

has often been motivated by considerations of how "perfectly rational" agents would behave in idealized environments. These questions are briefly addressed below.

A subsequent experiment (7) provides support for the hypothesis that the information missing from the classical bargaining models concerns the subjective expectations of the bargainers. Specifically, the hypothesis is that information about the prizes, and how it was distributed in these experiments, influences the outcome of bargaining by influencing the subjective expectations of each bargainer concerning the range of agreements likely to be acceptable to his opponent. The equilibrium nature of the tradeoffs observed in experiment 3 makes it likely that the bargainers assess these expectations correctly. Curiously, agents' subjective expectations at equilibrium play a prominent role in economic models of incomplete information, but not in models of complete information, in which the complete information about agents' preferences has been regarded as making such subjective expectations superfluous (at least for "rational" agents). A theoretical framework has yet to be developed to consistently model such expectations in environments where the bargainers' preferences and risk postures are common knowledge. The development of such a framework would offer the hope of yielding theories of bargaining which resemble existing theories, but which are more descriptively powerful.

This brings us to the question of what important properties of existing bargaining theories are consistent with observed results, and hence might be shared with more descriptively powerful theories. In noncooperative models, the nature of equilibrium has already been discussed and obviously presents a promising framework on which to build. Among cooperative bargaining theories, several make the same qualitative predictions about the influence of risk aversion on the outcome of bargaining (10, 17, 18). Briefly, the theories predict that, except in one class of bargaining situations, we should observe highly risk-averse bargainers obtaining less favorable agreements than less risk-averse bargainers. The exception (18) occurs in situations in which the potential agreements are risky outcomes that have a positive probability of leaving a bargainer worse off than if

the bargaining had ended in disagreement. (Consider bargaining over the terms of a partnership to engage in a risky venture, such as starting a new business. If the business is unsuccessful, the partners may lose their initial investment and be worse off than if they had failed to reach agreement and had kept their money in the bank.) In such cases, a highly risk-averse bargainer will be more reluctant than a less risk-averse bargainer to enter into any given agreement, and the prediction of several cooperative theories is that highly risk-averse bargainers will receive more favorable terms than less risk-averse bargainers, when agreement is reached. If these qualitative predictions hold up under empirical investigation, they may provide a basis for the construction of descriptive bargaining theories that will be compatible with many elements of existing theory.

Finally, it should be noted that the relation between theory and experiment in economics is somewhat complicated by the fact that many economic theories are phrased in terms of the behavior of idealized, perfectly rational agents. One role of experimental research is thus to assess the extent to which theories of rational behavior are descriptive of observable behavior. Such experimentation could be seen as testing the extent to which actual economic agents meet certain criteria of rationality. To the extent that an appropriate concept of rational behavior can be identified, theories found lacking in descriptive power may still retain considerable value: for example, arithmetic remains of value, even if we observe certain systematic mistakes people make in factoring numbers. Experimental research in such cases can help to separate the descriptive and prescriptive aspects of theory.

Experimental research may interact with game theory in a more fundamental way in situations in which there may be no compelling formulation of what constitutes rational behavior by an individual agent. In bargaining it seems likely that "rational" behavior cannot be precisely defined in the context of an isolated individual, since the outcome of bargaining depends on the mutual expectations and actions of more than one individual. To the extent that rational behavior in bargaining may require empirical knowledge about other bargain-

ers, experimental work can contribute to the most basic assumptions of even those theories meant primarily to model "perfectly rational" behavior (19). It thus seems likely that controlled laboratory experimentation will continue to be a growing part of the portfolio of research methods used in game theory and in economics generally.

References and Notes

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19. See H. Raiffa [*The Art and Science of Negotiation*] (Harvard Univ. Press, Cambridge, Mass., 1983) for a somewhat different perspective on this question. Note in this context that two-person bargaining provides a particularly stringent test of the definition of "rational" behavior. The problem is somewhat simplified, both theoretically and empirically (3), in markets involving many agents.
20. This work was partially supported by the National Science Foundation and has benefited from the comments of referees and the assistance and collaboration of numerous colleagues, including particularly M. Barr, R. Harstad, M. Malouf, J. K. Murnighan, F. Schoumaker, and D. Sides.

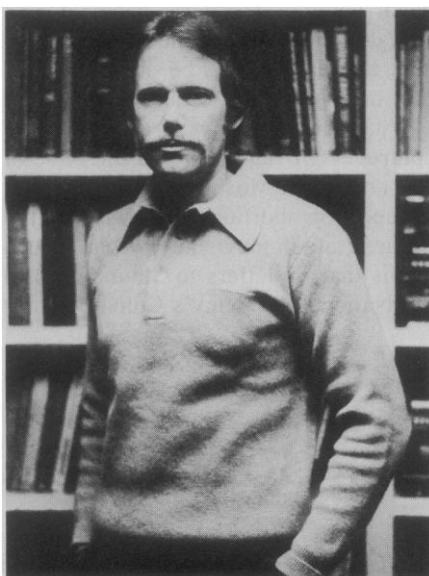
tives in the southern province of Guangdong. During his stay, he collected voluminous data about the Starwood Brigade in the Pearl River delta, no doubt helped by the fact that his command of Cantonese and other southern dialects is superb. He wrote to Skinner often, describing his findings. His research was going so well that he invited a delegation from his American sponsor, the National Academy of Sciences' China committee, to take a side trip and visit him while touring China. It was an unusual move, according to anthropologists interviewed, because most field researchers abhor outsiders venturing near their research territory, even briefly. Members of the delegation sensed nothing amiss during their visit and, for that reason, were later reluctant to believe the Chinese allegations.

In the meantime, his wife, Maggie So, who had been a graduate student at Berkeley, visited Mosher in the village in March 1980 and apparently decided her husband was engaged in improper activities. She reportedly told U.S. consulate officials and, later, the Stanford committee that he was enticing people with gifts and favors to pave the way for his research. He was handing out small appliances, but that was "small potatoes," according to one source. The gifts allegedly even surpassed Mosher's donation of a house which he had built and lived in while in China and a van he brought in from Hong Kong and left to the brigade, gifts that he openly told his American colleagues about. Mosher, in a letter to an American China scholar, said that it would be too expensive to export the van out of the country.

The Chinese privately leveled specific charges against Mosher to Americans in the country. They claimed Mosher had traveled illegally through a restricted province, unlawfully brought the van in from Hong Kong, and tried to smuggle ancient coins out of the country. Mosher concedes that he traveled to the province, brought in the van, and tried to exit the country with the coins, but argued he had the necessary permission to do so. Indeed, Clifford Barnett, chairman of the anthropology department, says that the faculty did not base its decision on these allegations.

According to Stanford sources, Mosher also allegedly gained access to classified documents, including police records and class status registers of peasants during the Cultural Revolution. China specialists say that the papers are extremely sensitive because they disclose the past political and social status of a person that could still fuel repercus-

sions. Moreover, the Chinese discovered that Mosher was taking photos of documents with microfilm. Although the use of microfilm is an increasingly common method of data gathering among field researchers, the Chinese officials, including Zhao Fusan, head of the Chinese Academy of Social Sciences, began to suspect that Mosher was an intelligence agent for the United States or for Taiwan. Mosher denies that he was an agent and Barnett says that the university has no evidence to support the charge.



Steven Mosher

Very bright and highly ambitious

It is unclear when American researchers in China and the United States began crediting the Chinese allegations.

Perhaps one incident in particular made Americans in China sit up and take notice. Distraught over her husband's activities, Maggie So went to the American consulate in Guangzhou and told officials about Mosher's alleged activities. Officials, including one who had befriended Mosher, looked at her in disbelief. The woman then challenged them to examine a duffel bag that Mosher had left at the consulate after the Chinese, now suspicious of him, had wanted to inspect before he crossed the border into Hong Kong. Mosher had said that the contents were research papers. According to sources in China at the time, consulate officials determined that Mosher's bag contained more than just research papers and concluded that the Chinese suspicions warranted investigation.

Cables, telephone calls, and letters were rapidly exchanged between the consulate in Guangzhou and the U.S. embassy in Peking. Zhao complained to John Jamieson, the resident academic

adviser at the embassy from 1979 to 1981, to Arthur Wolf, who was in China at the time, and other Americans. Michael Oksenberg, who helped coordinate the exchanges and was a former member of the National Security Council under Carter, wrote Mosher, calling for an explanation. Mosher responded in convincing fashion that the Chinese were trumping up charges and that there was considerable misunderstanding about what he had permission to do.

According to sources, the Chinese were inclined to drop the matter quietly. But then Mosher's article appeared in the Taiwan press. Zhao registered a strong complaint with Prewitt at a meeting in Peking on 14 November 1981.

Mosher insists that Stanford succumbed to the Chinese threats, but the university resolutely denies it. After the Taiwan article was published, Skinner, as head of Mosher's dissertation committee, sent a strongly worded letter to his student. Skinner wrote on 18 June 1981, that the publication was a "painful and serious matter." He said, "I am appalled at your irresponsibility and insensitivity. . . . The most reprehensible aspect of this action is the implicit lack of respect for (not to say betrayal of) the people you studied." But, despite his impassioned criticism, Skinner concluded, "Under the circumstances, it behooves you to be Mr. Clean himself. . . . Let me urge you to refrain from the time being from further journalistic publication, in Taiwan or elsewhere . . . and return to the United States, where hopefully you will be able to gain some perspective on your behavior." However, even then Skinner did not go so far as to threaten expulsion.

One of the complicating factors in the case is that Maggie So and Mosher are now divorced. Her testimony was very important to the committee's decision to expel Mosher, faculty members say. Mosher charges that she testified against him in retaliation. "She is a scorned woman," he says.

But members of the anthropology department say that they took the fact of the divorce into account. Each of them contends that the investigating committee went to great lengths to corroborate her allegations. They say that Mosher's own letters to the committee and others were incriminating and that part of his wife's charges were confirmed by coincidental details in a letter that Zhao sent to the committee. All of the faculty members contacted said that if her story were not true, it could have been easily refuted by Mosher, but he only gave the committee a blanket denial. "He did

nothing to answer our specific allegations," one faculty member says.

Mosher argues that faculty members acted in their own best interests. "They're protecting their own," Mosher says. "It's either offending two faculty members or me. I'm nobody in comparison." But the professors counter that the university tried hard to minimize any conflict of interest. The three-member investigating committee was composed of two non-China specialists in the department and a professor from Stanford's law school. The China experts in the department, Skinner and Wolf, were not allowed to vote.

Mosher continues to maintain that the heart of the issue is academic freedom, even though Stanford insists evidence of serious professional misconduct justifies the decision to expel him. He is not the least bit contrite that his article ran with the photos or that it was published in Taiwan, whose government is a blood enemy to the Chinese. "I apologize to no

one for having done so," he says. "It was a scholarly objective article and I'm proud of it. It is a measure of the success of my research that the Chinese Communists are so anxious to discredit it."

So, while Mosher portrays himself a maligned man, charging Stanford with following the Chinese in "falsely accusing me of 'grave misconduct,'" anthropology department members remain tight-lipped about the specific reasons they kicked him out. Several believe that disclosure of the report would particularly endanger Maggie So's relatives, who might suffer if Mosher's behavior was revealed. Although some members believe that the risk may be small, they say they are not willing to take the chance.

What seems to have been lost in the controversy over Mosher is the issue of late abortions. Mosher was not the first to report on abortions performed by the Chinese late in pregnancy. What is curious is that, in letters to Skinner and to the National Academy's China commit-

tee, Mosher did not express any moral outrage over the abortions until months after he left China and was back in Taiwan, sources say. So it is not apparent why Mosher raised the issue of abortion in China. He will pursue the subject of birth control in China in a chapter of a book to be published this summer.

Prewitt points out that it is uncertain whether forced late abortions is a government-wide policy or an isolated campaign by one overly zealous brigade in a country determined to stem its population growth. More study is needed, Prewitt says. Mosher may have intended to focus the world's eyes on China's abortion practices, but instead he has captured the limelight himself. Skinner wrote Mosher that "international observers will see your piece as designed to embarrass the [Chinese] government politically; it comes off as a political gambit not as a humanitarian protest. How could you be blind to this outcome?"

—MARJORIE SUN

U.S.-India Project: Bold Plans, Few Dollars

Both sides have chosen research topics and want results in 2 years; now the money must be found

Nine months ago President Reagan and India's Prime Minister Indira Gandhi endorsed a plan conceived by the U.S. State Department for a high-level scientific exchange. It was meant to bring the two countries together in a problem-solving effort after a long period of estrangement. This spring the Indo-U.S. Science and Technology Initiative, as it is now called, is going through an early trial that will shape its future and establish the degree to which it will differ from older programs of this kind.

The officials and scientists who have volunteered to work on the exchange hope to meet in Washington this month to sketch out budgets and detailed study plans. It is already clear, however, that the high level of political commitment to this program will not be matched by a major commitment of funds, at least in the short term. The Administration's goal is to come up with tangible results which Reagan and Gandhi can boast about in another meeting to be held in 1984. However, one of the U.S. research directors says this will have to be accomplished this year on a shoestring budget. The 1985 appropriation will be crucial.

The beauty of science and technology agreements, as one White House aide said recently, is that they are seen as nonpolitical. Their work "cannot be attacked politically by anybody, and it can be used by everybody." Their weakness is that they tend to fade into obscurity once the first gesture is past. India's science attaché in Washington, R. D. Deshpande, says of the earlier exchange programs, "They tend to gather dust." In his opinion, the most important distinction of this program is that it has "a direct link with the White House through the Office of Science and Technology Policy." No previous exchange with India had this, which he describes as "a major policy gain."

On the U.S. side, the program comes under the direct jurisdiction of George Keyworth, the President's science adviser. In India, it reports to M. G. K. Menon, chairman of the science advisory committee to Gandhi's cabinet. Administration of the program has been passed to the National Science Foundation (NSF), which will coordinate research funded by the National Institutes of Health, the Agency for International

Development, the Department of Agriculture, and others. The initiative will not lack overseers. There is an independent U.S. Senior Scientific Panel, chaired by D. Allan Bromley, the Yale physicist and president of the American Association for the Advancement of Science. The Indian committee is chaired by S. Varadarajan of the Department of Science and Technology. In addition, Frank Press, president of the U.S. National Academy of Sciences, will appoint another group of outside experts to watch over the research. Its assignment is not clearly defined, but will include finding Americans interested in joining the program, reviewing projects, and suggesting follow-on studies.

With so much prestige at stake, Deshpande says, it is not necessary to worry about money. It will come when it is needed. In the same vein, Bromley says, "It's amazing what a difference [Presidential involvement] makes in cutting through bureaucracy and red tape." In addition to its high visibility, the program will be distinguished, Bromley says, by the fact that it will be a true exchange, supporting only work of bene-