

Abstract

In our everyday lives, we come across situations where we might get the impression of seeing characters in the clouds, or faces in moon craters. We think that we found a pattern that we can use to beat a slot-machine, that the constellation of the stars influences us, that we hear voices in background noise, or hear tones in it. All these examples are instances of a phenomenon called apophenia. In other words, apophenia denotes situations where we make a pattern recognition error. A special case of apophenia, in which our brains make the error during the immediate sensory information processing, is called pareidolia.

Today there is no unified opinion about the definition of apophenia and pareidolia. This thesis is concerned with the findings about pareidolia, whether it is a product of an evolutionary effort to minimize losses and pattern overfitting. Furthermore, it clarifies apophenia with pareidolia as a special case, and offers a more detailed look at face pareidolia; how our brain processes information about faces, differences between the sexes in propensity to face recognition, and a possible explanation of its evolutionary origin.

Key words: pareidolia, apophenia, error management, psychotism, perception