

BAIRD, DOUGLAS G., GERTNER, ROBERT H., and PICKER, RANDALL G.: *Game Theory and the Law*. Cambridge MA, 1994. Harvard University Press. 330 pp.

Ken Binmore once compared writing about refinements of the Nash equilibrium concept to the Herculean task of defeating the nine-headed Hydra, which grew two heads for each one chopped off. I am tempted to use this allegory also for the task of keeping up with the spate of books on game theory that appear at the moment: for each book I have read, two new ones appear on my desk. The first question to ask is, therefore, at what niche in the market for game theory books the authors are aiming. As the title suggests, the book applies the tools of game theory and information economics to legal problems in order to advance our understanding of how laws work. At the same time, 'Game Theory and the Law' seeks to serve as an accessible primer on game theory for non-specialists, especially lawyers.

The organization of the book is as follows. The first chapter is about normal form games and the solution concepts of dominant strategy and Nash equilibria. The authors illustrate their concepts with examples from tort law. The second chapter deals with extensive form games and the solution concept of subgame perfection. Here, the authors draw on examples from commercial law.

Chapter Three introduces games of imperfect information and discusses disclosure laws and renegotiation. Chapter Four is about games of incomplete information and how they can be used to analyze contract default rules.

In Chapter Five, supergames are used to explain reputation, predation, and cooperation. Chapter Six deals with a variety of problems such as embedded games, public goods, network externalities, and herd behavior. The last two chapters are about non-cooperative bargaining theory under complete and incomplete information and the application of these models to explain the litigation process.

I find it fairly difficult to assess 'Game Theory and the Law' simply because I do not belong to the target group at which the book is aiming. I already knew most of the subjects when I started reading the book so that for me the major question was not so

much what material the authors cover but how they present it. To answer this question right at the outset: the presentation is certainly excellent. The book is a judicious blend of modern game theory with carefully selected legal applications and problems. The basic concepts of modern game theory are introduced without requiring the reader to know any formal mathematical tools beyond simple algebra. The authors then use the game theoretic tools to further our understanding of the way in which legal rules may affect how people behave. The exposition is extremely clear and intellectually rigorous.

Let me finish with one potential weakness of the book. Having struggled with quite a few of the game theoretic concepts treated in the text, I have a good idea of how complicated they are. Therefore, I can understand fairly well why Osborne/Rubinstein (*A Course in Game Theory*, MIT Press 1994) do not treat games of incomplete information at all. In contrast, in 'Game Theory and the Law' one of the early chapters is already about signaling games. I have little idea of how much lawyers will understand of these issues, let alone how much they actually want to understand. I conjecture that the book is pitched at exactly the right level. The final answer to this question has, however, to be provided by a member of the target group.

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