Culture and individual differences

Arthur B. Markman,[a] Serge Blok,[a] John Dennis,[a] Micah Goldwater,[a] Kyungil Kim,[a] Jeff Laux,[a] Lisa Narvaez,[a] and Eric Taylor[b]

[a]*Department of Psychology, University of Texas at Austin, Austin, TX 78712;* [b]*Department of Psychology, University of Illinois, Champaign, IL 61820.*
markman@psy.utexas.edu **blok@psy.utexas.edu**
johnlmdennis@mail.utexas.edu **micahbg@mail.utexas.edu**
kyungil@psy.utexas.edu **laux@mail.utexas.edu**
grimmlr@mail.utexas.edu **eric@gregalo.com**
http://www.psy.utexas.edu/psy/FACULTY/Markman/index.html

Abstract: Tests of economic theory often focus on choice outcomes and find significant individual differences in these outcomes. This variability may mask universal psychological processes that lead to different choices because of differences across cultures in the information people have available when making decisions. On this view, decision making research within and across cultures must focus on the processes underlying choice.

Economic theory is cast in universal terms. People make choices that have the greatest long-term expected utility. Expected utility is itself a psychological concept, because items are only useful to the extent that they permit people to satisfy their goals. Thus, assessing whether people make choices that accord with expected utilities requires understanding people's goals and motivations. Because goals are idiosyncratic, most tests of "Homo Economicus" involve some form of currency, because the utility function for money is monotonically increasing for almost all individuals.

The target article follows in a tradition of recent studies that have begun to explore the limitations of these tests of economic models. Some of these explorations come from within cultures and demonstrate that individuals have many different kinds of relationships, and that their transactions within those relationships are governed by different rules (Fiske & Tetlock 1997). For example, while we gladly pay cash for a shirt in a store, we would be unlikely to pay a parent for a shirt. Other explorations make clear that people may conceptualize a situation in very different ways depending on whether money is involved. For example, imposing weak monetary penalties for environmental transgressions can lead business decision makers to switch from thinking about polluting as a moral problem to a financial one (Tenbrunsel & Messick 1999). Finally, analyses of the development of currencies suggest that people often create different kinds of money that are suitable for different kinds of transactions. For example, people who give cash on birthdays often try to find new bills and expect that money to be used for frivolous purchases (Zelizer 1994). All of these demonstrations suggest that money itself is bound up with people's economic and social goals.

The target article extends this line in an interesting way. By exploring similar tasks across different cultures, the target article provides a way of assessing the degree of variability in people's approach to money and transactions across cultures. While there is impressive variability across cultures, the examinations of individual cultures is perhaps most interesting. For example, participants from cultures with a high rate of sharing (like the Aché) made high offers, and offers of all types were typically accepted. In contrast, participants from cultures with a low rate of sharing (like the Hadza) often made small offers, and many of those small offers were rejected.

Where does this variability leave decision theorists? The appeal of economic models used to be that they provided a benchmark for assessing behavior that could be applied to different individuals and to different cultures. Certainly, the notion of utility has a psychological fudge factor, because people's goals are not assessed directly, but at least there was a unifying framework for thinking about choice. As the present studies make clear, however, these choices are interpreted in a broad social context. Hadza participants may have rejected offers as a way of punishing the people who made them. If so, their choices were sub-optimal within the game setting. However, social structures are designed for the long-term, and punishing other members of a culture who are acting selfishly may provide the best long-term reward for members of that culture.

The problem with this explanatory story is that it is idiosyncratic to a particular culture. If every culture requires its own explanatory story (and the variability observed in the present studies is consistent with this possibility), then how are we to find generalizations about human decision-making behavior?

Markman and Medin (2002) suggest that there may be generalizations about decision-making performance by people from different cultures that are masked, because most studies of decision making focus on the outcome of decisions rather than on the processes by which decisions are made (see also Medin et al. 1995). On this view, choice outcomes are determined by culture-specific factors such as the kinds of transactions in which members of that culture typically engage. Nonetheless, many aspects of decision-making behavior may involve important mechanisms that are common across members of different cultures. Furthermore, there may be individual difference variables that may also lead to stable cultural differences in choice behavior.

For example, there has been an upsurge in research on the influence of motivational factors on decision making. Although the particular goals that someone may have are culturally determined, the influence of the activation of a particular goal on decision-making behavior may be common across individuals. In one study, Fishbach et al. (2003) find that people are able to maintain goal-directed behavior in the presence of tempting alternatives, because the temptations actually reactivate the threatened goal. Similarly, Brendl et al. (2003) find that activation of a goal (e.g., smoking) not only increases people's preference for goal-related items (e.g., cigarettes), but also decreases their preference for goal-unrelated items that might compete with the active goal (e.g., compact discs).

Other research has focused on individual difference variables that might differ across cultures and influence decision making. For example, there are stable cross-cultural differences in people's self-construal, such that members of East Asian cultures tend to perceive themselves as more interdependent with others than do members of Western cultures (Lee et al. 2000). People who have a relatively more interdependent self-construal are more likely to focus on potential losses that options might cause, whereas those with a more independent self-construal are more likely to focus on potential gains (Aaker & Lee 2001).

Thus, cultural differences in decision making may still be caused by cognitive mechanisms that are culturally universal. Although the content of people's goals is clearly different across cultures, the mechanisms of operation of the motivational system may be universal. Likewise, although cultures may emphasize different personality characteristics (on average), the influence of these characteristics on choice may be the same in members of different cultures. We suggest that research should shift away from an assessment of broad choice outcomes and toward the psychological characteristics underlying choice processes.

Building a better micro-foundation for institutional analysis

Elinor Ostrom

Workshop in Political Theory and Policy Analysis, Indiana University, Bloomington, IN 47408. **Ostrom@indiana.edu**
http://www.indiana.edu/~workshop

Abstract: The target article summarizes important research demonstrating that the canonical model of selfish, economic man is not empirically supported outside competitive settings, and that experimental research conducted in university settings should not be discounted because undergraduates were the subjects. Assuming that individuals are capable of reciprocity and trust provides a firmer foundation for the study of institutions, incentives, and outcomes.

As a scholar who has conducted multiple experiments, I have been a consistent fan of the small-scale societies study undertaken by

https://doi.org/10.1017/S0140525X05390145 Published online by Cambridge University Press

this distinguished group of scholars. Some scholars have not taken experimental research seriously because college students are frequently the subjects recruited for study. Since I have spent more time conducting field research than experiments, the greater internal validity of experimental research has been for me a complement to the external validity my colleagues and I have achieved from field research. In our extensive research program on common-pool resources, one of our core strategies has been to go back and forth between field and laboratory research in an effort to understand what conditions enhance the likelihood of participants actually contributing to the sustainability of common-pool resources (see Gardner et al. 2000; Ostrom et al. 1994).

Therefore, it is encouraging that the findings reported in the target article from experiments conducted with residents of small-scale societies in many parts of the world are consistent with laboratory experiments conducted in a mid-western university (Ostrom & Walker 2003; Walker et al. 1990), as well as with parallel field experiments in Colombia (Cardenas 2000; Cardenas et al. 2000).

What is now well established from all of this research is that the narrow model of "economic man" is not a good foundation to explain behavior outside of open competitive markets. Scholars should no longer presume that individuals seek *only* short-term, material benefits for themselves in either experimental or field settings outside of competitive markets. We must not assume, however, that all individuals seek benefits for others, contribute to collective benefits, and thus are always "good guys." Individuals are capable of learning to trust others and to follow norms of reciprocity, but there are some individuals in every culture who are well modeled by the construct *Homo economicus*.

Individuals, who want to achieve collective objectives over time, must find a wide variety of institutional mechanisms that enable them to create fair rules of contribution and distribution and ways of monitoring people's contributions without squelching cooperation by overmonitoring. Without these mechanisms, a few individuals can begin to grab benefits, and levels of trust and cooperation can plummet rapidly.

The findings of the target article are particularly important for building better institutional theories. Until recently, the microfoundation for the theoretical study of institutions and incentives has been the canonical model of selfish individuals. With this model, one predicts that no one will cooperate in providing a public good (Olson 1965) or protecting a common-pool resource (Hardin 1968).

The tragedy of the commons does indeed occur in some settings. It has taken several decades of extensive field and experimental studies to show, however, that the tragedy of the commons is not a *necessary* outcome when resources are owned by a small community rather than by national governments or private owners. The real tragedy has been that so many scholars have assumed that individuals facing the problems of providing public goods or protecting common-pool resources were helpless and trapped in ongoing social dilemmas. When using the assumptions of selfish and trapped individuals, only one solution is proposed – to impose rules by external authorities. The preferred rules vary from those of central ownership to those of private ownership. The process of solving these problems, however, is always perceived to be in the hands of government officials. Those government officials are presumed to be acting in the public interest – contrary to the canonical assumption of economic man. The basic contradiction of modeling citizens as selfish and helpless while modeling public officials as all knowing and striving for the public interest is overlooked in the literature calling on the government to impose solutions for social dilemma problems.

With the accumulation of evidence of greater other-regarding behavior than previously assumed, it is now possible to build institutional theories on a more complex, but realistic foundation recognizing that individual humans seek multiple goals, including their own immediate material well-being as well as outcomes of benefit to others in their family, firm, community, and broader society (North 2005; Ostrom 2005).

Unfortunately, some readers have concluded from earlier reports of the target study that another primary foundation for explaining behavior exists – culture. Although it is extremely important that all social scientists recognize the importance of culture, it is also important that we recognize the creativity of humans and their adaptability. The studies reported on in the target article are all from small-scale communities. One can assume that in such communities, individuals facing repeated needs for cooperative efforts develop norms of reciprocity that facilitate gaining joint benefits. It is essential that scholars should not view culture as in itself an iron box determining outcomes.

Shared beliefs provide a broad environment in which individuals – if given opportunity and time – innovate and create rules for relating to one another, rules that enable them to build trust and the norms of reciprocity for solving problems of providing public goods and protecting common-pool resources. The culture of the whale hunters of Lamalera in Indonesia did not simply occur. Their high level of reciprocity evolved as members of hunting crews solved practical problems of dividing a catch, so that those who were directly or indirectly responsible for success were benefited and would contribute again in the future.

Henrich et al.'s important work on cultural evolution complements and extends the findings from biological evolution, and needs to be complemented by a more self-conscious awareness of institutional evolution. As individuals create the rules and norms affecting their rights and duties, they are creating new social environments that either foster or detract from the establishment and the evolution of productive societies.

Making it real: Interpreting economic experiments

Eric Alden Smith

Department of Anthropology, University of Washington, Seattle, WA 98195-3100. **easmith@u.washington.edu**
http://faculty.washington.edu/easmith/

Abstract: The relationship between game play and naturalistic cooperation, generosity, or market involvement is ambiguous at best, making it difficult to link game results to preferences and beliefs guiding decision-making in daily life. Discounting reputation-based explanations because the games are anonymous, while arguing that game play is guided by motivational structures or framing effects reflecting daily life, is inconsistent.

Findings that people's choices in economic experiments often deviate substantially from those that would maximize their immediate material payoffs have generated substantial rethinking of the postulates of human decision-making. The work Henrich and colleagues have done in extending these methods to small-scale societies in many different cultural and ecological contexts is of great value, particularly to those of us concerned with the effects of cultural variation, ecological adaptation, and social interaction in shaping human behavioral variation. Now that some fairly extensive results are available, we are faced with the challenging and contentious task of formulating a new consensus. My comments on the target article, and on this broader challenge, focus on two related issues: (1) How do we interpret the relationship between experimental findings and real-world social behavior? (2) What are the implications of these findings for current theories of behavioral adaptation?

Relation to daily life. The advantage of experiments over naturalistic observation is that the researcher can control for various factors that might influence outcomes, and thus hope to arrive at a clearer understanding of the effects of various hypothesized determinants. The disadvantage is that the "ecological validity" or relevance of the experiment to naturalistic contexts can be questioned. If the experimental results are not simply artifacts, we have to ask what they really mean. A plausible hypothesis is that play in

https://doi.org/10.1017/S0140525X05390145 Published online by Cambridge University Press