5 Arrow—the Breadth, Depth, and Conscience of the Scholar: An Interview

Feiwel We have here an extraordinary opportunity. You are not only a leading authority in mathematical economics and game theory, but also a good friend of Kenneth Arrow, and a student of the Talmud. Could you favour us with your reflections on the man and scholar from all these various perspectives?

Aumann The obvious opening remark that one can make is the breadth of the man. In the study of Talmud two criteria are often mentioned for evaluating a scholar. One of them is depth (or more literally sharpness); the other is breadth, the amount of knowledge the scholar has. Of course, there is no question about Arrow's sharpness and depth. But, at least in my line of work, in mathematics and in mathematical economics, one finds that the people who are deep and sharp are not necessarily the broadest. His breadth sets Arrow apart. He knows just about everything. You can open a conversation on any topic and invariably he will know more about it than you do. I do not mean this in a "smart-alec" sense, but in a positive sense. He has extraordinary knowledge about all kinds of topics which has surprised me again and again. For example, I would quote to him a passage from the Bible in order to prove some point. And he would respond, "Oh yes, but doesn't the next verse say such and such ... ?" I don't know how he retains all this information. Two or three years ago I had a correspondence with him in which I pointed out a Talmudic source that anticipated the doctrine of the invisible hand. It is the first medieval source that speaks in terms of competition and the competitive formation of prices. At that time the accepted price theory was that of the "just price." This summer [1985] we were speaking about this topic again. I did not remember the exact name of the authority I had quoted, but Arrow just came straight out with it: Rabbi Samuel ben Meier. Though it was I who had initiated the correspondence, it was he who instantaneously recalled all the details from two or three years back.

Not only is his memory astounding, but also the understanding that accompanies it. It is not a kind of superficial breadth. Going back to the contrast between the sharp and broad Talmudic scholar, it often happens that the broad scholar has less understanding. But in Arrow's case the breadth increases the understanding; not only of a wide variety of subjects, but specifically of economics. The more points of view he brings to bear on the subject, the more refined is his understanding.

Another point about Arrow is his true modesty. There is absolutely nothing overbearing, condescending, or patronizing about him—

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characteristics that one so often finds in important people. Basically he is a remarkably simple person. Now others, aware of the problems involved in being a great scholar, sometimes assume a certain unnatural modesty. Arrow does not have to do that. He is unpretentious without being self-effacing. He is perfectly natural and straightforward. It is quite remarkable to have a person who is one of the great scholars of our generation, such an unusual person who behaves in such a forthright way. There are very few people who have this genuine modesty.

Arrow is not unworldly. He does not live in an ivory tower. He participates in very many committees, and he enjoys it. He likes to be involved in university affairs, in good causes of all kinds, and in general affairs. He is a director of a number of corporations. He takes the work seriously. He goes to the meetings of the boards of directors, interests himself in the affairs of the corporations. He probably gives advice that is very apt and is taken very seriously. In a sense he is very much "with it." No academic has to do these things if he does not want to. He genuinely enjoys doing them, and they probably add very much to his comprehension of the real world and his ability to do good economics. After all, economic theory that is detached from the world cannot be very persuasive. There is no question that his contacts with the business world have enhanced the quality of his work. But that is not the reason for them. He does these things because he feels a need to be involved. He is not a person who lives for himself.

Arrow is very social-minded. It is very important for him to do the right thing. He is basically a very moral and ethical person. That strongly affects his political and social outlook and economic policy views. He started out with a democratic socialist philosophy which he never abandoned. That is in contrast with many other economic theorists who have eschewed socialist ways of thinking in part because of their professional activities.

Part of the reason for Arrow's involvement in affairs of all kinds is that he feels that it is a person's moral obligation to do so, to help out where help is needed, and not simply to sit back in his office and do the things that he considers interesting. In some ways that is another manifestation of his modesty. He does not feel that his scientific work is so terribly important that he would be wasting his time when he sits on a committee or something of that sort.

Feiwel Some people feel that Arrow is more interested in ideas than he is in people. Is that so?

Aumann I cannot see any possible justification for that. He is immensely interested in people. He and his wife, Selma, do an enormous amount of entertaining. They probably host half a dozen dinner parties a month,

not to speak of breakfasts and other occasions. During the summer IMSSS seminars there are two weekly breakfast gatherings in his house. On occasion I have been entertained in his house twice a day. Sometimes one even feels awkward about it. He bustles around serving drinks and food, bussing the table, and so on. It is embarrassing to be waited on not only by a Nobel Prize winner, but also by the top intellectual in the gathering.

He is also interested in people in a much deeper way. Many great men are so involved in their own work that they forget about their families. Not Kenneth. He devotes an enormous amount of time and energy to his children. One of them is in college now; the other is an actor who is also involved in the production of plays. Whenever a play is put on, Kenneth will go again and again to see the show, to see how it is evolving. He gets very much involved in that. One time one of his sons had an operation of some kind and Kenneth was constantly in the hospital. Now you do not find this very often among people who are heavily involved in their work, be they academics, businessmen, or what not. These people will usually do what is necessary for the family (sometimes not even that), but they do not give that bit of extra love and concern that Kenneth does.

Also his involvement in all kinds of affairs which I mentioned shows his interest in people. He also cares very much for his students, but in a way that is very balanced. He will do what he can for his students, but only in situations where he thinks it is justified. He would not push any of his students into situations where he does not think the student is qualified. He is able to judge his own students dispassionately.

No discussion of Kenneth would be complete without mentioning his wife. Selma, an extremely successful psychiatric social worker, is a personality in her own right. Her views and attitudes are in many ways quite different from Kenneth's. These two people are very different, yet they complement each other beautifully. There is no question that she has been an enormous influence in shaping his character and ideas.

Feiwel Is Arrow very conscious of recognition? What drives him?

Aumann Every human being wants recognition. I have not seen any signs in Arrow that he cares for it more than others do. There is no evidence that the need for recognition might drive him. Naturally when a person gets the Nobel Prize he is pleased. One of the nicest things about Arrow is that he makes no false denials about unworthiness; he accepts accolades in a very gracious and graceful way.

Arrow is not a driven man. Somehow he does not have to work so hard. At least to him, what he does does not seem hard work. He is extremely quick. At seminars he will grasp things before anyone else does. During the summer IMSSS seminars, in a room full of fifty, sixty

people, many of whom are extremely eminent scholars, Arrow will make about half the remarks, sometimes more than half. And his remarks are always to the point. Often the speaker has to revise his paper as a result. He is simply so extraordinarily intelligent that it is perhaps not very hard for him to do what he is doing. He is very prolific. He writes an enormous amount. He reads an enormous amount. But he is definitely not a workaholic. He simply enjoys what he is doing and he does it with ease, and well.

One does not get the impression that Arrow feels obliged to turn down things because he has to do his work. One does not at all get the impression that he is driven. This is a very rosy picture, but he is really an extraordinary individual. To get back to your previous question about ideas rather than people, I do think that Kenneth is a very warm and friendly person. One never gets the impression of the kind of person who never has time for others.

Feiwel What is your impression of Arrow's attitude towards religion?

Aumann He is very interested in Jewish causes of all kinds. He is interested in causes that have to do with Israel. He suffers Israel's pains and rejoices in its successes. He is also critical of Israeli policy when he thinks it is wrong. As far as Jewishness is concerned, he is not at all aloof or anything like that. I believe that he belongs to one of the reform congregations in the neighbourhood, but is not an active, regular synagogue-goer. In that respect, I would classify him with other modern intellectuals who reject religion on the intellectual plane. But perhaps he is a little more sympathetic to religion than many modern intellectuals, though he himself is not religious in the usual sense of the word. Again, he is very widely read in religious matters and has a good understanding of many of the issues, especially the emotional and aesthetic aspects. He does have an emotional tie to religion, but philosophically and intellectually he rejects it.