A Collection of Statistical Illusions

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This collection of 'statistical illusions' is not intended to be exhaustive, rather it displays a first quick selection of interesting problems, paradoxes and fallacies in the fields of probability theory and statistics.

A. Probability Theory

- Monty Hall Problem
- Two Children Problem
- Bertrand's Box Paradox
- Two Envelopes Problem
- St. Petersburg Paradox
- Sleeping Beauty Problem
- Bertrand's Stick Paradox
- Bertrand's Factory Paradox (look for 'Bertrand paradoxes' in the entry)
- De-Méré-Paradoxon
- Borel-Kolmogorov paradox

B. Statistics

- Gambler's fallacy
- Ecological fallacy
- Simpson's Paradox
- Berkson's Paradox
- Jeffrey-Lindley Paradox

Other collections of statistical illusions

- Wikipedia Category: Probability theory paradoxes
- Wikipedia Category: Statistical paradoxes
- $\bullet \ \ https://stats.stackexchange.com/questions/23779/most-interesting-statistical-paradoxes$