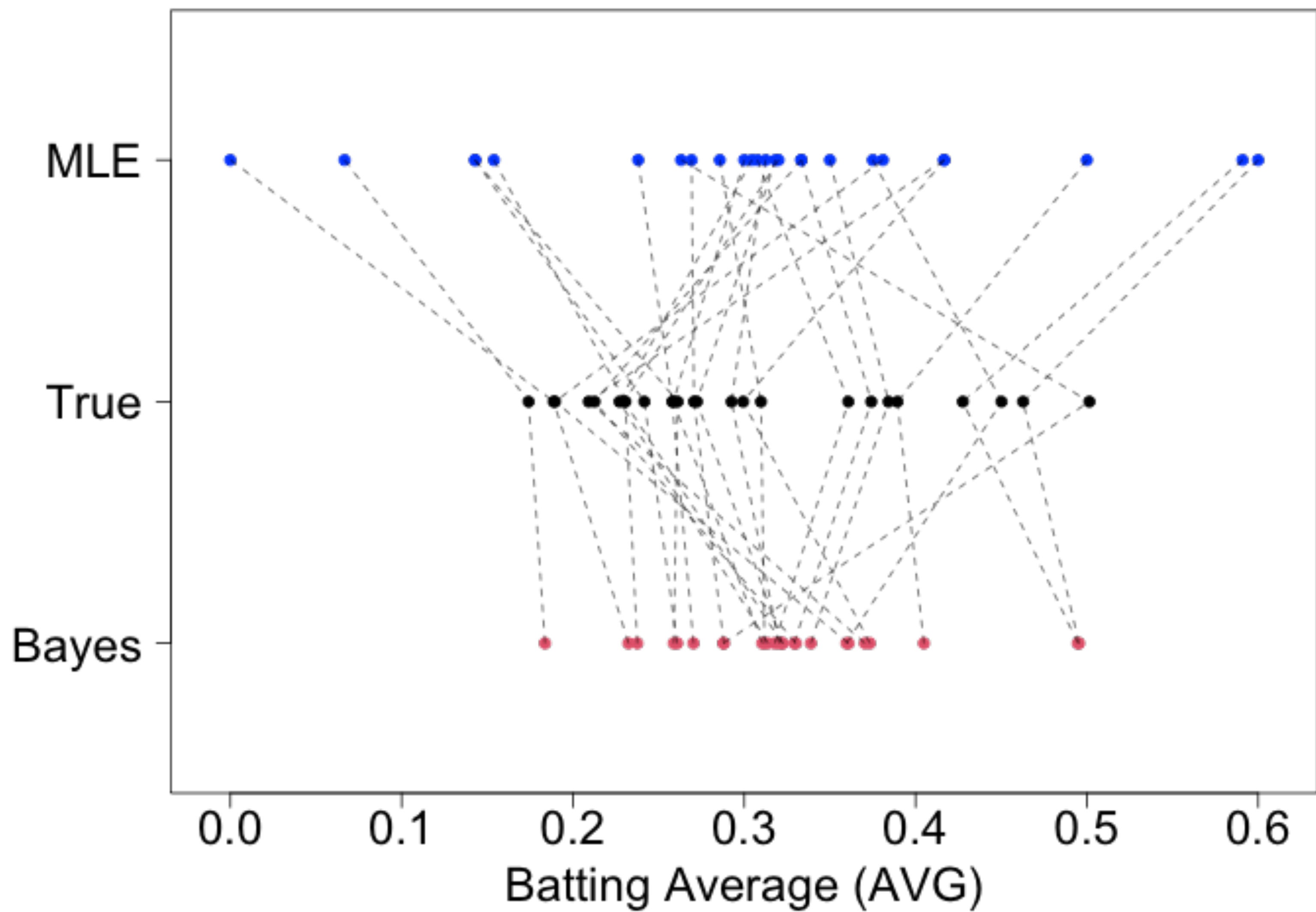


BATTING AVERAGES





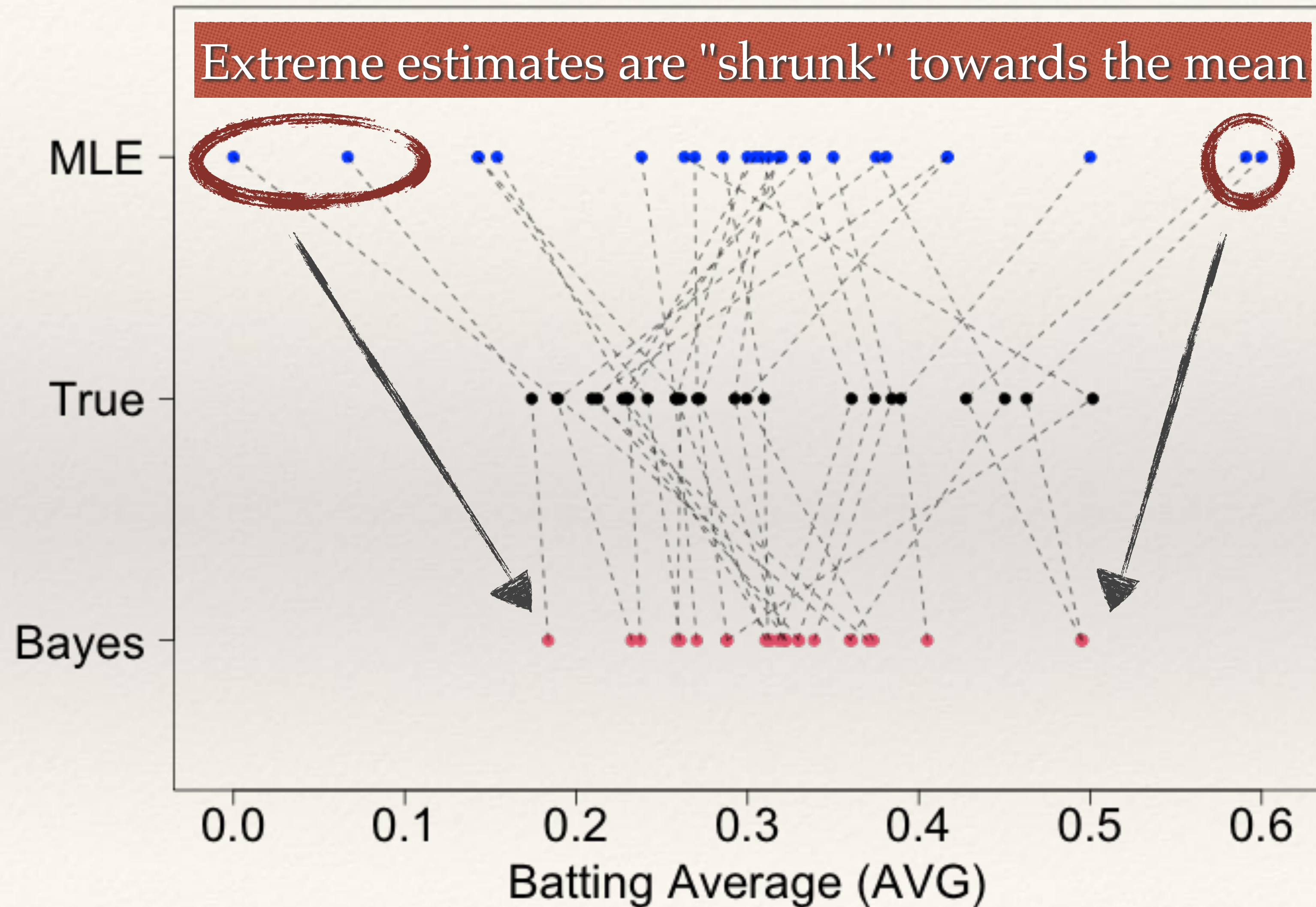


Extreme estimates are "shrunk" towards the mean





BATTING AVERAGES



SHRINKAGE AND TYPES OF POOLING

1. **Complete pooling** Only one estimate for all players (underfitting)
2. **Partial pooling** Players' estimates help inform each other. This means using an adaptive regularizing prior, as in the previous example.
3. **No pooling** Players are all independent, no information is shared (overfitting)
4. **Adaptive partial pooling** Players' estimates help inform each other. This means using an adaptive regularizing prior, as in the previous example.
5. **Partial pooling** Players' estimates help inform each other. This means using an adaptive regularizing prior, as in the previous example.