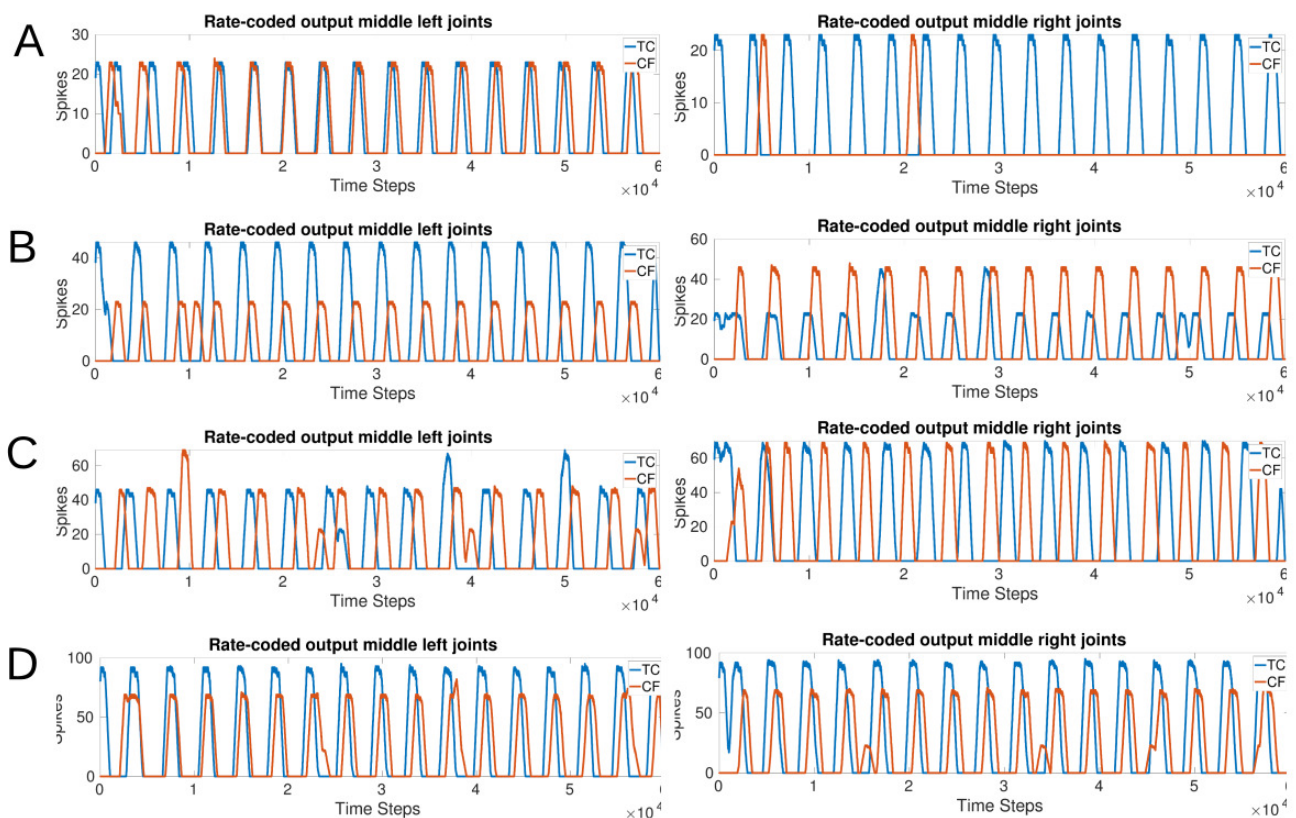# *Supplementary Material*

1 SUPPLEMENTARY TABLES AND FIGURES
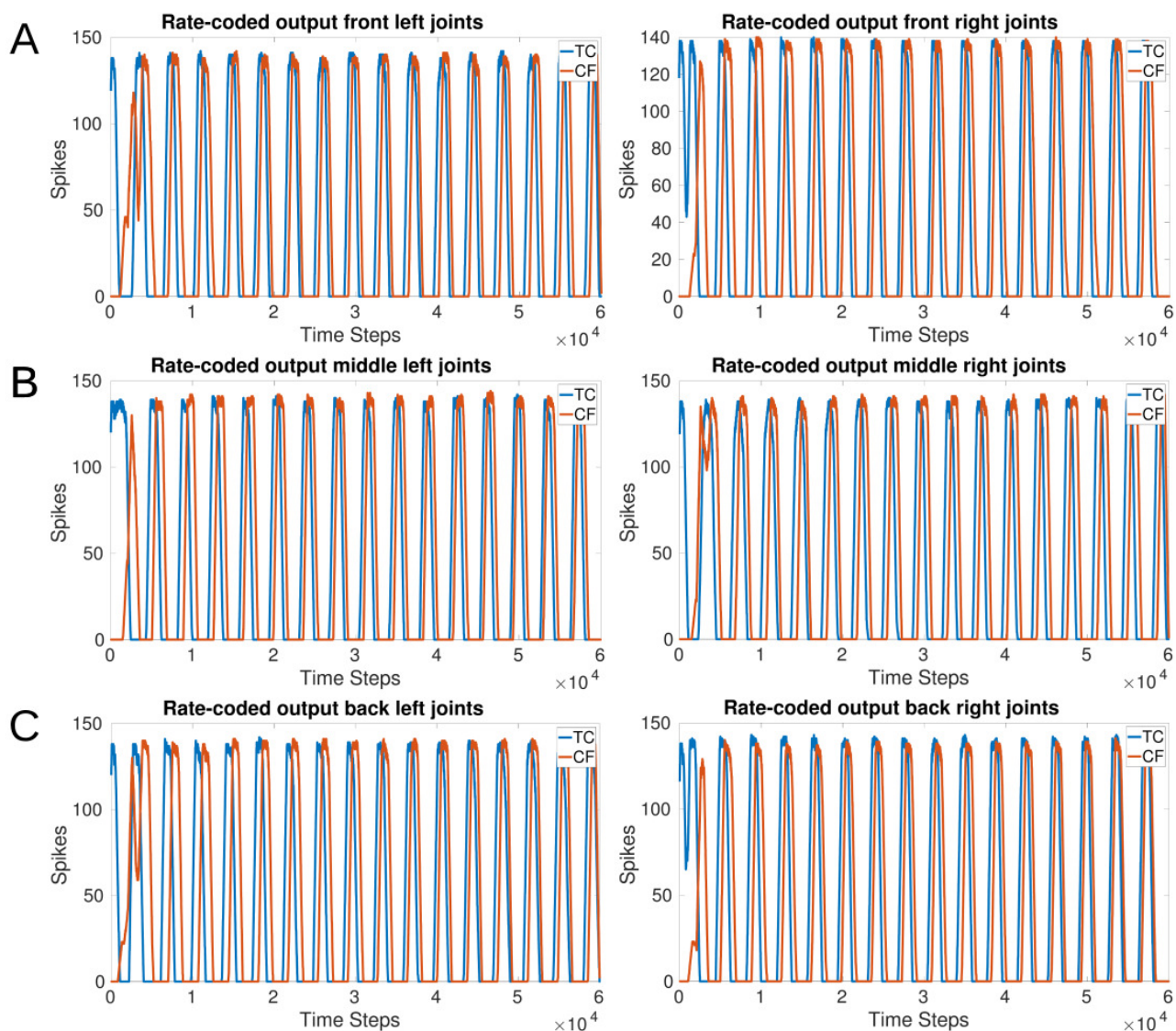
1.1 Figures

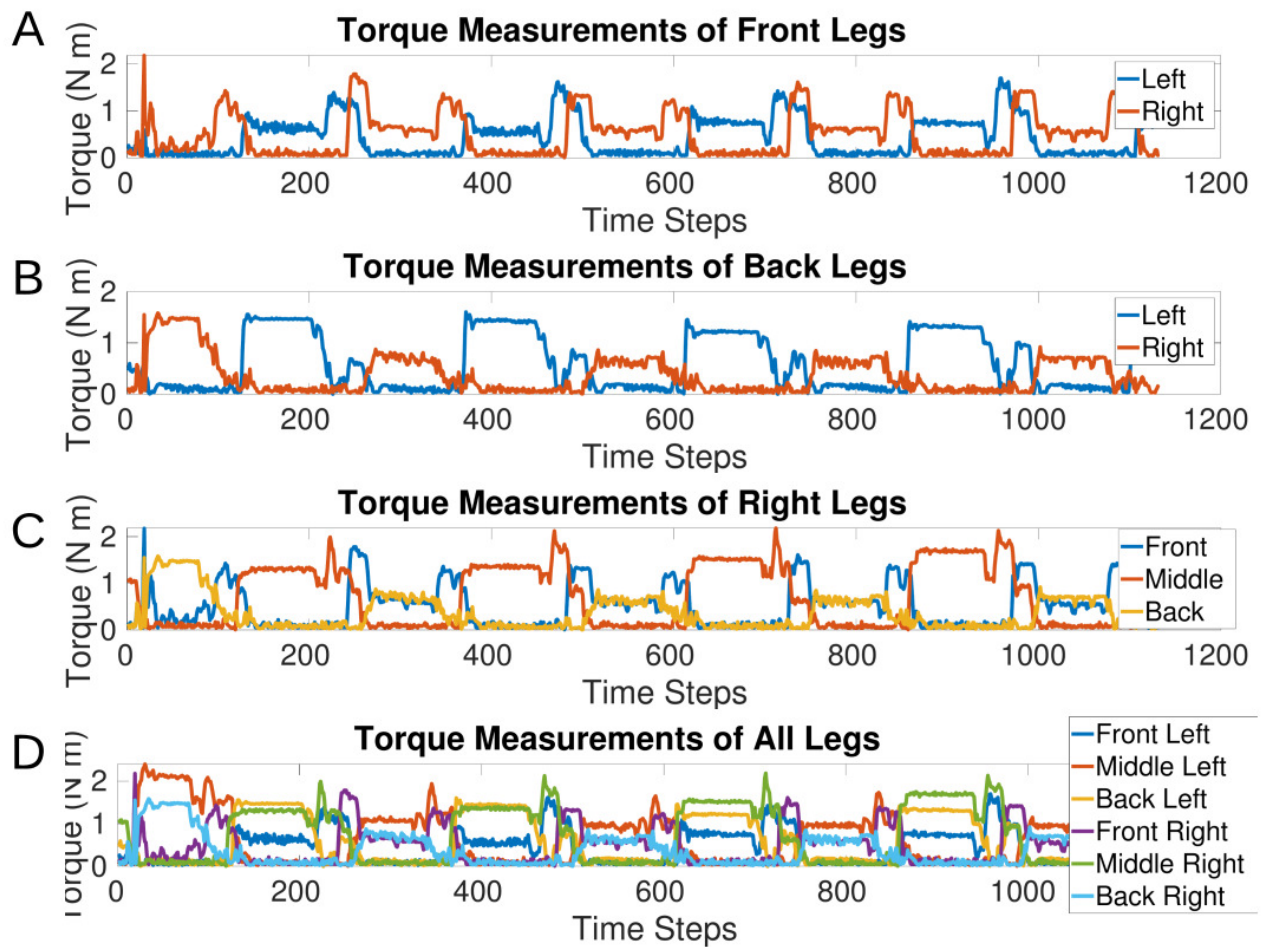**Rate-coded output for various sCPG population sizes**

Figure S1. Rate-coded output for increasing population sizes. A: One neuron per population. B: Two neurons per population. C: Three neurons per population. D: Four neurons per population.

Rate-coded output for 6-neuron sCPG population
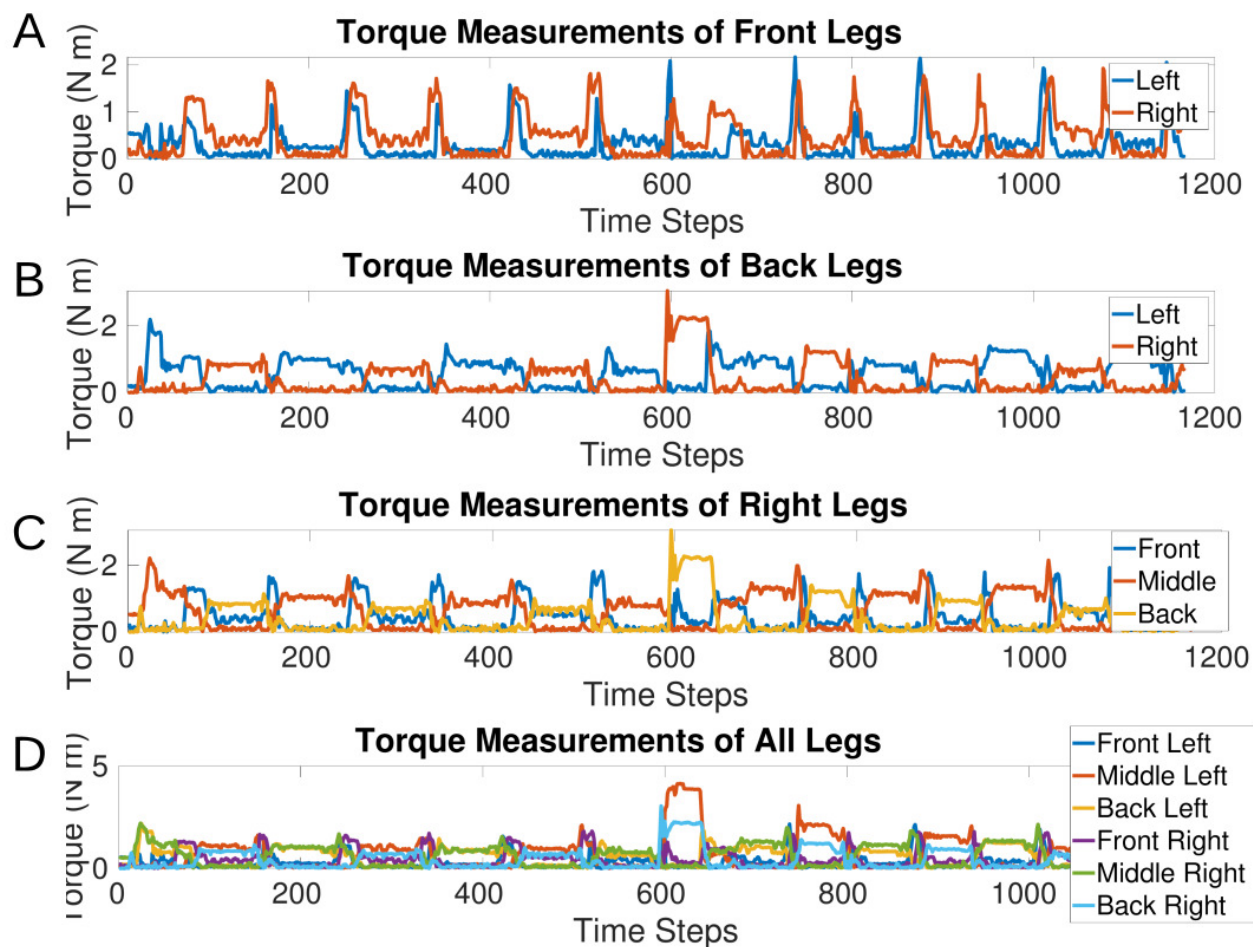

Figure S2. Rate-coded output for sCPGs with 6 neurons per population. A: Front legs. B: Middle legs. C: Back legs.

Video of MORF walking

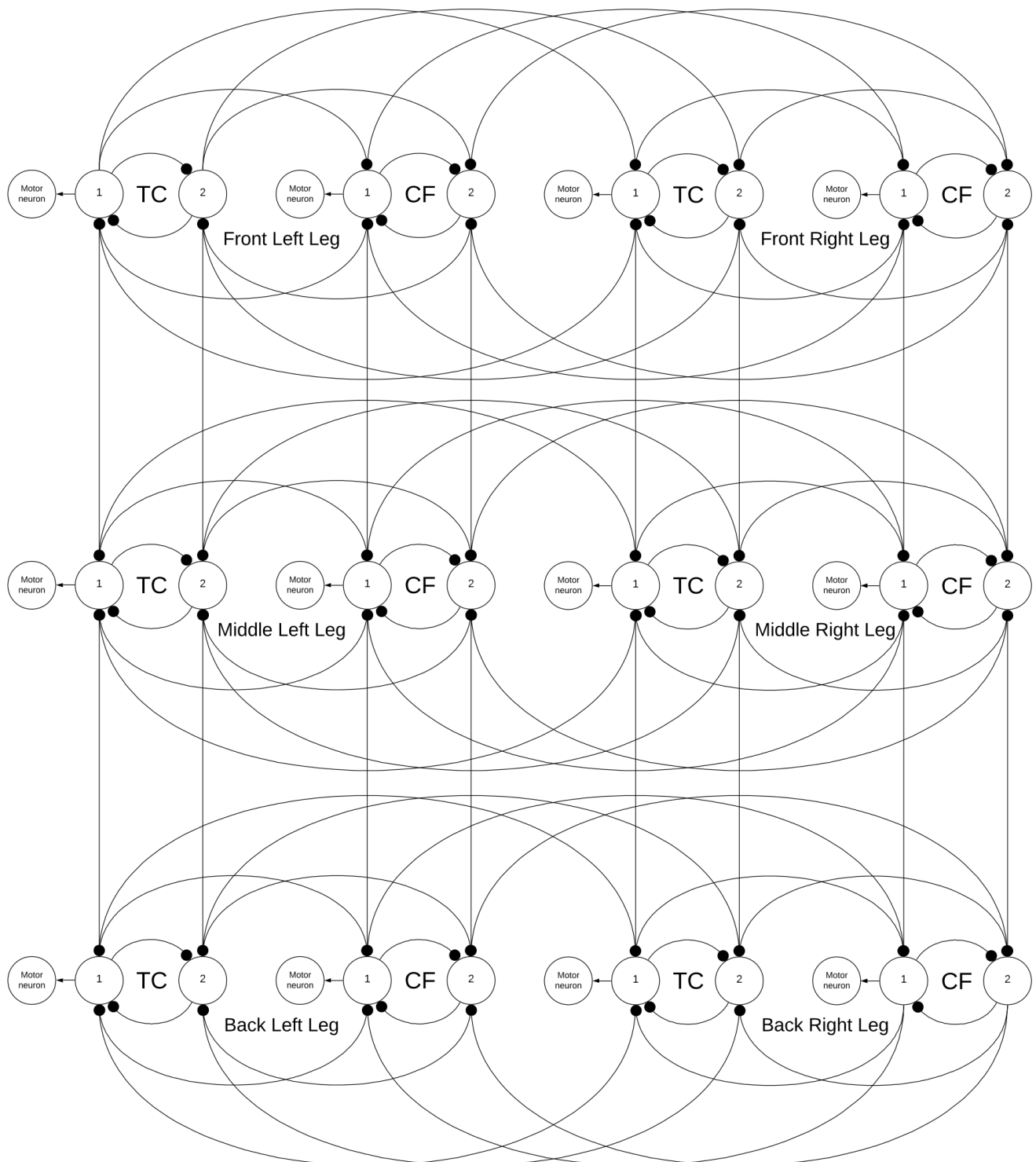**Torque output for MORF walking at a single frequency**

Figure S3. Converted torque measurement from Dynamixel motors when walking at a constant frequency.

Torque output for MORF walking when switching between frequencies

Figure S4. Converted torque measurement from Dynamixel motors when switching from one frequency to another.

Complete network of distributed sCPGs

Figure S5. Complete diagram showing all connections between individual neuron populations in the distributed network. The inter-segmental mutual inhibition connections are shown as a single connection with inhibition on either end to simplify the diagram.