

EVOLUTION AND THE INTERPRETATION OF DREAMS

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The discovery of REM sleep as a physiologic correlate of dreaming has created a tremendous controversy in psychiatry concerning whether "biologic" or psycho-analytic theories of dreaming are correct (Hobson, 1988). It is argued here that neurobiologic and psycho-analytic theories of dreaming constitute proximate levels of explanation and that an evolutionary approach is needed to provide an ultimate or functional level of explanation in order to provide a complete theory of dreaming (Mayr, 1982). The best current functional theories of dreaming come from the information-processing works of Palombo (1978) and the phylogenetic arguments of Winson (1985), and provide the opportunity for synthesis between neurobiologic and psycho-analytic dream theory. While this new view requires a reformulation of certain aspects of psycho-analytic dream theory, it also supports an evolutionary approach to psycho-analytic metapsychology. An evolutionary explanation is also offered for the structural and functional dichotomy of memory described by Winson (1985) through the Trivers (1976) hypothesis of self-deception (Slavin, 1987; Nesse, in press; Nesse and Lloyd, forthcoming) and certain clinical implications of this view of dreaming are discussed.

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TO SLEEP, PERFORCE TO DREAM - An ethological approach to the

problem of paradoxical sleep. P.M.DRIVER.

The functions of sleep, and particularly of dreaming, remain a major problem for both science and medicine.

Some say that sleep has no function, or that dreaming is random. Yet if one is deprived of dreaming sleep the resulting problems are serious indeed.

Rapid Eye Movement sleep (paradoxical sleep) alternates with non-REM sleep