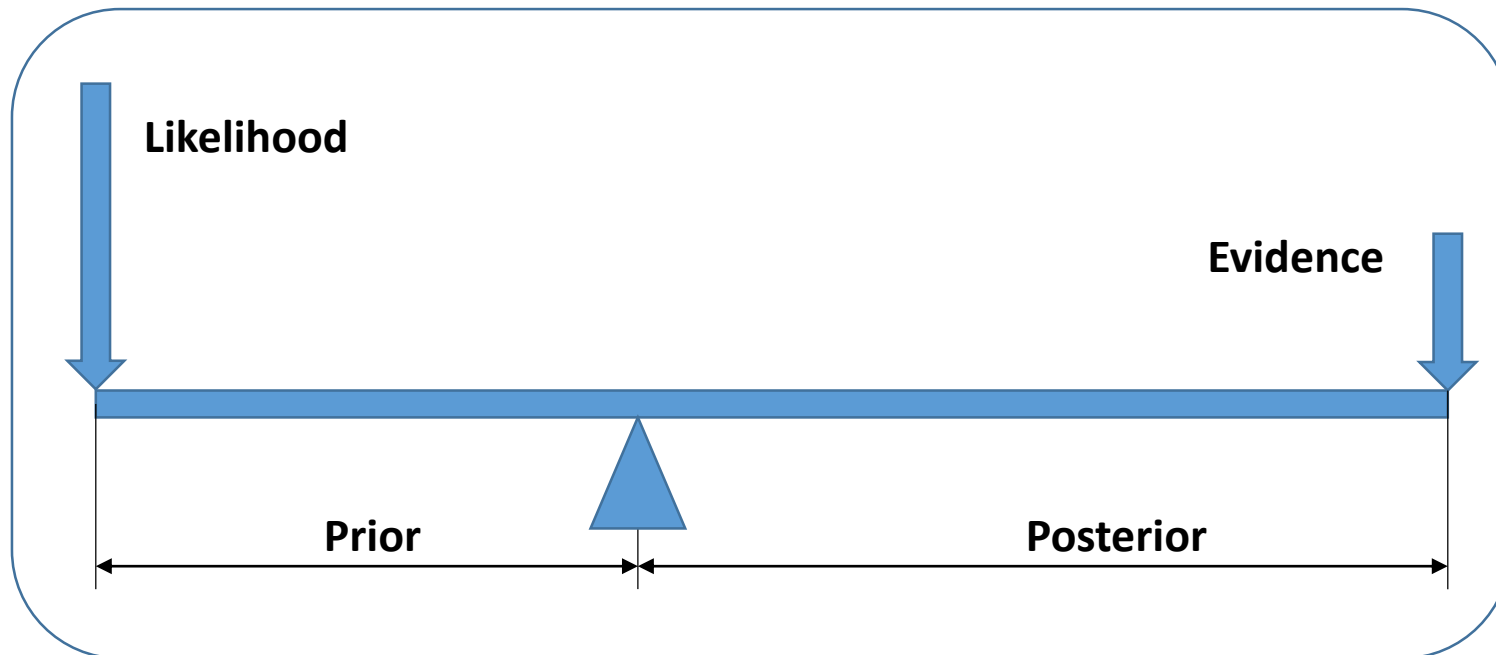$$P(A) * P(A|B) = P(B) * P(B|A)$$

… when you have eliminated the impossible, whatever remains, *however improbable*, must be the truth

$$Posterior = \frac{Prior \ * Likelihood}{Evidence}$$