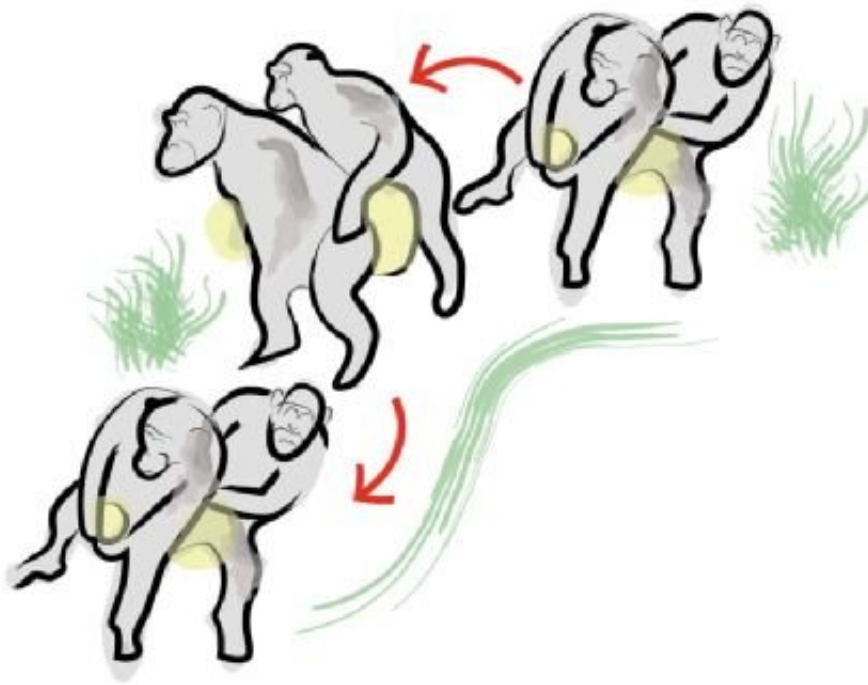


How humans learnt to dance; from the Chimpanzee Conga

December 12 2019



Credit: University of Warwick

Psychologist observing two chimpanzees in a zoo have discovered that they performed a behaviour hitherto never seen, they coordinated together in a rhythmic social ritual.

Two chimpanzees housed in a zoo in the US have sparked the question

about how human [dance](#) evolved after being observed performing a duo dance-like [behaviour](#), similar to a human conga-line.

In the paper "Coupled whole-body rhythmic entrainment between two chimpanzees" published today, the 12th of December in the journal *Scientific Reports*, researchers led by the University of Warwick found the levels of motoric co-ordination, synchrony and rhythm between the two female chimpanzees matched the levels shown by orchestra players performing the same musical piece.

Other species have been shown to be able to entertain by moving to the pace of a rhythmic tempo by an [external stimulus](#) and solo individuals, however this is the first time it hasn't been triggered by nonhuman partners or signals.

Although the newly described behaviour probably represents a new form in captivity in this [great ape](#) species, the behaviour forces scientists interested in the evolution of human dance to consider new conditions that may have catalysed the emergence of one of human's most exuberant and richest forms of expression.

Dr. Adriano Lameira, from the Department of Psychology at the University of Warwick comments:

"Dance is an icon of human expression. Despite astounding diversity around the world's cultures and dazzling abundance of reminiscent animal systems, the evolution of dance in the human clade remains obscure.

"Dance requires individuals to interactively synchronize their whole-body tempo to their partner's, with near-perfect precision, this explains why no dance forms were present amongst nonhuman primates. Critically, this is evidence for conjoined full-body rhythmic entrainment

in great apes that could help reconstruct possible proto-stages of human dance is still lacking."

The researchers report an endogenously-effected case of ritualized dance-like behaviour between two captive [chimpanzees](#)—synchronized bipedalism. By studying videos they revealed that synchronisation between individuals was non-random, predictable, phase concordant, maintained with instantaneous centi-second precision and jointly regulated, with individuals also taking turns as "pace-makers."

More information: Lameira, A.R., Eerola, T. & Ravignani, A. Coupled whole-body rhythmic entrainment between two chimpanzees. *Scientific Reports* 9, 18914 (2019) [DOI: 10.1038/s41598-019-55360-y](https://doi.org/10.1038/s41598-019-55360-y)

Provided by University of Warwick

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