Abstract

Apart from being an audacious attempt and a masterpiece, Freud’s Interpretation of Dreams has provoked controversy since its publication. After the neurological linkage between Rapid Eye Movement (REM) sleep and dreams, many hypotheses are proposed focusing on REM or its accompanied dreams. This paper reviews recent discoveries regarding the neuro-cognitive aspects of sleep, dreaming, and emotions as a dream ingredient. This paper assumes that a dream content is decomposable into a sequence of Timed Artificial Dream Actions (TADAs) and that dream interpretation resembles the ability of an expert system explaining HOW and WHY questions. Freud tried to answer WHY each dream ingredient is being incorporated. The inverse of this process is to answer HOW a TADA is formed, and it is the concern of this paper. Based on dream-contents, an operational model for dream ingredients is proposed. The proposed TADA generator, nicknamed Oneiros, is decomposed into three modules Morpheus, Phantasos and Phobetor. Morpheus is responsible for the lexical processing of memory contents, in order to perform tasks such as extracting objects, emotions and alterations. Phobetor is responsible for all phobetic-specific aspects. Phantasos is responsible for the actual generation of a TADA.
References


Index Terms

Computer Science
Artificial Intelligence
Keywords

Rapid Eye Movement(REM) sleep, Dream Action, Ngram