Cumulative cultural evolution?

- (i) a change in behaviour (or product of behaviour, such as an artefact), typically due to asocial learning, followed by
- (ii) the transfer via social learning of that novel or modified behaviour to other individuals or groups, where
- (iii) the learned behaviour causes an improvement in performance, which is a proxy of genetic and/or cultural fitness, with
- (iv) the previous three steps repeated in a manner that generates sequential improvement over time

Research question

Is copying essential for cumulative cultural evolution?