

Active Inference: Toward a Unified Model of Mind, Waking, and Dreaming Consciousness

[This working essay aims at connecting Horneyan theory with Tereshakovec's SLP/PDP model of the mind and with J. Allan Hobson and Karl J. Friston's model of consciousness by active inference.]

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As noted by Jack Danielian (2014, p.c.), the last book by Karen Horney that was published within her lifetime, *Neurosis and Human Growth* (1950), contained her most abstract ideas and was very far ahead of its time. The psychoanalytic establishment did not know what to do with the book, and refused to review it. This was partly because Horney lacked an alternative model of dreaming or of the mind, and so there was no way for brain scientists to know whether Horney's theory of anxiety neurosis was less tautological than Freud's. Horney's theory could not be called scientific, since her premises could not be subjected to corroboration or disproof at the time.

However, Andrew N. Tereshakovec offered just such a correct, realistic model of the mind in his book, *The Mind: The Power that Changed the Planet* (2007). In addition, since 1988, J. Allan Hobson has developed a realistic model of dreaming to supersede the Freudian model, and he and Karl J. Friston (2012, 2014, *inter alia*) have provided scientifically rigorous, plausible, testable accounts of the mechanism and purpose of what we perceive as waking and dreaming consciousness. In short, the mechanism underlying both dreaming ("primary") and waking ("secondary") consciousness is *active inference*. Active inference continuously generates and tests hypotheses, during sleep and wakefulness, to discover the hidden causes behind sensory input. The purpose of the biochemical processes underlying dreaming and waking consciousness is to interact with and approximate external reality more and more closely, while reducing the complexity of the overall system of beliefs about the world.

It is not enough, however, to propose an alternative view of dreaming, like Hobson's, which implies that the Freudian model is wrong, or to show that one can account for neurotic conflicts based on different assumptions, as Horney did. It may not be sufficient either to propose a more correct model of how the mind works, as Tereshakovec did with his SLP/PDP model, or even to integrate it with Hobson and Friston's work, although these steps also need to be taken. In my view, it is furthermore necessary to show how the Freudian disguise-censorship model can be meaningfully incorporated into Friston, Hobson, and Tereshakovec's frameworks of understanding. Freud's models of dreaming and of mind describe the self-reinforcing logic that persists in neurotic thought and behavior. This tautological reasoning arises when when consciousness has been thwarted from its goal of learning about the world through active inference,

and the brain-mind has thus been turned into a closed system, which can only reinforce itself, not being able to see or correct its own mistakes.

References

Friston, K. J., and J. A. Hobson (2012). Waking and Dreaming Consciousness: Neurobiological and Functional Considerations. *Progress in Neurobiology* 98(1) [2012], 82–98.

Friston, K. J., and J. A. Hobson (2014). Consciousness, Dreams, and Inference: The Cartesian Theatre Revisited. *Journal of Consciousness Studies* 21(1–2) [2014], 6–32.

Hobson, J. A. (1988). *The Dreaming Brain: How the brain creates both the sense and the nonsense of dreams*. New York: Basic Books.

Horney, K. (1950). *Neurosis and Human Growth*. New York: W. W. Norton.

Tershakovec, A. (2007). *The Mind: The Power that Changed the Planet*. Bloomington, IN: AuthorHouse.