

Statistical Thinking for the 21st Century

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Chapter 8

8.2 Randomness in statistics

The term “random” is often used colloquially to refer to things that are bizarre or unexpected, but in statistics the term has a very specific meaning: A process is *random* if it is unpredictable.

Psychologists have shown that humans actually have a fairly bad sense of randomness. We tend to see patterns when they don't exist, which leads to the phenomenon of *pareidolia*, in which people will perceive familiar objects within random patterns (such as perceiving a cloud as a human face or seeing the Virgin Mary in a piece of toast).