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inspiration. As I do this work, Gade's book helps me perceive some of the many ways in which nature/culture constitute each other in this region. But in the end, perhaps reflecting my own passions, I perceive a somewhat different skein of relationships linking environment and society - a skein driven by processes that exclude and dominate certain nature/cultures, to the privilege of others, an intersection in which power and ecology have to be understood together. I also see intersections in which modernity is as much part of lo andino as is history, and in which social actors look to the modern as much as to anything else as they attempt to breach these processes of exclusion. Reading this book as I do this work warns me to think carefully and self-critically about the way I see the cultural and political ecology of this region; doing this work as I read the book reminds me that there are many ways of framing landscape interpretations, in the Andes as elsewhere. None is privileged, nor are they necessarily mutually exclusive in their entirety. But they lead us along different paths and, perhaps, invoke different futures.

Game Theory Evolving: A Problem-Centered Introduction to Modeling Strategic Interaction, by Herbert Gintis. Princeton: Princeton University Press (2000), 528 pp.

Reviewed by Edward Castronova, Department of Economics, California State University - Fullerton.

In 50 years, graduate students in the various social science disciplines will take a common course in Human Behavioral Theory, and the content of that course will include much of the material in this book.

The behavioral theory Gintis presents is based on two simple ideas: First, that people form rules and habits of action that regulate their decisions in complex social environments (as opposed to precisely calculating the right decision in every situation); and second, that the rules people stick to are the ones that survive a process of evolutionary selection, where the fitness of a rule depends on how well it works. To me, these two ideas, which together constitute the core of evolutionary game theory, are not only simple, they are pretty obviously true assumptions about real people. Still, they are definitely outside the paradigm in contemporary social science. The two approaches often come to the same answers, but not always. Gintis argues that the evolutionary approach is superior to the rational choice approach. Whether he is right is up to the reader; I will only note that the methods of evolutionary game theory are by themselves so simple, elegant, and persuasive that they are worth one's attention. This book is a great way to learn about them from scratch.

Gintis assumes that the reader knows only a little algebra and basic calculus, but has a willingness to fiddle around with equations and numbers if it helps to understand an interesting problem. The method is to introduce a few basic ideas at the start of each chapter, and then give the reader a bunch of problems to work through. It is an excellent teaching strategy. The problems hone intuition about how the models reflect society, which is the point of using the math in the first place - there is no threat here of becoming lost in pages and pages of meaningless theorems and proofs. Instead, the focus is on understanding the underlying logic of the situation, and the situation is almost always very human and very real. People who work through this book will actually understand and be able to work with the theory it presents.

The book begins with five chapters and about 120 pages on the basics of game theory: the idea that people are players in a game, that there are points to be won, and that decisions interact in funny ways to determine the score. All the standard material is here, but presented, as I mentioned, in a way that is much more interesting and much more amenable to understanding than the standard game theory texts. Since evolutionary game theory has its roots in the area between economics and biology, examples are drawn from both, although the emphasis is on economics. Biologists will learn that companies, like animals, can make credible or incredible threats to obtain territory, but economists will learn that birds, like people, will sometimes engage in apparently selfless behavior for truly selfish reasons. Both will learn that Klingons will do - well, whatever, who cares? That is to say, one knock on the examples and problems is that they are occasionally too cute, in the sense that they either trivialize something that is really quite important, such as the Tragedy of the Commons, or that they become puzzles with no apparent relevance

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for humans. But perhaps this is just the price of making the basics of game theory mildly entertaining. It is worth paying.

Chapters 6 through 10 introduce the reader to the evolutionary theory of games. The strategies that people use in games are viewed here as a kind of endowment, a more or less fixed part of their behavioral repertoire that will be relied on until it is replaced by something better. The job of the theorist is to predict which strategies will thrive in which environments. The concept of evolution is used to make the prediction. It says (in one version, anyway, the replicator dynamics) that people will switch strategies when they run across someone whose strategy seems a lot better. Thus, good strategies have more 'offspring' than others; they grow in the population, while bad strategies die out. Strategies that are stable in some sense (i.e. able to withstand invasions by mutants) are considered equilibria; they are the kinds of behaviors one can expect to see in the real world. The material requires some homework in the area of differential equations, but the reward is valuable. The behavior of firms, candidates, consumers, and animals will now be seen as different examples of one unifying and extremely plausible decision-making dynamic.

In Chapters 11 through 15, Gintis narrows the focus to human behavior and applies the evolutionary approach to a number of areas where the standard approach has its problems. For example, is there such a thing as altruism? True, we do observe what appears to be selfless behavior all the time. The standard approach to this behavior is to ask: Can I construct a self-interested person, who logically pursues her goals (i.e., a 'rational actor'), who would act this way? In Gintis' approach, this kind of question does not even make sense. If rationality always involves self-interest, and all people are rational, to ask this question is just to deny the premise that some acts are selfless. Instead, the evolutionary approach asks: Are their circumstances in which selfless behavior is also evolutionarily fit behavior? The difference is in the assumptions, with the standard approach requiring universal self-interest and the logical pursuit of precise objectives, and the evolutionary approach requiring only that dumb strategies eventually die. It may not be evident that the two approaches are all that different, and indeed in many situations they do come to the same answer. To see the difference, however, consider the finitely-repeated prisoner's dilemma, where constant defection is the only logical, self-interested strategy. In a finite population of trigger-strategy defectors (people who cooperate until you defect, and then defect until the end), however, anyone who tried that strategy would pretty quickly find it to be dumb, and would switch over to something more cooperative. These are the kinds of results we observe in game theory experiments; Gintis shows that insights from evolutionary game theory are able to explain them.

This material also gives readers a very handy toolbox of hints for making decisions in their own lives. When can you believe some information you receive? When will people do what they promise? Who can you trust? How can you collude with your competitors without violating the Sherman-Douglas Act? How can you use your power over someone (your landlord, your boss, your kid) to get what you want? What is the best way to bargain?

While the material is useful and entertaining, there are still some things about the book that are not so great. This has to be one of the worst editing jobs I have seen in an academic book, especially one that hopes also to be a textbook. There are computer codes in the text, whole paragraphs repeat, and symbols are occasionally wrong. My advice to the reader is that if you can't get a problem, try re-doing it with the most plausible change of symbols! Is the author being nice or mean when he acknowledges the editors by name on page xxix?

Secondly, the book cannot seem to make up its mind as to whether it is a textbook or an academic book. There are extensive instructions for teachers throughout, and the problem-oriented focus lends itself to teaching, of course. But often the material seems to assume a very high level of prior training by the 'student'. There is a lot of material about the methodological debate between evolutionary game theory and neoclassical rational choice; most students will not be all that interested and they won't really understand what it is all about anyway. Moreover, even some of the purely teaching-oriented sections still assume that students know quite a bit about the neoclassical paradigm, including utility functions, the concept of social surplus, and optimization theory. A future edition should a) get rid of all the bugs, and b) make this a text, with a clear prerequisite of intermediate micro theory (or not, removing the extra material), OR make the book clearly academic and get rid of the emphasis on instructors.

Finally, one of the most convincing tools of persuasion in the book is its simulations. Sometimes Gintis sets up a problem, and if the analysis of it might seem unconvincing on its face, he says (in essence anyway) 'Look, suppose you had a thousand people playing this game, and every day some percentage of them switch what they do based on how things are going.' He sets it all up on a computer and lets it run for a million days. You can clearly see which behaviors stick around, which ones die, and which ones cycle in and out of popularity. It is both very convincing and also a strong argument for looking at human society through the lens of evolution.