The Rorschach Inkblot Test, Fortune Tellers, and Cold Reading

Famous clinical psychologists used the Rorschach Inkblot Test to arrive at incredible insights. But were the astounding performances of these Rorschach Wizards merely a variation on astrology and palm reading?

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Psychologists have been quarreling over the Rorschach Inkblot Test for half a century. From 1950 to the present, most psychologists in clinical practice have treasured the test as one of their most precious tools. And for nearly that long, their scientific colleagues have been trying to persuade them that the test is well-nigh worthless, a pseudoscientific modern variant on tea leaf reading and Tarot cards.

Introduced in 1921 by the Swiss psychiatrist Hermann Rorschach, the test bears a charming resemblance to a party game. A person is shown ten inkblots and asked to tell what each resembles. Like swirling images in a crystal ball, the ambiguous blots tell a different story to every person who

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gazes upon them. There are butterflies and bats, diaphanous dresses and bow ties, monkeys, monsters, and mountain-climbing bears. When scored and interpreted by an expert, people's responses to the blots are said to provide a full and penetrating portrait of their personalities.

The scientific evidence for the Rorschach has always been feeble. By 1965, research psychologists had concluded that the test was useless for most purposes for which it was used. The most popular modern version of the Rorschach, developed by psychologist John Exner, has been promoted as scientifically superior to earlier forms of the test. In 1997 the Board of Professional Affairs of the American Psychological Association bestowed an award on Exner for his "scientific contributions" and applauded his version of the Rorschach as "perhaps the single most powerful psychometric instrument ever envisioned."

The Rorschach test cannot detect most psychological disorders (with the exception of schizophrenia and related conditions marked by thinking disturbances), nor does it do an adequate job of detecting most personality traits.

Such bloated claims to the contrary, however, research has shown that Exner's approach is beset by the same problems that have always plagued the test. The Rorschach—including Exner's version—tends to mislabel most normal people as "sick." In addition, the test cannot detect most psychological disorders (with the exception of schizophrenia and related conditions marked by thinking disturbances), nor does it do an adequate job of detecting most personality traits (Lilienfeld 1999; Lilienfeld, Wood, and Garb 2000).

Despite such shortcomings, the Rorschach is still administered hundreds of thousands of times each year in clinics, courts, and schools. Psychologists often use the test to help courts determine which parent should be granted custody of a child. It's used in schools to identify children's emotional problems, and in prisons to evaluate felons for parole. Convicted murderers facing the death penalty, suspected victims of sexual abuse, airline pilots suspended from their jobs for alcohol abuse—all may be given the Rorschach by a psychologist who will use the test to make critical decisions about their lives.

In the 1940s and 1950s the Rorschach was unblushingly promoted as a "psychological x-ray" that could penetrate the inner secrets of the psyche. Although it failed to live up to such promises, the test still possesses a powerful mystique.

Blind Analyses and the Rorschach Mystique

Why is such a scientifically dubious technique so revered among psychologists? The lasting popularity of the Rorschach has little to do with empirical validity. Certainly one secret of the Rorschach's success is clinicians' tendency to rely on striking anecdotes about its extraordinary powers—rather than on careful scientific studies—when assessing its value. Psychologists who treasure the Rorschach can recount colorful stories of how the test miraculously uncovered hidden facts about a patient that other tests failed to detect. Indeed, the test's rise to popularity was due mainly to the near-magical performances—known as "blind analyses"—that Rorschach experts exhibited to their amazed colleagues during the 1940s and 1950s.

In a blind analysis, the Rorschach expert was told a patient's age and gender and given the patient's responses to the blots. From this modest sample of information, the expert would then proceed to generate an amazing, in-depth description of the patient's personality. During the 1950s, the ability to make such astounding "blind diagnoses" came to be regarded among American psychologists as the mark of a true Rorschach genius.

Stunning performances by Rorschach "wizards" converted many psychologists of the era into true believers. For example, one highly respected psychologist has reported how, while still a student, he attended case conferences at which the famed Marguerite Hertz interpreted Rorschachs. Hertz's astute observations based on the test were "so detailed and exact" that at first he regarded them with great skepticism.

However, the young man's doubts dissolved the day that he and a fellow student presented the Rorschach results of a patient they both knew very well: "We fully expected Hertz to make errors in her interpretation. We were determined to point these out to the group. . . . We were shocked, however, when Hertz was able to describe this patient after reading only the first four or five responses. . . . Within 25 minutes Hertz not only told us what we already knew but began to tell us things we hadn't seen but which were obviously true once pointed out" (Kaplan and Saccuzzo 1982, 379).

Such astounding performances had a profound effect on many budding psychologists. As a leading clinical researcher observed, "Blind analysis is one of the spectacular aspects of the Rorschach technique and has probably been the most important factor in the acceptance of the Rorschach" (Zubin 1954, 305).

Rorschach Wizards: A Puzzle in Need of an Explanation

The performances of Rorschach wizards bore more than a superficial resemblance to palm reading and crystal ball gazing,

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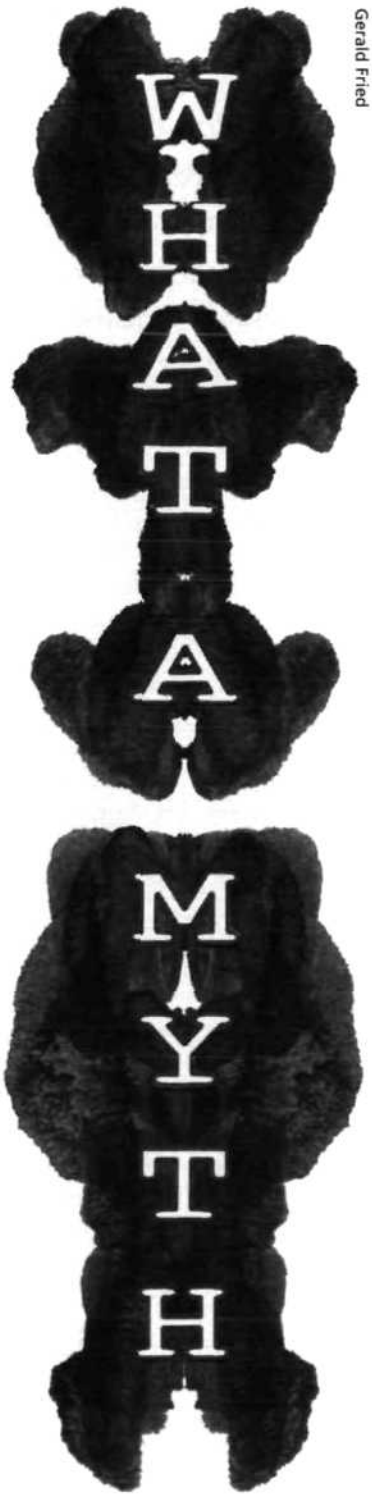
although few psychologists of the 1950s were prepared to recognize this connection. By the early 1960s, however, the wizards' astonishing successes were beginning to turn into a puzzle in need of an explanation. Research revealed that Rorschach virtuosos didn't possess any miraculous powers. To the contrary, in several well-known studies, leading Rorschach experts failed miserably when they attempted to make predictions about patients (e.g., Little and Shneidman 1959; see discussion by Dawes 1994).

Such findings presented a striking paradox. If Rorschach wizards stumbled so badly in controlled studies, how could they produce such amazing performances in blind analyses? The answer to this question was understandable to anyone familiar with the wiles of palm readers.



Gerald Fried

A Few Simple Tricks

Two shrewd commentators of the late 1940s had already divined that at least some Rorschach wizards achieved their success by resorting to tricks. In a clever and sometimes humorous article, J.R. Wittenborn and Seymour Sarason of Yale identified three simple stratagems of Rorschach interpreters that tended to create a false impression of infallibility (Wittenborn and Sarason 1949).

The first stratagem was as old as the Delphic Oracle of ancient Greece, whose notoriously ambiguous prophecies were crafted to turn out correct, no matter which direction events took. The Oracle once told a king that if he went to war he'd destroy a great nation. Encouraged, he launched an attack and was disastrously defeated. The prophecy wasn't wrong, however. After all, the Oracle hadn't said *which* nation the king would destroy.

Wittenborn and Sarason noted that Rorschach interpreters resorted to a similar tactic, delivering "ambiguous phrases or esoteric Rorschach clichés which can be given almost any specific interpretation which subsequent developments may require."

Second, Wittenborn and Sarason observed, Rorschach adepts sometimes ensured their success by including several inconsistent or even contradictory statements in the same interpretation: "One or the other of these statements may be employed according to the requirements of the circumstances. Such resourcefulness on the part of the examiner is often ascribed to the test itself."

Third, Wittenborn and Sarason observed, Rorschach experts sometimes enhanced their reputations by giving impressive interpretations *after* they learned the facts of a case: "Some clinical psychologists, when told about some clinically important features of a patient, say, 'Ah, yes. We see indications of it here, and here, and here.'"

Despite the tricks described by Wittenborn and Sarason, however, it's difficult to believe that all Rorschach wizards of the 1940s and 1950s were conscious fakes. The explanation is almost certainly more complicated than that. But before proceeding further, we'll pause to discuss the psychology of astrology and palm reading.

The Barnum Effect

In the late 1940s, psychologist Bertram Forer published an eye-opening study that he called a "demonstration of gullibility" (Forer 1949). After administering a questionnaire to his introductory psychology class, he prepared personality sketches. For example: "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."

Forer asked the students to rate their own sketches for accuracy. The students gave an average rating of "very good." More than 40 percent said that their sketch provided a *perfect* fit to their personality.

The results seemed to show that Forer's personality questionnaire possessed a high degree of validity. However, there was a diabolical catch: Forer had given all the students the same personality sketch, which he manufactured using horoscopes from an astrology book. The students had gullibly accepted this boiler-plate personality description as if it applied to them uniquely as individuals.

Although the statements borrowed from the astrology book were seemingly precise, they applied to almost all people. Following the eminent researcher Paul Meehl, psychologists now call such personality statements "Barnum statements," after the great showman P.T. Barnum who said, "A circus should have a little something for everybody" (he's also credited with, "There's a sucker born every minute").

As Forer had discovered, people tend to seriously overestimate

the degree to which Barnum statements fit them *uniquely*. For example, students in one study who were given Barnum statements disguised as test results responded with glowing praise: "On the nose! Very good"; "Applies to me individually, as there are too many facets which fit me too well to be a generalization."

Belief in the intuitive powers of Rorschach wizards is difficult to reconcile with the revelations of research. When the supposedly extraordinary insight of Rorschach experts has been tested in rigorously controlled studies, results have been disappointing.

Astrologers and Palm Readers

Astrologers and palm readers have long used Barnum statements (along with a few other stratagems) to create a false impression that they know the personality, the past, and even the future of people they've never met. The name for such bogus psychic practices is "cold reading" (Hyman 1981; Rowland 2002). Skillful cold readers apply the Barnum principle in many ways, for example by spicing their readings with statements like these: "You're working hard, but you have the feeling that your salary doesn't fully reflect your efforts"; and "You think that somewhere in the world you have a twin, someone who looks just like you." Such statements appear personal and individualized, but in fact are true of many American adults.

After being warmed up with Barnum statements, most clients relax and begin to respond with nonverbal feedback, such as nods and smiles. In most psychic readings, there arrives a moment when the client begins to "work" for the reader, actively supplying information and providing clarifications. It's at this critical juncture that a skillful cold reader puts new stratagems into action, such as the technique called the "push" (Rowland 2002). A psychic using the push begins by making a specific prediction (even though it may miss the mark), then allows feedback from the client to transform the prediction into something that appears astoundingly accurate:

Psychic: I see a grandchild, a very sick grandchild, perhaps a premature baby. Has one of your grandchildren recently been very sick?
Client: No. I. . . .
Psychic: This may have happened in the past. Perhaps to someone very close to you.
Client: My sister's daughter had a premature girl several years ago.
Psychic: That's it. Many days in the hospital? Intensive Care? Oxygen?
Client: Yes.

By using the push, a cold reader can make a guess that's wildly off target appear uncannily accurate. The push and other techniques are effective because, by the time the cold reader begins using them, the client has abandoned any lingering skepticism and is in a cooperative frame of mind, thereby helping the psychic to "make things fit."

Intriguingly, scholars who have studied the psychology of palm reading and astrology agree that although some psychics are conscious frauds, many sincerely believe in their paranormal powers. For example, psychologist Ray Hyman, professor emeritus at the University of Oregon, published a classic article on cold reading in the SKEPTICAL INQUIRER in which he described his own saga as a palm reader (Hyman 1981). While in high school, Hyman was originally doubtful about the validity of palm reading. But after trying it himself, he became persuaded that it could work magic, particularly when he received a great deal of positive feedback from clients. He became a fervent believer in palm reading and made a "side" living from it for some time.

Then one day a friend suggested that Hyman provide his interpretations backwards, giving clients interpretations that were exactly the *opposite* of what the palm reading textbooks suggested. To Hyman's amazement, the "backwards" interpretations were received equally well (if not better) by clients. This sobering experience persuaded him that the "success" of palm reading had nothing to do with the correctness of the interpretations. As such cautionary tales illustrate, Barnum statements can fool both the client who believes them and the naïve psychic who believes the client.

Rorschach Wizards: Three Explanations

Having taken a detour into the realm of astrology and palm reading, we're ready to return to the land of Rorschach wizards. Let's begin by considering three plausible explanations for the spectacular performances of the Rorschach virtuosos of the 1950s.

First, it's possible that these Rorschach wizards possessed a special clinical insight, a heightened intuition, that allowed them to surpass ordinary human limitations. Drawing on their unique clinical talents and their experience with thousands of patients, they developed an uncanny skill that allowed them to extract unexpected insights from inkblots.

Of course, this is the view that Rorschach devotees have generally preferred. Even today, many psychologists exhibit an extraordinary faith in the powers of clinical intuition. However, belief in the intuitive powers of Rorschach wizards is difficult to reconcile with the revelations of research. As we mentioned earlier, when the supposedly extraordinary insight of Rorschach experts has been tested in rigorously controlled studies, results have been disappointing. Given such findings, it's implausible that the Rorschach wizards of the 1950s were possessed of extraordinary clinical insight. Thus, we have to

consider a second explanation for their extraordinary performances: Maybe they were frauds.

Thanks to the shrewd article by J.R. Wittenborn and Seymour Sarason of Yale that we discussed earlier, there's little question that some Rorschachers of the 1940s and 1950s used tricks that lent the test a false impression of infallibility. However, it's extremely unlikely that all Rorschach wizards of the era were conscious frauds. Several prominent Rorschach experts, such as Marguerite Hertz (whose interpretive skills we described earlier), were known to be people of high integrity. Thus we're led to a third explanation: The uncanny Rorschach wizards of the 1950s were probably cold readers who, like the young palm reader Ray Hyman, were deceived by their own performances.

The Rorschach Wizard as Cold Reader

If blind diagnosis with the Rorschach was really just cold reading, how could it have worked? A Rorschach wizard about to give a blind analysis usually has access to much more information than do most fortune tellers. First, Rorschach responses usually contain valuable clues regarding a patient's intellectual capacity and educational level. Furthermore, many responses provide hints regarding the patient's interests or occupation.

As an interesting example, the Rorschach analysis of Nobel-prize-winning molecular biologist Linus Pauling has recently been published (Gacono et al. 1997). Here are a few of his responses to the blots: "The two little central humps at the top suggest a sine curve. . . ." "This reminds me of blood and the black of ink, carbon and the structure of graphite. . . ." "I'm reminded of Dalí's watches. . . ."

Even non-wizards can guess that the person who produced these Rorschach responses was well educated in mathematics ("sine curve") and chemistry ("the structure of graphite"), and probably had broad cultural interests (the reference to artist Salvador Dalí).

Besides such clues contained in the Rorschach responses, other sources of information are often available to a wizard. The fact that the test results come from a particular clinic or hospital can be informative. For example, if the test comes from an inpatient psychiatric unit, the chances are high that the patient is suicidal or out of touch with reality.

Thus, the Rorschach wizard who undertakes a "blind diagnosis" is often in possession of a wealth of information that would make a palm reader envious. In the early part of the diagnostic performance, this information can be fed back to the listeners in classic "cold reading style." For example, with Linus Pauling's Rorschach, the reading might begin: "Hmmm. This is obviously a very bright individual. Well educated, a 'cerebral' type. Focuses on thoughts, probably avoids reacting to events in a purely emotional way. I have the impression of a scientist rather than a business person or artist, though I do see some artistic tendencies."

If the Rorschach comes from a particular source—for example, a therapist who works with moderately troubled clients—the wizard can use appropriate Barnum statements. For instance, here's a safe statement that fits virtually all clients one way or another: "This patient's emotions tend to be inconsistent in terms of their impact on thinking, problem solving, and decision-making behaviors. In one instance thinking may be strongly influenced by feelings. In a second instance, even though similar to the first, emotions may be pushed aside and play only a peripheral role. . . ." This statement, based on a recent Rorschach text (Exner 2000, 87), might well have come from Bertram Forer's famous astrology book. Notice that the statement merely says that the client's thoughts sometimes control his feelings, but that his feelings sometimes control his thoughts. Although the statement appears to be saying something important and specific, in fact it applies to virtually all therapy clients (and probably virtually all readers of this article!).

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Such Barnum statements are apparently still taken seriously by many psychologists today, judging from the large number of Rorschach books that are purchased each year. Thus we can be fairly sure that when Rorschach wizards of the 1950s spouted similar phrases during blind analyses, their colleagues thought something important was being said.

Once the listeners were "warmed up" by such apparently profound insights, the Rorschach wizard's job became much easier. Abandoning any initial skepticism, listeners probably began giving subtle or not-so-subtle feedback by nodding or smiling. The wizard could use this feedback as a guide for making increasingly precise statements. In all likelihood, wizards probably used something like the push, described earlier. For instance, here's a hypothetical example of how the push could be used Rorschach-style:

Wizard: There are signs of a very severe trauma, it could be recent. Perhaps a rape? Or a violent assault?

Listener: No. She . . .

Wizard: This trauma may have happened in her teen years or even earlier. She may be repressing it so she doesn't remember.

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next decade. Well, not exactly, of course. But the number of deaths in major terrorist incidents from 1983–1993 (2,544) aren't such a bad predictor of those from 1993–2003 (4,376). It may seem like a whole new world since September 11 to New Yorkers and President Bush, but not so much has changed from a global perspective (since the 1920s, twenty-eight other terrorist attacks have each killed more than 100 people). As throughout the history of warfare, aggressive and defensive technologies will continue to improve; however, there is little basis, other than fear, for believing that terrorism (a technique of the weak in fighting the powerful) will emerge as a vastly greater risk to humanity.

It may be, as Pinker suggests, that "defiance and solidarity" will deter terrorists. That was surely President Bush's view before he attacked Iraq, though his critics believe the opposite. Perhaps a diminution of American arrogance in the international arena, and examining and addressing the root causes of terrorism, would be more effective. Time will tell if Bush's approach worked or not. Meanwhile, it is imperative that Americans continue to ask themselves whether the terrorists' objectively modest attacks aren't succeeding beyond Osama bin Laden's wildest dreams through our capitulation to fear, which causes us to distort our national values and comportment in the world community. □

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Listener: She was in a severe car accident when she was only eight.

Wizard: I think that may be it. She and people she loved were badly injured?

Listener: Yes.

As this example shows, the push can place the Rorschach wizard in a "win-win" situation. If the long-shot guess is correct—for example, the patient has actually been raped or assaulted—then the wizard's prediction may seem miraculously accurate. In contrast, if the guess is incorrect, the wizard can re-interpret it so that it seems "close"—or claim that the trauma occurred but that the patient has repressed the experience!

As Ray Hyman pointed out, a cold reader can be entirely sincere. Professional cold readers even have a term, "shut eyes," to describe individuals who engage in psychic cold reading while sincerely believing in their own paranormal powers. Similarly, most Rorschach wizards of the 1950s who used cold reading techniques probably genuinely believed in the test. When the wizards made certain statements about patients (for example, Barnum statements), they often met with the agreement and even astonishment of their listeners. When they made certain highly intuitive guesses about patients (actually, the push), they found that they were often "close" to the truth, and that their listeners were highly impressed. Reinforced by positive feedback from their colleagues, the wizards gradually became skilled cold readers, believing that their remarkable insights had arisen from the Rorschach.

The era of the Rorschach wizards belongs mainly to the past. Although skilled clinicians still occasionally dazzle graduate students with their stunning Rorschach performances, only a few psychologists today engage in public blind diagnoses. But the legacy of the great wizards lives on. The aura of magic created in the 1940s and 1950s still lingers as the Rorschach mystique, the almost religious awe that many clinicians continue to display toward the test despite its tattered scientific status. Perhaps more important, the Rorschach wizards contributed to the belief—still strong among many clinical psychologists—that intuitions and clinical experience provide deeper insights than mere scientific knowledge can. Thus it is that clinicians still use the Rorschach for purposes for which it has no demonstrated usefulness, mistakenly believing that their supposed insights arise from the extraordinary powers of the test, rather than from their own unrecognized notions and preconceptions.

References

Dawes, Robyn M. 1994. *House of Cards: Psychology and Psychotherapy Built on Myth.* New York: Free Press.

Exner, John E. 2000. *A Primer for Rorschach Interpretation.* Asheville, North Carolina: Rorschach Workshops.

Forer, Bertram R. 1949. The fallacy of personal validation: A classroom demonstration of gullibility. *Journal of Abnormal and Social Psychology* 44: 118–123.

Gacono, Carl. B., Clifford M. DeCato, Virginia Brabender, and Ted G. Goertzel. 1997. Vitamin C or Pure C: The Rorschach of Linus Pauling. In *Contemporary Rorschach Interpretation* edited by J. Reid Meloy, Marvin W. Acklin, Carl B. Gacono, James F. Murray, and Charles A. Peterson. Mahwah, New Jersey: Lawrence Erlbaum.

Hyman, Ray. 1981. Cold reading: How to convince strangers that you know all about them. In *Paranormal Borderlands of Science* edited by Kendrick Frazier. Buffalo, New York: Prometheus.

Kaplan, Robert. M., and Dennis P. Saccuzzo. 1982. *Psychological Testing: Principles, Applications, and Issues.* Monterey, California: Brooks/Cole.

Lilienfeld, Scott O. 1999. Projective measures of personality and psychopathology. How well do they work? SKEPTICAL INQUIRER 23 (May): 32–39.

Lilienfeld, Scott O., James M. Wood, and Howard N. Garb. 2000. The scientific status of projective techniques. *Psychological Science in the Public Interest* 1: 27–66.

Little, Kenneth B., and Earl S. Shneidman. 1959. Congruencies among interpretations of psychological test and anamnestic data. *Psychological Monographs* 73 (6, Whole No. 476).

Rowland, Ian. 2002. *The Full Facts Book of Cold Reading* third ed. London, England: Ian Rowland Limited.

Wittenborn, J. R., and Seymour B. Sarason. 1949. Exceptions to certain Rorschach criteria of pathology. *Journal of Consulting Psychology* 13: 21–27.

Zubin, Joseph. 1954. Failures of the Rorschach technique. *Journal of Projective Techniques* 18: 303–315.

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