

Using Probabilities in Reverse Makes No Sense

In many problems, however, we must **estimate values based on observations.**

Probabilities are **not invertable**:

- if I tell you that I flipped a coin,
- and the result was “tails,”*
- **what can you say about my coin?**

Only that one side is marked as “tails”—not two “heads”.

- *For those who grew up without coins: “heads” means the side with a person’s head, and “tails” means the other side.
Most coins in most countries allow this distinction.

