

This week on [cognitionandculture.net](http://cognitionandculture.net), several posts will dwell on social learning and cooperation. [Laurent Lehmann](#), Marcus Feldmann and others have a series of papers that call into question many assumptions frequently made about cultural transmission and the part it played in the emergence of cooperation in our species...

A very influential position in this field is the theory of dual inheritance, and cultural group selection, developed (mostly) by [Robert Boyd](#) and [Peter Richerson](#). In a very narrow nutshell, these theories state that

- 1) We are innately motivated to imitate our peers, particularly the more powerful or prestigious.
- 2) Coupled with group selection, imitation favours the spread and survival of altruistic social norms. Human groups favoured with social norms promoting altruism fare better in evolution than other groups.
- 3) This mechanism is the cause of biological altruism in our species (biological altruism means making sacrifices in favour of an individual that is not related to you, so that your genes do not benefit from the sacrifice).

In a [first paper](#), they argue, against point (3), that individual learning may be more likely than cultural transmission to produce cooperation.

In a [second paper](#), reviewed today by [Jean-Baptiste André](#) - [here](#), Lehmann et al. challenge claim (2): they argue that cultural evolution breeds altruism only if we make drastic assumptions about imitation mechanism. For example, the assumption that, when we imitate someone, we should be completely blind to the results brought about by his behaviour.

The predictions of cultural group selection would still hold true if we did imitate others blindly, paying attention only to the prestige of our models, or to the pressure of the majority, when we decide to reproduce a behaviour. But even in some of the experimental examples favoured by dual-inheritance theorists, it seems that we do pay attention to success when we imitate a given strategy. Only, dual-inheritance models disguise this attention we pay to success and outcomes as a form of deference towards prestigious individuals. At least, that's what I tried to do in [this post](#).

Feel free to add your contribution to the series - many people here at the institute strongly believe in dual inheritance theory, and they certainly have good points to make in the debate! I am looking forward to animated discussions.