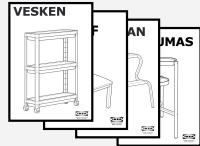


(a) Data Source IKEA Manuals



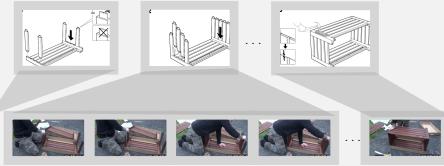
Assembly Videos



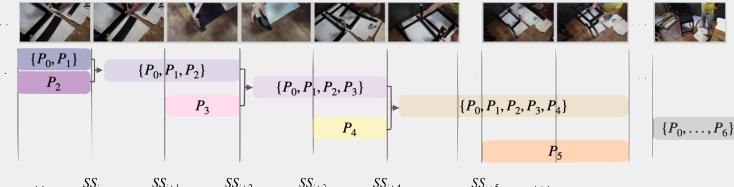
Decomposed Objects



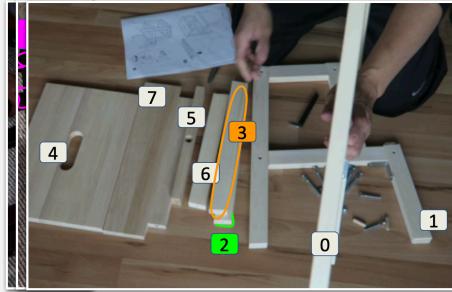
(b) Step Annotation



(d) Substep Annotation



(c) Parts in Frame Annotation

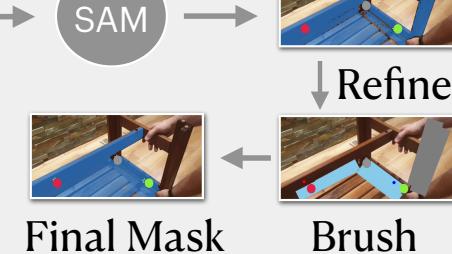


(e) Segmentation Mask

Points
Prompt



Highlighted
Meshes



(f) Pose Annotation



Camera Changes Annotation



Keypoints Annotation

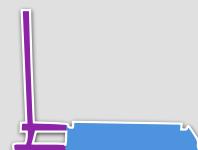
PnP + RANSAC

Initial Pose:
*Wrong
Relative Pose*



Manually
Refine

Final Pose:
*Correct
Relative Pose*



Cross Frame Optimization

Camera Intrinsics