Reuben Gronau:
For us, income inequality is still one of the major problems of the Israeli economy. It translates into inequality in schooling and inequality in schooling translates into problems of institutions of democracy.

Orley Ashenfelter:
Welcome to The Work Goes On, a podcast from the Industrial Relations Section at Princeton University. I'm your host, Orley Ashenfelter, the Joseph Douglas Green 1895 Professor of Economics at Princeton University. In this podcast series of conversations with leading thinkers and practitioners, we are creating an oral history of an entire generation of industrial relations experts and labor economists whose contributions to their fields have been absolutely extraordinary. Our guest today is Reuben Gronau, who is Professor of Economics Emeritus at the Hebrew University of Jerusalem. He is renowned for his work in labor economics and especially for his study of the value of time in many applications of economics, as well as for his role in economic policy in Israel. Reuben, welcome to The Work Goes On.

Reuben Gronau:
Thank you very much.

Orley Ashenfelter:
Yeah, that's so interesting. I wasn't aware of your fact that your parents were from Germany originally, and of course has left in 1933. We all know what happened at that point. Hitler came to power, and
everything went downhill for many people. I'm curious though, how did they manage to get from Germany to Palestine?

**Reuben Gronau:**
Well, my father was relatively well-to-do and as British government, mandatory government at the time had immigration permits for people with means, so I assume they came on this type of a certificate. My mother came in '35. My father joined her in '36 or so and they lived in Tel Aviv. Tel Aviv was established in 1905 but was relatively new city. In other words, I would walk through sand to the beach. This was a 20-minute walk, but part of the road was still sandy. And the place where I lived was encircled by citrus groves, by wine yards and so forth. Where I played football at the time, or soccer at the time, is now the municipality. So you can imagine the completely different type of use than American used to have.

**Orley Ashenfelter:**
Your parents would had been German speakers I guess, and you were brought up in Israel, I assume, speaking Hebrew.

**Reuben Gronau:**
Yeah, definitely. My parents spoke German throughout their life and the whole community was German speaking. My mother would buy her groceries from a German-speaking grocery seller. She would go to butcheries. She would communicate with the butcher in German. I had the brother and the sister and my mother started talking Hebrew only once my sister married and she married a non-German-speaking boy. So, my mother had to use Hebrew for communication with him. My father was in the business community; of course, knew Hebrew, but spoke Hebrew with a very heavy German accent. And I was slightly ashamed of his accent. I still maintain my accent in English at least, but this was very odd.

**Orley Ashenfelter:**
Now I know you ended up as a professor at the Hebrew University in Jerusalem, and I guess you went to school there too.

**Reuben Gronau:**
At the time, there was no choice. There was one university in Israel. The university was established early in the 20th century. It was established by people like Einstein, Weitzmann, and people of that status. As you know, the United States gained a lot from immigration, from Jewish immigration of physicians, of physics professors, physics experts, even economic experts who moved from Germany to the United States. A similar phenomenon occurred in Israel, and the university was established mostly by German speaking or German or people who left Germany to settle in Israel.

**Orley Ashenfelter:**
That's very interesting. You're right. Teachers of mine in fact, and we've had other people on this podcast who had instructors who had come from Germany. Well, how in the world did you end up at Columbia University?

**Reuben Gronau:**
As I said, I studied economics. Economics was quite novel in Israel, or at least American economics was novel in Israel because economics as was known prior to 1949 was European economics. And that was
more of a social science like sociology, maybe political science of the time. It was sort of storytelling. Don Patinkin, who moved to Israel in '49, 1949, is credited rightly so as a father of modern economics in Israel. He became a professor at Hebrew U. and he introduced Chicagoan economics into Israel and market economics, formal economics. And I came to the university in '55. We didn't know what economics was all about. My best friend was Yoram Ben-Porath, whom you know, who was also a great innovator in labor economics. His brother was in economics and told us that it is a quite interesting field. So we moved into economics. There was not the data to calculate the rate of return on education, definitely not economics education at the time.

Orley Ashenfelter:  
Patinkin moved to Israel. Where did he come from?

Reuben Gronau:  
Patinkin was born in Chicago. He was essentially a yeshiva bocher. He hesitated whether he should take religious studies at Yeshiva, which is a religious Jewish school, or whether he should go to the university. He ended up at the university as one of Friedman's students. He finished his dissertation, I think, with Hayek and the old time Chicago school. And then after teaching at Chicago and Illinois, he moved to Israel.

Orley Ashenfelter:  
That's interesting. Wasn't aware that he was an American. I guess I should have been. Did he teach you?

Reuben Gronau:  
Yeah, definitely. He taught us as a graduate student and as we studied three years as undergraduates and I didn't have the opportunity to study with him. But then I studied for another two years in the graduate school for an MA degree, and there he was a teacher in macroeconomics and monetary economics.

Orley Ashenfelter:  
I know you did your PhD at Columbia at a period when Columbia had this remarkable group of people in labor economics. How did you come to be, go to New York and Columbia?

Reuben Gronau:  
I was actually very fortunate because labor economics at the time was at its early phases. In Jerusalem, hardly anyone knew what labor economics was all about. The only person perhaps who knew what labor economics is about was a person by the name of Yehuda Grunfeld who studied in Chicago, later came to Israel and died at a relatively young age. But he was our teacher and he told Yoram Ben-Porath about labor economics. Actually, one of my MA theses was a rate of return in teachers' salaries in Israel. So, I knew something about labor economics and Grunfeld told Yoram that Columbia is quite a good place. There are two young people there by the name of Becker and Mincer who are worth listening to and I didn't come to study labor economics, but I ended of course with Gary and with Jacob.

Orley Ashenfelter:  
Yes. And it was a hotbed of many people were at Columbia around that time after you of course, but including many students. I actually had the pleasure of replacing Jacob Mincer one semester when he
was on leave and teaching some of the students there. It was quite a pleasure to do that.

So, your dissertation I know was about the value of time and its role in transportation. Is that what your PhD thesis was?

Reuben Gronau:
Yeah, actually the role of luck played a major role in this thesis. When I came to Columbia, Jacob and Gary were on sabbatical, but I met him at the introduction party, and I talked to Jacob. Jacob suggested I'll be his TA in statistics the following year, and he introduced me to Gary and when I came to Gary to the National Bureau, he gave me a paper and told me to read it. It may be quite interesting. That was a paper, an early version of the paper on the allocation of time.

So, he asked me whether I'd like to write a dissertation as my PhD dissertation on topic, and I told him I'd like to do so because you read it, it was mind-boggling. It was completely new in economics to think of time as a real constraint on your activities. So later, and I told him, studying with Jacob, I'd like to do a mixture of theory and empirical work, and the only place I could find empirical data on the usage of time was in the field of transportation because there were no time budget service in the United States.

The only ones that had been before were the time of the Great Recession. So he told me that I couldn't do it because there is already somebody who plans to write a dissertation on that topic. So I was looking around another month or so, and then Gary called me and told me that I could do it because the guy who wanted to do it decided to go to Wall Street. Now the guy who went to Wall Street ended up to become a millionaire, and I became a poor teacher of economics.

Orley Ashenfelter:
So, it's not clear who made the right decision, I guess.

Reuben Gronau:
Let me only add. In other words, when I finished the dissertation, Gary suggested I'd go for the summer vacation to Washington because the Council of Economic Advisers was just studying the feasibility and profitability of the SST. The airline companies were pressuring the government to invest in research and prototype of an SST, namely a supersonic transport plane. And I went there. My estimate shows that the value of time was for business travelers was equal to the wage rate, but for people traveling on their own means and for pleasure, was only a third of their value of their wages. And adopting these estimates, the government decided that it should not invest in the SST, which was the right decision because the European SST turned out to be one of the largest flops of the airline industry.

Orley Ashenfelter:
Now, did you work at the Council of Economic Advisers?

Reuben Gronau:
Yeah, for three months for the summer period, or two months.

Orley Ashenfelter:
Really? Do you remember who you worked for?

Reuben Gronau:
No, I couldn't remember the name.

**Orley Ashenfelter:**

I wasn't aware that you had worked at the Council. There are other people that have done that too, that a lot of times it's not so clear that that's happened. This paper was, I guess it was quite influential in many ways. I know that the point that saving time is what the quality of travel is about became sort of integral to everything that's done in that whole field. So, you were obviously very important in that way. You also had a very good luck and in fact, I had a podcast last week with Jim Heckman and he was very flattering about your work on selection bias in labor force behavior of married women. How did you come to do that?

**Reuben Gronau:**

When I came back to Israel, I decided I'm going to do a study on the labor force participation of women, which were at the time in Israel was a topic, which has never been touched upon. And I started working on it and then I decided instead of using, looking at the participation, I'll try to impute the value of time of women in making the decision whether to work or to stay at home. So, I studied that field and I had of course all the time to use the wage data of women, but I realize that the wage data is in a way, a biased estimate because the distribution is truncated.

You don't see the part of the distribution for those women who decide to stay at home. So, going back to the problem of the truncated distribution, I worked it out. I was able only to work it out for a binomial distribution where the R correlation is equal to zero. And I sent it to the JPE and turned out that Gregg Lewis had worked out the same problem before, but published paper in some remote Spanish South American journal, but he still approved my paper.

Of course, Jim saw it or worked it out himself, and he worked out a more complicated problem and got his prize for it.

**Orley Ashenfelter:**

The Nobel Prize. We've moved along quite a ways in this podcast and I do want to turn to another topic that many people are probably not going to be aware of, and that's the role that you've played in Israel in economic policy. I wasn't aware until I started looking at what you had done that you had been on the monetary policy committee. I know Israel has a system like the British do now where the monetary policy committee sets the interest rates, I guess. And there are three permanent members who come from the bank and then there are three others that come from the public. So you did this for a number of years. What was that like?

**Reuben Gronau:**

That was a fascinating period of my life. This was of course the end of my career because we have an obligatory retirement age of 67, and I retired already at the age of 65 from teaching. This was a normal continuation of my activity in the public sphere. As you may remember, I was early 1990, I was at Princeton for sabbatical. I was working on some remote problem of the R-square, when you have binary data. And at some point I received a phone call asking me to serve on a committee setting phone rates. I told the person who called me who was a member of the budgetary committee in Israel that, or budgetary office in Israel, I told them that I'd be ready to serve on the committee if I'm a chairman.

I was already on another committee before, so I had the experience of regulatory committees. And since then, I spent most of my time on policymaking committees, setting water rates, electricity rates, and so
forth. At some point in around the year 2011, my friend Stan Fischer, who was a governor of the Bank of Israel, asked me whether I'd be ready to join the council.

I came of course from a completely different background than the rest of the members. They were all macroeconomists, and I brought the microeconomic angle, but it was a fascinating period of 10 years. It was the end of sort of the inflation period or in Israel going through the 2008, successfully through the 2008 crisis, and then suddenly we hit a period with very low inflation. The question was whether we should lower our interest rate or stay with normal rates. The committee decided to lower its rate, I thought at the time, and I think now it lowered them too much and stayed with low interest rates for too long. But I'm sure there are other people in the United States who think likely about the Fed policy. And now of course we have running through inflation, which is perhaps modest compared with the United States, but well beyond the bounds, and they face very high interest rates.

Orley Ashenfelter:
That's absolutely fascinating. I read your paper on the deregulation of the phone system in Israel, and I guess you were involved in doing that, and it was a period, a lot of people have forgotten this, but there was a time when there was no such thing as a cell phone really, and landlines were the common way to have a phone. And then at some point, suddenly cell phones started to grow, and I guess in some ways displaced landlines. Many people no longer have landlines. How did you get involved in that?

Reuben Gronau:
Well, as I told you, when I was at Princeton, somebody called me from the Ministry of Budget. He knew that I was in previous committees of both of phone rates and electricity rates, and he knew that I am able to read numbers, which is very important when you want to set prices to be able to, even if it’s not an econometric study, but to be able to calculate the cost of the company because you want to balance good of the customers with wellbeing of the company. And we were able to lower the rates because the companies in Israel were always government held and were always monopolies. So, usually worked for the workers because the workers were enjoying very high wages, well above the wage they could make in the private sector, and customers paid the price. Its price setting, for example, for cell phones was a fascinating field because, I don’t remember. I think the same thing happened also in the United States.

The cell phone rates distinguished between incoming calls and outgoing calls, and they priced incoming calls much higher than outgoing calls. Now with incoming calls, the person who owns the phone has no interest what the other guy is paying, he is interested only in the price of outgoing calls. So, the companies definitely differentiated between the two, establishing very high prices for incoming calls and low prices for outgoing calls.

Now, this was a system, also on international calls like when in the early 90s when I was at the committee for the fixed phones, we discovered that in international calls, the incoming calls in Israel were priced at a much higher price than outgoing calls because incoming calls came from the United States. And as you know, Americans are very rich people. Israelis are poor people, so the incoming calls subsidized the whole phone system. And when you go into this field, you realize that unless you set the price of incoming calls at a very low price, preferably nil, you can’t get competition. And it’s only when we set the rate of the incoming calls at a very low price that we were able to get competition in the cell phone industry, which is now priced at very low prices in Israel compared with United States, and that affected also the fixed phones. I just want to add one thing, if you haven’t learned it, economics is a fascinating field even when you practice it.

Orley Ashenfelter:
Yes, exactly. Well, it sounds like you... I’m so glad we could talk about this because it sounds like you have actually practiced it. I just have one last question I want to ask you. You've lived in Israel all your life, born there from the time that it was Palestine and British colony to the current time when it's a highly developed country. I'm curious, how do you feel about the way the economy has evolved over that period? Is there a lesson in that?

Reuben Gronau:
The lesson that I can derive from it is the fact of growth on income inequality. As you become richer, I think inequality rises. And unless the government intervenes, you'll find a lot of relatively poor people, middle class people, and very few rich people. I don't have to tell you this lesson, since you observed the data in the United States. We grew up in a semi-socialistic environment. So, for us, income inequality is still one of the major problems of the Israeli economy. It translates into inequality in schooling, and inequality in schooling, it translates into problems of institutions of democracy. And as you know, this is the main topic that we are addressing these days.

Orley Ashenfelter:
That's a very provocative set of comments too. Thank you so much, Reuben. It's been an absolute pleasure to talk to you. Our guest today has been Reuben Gronau, professor of economics and emeritus at the Hebrew University of Jerusalem. Please join us again for the next episode of The Work Goes On, an Oral History of Industrial Relations and Labor Economics from the Industrial Relations Section at Princeton University, when we will speak with John Pencavel, the Levin Professor of Economics emeritus at Stanford University. I'm your host Orley Ashenfelter. Thanks for listening.

Announcer:
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