

AUTHORS' REPLY

ANAESTHESIA AND THE CIRCLE-TOUCH TEST: EXPLORING PHENOMENA AND METHOD IN HYPNOSIS

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In commenting on the data and conclusions of Wilton, Barnier and McConkey (1997), Wagstaff (1997) offers alternative ways of thinking about our methods and findings. Among other points, he questions (1) the correspondence between our appeal to an interactionist approach to these data and our use of terms such as 'trance-logic', (2) the ability of hypnotized individuals to experience anaesthesia within the circle of the circle-touch test, and (3) the operation of experimental demands in the complex setting in which hypnosis occurs. These points are important, and we would like to outline some relevant issues and approaches that are needed to understand phenomena and method in hypnosis.

Wagstaff (1997) comments that our focus on the interaction of social and cognitive processes operating in the hypnotic setting is inconsistent with the notion of 'trance logic' (Orne 1959, McConkey, Bryant, Bibb & Kihlstrom, 1991). Language can sometimes get in the way of communicating and understanding, and the use of terms such as 'trance logic' or 'compliance' may be provocative simply because of their initial associations with particular theoretical 'camps'. These associations, however, should not sidetrack or constrain our attempts to understand hypnotic phenomena. There is much to explain in the field of hypnosis, and theoretical approaches should concentrate on understanding the phenomena before we move to explanation. That is, an inductive rather than a deductive approach is sometimes of value and, for this reason, Wilton *et al.* (1997) chose to stay close to the empirical data. When ambiguity and complexity are present in the data, an approach to empirical and theoretical work that recognises the multiple interacting influences on hypnotic behaviour and experience, seems preferable to an 'either/or' selection of theoretical stances (see also McConkey, Bryant, Bibb, Kihlstrom & Tataryn, 1990). This view is consistent with the desire in the field for an integration and co-existence rather than division and destruction in examining hypnotic phenomena (Kirsch & Lynn, 1995).

As Wagstaff (1997) notes, investigators agree that when a high hypnotizable person is given a hypnotic suggestion for anaesthesia or analgesia, something happens. He also raises the important issue of whether a suggestion for specific anaesthesia, such as the one used in the circle-touch test, can be experienced in a compelling way. Laying aside the issue of whether total anaesthesia for a well-defined area is possible (although other hypnotic effects that seem 'impossible' are experienced as real; for instance, see work on hypnotic sex change by Noble and

McConkey, 1995), one important question is how do we gain access to and evaluate this essentially private experience. Wilton *et al.* (1997) asked participants to make ratings of their belief, success, effort, and thought, and found a positive association between successful hypnotic anaesthesia and believing that nothing was felt when touched in the circle, and also between putting effort into experiencing hypnotic anaesthesia and thinking about the instructions, and a negative association between successful hypnotic anaesthesia and thinking about the instructions. Further, we found a positive relationship between hypnotizability scores and ratings of success and belief, and a negative relationship between hypnotizability scores and ratings of effort and thought. These ratings suggest that high hypnotizable, hypnotized individuals can experience suggested anaesthesia in a compelling way. We acknowledge, however, that such ratings and other self-report measures may be inaccurate or may be influenced by salient aspects of the experimental setting; work on demand characteristics has told the field this for many years (e.g., Orne, 1962).

The limitations of these measures highlight the need for more creative methodologies to be developed and used to help understand the experience of hypnotized individuals. Recently, we have been developing a continuous behavioural measure of changes in the strength of the participant's hypnotic experience at the time of the suggestion. This involves subjects turning a dial to indicate changes in their experience of the suggested effect. The dial is connected to a computer that registers the strength of the hypnotic experience every second. This method will, we hope, offer a new way of indexing the subjective experience of hypnosis. In a recent experiment, for instance, we compared high and low hypnotizable subjects' responses to a suggestion for glove anaesthesia and subsequent touches by an aesthesiometer. The behavioural profiles of subjects' experiences indicated that highs experienced the anaesthesia to a greater degree than lows, and also maintained their experience when being touched by an aesthesiometer. Currently, we are using this method to investigate a range of hypnotic phenomena, including arm levitation, anosmia, heat hallucination, and sex change.

Wagstaff (1997) highlights that the circle-touch test is an ambiguous procedure that may lead some hypnotized individuals to feel confused and uncertain about how they should respond. This was one reason why Wilton *et al.* (1997) investigated the procedure and its component aspects. As we noted, a well-defined procedure for the test does not exist, and there has been no previous empirical analysis of the impact of its specific components (Wilton *et al.*, 1997). Despite this, the circle-touch test and some other 'clinical' tests have been used in clinical and forensic contexts to identify the 'truly hypnotized' individual (e.g., Orne, Dinges & Orne, 1984). At the very least, our data indicate that the clinical use of methods that are little understood is unwise, if not misleading and indefensible.

Although it may be possible to argue that our findings are illustrative of one view of hypnosis as opposed to another, part of the value of the work lies in what it can tell us about how hypnotized subjects interpret experimental procedures. Kihlstrom (1995; McConkey, Glisky & Kihlstrom, 1989) argued that, to make sense of experimental outcomes, experimenters must understand the subject's behaviour from the subject's point of view rather than from their own. If the subject's perceptions of the experiment are at variance with the intentions of the experimenter, there are effectively two experiments occurring; the one the experimenter thinks is being conducted, and the one the subject believes he or she is in. Strong theoretical

inferences may be premature unless hypnotized individuals are interpreting the task in the way that the experimenters think. Thus, just as we need research that uses methods sensitive to the experiential dimensions of hypnotic responding, we need research that uses methods sensitive to the interpretations that subjects place on the hypnotist's communications. Wagstaff (1997) makes useful suggestions in this regard, including the use of the real-simulating paradigm (Orne, 1959) to examine the experimental demands associated with the task. It is worth noting that, in this quasi-experimental design, simulators are best thought of as collaborators of the experimenter, rather than as subjects in the usual sense. That is, their job is to help the experimenter understand the interpretations that real subjects may place on the communications received in the experimental setting. In addition, as Wagstaff (1997) suggests, the Experiential Analysis Technique (EAT; Sheehan & McConkey, 1982), is another avenue for exploring the experiences and interpretations of the hypnotized individual, and that is an avenue that we are using. Again, this is a method of inquiring into the process underlying hypnotic behaviour and experience.

Overall, Wagstaff's (1997) comments underscore the different ways in which those in the field can think about and examine hypnotic phenomena. Different approaches can and should be used in moving forward to an explanation that will recognise the interactive influence of both cognitive and social processes in hypnosis.

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