

In an article entitled "Social Learning Mechanisms and Cumulative Cultural Evolution: Is Imitation Necessary?" published in [Psychological Science](#), Volume 20 Issue 12, Pages 1478 - 1483 and available [here](#), [Christine A. Caldwell](#) and Ailsa E. Millen make an interesting contribution to the development of experimental studies of cultural transmission and to the discussion of the role of imitation vs. emulation.

Abstract: Cumulative cultural evolution has been suggested to account for key cognitive and behavioral attributes that distinguish modern humans from their anatomically similar ancestors, but researchers have yet to establish which cognitive mechanisms are responsible for this kind of learning and whether they are unique to humans. Here, we show that human participants' cumulative learning is not always reliant on sources of social information commonly assumed to be essential. Seven hundred participants were organized into 70 microsocieties and completed a task involving building a paper airplane. We manipulated the availability of opportunities for imitation (reproducing actions), emulation (reproducing end results), and teaching. Each condition was independently sufficient for participants to show cumulative learning. Because emulative learning can elicit cumulative culture on this task, we conclude that accounts of the unusual complexity of human culture in terms of species-unique learning mechanisms do not currently provide complete explanations and that other factors may be involved.