Chapter 29 Does Your "Single-Minded" Characterization of Dreaming Now Find Confirmation and Explanation in the Lucid Dreaming Data?

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The descriptions by Dr. Hobson and others of lucid dreaming (states in which the dreamer has a reflective awareness that he is dreaming) demonstrate nicely that what we have called the "the single-mindedness" (absence of that reflective awareness) in most dreams is not an inevitable attribute of dreaming *per se* (Rechtschaffen 1997). Rather, by techniques described by Dr. Hobson and others, lucidity can be induced in association with dreams that would otherwise be single-minded. In turn, this means that lucidity must originate from specific brain processes. Early imaging studies showed low levels of frontal lobe neural activity during REM sleep, suggesting that the mechanism for lucidity might be at least partly localized to that area. This hypothesis is bolstered by reports of dream-like mentation during wakefulness in patients with frontal lobe injury.

These observations further suggest that frontal lobe processes might be important for the maintenance of lucidity during normal wakefulness. Direct evidence for an association between lucidity and frontal lobe activity comes from the study of Voss et al. (2009), which showed an increase in high frequency frontal region EEG activity during lucid dreams. Altogether, the single-mindedness/lucidity/frontal lobe story is illustrative of a major theme of "The Essay" – the contribution of empirical sleep research to the elucidation of mind-body issues.

References

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