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Joel David Hamkins* (jhamkins@gc.cuny.edu), Mathematics, CUNY Graduate Center, 365 Fifth Avenue, New York, NY 10016. *The hypnagogic digraph, with applications to embeddings of the set-theoretic universe.*

The hypnagogic digraph, a proper-class analogue of the countable random \mathbb{Q} -graded digraph, is a surreal-numbers-graded acyclic digraph exhibiting the set-pattern property (a form of existential-closure), making it set-homogeneous and universal for all class acyclic digraphs. A natural copy of this canonical structure arises during the course of the usual construction of the surreal number line, using as vertices the surreal-number numerals $\{A \mid B\}$. I shall explain the construction and elementary theory of the hypnagogic digraph and describe recent uses of this digraph in connection with embeddings of the set-theoretic universe, such as in the proof that the countable models of set theory are linearly pre-ordered by embeddability. Questions and commentary concerning this talk can be posted on my blog at <http://jdh.hamkins.org/the-hypnagogic-digraph-jmm-2016/>. (Received June 15, 2015)