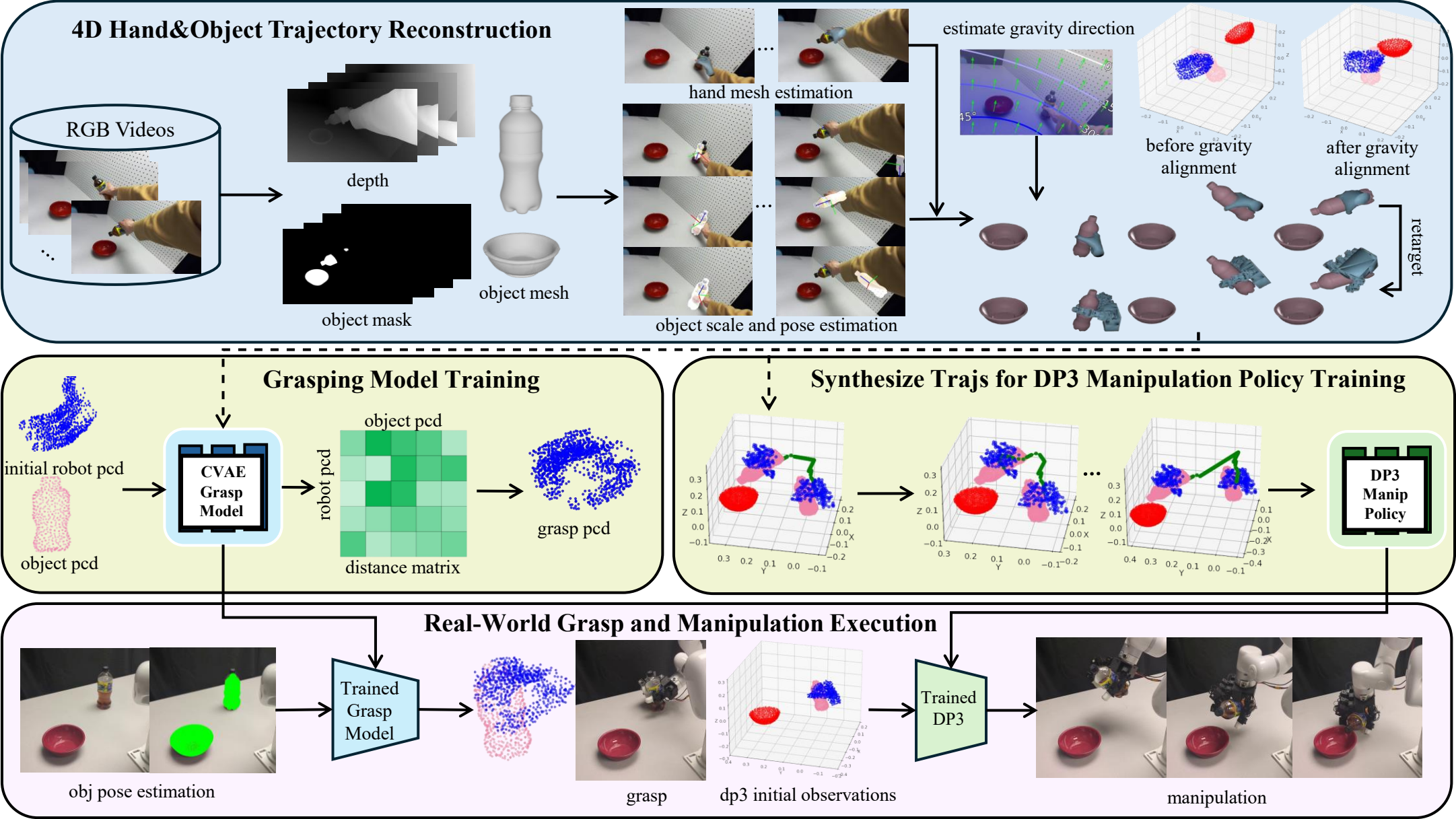
4D Hand&Object Trajectory Reconstruction
RGB Videos
depth
object mask
object mesh
hand mesh estimation
object scale and pose estimation
estimate gravity direction
before gravity alignment
after gravity alignment
retarget
Grasping Model Training
initial robot pcd
object pcd
CVAE Grasp Model
object pcd
robot pcd
distance matrix
grasp pcd
Synthesize Trajs for DP3 Manipulation Policy Training
DP3 Manip Policy
Real-World Grasp and Manipulation Execution
obj pose estimation
Trained Grasp Model
grasp
dp3 initial observations
Trained DP3
manipulation