

# Creating Culture in the Lab: Equilibrium Conventions in Inter-Generational Ultimatum Games

Andrew Schotter<sup>a</sup> and Barry Sopher<sup>+</sup>

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## Abstract

The Ultimatum Game and the experiments surrounding it, have presented economists with a puzzle that they have struggled to explain. But as Robert Aumann has pointed out, while there may be only one sub-game perfect equilibrium to the Ultimatum Game, there are an infinite number of Nash equilibria. All that is needed to maintain a non-sub-game perfect equilibrium is a set of Sender beliefs that the offer contemplated is the minimum that would be accepted and behavior on the part of the Receivers that confirms these beliefs. The only puzzle is how such a set of mutually consistent beliefs developed in the first place and how they are passed on from one generation of player to the next. Using an inter-generational game experimental setting, this paper investigates how "culture" serves as the selection mechanism which solves this puzzle. Culture is then simply a system of beliefs and self-confirming actions which support any one of these non-sub-game perfect Nash equilibria as the accepted solution to the game being played. The outcome is, as Robert Aumann has called it a "perfectly good" Nash equilibrium convention which is just not perfect.

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<sup>a</sup> Professor of Economics, New York University, <sup>+</sup> Associate Professor of Economics, Rutgers University. This work was completed under N.S.F. grants SBR-9709962 and SBR-9709079. The financial support of the Russell Sage Foundation and the C.V. Starr Center for Applied Economics at New York University is also gratefully acknowledged. The authors would like to thank Sangeeta Pratap, Mikhael Shor and Judy Goldberg for their valuable research assistance, and Yevgeniy Tovshcheyn for writing the program upon which the experiments were run.