

Negotiation

The many applications we have explored in the previous chapters illustrate how relevant are the tools and techniques of noncooperative game theory and experimental methods to a vast array of problems in business and social life. The remaining chapters of this book use the tools developed in the first half to study strategic problems in organizations to pursue the dual themes of trade and exchange in greater depth. Trading is so prolific that we tend to take it for granted. Yet trading skills are important for managers of private and public enterprises, and the premise of this book is that they deserve close scrutiny than is typically given in textbooks on economics and strategy. Every trading mechanism is based on the principle of voluntary exchange, which is only possible if property rights are well defined and policed. The act of trading essentially reassigns property rights according to the unanimous agreement of the parties involved. If property rights are ill defined or not enforced, then modeling exchanges as voluntary behavior might yield misleading predictions. A different kind of game, involving expropriation, theft, deception and fraud would be more useful.

Chapter 15 analyzes strategic play in bargaining problems. We analyze several bilateral and multilateral bargaining games, as well as other issues in industrial relations. Then in the latter parts of the chapter we explain why negotiations inherently combine bargaining with search and discovery, and analyze games in which both are present.

Since games are a mechanism for determining how participants with conflicting objectives resolve their differences, it is reasonable to ask how they are invented. Often the designer of a game, such as a contractor who requires his clients to sign an agreement he has previously written, favors some outcomes over others, and this surely affects the way he formulates the game. In Chapter 16 we show how a game can be interpreted as an agreement between the players that determines the rules of the game itself and the resulting payoffs. The chapter goes on to discuss the revelation principle, which states that any game of incomplete information leads to the same outcomes as another game in which players are given appropriate incentives to truthfully reveal their information. The revelation principle raises questions about why bargaining and negotiation games are drawn out, and we discuss some possible reasons. Chapter 16 also addresses games in which the person who devises the game also participates as a player along with several others. These are called principal agent models in the literature, and they are particularly applicable to employer employee relationships, where the employer writes a contract, and has some private information about the difficulty of the tasks and its value, whereas the employee has some private knowledge of his own ability and effort.