Table S1. Significant SPM1D clusters for joint angle waveforms mapped onto the whole-movement timeline.

Variable (code)	No. of significant clusters	Cluster location on whole timeline (%)	Phase	Direction (R vs F)
Elbow_Flex	2	33.66–34.00	Scooping	R > F
		34.84–55.56	Transporting	R > F
Forearm_Sup	3	10.88–34.00	Scooping	R > F
		34.00–38.76	Transporting	R > F
		93.92–100.00	Returning	R > F
Lumbar_Flex	0	—	—	—
Neck_Flex	0	—	—	—
Scap_DownRot	1	40.44–59.48	Transporting	R < F
Scap_Hadd	0	—	—	—
Scap_PostTilt	3	0.00–34.00	Scooping	R < F
		34.00–62.00	Transporting	R < F
		62.00–85.56	Returning	R < F

Footnote: Significant SPM1D clusters (paired t-test) for joint angle waveforms mapped onto the concatenated whole-movement timeline (0–100%). The waveforms were concatenated using the group-mean phase proportions, and SPM1D paired t-tests were performed **within each phase**. The significant clusters were then mapped to the whole-movement axis.