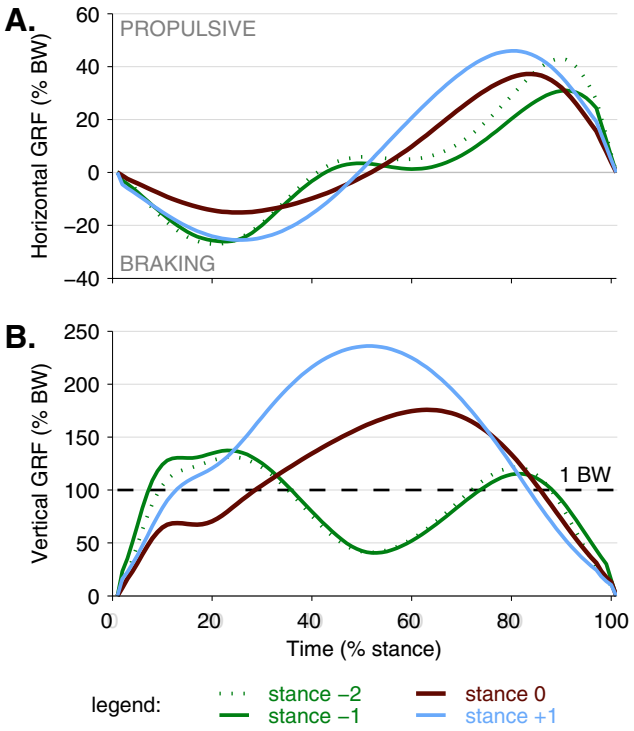

Fig. S1. Ground reaction forces during the spontaneous WRT. A. Horizontal (fore-aft) ground reaction forces. B. Vertical ground reaction forces.

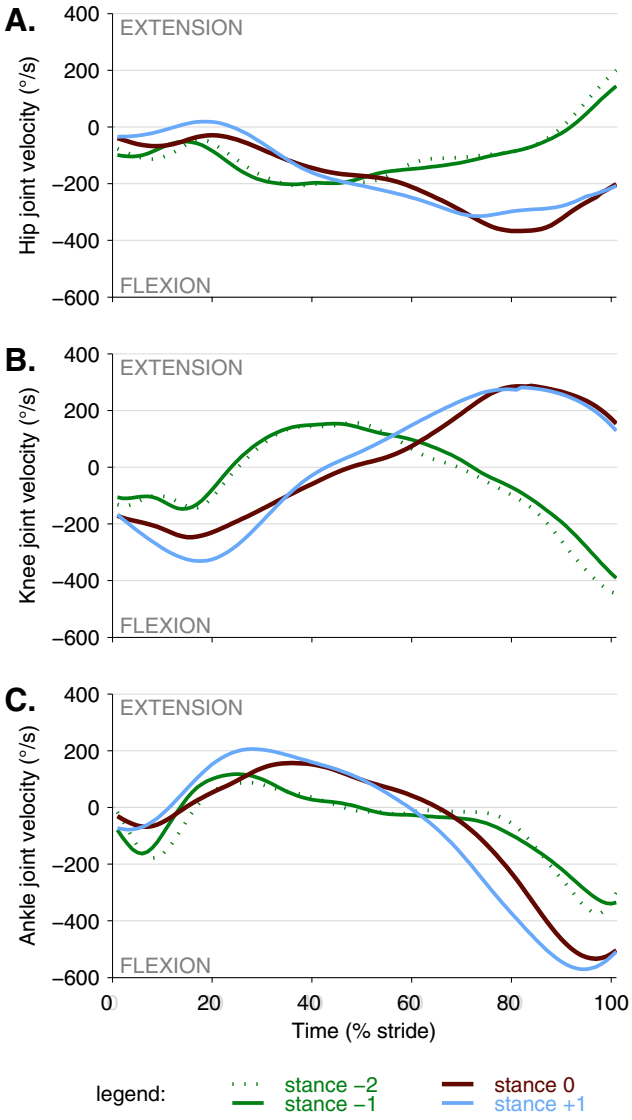

Fig. S2. Joint velocity during stance. A. Hip, B. knee, C. ankle .

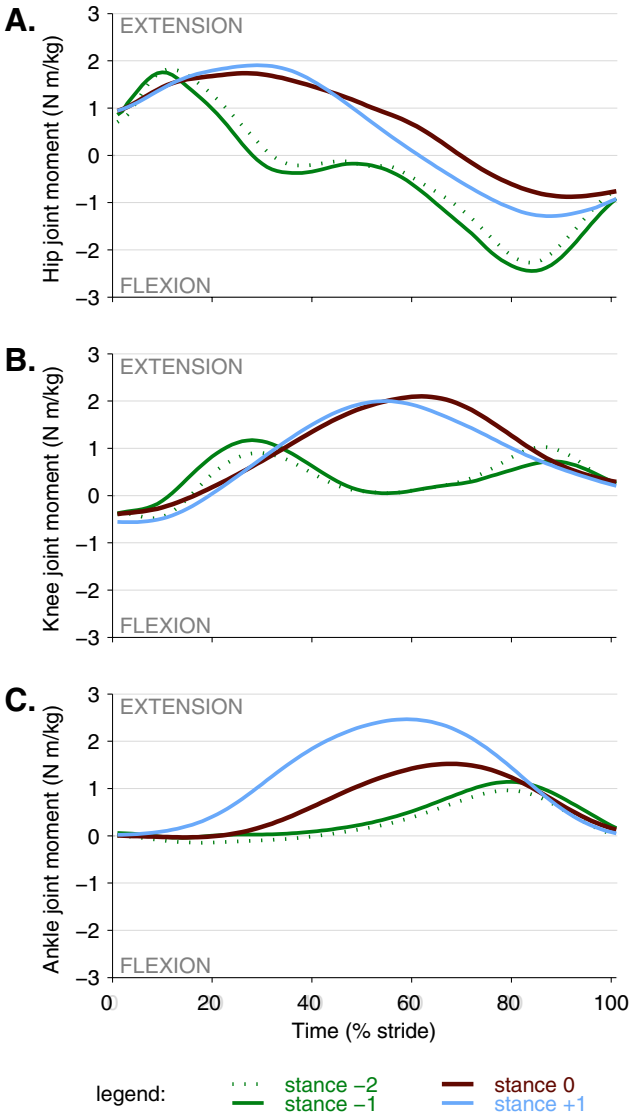

Fig. S3. Joint moment during stance. A. Hip, B. knee, C. ankle.

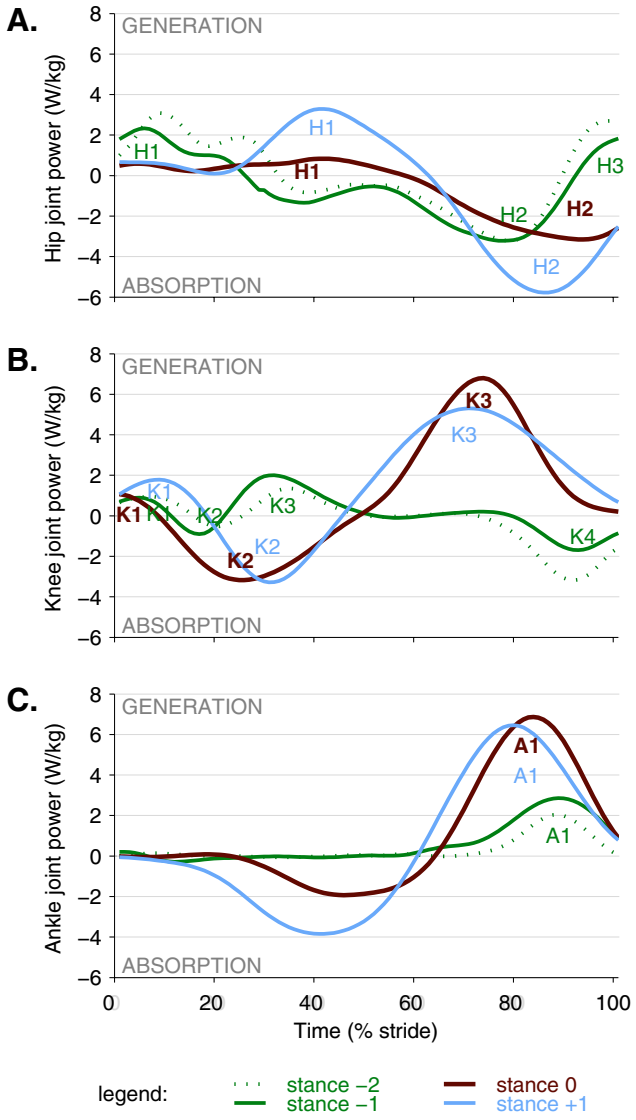

Fig. S4. Joint power during stance. A. Hip, B. Knee, C. Ankle. Joint power profiles during stance are divided in phases following Winter (1983, 1987). Only power phases that were present in both walking and running were taken into account (see figure 6). These accord to joint activation as follows: A1, concentric propulsive plantar flexion of the ankle at the end of stance; K1, eccentric knee extensor activity early in stance (loading response); K2, concentric knee extensor activity during midstance; K3, eccentric activity in the rectus femoris at the end of stance; H1, concentric hip extensor activity early in stance (loading response, sometimes absent); H2, eccentric hip flexor activity during midstance.

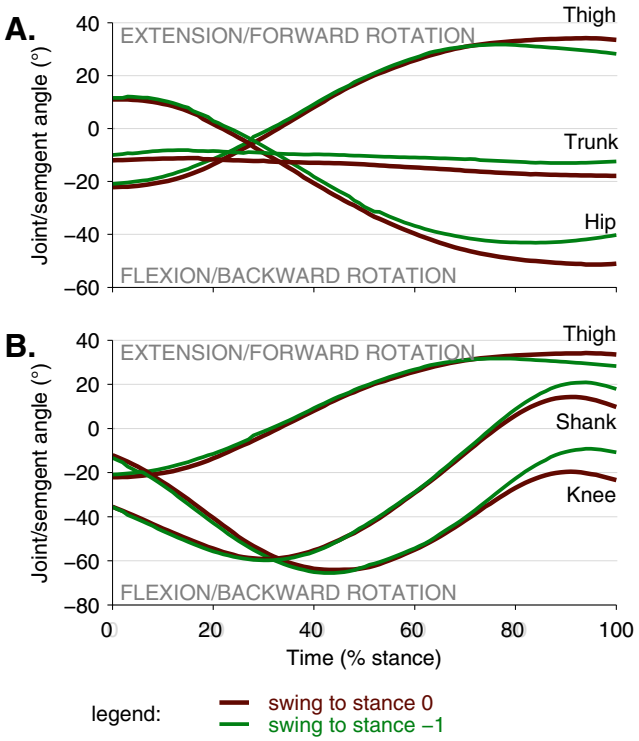

Fig. S5. Kinematics of the swing phase towards step -1 (green) and step 0 (red). A. Segment angles of thigh and trunk, and the resulting hip joint angle. B. Segment angles of shank and thigh, and the resulting knee joint angle.

	step -2		step -1		step 0		step +1	
	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.
Step length (m)	0.91	± 0.06	0.96	± 0.07	1.20	± 0.13	1.16	± 0.14
Step frequency (Hz)	2.34	± 0.18	2.42	± 0.19	2.30	± 0.16	2.59	± 0.14
Speed (m/s)	2.13	± 0.21	2.32	± 0.20	2.74	± 0.25	2.98	± 0.34

Table S1. Spatiotemporal realization of the spontaneous overground walk-to-run transition.