The Aura
A Brief Review

Empirical studies show no evidence for the existence of an aura around humans that supposedly only psychics can see. Why, then, does belief in auras persist?

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"I used equipment he invented as well as adaptations made of Dr. Walter J. Kilner's screens for some years before I discovered that my eyes could see auras without visual aids." —J.C. Pierrakos (2005)

One might feel compelled to reread the above quote because, after all, there is presently no objective evidence for the existence of auras. The word *aura* itself comes from a Greek word meaning *breeze*. The aura is claimed to be a glowing field surrounding a human being that is undetectable, except by gifted psychics. By interpreting the aura of an individual, one is said to be able to deduce personality, health, and present emotions (Randi 1995).

Believers in the aura describe it as a "vital force [that] spills beyond the perimeters of the skin into the atmosphere to create an energy field, or aura, which provides a great deal of information about the nature and functioning of human beings" (Pierrakos 2005, 18). Many methods have been used to test whether the aura exists. One method has been to test gifted individuals who claim to see auras. Attempts have also been made to look for auras with the aid of various instruments and apparatus. The great majority of these tests, which we review here, have shown limited or no evidence for the reality of auras. In spite of the lack of empirical evidence, proponents continue to advocate their existence. In the second part of this article we will discuss several explanations for proponents' continued belief in spite of the lack of evidence.

Empirical Studies of Auras

An obvious method for testing the existence of auras is to test psychics who claim to be able to detect them. In one such experiment, a windowless television studio with a barrier in the center and entrances at each end was used (Loftin 1990). A psychic and an experimenter stood on one side of the barrier while one or two subjects entered the studio on the other side. The psychic had less than three minutes to discern how many auras she detected. Two white-noise generators were used to cover any subtle sound cues, such as the sound of breathing, that might give away how many subjects were present in the room. Not surprisingly, the psychic did not score above chance.

Another experiment had a more elegant methodology (Gissurarsson and Gunnarsson 1997). It took place in a room that contained four screens made from unpainted fiberboards, which were placed in a row on one wall of the room. In this experiment, unlike in the one previously described, a control group was used. Ten aura seers and nine non-seers (the control group) were selected to participate in the experiment. All of the participants had to guess behind which one of the four screens the experimenter was hidden. This task was based on the assumption that the aura radiates a few inches from the body and should have been visible above the screen. Blinds covered the large windows on the wall behind the screens, and the whole wall was covered with brown paper. Suggestive shadows were eliminated through the use of Luxo lamps positioned across from the screens. A total of thirty-six sessions consisting of 1,449 trials was run. The results were non-significant for both groups, although "the control group did slightly better than the experimental group" (Gissurarsson and Gunnarsson 1997, 41).

Attempts have been made to measure the aura objectively and experimentally. Various instruments have been used or even invented for the purpose of observing the aura. In the early 1900s, W.J. Kilner thought that the aura could be made visible through the use of dicyanin screens containing a coal-tar dye. The dye appeared to alter the sensitivity of the eye by "making the observer temporarily short-sighted and therefore more readily able to perceive radiation in the ultra-violet band" (Kilner 1965, viii). Kilner studied the human aura for diagnostic purposes and made an explicit disclaimer of any clairvoyant or occult preoccupation. Ironically, the spiritualist movement quickly endorsed Kilner's findings as proof of existence of the aura. Shortly thereafter, aura spectacles and aura goggles were invented, based on the idea of the dicyanin screens (Gissurarsson and Gunnarsson 1997).

Existing instruments have also been used to attempt to quantitatively measure the radiation that an aura supposedly emits. A photomultiplier tube, a highly sensitive device, has been used to try to detect this radiation (Dobrin et al. 1977). The photomultiplier responds to small quantities of light by producing measurable amounts of electric charge. The amount of charge produced is proportional to the amount of light detected by the tube. This tube responds to light in the visible and ultraviolet range but not in the infrared range, which rules out heat effects. This experiment demonstrated that humans do reflect energy in the visible and ultraviolet spectrum, but this is not surprising. If the human body did *not* reflect energy in the visible range, it would be invisible.

Kirlian photography has also been used in the attempted examination of auras. A Kirlian photographic image of an object is obtained when a large electric potential is applied between the object and a dielectrically isolated electrode (Pehek et al. 1976). A famous instance in which Kirlian photography seemed to prove the reality of the aura happened when a section of a plant leaf was photographed and then torn away. The leaf was then rephotographed, which resulted in a faint image of the torn-out section still appearing in the second photo (Randi 1995). The luminous low-current gaseous discharge, known as a *corona discharge*—resulting from variance in pressure, humidity, grounding, and conductivity surrounding the leaf—persisted temporarily after the torn part was removed and was responsible for the Kirlian image of a complete leaf (Pehek et al. 1976).

Continued Belief in Auras

Seeing auras is actually one of the less common psychic experiences. Zingrone, Alvarado, and Agee concluded, based on a review of studies of the general population, that the "prevalence [of seeing auras] ranged from 0% to 6%" (2009, 161).

The *aura imagery model* suggests that individuals who claim to see auras might actually be perceiving a person through their senses while their mind and memory reinterpret this information as the experience of luminous beings.

One explanation for the persistence of belief in auras, given that there is essentially no objective evidence for their reality, could be rare cases of synesthesia. Synesthesia is a nonpathological neurological condition in which sensory experiences that are usually separate are experienced together. The most common type is color–number/letter synesthesia, in which the synesthete perceives numbers and letters in color (Spector and Maurer 2009). In a rarer type, colors are associated with faces. Ward (2004) reported a case study of G.W., a synesthete who experienced a color for names of people whom she knew personally. She reported that she perceived colors occupying her whole field of vision when her synesthesia was elicited by words. G.W. distinctly visually perceived the names

and faces of people she knew with colored halos or "auras" projected around the person or name. "G.W. does not believe that she has mystical powers and has no interest in the occult. However, it is not hard to imagine how, in a different age, such an interpretation could arise" (Ward 2004, 770). There are other case studies in which synesthetes report projecting colors onto people (Riggs and Karwoski 1934; Collin 1929; Cytowic 1989; Weiss et al. 2001; Ramachandran and Hubbard 2001 as cited in Ward 2004). It is especially interesting that in two separate samples, Zingrone, Alvarado, and Agee (2009) found that individuals who reported seeing auras were significantly more likely to report synesthetic events.

There are other explanations why belief in the existence of auras might persist. Perceptual distortions, illusions, and hallucinations might promote belief in auras. Physiological processes, such as rare cases of human luminescence caused by bacterial infections, might also be responsible for some reports of auras (Alvarado 1987). Psychological factors, including absorption, fantasy proneness, vividness of visual imagery, and after-images, might also be responsible for the phenomena of the aura. Gissurarsson and Gunnarsson (1997) discuss four classes, or models, of possible explanations: *scientific*, *clinical*, *psychical*, and *aura imagery*. In the *scientific model*, for example, an individual might experience visions of a series of colored halos surrounding another person's head. This phenomenon is known as "the glory" and usually occurs outdoors under certain meteorological conditions when a shadow is projected on a cloud of uniform water droplets. In the *clinical model*, seeing an aura might be related to epilepsy. Although epileptic auras are usually olfactory or emotional, visual auras also have been reported. Migraine headaches commonly result in visual phenomena that could easily be interpreted as auras (Sacks 1985). Eye disorders might also account for aura-like experiences. According to the *psychical model*, auras might be attributed to unknown electromagnetic field radiation energy that somehow is visible to only some individuals. This seems highly unlikely. The *aura imagery model* suggests that individuals who claim to see auras might actually be perceiving a person through their senses while their mind and memory reinterpret this information as the experience of luminous beings.

Psychological factors positively related to claims of psychic experiences might also contribute to the belief in the phenomenon of the aura (Zingrone et al. 2009). One study (Alvarado and Zingrone 1994) reported that aura vision was related to higher levels of reports of vividness of visual imagery and of imaginative-fantasy experiences. In another study, a positive relationship between auras and the claims of other psychic experiences was found (Zingrone et al. 2009). Seeing auras has been associated more with aspects of absorption and less with aspects of dissociative processes. *Absorption* was described as "a predisposition towards the processing of unusual perceptual input or of imagery" (Zingrone et al. 2009, 163). These authors also found that people reporting seeing auras were also more likely to report precognitive dreams, lucid and more vivid dreams, and out-of-body experiences.

Psychological factors, such as fantasy proneness, suggestibility, and the like, are related to levels of dopamine activity in the brain (see Raz et al. 2008 for a brief review). Catechol-O-methyltransferase (COMT) is an enzyme that breaks down dopamine in the brain. It has been found that which allele of the COMT gene an individual has is related to the degree of his or her suggestibility and hypnotizability (Raz 2007). Thus, propensity to see auras may have, at least in part, both a neurochemical and a genetic basis.

In summary, although there is ample evidence that human beings are surrounded by thermal, electromagnetic, and electrostatic fields (Presman 1970 as cited in Dobrin et al. 1977), there is a lack of evidence for the existence of the aura that psychics claim to see. Continued belief in the reality of auras can be attributed to several psychological, neurological, and optical effects. ■

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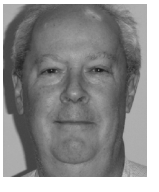

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