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Given that coordination occurs at the levels of neurons, circuits, and behavior within and among organisms across the whole animal kingdom, it is unlikely that coordination or oscillation as such is limited to particular neural architectures, such as a six-layered cortex. A cortex may turn out to be something to crow about for some as-yet-unidentified behavioral or computational traits, but it certainly does not work in isolation. Both broad and focused comparative studies on behavioral similarities and differences will be necessary to elucidate first principles underlying such phenomena.