

Dream Self-Reflectiveness as a Learned Cognitive Skill

S. Purcell, J. Mullington, A. Moffitt, R. Hoffman and B. Pigeau
Carleton University

Many prominent researchers subscribe to the notion that dreaming is cognitively deficient relative to normal waking consciousness (Foulkes, 1983; Hartmann, 1973; Koukkou & Lehman, 1983). Dreams are perceived as massively non-reflective and single-minded as evidenced by their apparent lack of imagination, lack of lucidity (awareness of dreaming while dreaming), and tendency to be forgotten (Rechtschaffen, 1978). The notion of dream 'isolation' from other systems of consciousness has been posited by Rechtschaffen as an inescapable conclusion once these characteristics of dreaming have been understood.

It is not the point of this paper to argue the questionable, underlying assumption that people are imaginative, self-reflective and generally lucid in normal waking consciousness. However, we do question the dichotomizing of self-reflectiveness as either present or absent (i.e. lucid or non-lucid). In contrast, this study uses a continuous notion of dream self-reflectiveness (Rossi, 1972) and conceptualizes it as a process which can eventuate in fully lucid dreaming. In addition, we question the need for a postulate such as 'dream isolation' unless normative dreaming shows a tenacious resistance to self-reflective modification.

Using a scale constructed on the basis of Rossi's theory of psychosynthesis and self-reflection (Editors Note: See Moffitt et al. paper this issue), this paper reports the results of an experiment assessing the extent to which self-reflectiveness in the dream state can be learned as a cognitive skill.

Three different experimental groups were trained over a three week period in different techniques of achieving self-reflection during dreaming using hypnosis (n=9), a mnemonic induction technique (n=9), and training on the self-reflection scale (n=8). Self-reflection was assessed by scoring the written dream reports of the participants on the scale. Two control groups provided the comparison standard against which the effectiveness of these treatments were evaluated. The first control group (n=11, called an attention control group) received an equivalent amount of training in developing detailed dream report skills but without demand characteristics for self-reflectiveness or lucidity. The second control group (n=11, a baseline control group) was untreated and simply submitted their dream reports over the three week period without specific instructions concerning the quality or quantity of their reports. Averaged across all groups the results indicated that self-reflectiveness showed a normal distribution in these diary reports with categories 3 and 5 occurring the most frequently. The most frequent self-reflective category of the baseline control group was category 3, consisting of dream reports which were both brief and single-minded. The attention control group showed significantly

longer dreams with higher scale scores than the baseline group, pre-dominantly in category 5 involving dreams with reported verbalizations. The treatment groups maintained this same pattern but with dream reports more frequently classified as levels 6 to 9. The mnemonic condition appeared to be the most effective in altering the self-reflectiveness of dreams. During week one of the experiment the treatment groups produced significantly more lucid dreams as well as lucid dreamers than the control groups. However, in weeks 2 and 3 these effects were not significant, largely as a result of a general decline in the frequency of reports across all groups, but magnified in direct relation to the strength of the demand characteristics of the experimental treatment conditions. There were also significant positive correlations of approximately 50 between the length of the dream reports and the ordinal values of the self-reflectiveness scale.

On the basis of these findings we are able to characterize the self-reflectiveness of normative dreaming (levels 3 to 5) as well as the likelihood of occurrence of higher levels of self-reflection up to and including lucidity, either as a spontaneous event or as a result of experimental manipulations. On the basis of the results of the baseline condition, we suggest that normative dreaming shows another property in addition to those suggested by Rechtschaffen (1978) which we call canalized inertia: an apparent difficulty in developing higher levels of dream self-reflectiveness. Thus, self-reflectiveness of normative dreaming appears to be canalized to certain intermediate levels in spite of the spontaneous occurrence of higher levels of self-reflection up to and including the highest level, lucid dreaming. Reflection upon these findings leads us to a number of conclusions. In our opinion, modern adult dreamers are operating single-mindedly when dreaming because they have learned to do so, not because they have to for biophysiological reasons. They can learn to do otherwise. We regard the canalization of the self-reflectiveness of normative dreaming as primarily a contingent sociocultural process and only secondarily as a necessary consequence of psychophysiological constraints. We conclude that intentional manipulations of attentional schemas in normal waking consciousness are sufficient to organize a self—reflective process during dreaming, and that the study of dreaming is not therefore served by the notion that it is isolated from other systems of consciousness.

References

- Foulkes, D. (1983). Cognitive processes during sleep: Evolutionary aspects. In Mayes, A. (Ed.) Sleep mechanisms and function. Berkshire, England: Van Nostrand Reinhold.
- Hartmann, E. (1973). The functions of sleep. New Haven: Yale University Press.
- Koukkou, N. & Lehman, D. (1983). Dreaming: the functional state-shift hypothesis. British Journal of psychiatry, 142, 221-231.
- Rechtschaffen, A. (1978). The single-mindedness and isolation of dreams. Sleep, 1, 97-

109.

Rossi, E. (1972). Dreams and the growth of personality. New York: Pergamon Press.

Original source: *Lucidity Letter Back Issues*, Vol. 4, No. 1, June, 1985, page 122.