

# Semantic-Level Annotation Design Guide

Level 1 - Abstract Stimuli (e.g., symbolic shapes, indirect cues):

- Expect low confidence and high variability.
- Avoid showing peer labels to prevent anchoring.
- Use tooltips and provide training examples for calibration.
- Segment tasks to avoid confusion from mixed stimulus types.

Level 2 - Concrete Stimuli (e.g., objects, animals):

- Annotators may show high confidence but are more prone to conformity.
- Hide peer annotations in real-time to reduce bandwagon effect.
- Randomize image order and introduce attention reset tasks between levels.

Level 3 - Emotion-Based or Subjective Stimuli (e.g., facial expressions):

- Annotators often experience interpretive uncertainty.
- Show peer annotations to support labeling confidence and consistency.
- Include ambiguity tags and allow flagging for further review.
- Consider human-in-the-loop interventions for disputed cases.

General Recommendations:

- Train annotators using calibration tasks tailored by level.
- Monitor confidence trends to adjust task presentation accordingly.
- Track overuse of default categories as a signal of annotation fatigue or task design flaws.