

The emergence of generalized exchange
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Generalized exchange, which is characterized by unilateral resource giving beyond dyads, describes an essential characteristic of human societies. If we can engage in only restricted exchange between fixed two individuals as several species do, such a society would be very hard to live. Thus, generalized exchange is considered an important type of social capital.

Since the work by Levi-Strauss, there has been little research on generalized exchange until recently. The research question is how to explain the emergence of generalized exchange among self-interested individuals. Since unilateral resource giving is costly to a giver, the existence of generalized exchange is a puzzle for researchers in most natural and social sciences (e.g., economics, evolutionary biology) who assume individuals are self-interested. The answer is that indirect reciprocity (i.e., receiving resources not from the recipient but from someone else) is the mechanism that makes generalized exchange possible. Based on computer simulations and mathematical analysis, there are several competing theoretical arguments that try to explain what kind of strategy leads to indirect reciprocity (e.g., Nowak and Sigmund, 1998a, b; Leimar and Hammerstein, 2001; Panchanathan and Boyd, 2003; Takahashi and Mashima, 2003). After discussing these strategies, I will show associated empirical evidence based on laboratory experiments and questionnaire studies. The results suggest that generalized exchange emerges because people adopt some kind of selective giving strategy (i.e., decides whether to give based on information about the recipient's past behaviour), but that specifying the strategy used still needs further research.