**Testing against chance can in some contexts be problematic (notably when stimulus conditions are unevenly balanced within stimulus classes and/or when classifier bias is not controlled for). Note, that the analysis pipeline already guards against this in numerous ways, notably:**

1. **Balanced designs are enforced by the analysis algorithms, such that any instance of a stimulus class that comes from a particular condition, will appear equally often as all other conditions that go into a stimulus class. For example, if a target position can either contain a letter or a digit, an equal number of letters and digits will go into the stimulus class for each target position.**
2. **Accuracy is always computed as the average number of correct classifications *per stimulus class*. So if the classifier is asked to discriminate between left- and right-targets, left-right accuracy is computed as the average of classification accuracy for right targets on the one hand, and classification accuracy for left targets on the other. This way, classifier bias for either left or right targets (if any) cannot influence overall classification accuracy.**