

### James Randi and the "Secrets of the Psychics" Nova video

1. One issue dealt with by the show was fraud. Clearly, there is a lot of it, and much of it is done in such a clever manner that most of us cannot hope to directly debunk -- however disbelieving we may be. Geller's spoon bending (previously prepared spoon), the "psychic surgeons" and the Christian TV faith healer Popovich (radio transmitters) are all examples of this. Randi (and CISCOP) has obviously made a cause of attempting to debunk the frauds (judging by his house, shown in the video, he could make a much better living by joining the frauds). Randi is very explicit about the fact that magicians, not scientists, are better equipped to look for fraud (both Darryl Bem and Ray Hyman are amateur magicians).
2. Clearly, however, not all of the people who are practicing psychic arts are deliberate frauds. Several of the psychics interviewed seemed to believe firmly in the truth of what they were doing. But the clearest case of this was the interview with Ray Hyman. He reported starting palm reading to make money in college. Although initially skeptical, he became convinced of the power of the methods by the amazing success of his readings. At the urging of a still skeptical friend, he tried saying the opposite of everything that he read in a person's palm. Needless to say, his faith was shaken by the fact that the readings were just as successful. The bottom line is that the effects talked about in the video and in Gilovich are sufficient to fool many of the psychics themselves as well as the public. Sincerity and honesty are not sufficient qualities to avoid inappropriate belief in these methods.
3. Another issue is the willingness to believe (Chapter 5) and the flexibility of interpretation (Chapter 4) displayed by a wide variety of people. Ray Hyman attributes the success of his palm reading to the fact that the people being read want you to succeed. His thoughts on this and how it can be exploited in psychic techniques are in a reading called "Cold Reading," that can be linked to from Randi's home page (on the course "Internet resources"). Another example of flexible interpretation was given in the horoscope demonstration on the video; people overwhelmingly rated their "personalized" horoscopes as very or extremely accurate, despite them all being the same. The trick, of course, was that the statements in the horoscope were general, vague, or likely to be true of most people.
4. As a side comment to this willingness to believe, Randi comments that scientists have a great knack for finding exactly what they are looking for. A tendency for this to happen is in part to be expected if doing science requires commitment to carry a program through. Certainly, it needs to be considered in discussions of scientific objectivity. However, it should also be noted that Randi probably doesn't spend much time investigating scientists who have successfully debunked their own methods.
5. The controls are (post-hoc) simple, but they chronically are not run (remember the case shown in the facilitated communication video). Mainline physicians in Western countries did not run double blind controls on highly subjective readings of EEGs and X-rays until very recently. Similarly, the Russian researchers obviously had been working for many years without doing blind reading of the heart records and EEGs that were allegedly influenced by a psychic. Passing the horoscopes to the person in back, in the horoscope demonstration, is another simple control that usually is not done (e.g. do most people who read horoscopes deliberately try out

the wrong month -- or better yet have someone take the labels off and see which one fits the best?). Again, there is no reason to doubt the sincerity of the people involved -- just the adequacy of their methods and conclusions.

6. A separate phenomenon is the tendency for supporters of the claims to describe their phenomena in ways that get harder to test when faced with challenge. In part this is a natural tendency in a bone fide investigation that starts running into difficulties. If there were not some perseverance and redefinition in the face of initial failures, the ideas would not have had an adequate test (think of discussion in science journals as a court trial for ideas). But it is also the refuge of the frauds. As Randi puts it: "They say, 'This is going to be a great test.' Right up to the last minute. Then they say, 'By the way, this is Thursday. It never works on a Thursday.'"
7. Finally, there are clear limits to what can be done by Randi's techniques. As one of the participants in the horoscope demonstration pointed out, Randi can demonstrate that many of the effects can be due to fraud or sincere misinterpretation, but he cannot, with these methods, show that there is no effect in general. For that purpose, the laboratory investigations (see next note) are important.

The video was called "Psychic", but obviously applies just as much to the "alternative health practices" chapter as to the ESP chapter.

For general interest, follow some of the links attached to Randi's or the skeptics web site.