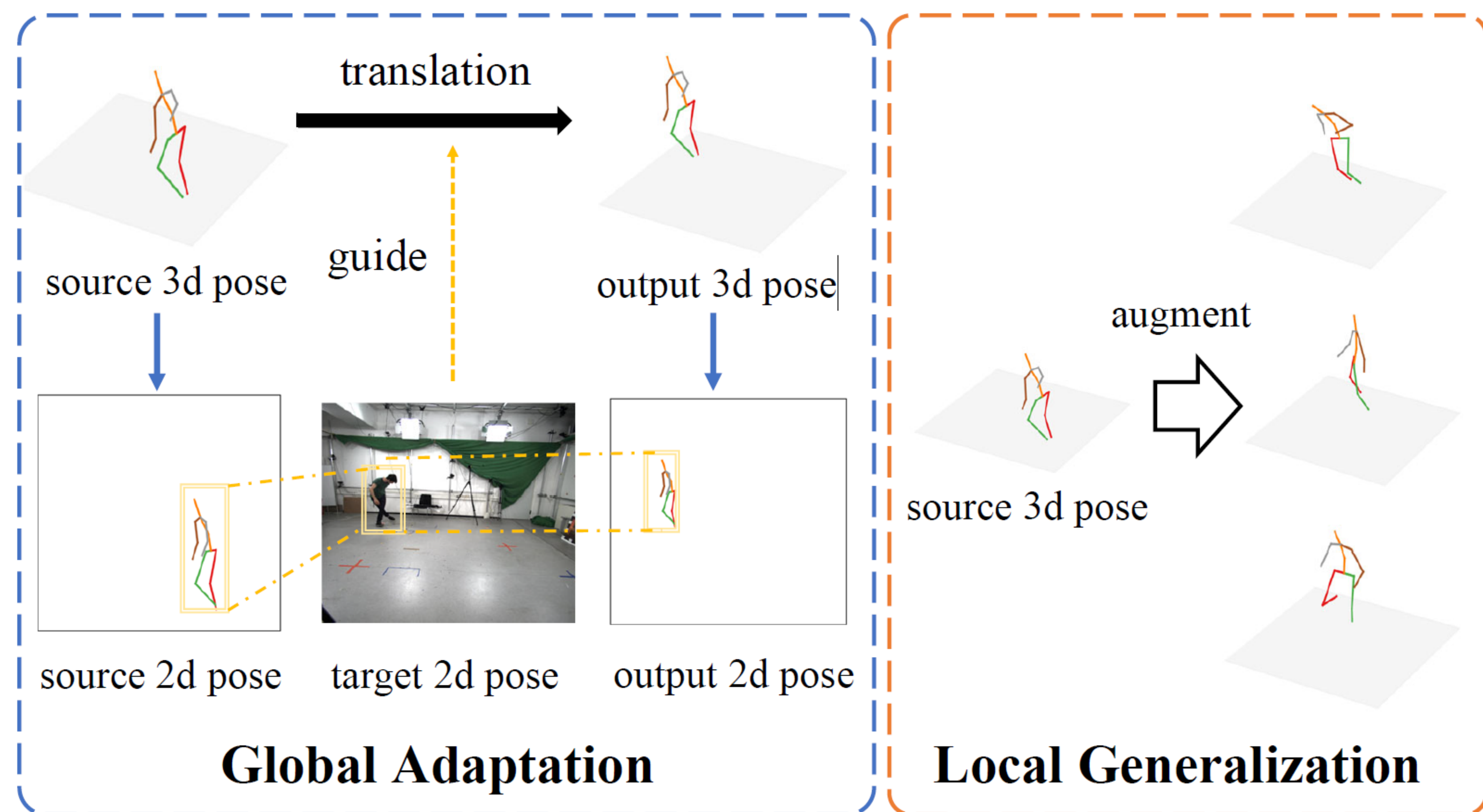
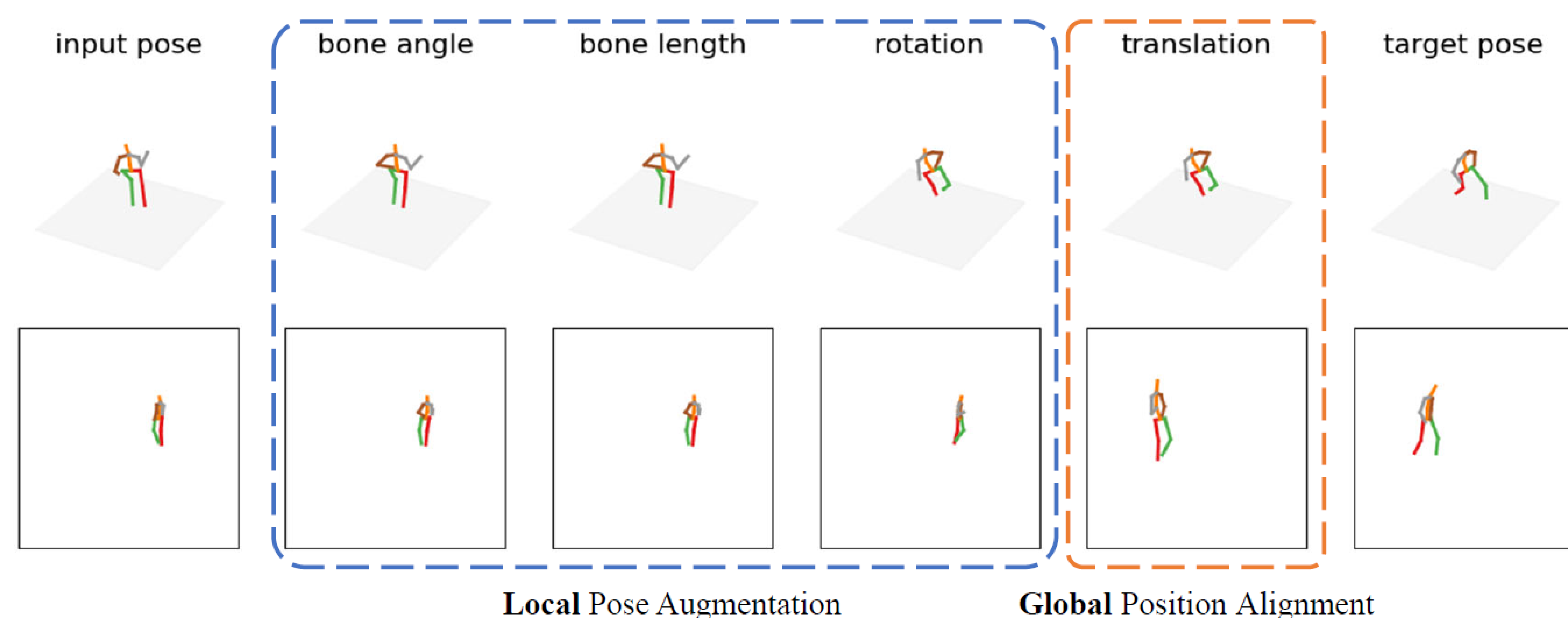


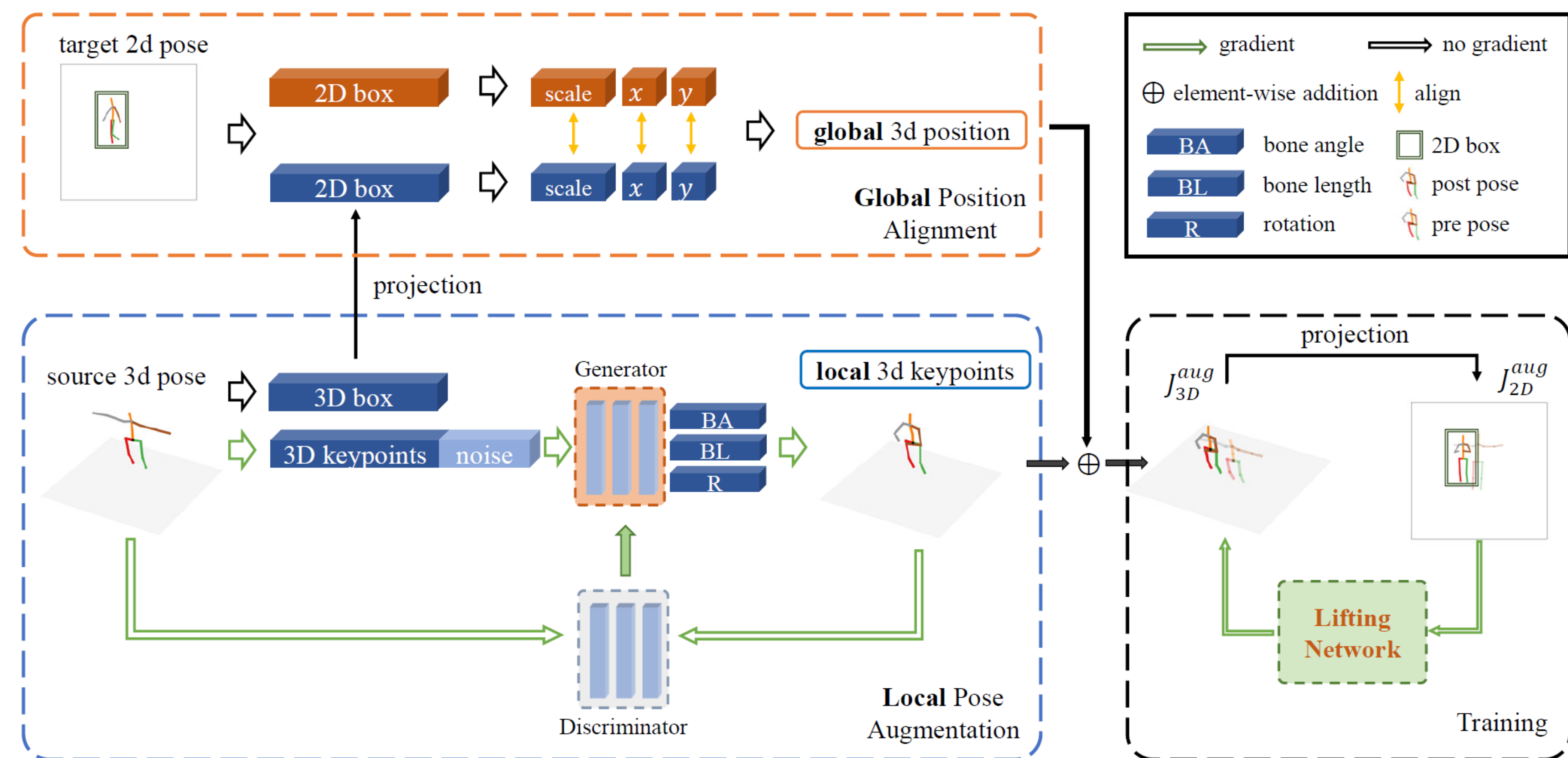
Motivation



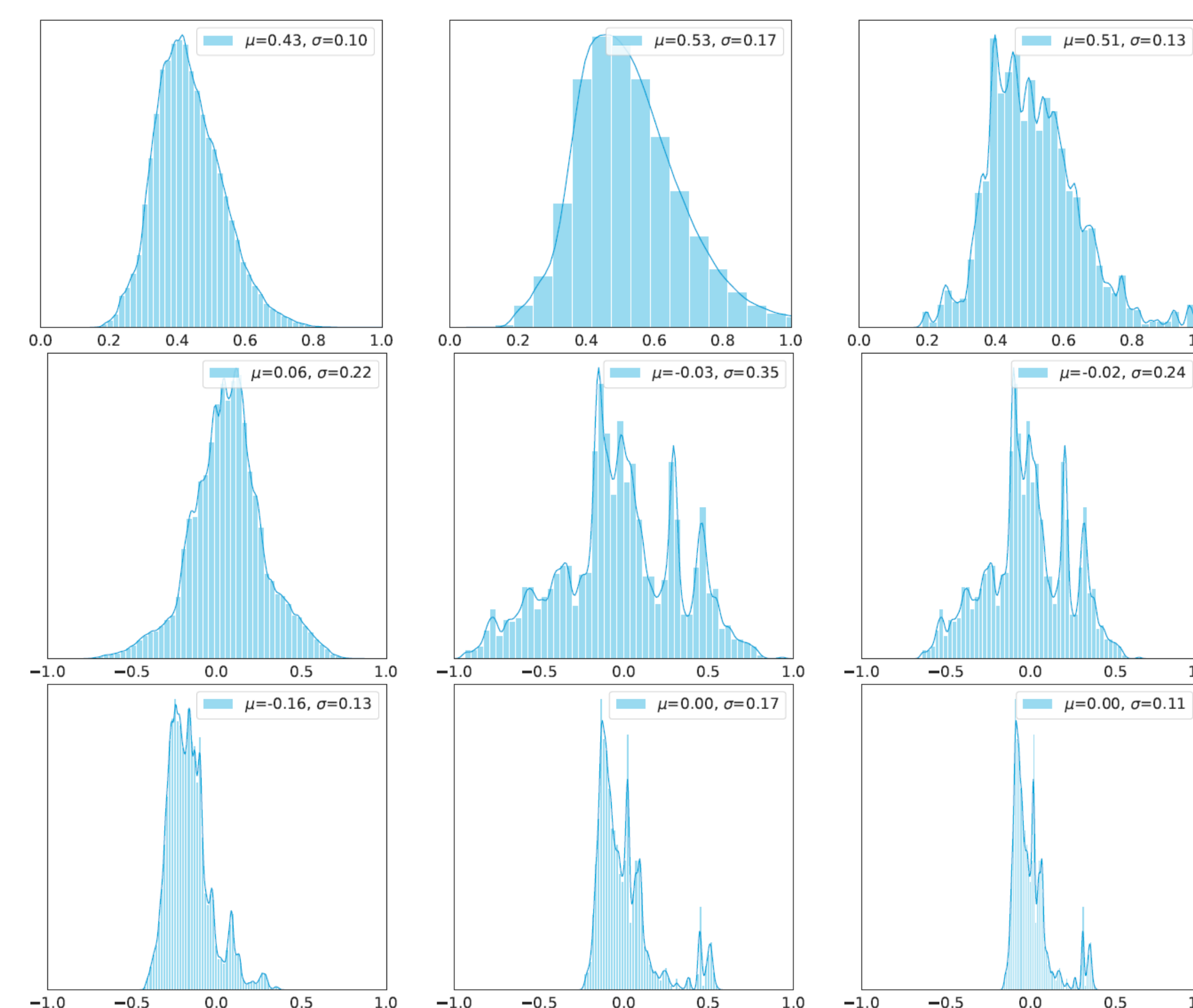
- **Why?** When applying a pre-trained 2D-to-3D human pose lifting model to a target unseen dataset, large performance degradation is commonly encountered due to **domain shift**.
- **What?** 1) the large distribution gap over **global** positions of poses between the source and target datasets due to variant camera parameters and settings, and 2) the deficient diversity of **local** structures of poses in training.
- **How?** Combine global adaptation and local generalization.



Method



Experiments



Method	MPJPE (↓)	PCK (↑)	AUC (↑)
SemGCN	95.96	80.68	48.48
+ LPA	87.64 (-8.3)	84.21 (+3.5)	51.24 (+2.8)
+ GPA	86.56 (-9.4)	83.85 (+3.2)	50.98 (+2.5)
+ PoseDA	78.37 (-17.6)	86.17 (+5.5)	54.74 (+6.3)
SimpleBaseline	81.23	85.85	53.95
+ LPA	66.56 (-14.7)	90.16 (+4.3)	60.41 (+6.5)
+ GPA	69.19 (-12.0)	89.90 (+4.1)	58.50 (+4.6)
+ PoseDA	64.79 (-16.4)	90.55 (+4.7)	61.32 (+7.4)
ST-GCN	81.19	85.92	53.78
+ LPA	74.31 (-6.9)	88.72 (+2.9)	56.20 (+2.4)
+ GPA	74.41 (-6.8)	88.58 (+2.7)	55.52 (+1.7)
+ PoseDA	69.50 (-11.7)	90.15 (+4.2)	58.56 (+4.8)
VideoPose3D	82.55	85.71	53.35
+ LPA	66.65 (-15.9)	90.05 (+4.3)	60.24 (+6.9)
+ GPA	66.07 (-16.5)	90.87 (+5.2)	60.07 (+6.7)
+ PoseDA	61.36 (-21.2)	92.05 (+6.3)	62.52 (+9.2)

Ablation study. Source: H3.6M. Target: 3DHP.

Code

