

DISCUSSION COMMENTARY

THREE DIMENSIONS OF HYPNOSIS OR MULTIPLE ROUTES TO SUGGESTED RESPONDING?

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Professor Barber's three-dimensional theory is an interesting and thought-provoking approach to the explanation of hypnosis and hypnotic responding and I agree with much of what he has to say. In particular, I strongly support the general contention that existing theories of hypnosis are not mutually incompatible but rather examine different aspects of the same phenomenon. I also firmly believe that the integration of current theoretical approaches in a single comprehensive framework offers the most productive avenue for future development in this area (cf. Nadon, 1997). However, there are a number of issues which lead me to believe that the three-dimensional theory offered here is unable to provide such a framework. Although I applaud the pursuit of integration, in this commentary I will outline why I believe the proposed formulation is incapable of realizing such a goal; in so doing, I will offer an alternative view as to how this enterprise might proceed.

In the main, the analysis on which the three-dimensional theory is based is limited to a relatively small set of empirical and theoretical concerns and does not consider many of the issues that are central to contemporary hypnosis research (see, for example, Kirsch and Lynn, 1995). On the conceptual side, the 'trance' and 'cognitive-behavioural-social-psychological' schools of hypnosis are described in very general terms without differentiating between the numerous and diverse models within each. There is also no discussion of the issue of hypnotic involuntariness, which is arguably one of the most important aspects of hypnosis to be addressed by any theory in this sphere (Kirsch and Lynn, 1995). This may be due to a reluctance to consider the processes underlying responses to less 'difficult' suggestions such as those for ideomotor movement and inhibition which, although less impressive than the phenomena which are addressed, nevertheless remain an important part of the domain requiring explanation (Hilgard, 1973). On the empirical side, the three-dimensional theory covers a very circumscribed set of findings which, although important, represent only a tiny fraction of the research conducted in this area. Moreover, some of the evidence cited as the basis for the theory is less than convincing when placed under close scrutiny. For example, Barrett (1990) provides few, if any, details of the measures used to assess fantasy and amnesic behaviour or the analyses performed to distinguish the different types of highly susceptible subjects she describes. Moreover, subjects are distinguished on the basis of whether or not they enter 'trance' quickly, despite there being no widely accepted definition of what 'trance' actually is or, most importantly, how we are to reliably identify it when and if it is present.

Given the limited scope of the discussion that accompanies the three-dimensional account, it seems unlikely that it can form the basis of a new theoretical paradigm for

the organization of research in this area. This is particularly so given the level of analysis that is adopted in the elucidation of the theory. Rather than specifying the processes underlying the generation of hypnotic phenomena in precise, mechanistic terms, largely descriptive labels are employed (for example, 'dissociation', 'letting go', 'going with the flow') that are ill-defined and resistant to satisfactory operationalization. Without the conceptual precision that is essential in any scientific paradigm, the three-dimensional account will remain a heuristic pointing to a number of issues that are of potential interest to the field, but which fails to provide any novel insight into the actual mechanisms underlying hypnotic phenomena.

The primacy of suggestion

The problems with the three-dimensional formulation extend beyond a simple lack of conceptual precision, however. There would seem to be enough empirical evidence to justify a distinction between fantasy-prone and positively set subjects and, despite the absence of compelling evidence, the existence of amnesia-prone individuals can be accepted for the sake of argument. Clearly, the distinction between these three types of subjects has important theoretical implications and I very much support the three-dimensional theory's position in this regard. Nevertheless, I would argue that the distinction between different kinds or 'dimensions' of hypnosis is largely tangential to the most important issues in this context, and leads us away from the most appropriate way of explaining the data in question. It seems inevitable that the subjective experiences of fantasy-prone, amnesia-prone and positively set subjects will differ significantly during hypnosis, and the techniques used to elicit these experiences may also vary widely. Moreover, it is highly likely that the experiences of individuals of each subtype will be related in some way, such as by the presence of absorbed imagining in the case of fantasy-prone subjects. In this sense it is meaningful to speak of different 'kinds' of hypnosis. The problem arises with the statement that different contemporary accounts of hypnosis provide the most appropriate explanations for the hypnotic behaviour of the three types of highly responsive subjects that are being described. This assertion holds true only if one assumes that the mechanisms underlying the suggested responses of these individuals are fundamentally different in each case. However, there does not appear to be any substantive evidence to imply that, on a basic mechanistic level, the responses of these subjects are significantly different. Subjects in each group respond successfully to most suggestions on standardized hypnotic susceptibility scales and are therefore largely indistinguishable on a behavioural level, at least when assessed by these methods. The only apparent difference in terms of suggestive responding is the finding that amnesia-prone subjects respond more readily to suggestions for post-hypnotic amnesia than either of the other groups. Any differences between fantasy and amnesia-prone subjects in the experience of suggested hallucinations are also attributable to the amnesic tendency of the latter. In this case, both fantasy and amnesia-prone subjects experience the same 'real as real' hallucinatory phenomenon, despite there being source monitoring differences between the two. Other cited differences between the three groups, such as the tendency to engage in imagery or use cognitive strategies, do not refer to suggestion *per se*, but to factors which may influence the nature and likelihood of its occurrence. In other words, such differences speak only of the processes that *moderate* suggestive responding, and not those that *mediate* it. The fact that amnesia-prone subjects experience post-hypnotic amnesia so readily may be one exception. However, we have no

grounds to assume that the amnesic tendency of these individuals, which may indeed predispose them to experience post-hypnotic amnesia, is in any way responsible for their successful responses to other types of suggestion.

If one assumes that the suggested responses of fantasy-prone, amnesia-prone and positively set subjects are mediated by the same basic set of psychological mechanisms, which seems to me to be warranted given the available evidence, Barber's proposals concerning the explanation of these responses seem misguided. Rather than offering different accounts for the responses of different individuals, we need to construct a single account that applies to all. The fact that so-called hypnotic phenomena are possible even in the absence of a prior hypnotic induction (for example, Barber, 1965) suggests that elucidating the mechanisms underlying suggested responses *per se* should be our first priority in this endeavour (cf. Bernheim, 1890). As Kirsch (1997) has noted, the high correlation between so-called 'waking' and 'hypnotic' suggestibility, coupled with the fact that the hypnotic induction seems to have only a relatively modest effect on suggestive responding (Barber, 1965; Hilgard and Tart, 1966; Kirsch, 1997), clearly indicates that the same causal mechanisms are responsible for suggested responses in both hypnotic and non-hypnotic contexts. As such, I believe that the most fruitful avenue for theoretical development would be to begin by providing an account of suggestion itself, which could then be used as a framework for the explanation of suggested responses in a variety of contexts, including the hypnotic situation. Although this strategy might be rejected on the grounds that amnesia-prone individuals require a hypnotic induction to achieve high suggestibility, until there is more convincing evidence in support of this assertion the most parsimonious approach is almost certainly the most appropriate. Moreover, once we understand the basic mechanisms of suggestive responding in a non-hypnotic context we can begin to address the factors, such as those associated with the hypnotic situation, that influence the nature and occurrence of suggested phenomena. Even if amnesia-prone individuals do require an induction to achieve high suggestibility, my prediction is that the explanation of this would reside in these moderating factors.

If viewed from the current perspective, Barber's distinction between the three types of excellent hypnotic subject is theoretically useful and represents an important advance in the understanding of suggestion. Most generally, this distinction, and the evidence on which it is based, demonstrates that there can be a number of routes to successful suggested responding. For example, although the majority of individuals may need to engage in cognitive strategies to successfully produce a suggested behaviour or experience, the same suggested responses can also be produced by engaging in fantasy. However, if we assume that amnesic mechanisms are not responsible for the suggested responses of amnesia-prone subjects, it is less obvious how the alternative model I am offering here could explain the high suggestibility of these individuals. The most likely explanation consistent with the present approach is that an additional variable that moderates the tendency to successfully respond to suggestions is operating in these subjects. While identifying such a moderating variable is difficult in the absence of a detailed model of suggestion, the evidence cited in support of the three-dimensional theory indicates that a tendency for absorption may be one possible candidate. Contrary to the assertion of Barrett (1990), amnesia-prone individuals score considerably higher on the Tellegen Absorption Scale (TAS; Tellegen and Atkinson, 1974) than normal (see Tellegen, 1982), and the relative superiority of fantasy-prone individuals on the TAS may be due to the preponderance of fantasy-based items on this scale.

The position offered here captures the same spirit of conceptual reconciliation celebrated by Barber, although it reformulates the basic issues of importance to hypnosis research in a rather different fashion. Whereas the three-dimensional formulation reconciles so-called 'state' and 'non-state' theories by relating them to the responses of different individuals in the hypnotic situation, the present approach does so by viewing both state and non-state variables as equally important factors that may influence the likelihood of suggested phenomena occurring, and the form that any successfully suggested responses might take. One of the most appealing features of such an approach is that *any* state or non-state factors are potentially relevant and not simply those associated with the hypnotic situation. As such, the present approach places the understanding of suggestion and hypnosis in a wider psychological context than is typically considered by theories in this domain, including that offered by the three-dimensional theory.

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