(iv) *Differences between the two contexts*

But although the similarities between conditions which are considered conducive for generating the Barnum effect, and those found in 'live' psychic readings are striking, the evidence is only circumstantial, and there are grounds for suggesting that such a facile assumption may be mistaken. The method by which pseudopsychics present material is quite different from that conventionally adopted in the Barnum literature; Barnum feedback is invariably presented as a single body of text, so that the subject is able to view the sketch as a whole, whereas in psychic readings information is transmitted verbally and sequentially, conferring different properties to the communication and making different demands upon the recipient. Two factors are considered here: the indexicality of spoken language, and the greater reliance upon memorial representation of the material.

It has been claimed that the vast majority of expressions normally used in conversation are indexical, that is, the meaning of the expression alters with the context of use (eg Barnes & Law, 1976). Such verbal communications require a more active role on the part of the listener. Instead of meaning being inherent in the message itself, the listener must decide which of the multiplicity of possible meanings will be most in accord with that intended by the speaker. The choice is influenced by the way the listener interprets the environment in which the message is uttered, who the speaker is, what their status is, what they have said previously, what is likely to happen next and so on (Potter & Weatherell, 1987, p.23). In normal dialogue, where there is a genuine attempt to communicate, and the number of plausible alternative interpretations is severely constrained by the context, this process can run quite seamlessly, as the listener's adopted meaning approximates that intended by the speaker.

In the pseudopsychic communication, however, this usual relationship may be exploited by the use of statements which would not be regarded as a genuine attempt to communicate any specific information known to the speaker, rather, the utterances are chosen because they are sufficiently free of meaning to encourage the listener to impose one of their own. The listener, guided by the assumption that the speaker is speaking to and about them and thus

that what is communicated should in some way be personally relevant, interprets the message in terms of their own personality, circumstances and experiences.

Clients can be encouraged to work harder than usual to decipher messages, as the reader feigns difficulty in understanding a received communication or particular omen, or claims to "only see pieces, as in a jigsaw puzzle" which only the client could truly understand (Earle, 1990, p.6). They may even "remember" information which was never actually part of their reading, but was evoked in some way by the process of interpreting the given material. As a result, clients may evaluate the reading not on the basis of what was actually said, but with reference to their processed version of the raw stimulus; a version which has been interpreted, elaborated, personalised, such that it should not be surprising that the reading is seen as impressive.

The dynamic and transitory nature of a message presented in real-time places greater demands on cognitive resources. The listener must depend upon memory as the only record of the reading, while the complexity of the interaction encourages the organisation of incoming information into forms which are less costly in terms of processing. It has been suggested that individuals make use of conceptual frameworks or schemata to impose meaning upon putatively meaningful material in other contexts (cf. eg Pichert & Anderson, 1977). This process tends to prioritise incoming information according to how salient it is deemed by the schema that has been adopted, emphasising those aspects of the communication which accord with expectation, and de-emphasising those which do not. This process is very prone to incorporating distortions, especially in recall, in a manner which serves to make the whole more coherent and meaningful for the client (see eg Loftus, 1979).

Pseudopsychics are aware that Ss come with particular expectations of their reading (see, eg, Jones, 1990), especially in terms of the problems they would want to be resolved or questions to be answered, and that these will tend to bias their interpretation of the reading so that it bears upon them rather than other questions. The reconstructive nature of memory is similarly exploited by recommending that readers not be afraid of feeding clients with possibly contradictory information during the course of a reading, in the knowledge that they will only attend to and subsequently recall what was true of them and safely forget the rest (eg Ruthchild, 1981).

(v) *The Barnum Effect: a reinterpretation*

This characterisation suggests a modified or expanded account of Barnum acceptance. The reading is successful not simply because it is accepted at face value as uniquely accurate, due to Ss' unsophisticated evaluation or because they are coerced by situational demands (although these play an important role). Rather, the reading is treated just like any other communication event, with Ss scanning past experiences to find appropriate meanings for statements addressed to them, unconsciously elaborating on themes in uniquely personal ways, and subsequently evaluating the elaboration, not the reading itself. Thus the mechanism by which the Barnum effect acts may reflect an artifact of normally efficient cognitive processes concerned with making sense of communications from others, and may have more in common with other cognitive or processing biases (see, eg, Nisbett & Ross, 1980) than has been previously thought.

(vi) *Characteristics of the present study*

The present study is a preliminary attempt to assess whether the Barnum Effect is especially influential in the psychic reading context, by presenting Barnum statements as feedback in a simulated psychic reading. The intention is to retain those aspects of the reading context which emphasise the process's mysteriousness and relevance, as well as those which emphasise the normally transitory nature of such communications. To evaluate the relative contribution of the gullibility hypothesis and the cognitive processing artifact hypothesis, we consider some of the personality factors claimed by the former to covary with acceptance as

well as the effects upon Ss' representations claimed by the latter to generate differences in accuracy of item recall with initial acceptance of the item's meaning.

(v) *Experimental hypotheses*

- H1: General acceptance will be high, and in the range of previous BE research.
 H2: Ss' overall acceptance ratings will increase as their locus of control scores tend to the external.
 H3: Ss' overall acceptance ratings will increase as their scores increase on a measure of need for approval.
 H4: Gross recall on the surprise test will be better for those statements that achieved a high initial acceptance than for those that were rejected.
 H5: Of those statements that are recalled, there will be a tendency for the degree of distortion in recall to increase as acceptance ratings increase.

Method

Design

Measures of locus of control and need for approval were used as predictors of mean acceptance level in a between subjects design. Ss' acceptance ratings were also used as predictors of subsequent recall using a within subjects design.

Materials

A Belief in Paranormal (BIP) scale was specially constructed because the focus of interest here is quite different from that addressed by existing scales (see Palmer, 1986 for a review). The BIP scale includes items relating specifically to previous experience of and faith in the Tarot as a divination tool. Inventories of locus of control and social desirability were taken from Rotter (1966) and Crowne & Marlowe (1961) respectively.

Subjects

6 first year psychology undergraduates at Edinburgh University (16 male, 30 female, aged 18-23) acted as subjects. The sample was chosen to minimise the likelihood that they had been exposed to the Barnum Effect through their studies, or that they had become suspicious of hidden agendas as a result of experiencing deception in other psychology class experiments.

Procedure

(1) Recruitment

Students were approached during compulsory tutorials, and were asked to participate in "an evaluation of a Tarot Reading". It was emphasised that they would not themselves be the subjects of the study, but instead would be acting as independent judges helping us to evaluate a claim of psychic ability made by a third party. Upon recruitment, Ss were given the measures of need for approval, locus of control and belief in the paranormal. These were sensibly to be used to provide a more "objective" measure against which to gauge the Tarot reading's content. Ss completed the questionnaires at home and returned them to E immediately prior to the reading.

(2) The study

The study was organised in time blocks of 60 minutes duration arranged over a period of three weeks. The timetable format was designed to keep Ss separate immediately before and after their readings so that they could not discuss its content with each other (which could

undermine the sham context), as well as to reinforce the impression that a Tarot card reader was giving up his or her own time to attend the department.

Ss were informed that to avoid any involuntary transfer of information (particularly non-verbally) there could be no direct contact between them and the claimant. Instead, communication would take place via a cable link-up between BBC microcomputers. The procedure was actually necessary to disguise the fact that there was no 'reader' at all, but rather it was the experimenter (E) who would be transmitting the reading.

Ss were primed to expect personality-based information by being told that the reader had been instructed to concentrate on information which was instantly verifiable by the client. They were then introduced to an old-style and slightly worn Tarot deck which would be used to produce the card spread. Written instructions were provided which detailed how to generate the Grand Cross arrangement (after King, 1989), although E was present to ensure that the procedure was followed accurately. Cards were placed *face down and without looking at them*¹ on a 24" x 18" green baize-covered 'portable table'. Once the arrangement was complete, E removed the table along with unused cards, ostensibly to transport them to R. Upon E's departure, S would sit at the terminal and wait for R to interpret the arrangement and start to relay any impressions formed.

(iii) Transmitting and rating the reading

The reading was relayed from E to S in real time, typed letter by letter to S's terminal screen. A question mark would be typed to indicate that a message was complete, prompting S to rate the statement for accuracy using a 5-point scale (after Carrier, 1963)². Ss were told that the assessment would appear to them on-screen as feedback and to E to be recorded, but that R was given no feedback other than that the client was ready for the next impression. After a rating had been registered, that message would disappear from the screen.

All Ss received feedback consisting of the same 20 Barnum statements. The order of presentation of statements was counterbalanced across Ss, principally to control for any primacy and recency effects which could confound any recall measure, and to encourage different Ss to remember different items should they subsequently compare experiences. Once the statement list was exhausted, S received a message on-screen from R which indicated that the reading was over.

(iv) Recall

After a delay³, Ss were given a 'surprise' recall test, being asked to "give an account, as accurately as possible, of what the reader said to you". Ss recorded their recollections on a sheet which consisted of a series of numbered boxes corresponding to the number of statements they had been given. Ss were informed that they were not expected to remember all the items, and certainly not in the order in which they were given. There was no time limit to this recall stage.

Ss were then provided with a handwritten account of the reading, contained on a printed sheet similar to that used to record their recall, and which had ostensibly been completed by E as the reading was being transmitted. They were asked to try and link their recall to the specific statements which prompted them. In this way we hoped to avoid the difficulties of

- 1 This was to avoid potential problems of subject familiarity with the meanings of some of the cards, which could have preoccupied them during the reading assessment phase.
- 2 Where 1 = almost entirely wrong, 2 = more wrong than right, 3 = about half and half, 4 = rather good, and 5 = amazingly accurate.
- 3 To exploit the logarithmic decay of memories, delays were set at 20 minutes, 24 hours or 7 days to consider the effects of time on recall patterns. Given the scope of the present paper, I am not able to discuss the effects of differential delay beyond stating that although increased forgetting is associated with longer delays, there are no gross change in pattern of recall.

attempting to determine which recall item related to which actual statement, a procedure which could be problematic where recall is incomplete or distorted.

(vi) Debrief

Immediately after completing the recall task, Ss were given a full and sympathetic debrief which emphasised the necessity of the deception and the steps which had been taken to minimise any of its potentially negative effects. Ss were given the opportunity to discuss the study in as much detail as they required.

Results

(i) General acceptance

It is of interest to determine whether the use of the novel environment of a simulated psychic reading had any effect on Ss willingness to accept feedback. Table 1 presents the incidence of acceptance or rejection of items, with responses collapsed to give three cells, accept, neutral and reject;

	Accept ("amazingly accurate" or "rather good")	Neutral ("about half and half")	Reject ("more wrong than right" or "almost entirely wrong")
Observed	483	175	262
Percentage	52.5%	19%	28.5%

Table 1: Incidence of acceptance or rejection of statements

It is evident that there is a very unequal distribution of ratings, with a marked tendency for Ss to accept items as being accurate. Data from the "about half and half" category represents neither acceptance nor rejection of an item, and theoretically is problematic to interpret.⁴ Comparing only the incidence of S acceptance or rejection with expected values, we find a highly significant deviation in the predicted direction [$\chi^2 = 65.56$, 1df, $p < .001$], which allows us to accept H_1 .

(ii) Covariance with personality measures

The gullibility hypothesis predicts that Barnum statement acceptance will covary with Ss' scores on personality measures believed to be related to the fairly nebulous concept of "gullibility". Two of the most successful indicators reported thus far - locus of control and need for approval - were implemented here. However, both personality indicators gave rise to positive, but ultimately non-significant correlations [for need for approval, $r_s = .065$, ns; locus of control, $r_s = .231$, ns], thus failing to lend support for H_2 and H_3 . It is interesting to note a positive relationship between belief and acceptance [$r_s = .353$, $p < .05$], which indicates that believers were more persuaded that the reading was an accurate description of them.

(iii) Analysing recall

Recall was analysed by three judges (one of whom was E) working independently. All judges were blind to Ss' acceptance ratings for each statement. Analysis consisted of rating the similarity between Ss' recollection of each item of the reading and its presented form,

There are two plausible accounts of the likely distribution of ratings should the Barnum effect not be effective here: either ratings would be evenly distributed across all 5 categories [Weisberg, 1970, assumes that a non-rectangular distribution of ratings across the five point scale constitutes an endorsement of the effect], or else incidence follows a more normal distribution with the more moderate central categories being selected more frequently than more extreme ones. If we remove the central category, and collapse data on either side, then we do not have to discriminate between

using a four-point scale where 0 = not recalled at all, 1 = recalled with distortions which modify the original gist of the statement, 2 = recalled with distortions, but with the overall gist retained, and 3 = recalled accurately. Recall scores were then compared with the original rating for that item.

The cognitive processing artifact hypothesis predicts that Ss will recall more items which were originally accepted than those which were rejected. Frequency of recall of each statement type is given in table 2.

	Accept ("amazingly accurate" or "rather good")	Neutral ("about half and half")	Reject ("more wrong than right" or "almost entirely wrong")
Recalled	257	74	134
Not recalled	226	101	128

Table 2: gross recall for accepted and rejected items

Although there is a slight trend in the direction predicted by H4, the difference is not significant [$\chi^2 = 1.427$, ns], suggesting that original acceptance of the item did not affect the likelihood of it being recalled. However, such a conclusion may be simplistic as it ignores the distinction between different types of recall. The graphs in fig. 1 illustrate in more detail the effect of original rating upon recall.

The bars represent the proportions of items of each type that were recalled relative to that expected by a chance distribution - a positive histogram indicates that the item type was recalled more often than expected, whereas a negative one indicates that it was recalled less often. From this, we can see that Ss tend not to forget those items to which they responded extremely, either in strongly accepting or strongly rejecting the description. Rather, it seems to be those items about which Ss were ambivalent that suffer most from being forgotten completely.

However, when we consider the integrity of recalled items, we find very different patterns; where rejected items are remembered, the original meaning seems to have been retained, with any distortions in form tending to be superficial. In contrast, Ss are much more likely to remember *accepted* items in a form which is so distorted as to have altered the original gist of the item. Further analysis supports this impression, indicating that the higher the original rating, the greater the tendency to distort recall (giving a low recall rating) [$r_s = -.115$, $p < .01$, 1-tail], in line with H5.

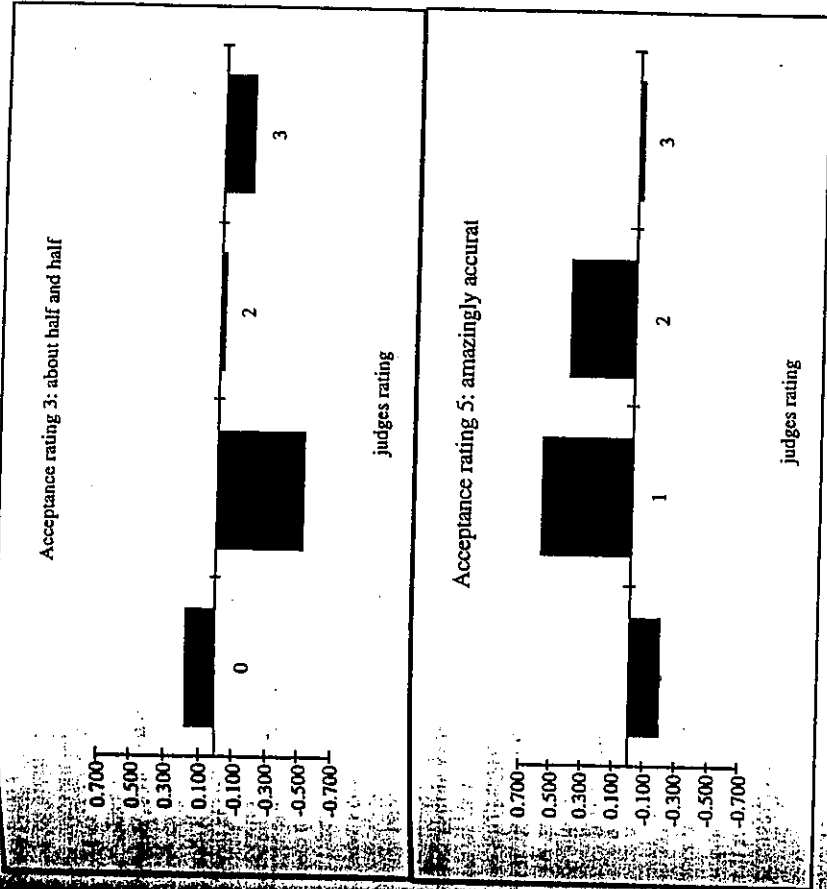
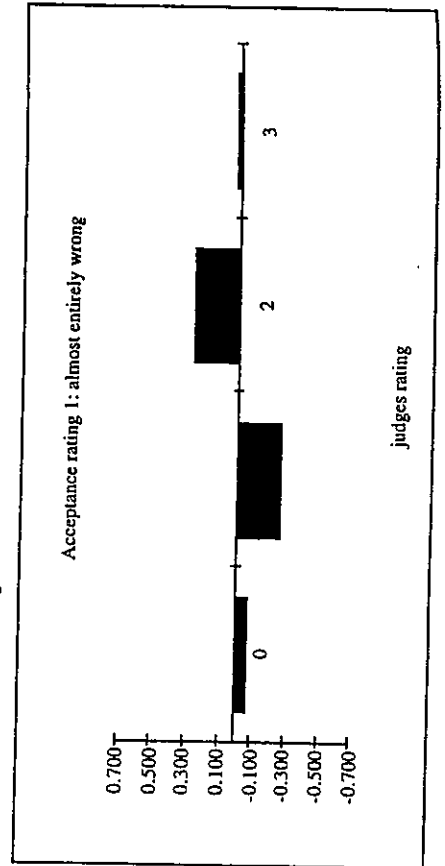


Fig 1: No of items recalled (above that expected by chance) as a function of original acceptance rating.

Discussion

Indirect support for the gullibility hypothesis could have been claimed if Ss' acceptance levels had covaried with their scores on measures of social desirability and locus of control - it has been reported previously (eg Snyder & Larson, 1972). It is perhaps a little surprising, then, to note that neither effect reached significance here. It could plausibly be argued that failure to detect an effect in the present study is explained, at least in part, by the relatively small subject pool involved. This is highlighted by the effect size of the correlation between Ss' scores on locus of control and their level of Barnum acceptance, which at .231 is in keeping with that reported by others (cf Mosher, 1965). The data for need for approval are less encouraging, and must be regarded as casting some doubt upon the influence of this particular personality variable here. Taken together, the two results reinforce the impression that evidence accrued to date in favour of the effect upon Barnum acceptance of both these variables is based on relatively small, but significant correlations, which may reflect constant but very weak effects. We certainly have no guarantee that these factors play a role in actually inducing the BE, although they may play some part in shaping it thereafter.

Failure to find convincing effects of personality variables upon Barnum acceptance would be surprising if the effect itself was shown to be more explicable in terms of an artifact of cognitive processing. An initial attempt to evaluate this interpretation of the effect was

conducted here through the analysis of Ss' subsequent recall for their readings. If this recall is favourably selective or distorted such that it presents a more coherent and accurate account of the Ss' actual personality, then it would tend to support the notion that the message has been actively processed by Ss in order for it to have meaning for them. It would also be suggested by Johnson et al (1985), since it is difficult to explain why such a process should occur if Ss are only acquiescing. Indeed the data provide some (if not wholehearted) support for this notion. Although not significant, there was a tendency for Ss to better recall those items which they had accepted over those which they had not. This can be explained in terms of accepted items being subject to greater or more successful elaboration, which allows for easier subsequent recall (in a manner reminiscent of Craik and Lockhart, 1972). More promisingly, there was a distinct trend for those items which were accepted to suffer more distortion in recall than those that were less well accepted. This fits well with a model in which the attribution of meaning to a statement causes it to be modified in ways which increase the goodness of fit.

Given the exploratory nature of the study it is likely that other interpretations of the findings are possible, and which would need to be considered. One such is that Ss may simply have spent longer considering statements which they felt may have been true of them, so that improved recall may merely reflect greater exposure to those particular messages. This can be controlled for in future replications by placing specific limits on presentation time. It is also unfortunate that no attempt was made to counterbalance the favourability of items. As a result, we are unable to rule out the possibility that differential recall may have been due not to the manipulated characteristic but to other attributes of the items themselves, such as topic of concern. Perhaps some issues are inherently more memorable than others.

In conclusion, then, this study reports some support for an expanded characterisation of the action of the Barnum Effect in psychic reading contexts. It suggests that it may be more fruitful to consider acceptance in terms of an artifactual consequence of information processing processes geared towards deciphering communications from others, rather than simply as a result of some general personality trait or situational factor as has previously been assumed.

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Symposium
NEW LIGHT ON APPARITIONS

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Raymond A. Moody, Dean I. Radin, William G. Roll

A LATTER-DAY PSYCHOMANTEUM

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Abstract

Inspired by the psychomanteums, or oracles of the dead, in ancient Greece, I have developed a procedure to facilitate visionary encounters with departed loved ones. The central feature is a chamber with a large mirror into whose clear depth the subject gazes. Of 50 volunteer subjects guided through the procedure, 35 described vivid experiences. Other researchers, who have used this method, report similar results. The work helps to explain the reports from the Greek oracles of the dead, it provides opportunities to explore brain activities during visionary experiences, and it may be developed into a form of therapy for prolonged grief states.

In ancient Greece, there were curious institutions known as psychomanteums, or oracles of the dead, where people traveled allegedly to see and to consult with the spirits of deceased relatives and friends. The facilities are mentioned by Homer in *The Odyssey*, the historian Herodotus, the comic playwright Aristophanes, the geographer Strabo and the travel writer-physician Pausanias, among others. Such accounts suggest that the procedures employed were not a form of mediumship but that had their own firsthand, unmediated encounters with the departed. For millennia, scholars assumed that stories of the oracles of the dead were literary fabrications or that the operators of the facility were engaged in systematic fraud. In 1957, Sotirios Dakaris, a Greek classical archeologist, discovered the site of the most renowned of these facilities, the Oracle of the Dead at Ephyra on the Acheron River in Spain. When fully excavated, the oracle turned out to be an enormous subterranean complex of dormitory rooms, corridors, and a winding labyrinthine passageway opening into a central apparition hallway approximately fifty feet in length. The remnants of an enormous cauldron surrounded by a ballustrade were found in this chamber. Dakaris concluded that the psychomanteum, the technicians who conducted the sessions, concealed themselves in the cauldron and pretended to be the spirits the seekers had come to see. I decided to test an alternative hypothesis: Throughout history metal cups, bowls and cauldrons have been highly polished on the inside surfaces, filled with water or oil and used as speculums for mirror gazing. Could lifelike apparitions of the departed be recreated by the use of mirror gazing?

A latter-day psychomanteum was constructed using a large wall mirror surrounded by a ballustrade to exclude reflections. Subjects sitting within the chamber are able to gaze into a clear