Claudia: Here at the Conference Board in New York City on December 11th, 2001. And I'm here with Victor Zarnowitz. And I've asked Victor to begin at the beginning and end at the end, but where he sees the beginning is wherever he wants to begin it. And I'm willing to begin at whatever beginning he wants. So thank you, Victor.

Victor: Well let me begin when I came to New York, and that would be the last of January, 1952. And I came from Heidelberg, Germany, where I spent some time studying economics, getting a Ph.D., and primarily waiting for the U.S. visa, which took a while. And took enough time for me to finish there. If you compare it, for example, with the fate of others, Jacob Mincer, for example, a good friend of mine also from the National Bureau, he came earlier because he didn't have my problem.

He was in Germany longer, and I came from Russia. And there was a law called the McCarran-Walter Act, that made it difficult for people who came from Russia, at the time, to get into the U.S.

Claudia: [inaudible] communist.

Victor: Something like that, right. But that was revoked in the Congress, and then I could go. And instead of studying in the U.S. as Jacob did, for example, in Emory, and so on, I studied in Heidelberg. Which wasn't so pleasant given my past, but it was all right. It was a whole group of students, mostly medicine, and I was the only one in economics at that time. In Heidelberg, I got a Ph.D. there.

Then I came to New York, and then my first job, [inaudible] was with the National Bureau of Economic Research, which was, at that time, at the Columbus Circle. The place where there is today, the Convention Hall, with a tall tower there. And I just looked for a job, and by, I believe mid-May about 10 weeks after I came to New York, I got a job at the National Bureau.

Claudia: So you had not heard about the National Bureau?

Victor: Oh, I heard about the National Bureau. That's why I came there, of course.

Claudia: But were you in contact with [Arthur] Burns or with [Geoffrey] Moore?

Victor: I was not in... No, not before I got the job. And I got the job, not with Moore or Burns, not in business cycles, but in the study of mergers by Gideon Rosenbluth, the Canadian economist, then in New York. Instead of a good friend of mine. And was working on that project, and I applied for a research scholarship at the Social Science Research Council.

And about a year after I came to New York, we moved for an academic year to have it, but I had this postdoctoral fellowship, scholar of the Social Science Research

Council. But then after that, academic year at Harvard where I studied with [Paul] Samuelson and then [Robert] Solow and then [Wassily] Leontief And now they're great names.

I came back to the Bureau. I was very attached to the Bureau, even after only a year of working there. I liked the atmosphere. I liked very much the place. The kind of work that they did, appealed to me. Largely empirical, but I believe it's not quite correct to say, "It was largely empirical." I think they [inaudible] theoretical advances. Well, that's sometimes difficult to get, but they were working on it.

I believed that [Wesley] Mitchell's 1913 book, which was kind of the beginning of the studies of business cycles at the Bureau, he was, after all, the founder of the Bureau. I missed him, by the way, because he died shortly before I arrived. But I believed that it's not right and not fair to claim that his work was empirical. Although some people, even at the Bureau would subscribe to it, probably George Stigler would.

Anyway, I found the atmosphere and the type of work very appealing. I was interested in business cycles much earlier. In Heidelberg, my professor, Eric Preiser, wrote a little book on the theory of business cycles, it was very interesting.

Claudia: What was your Ph.D., I'll call it "a dissertation," on?

Victor: My dissertation it was my dissertation, it was a doctorship, as they call it. And it published in a book in Heidelberg, and it was on the theory of income distribution. So it was not on business cycles, or not directly. [speaking in German] in Germany. In German, [speaking in German], which means development and the present state.

So I had already something, but I had to start anew, in a sense. At the Bureau, I was just a research assistant there, for a while. But I worked with Gideon and found that interesting, as well. But it was not my field, typically, you know. I went to Harvard for a year, and when I came back, I had my first paper in English. It was actually on input output theory, and out...

Claudia: And that was the one that was, I think, published in *The Review of Economic Studies* in '61.

Victor: That's right.

Claudia: Right, but...

Victor: Well, I'm impressed that you know that much.

Claudia: But what's interesting is that you did that research during a nice, I think, fertile year, '53, '54. And then did some editor say, "Do this, do that," and it took until '61 to get it published? Or did you just work on it?

Victor: No, no, I think it was published earlier. I don't know exactly when.

Claudia: I think it was '61, I read it.

Victor: [inaudible]. It was on... Well, then it took a long time, perhaps right.

Claudia: It took a little time.

Victor: But I didn't realize it was that late. All right. But this paper in *The Review of Economic Studies* was written at Harvard.

Claudia: And you thanked the people who were there.

Victor: Right.

Claudia: That's how I put it together that, of course, that came out of the year '53, '54.

Victor: Right. But I came back... I think '61, I wrote... It was in '61 I wrote the thing on forecasting at the Bureau. Anyway, we can check it, with my [inaudible].

Claudia: You know what, Victor? I could be wrong.

Victor: I think you are probably wrong. I don't think it took that long, no. I don't think it took long. I submitted it probably before I came back to the Bureau, and it didn't take that long, no.

Claudia: Okay, then I'm wrong.

Victor: But anyway, after I came back to the Bureau, I worked with [inaudible], he was also at the Bureau, and he had some. And I think, but it was for a while that I worked with a guy from Berkeley in fiscal policy. What's his name?

Claudia: I don't know.

Victor: And then I have to look it up. Maybe I should do it now.

Claudia: Sure. I can turn this off.

Victor: Because, you know, it will be probably better.

Claudia: We're back. I just want to correct something, which is that Victor's *Review of Economic Studies* paper was 1956. And so we're reconstructing the Zarnowitz Bureau history. Okay, Victor.

Victor: Well after I came back from Harvard in 1954... '53, '54, the academic year, I was at Harvard on a postdoctoral research training fellowship of the Social Science and Research Council. And I spent that year working at [Paul] Samuelson's seminar, [Wassily] Leontief's seminar, and these were the two main centers of my study. And out of the Leontief seminar came this paper, which was my first English publication on "Cause and Consequences of Changes in General Equilibrium Systems," in the

Review of Economic Studies, June 1956.

So I came back. At the Bureau, I worked there for a short while on fiscal problems with two professors from Berkeley. But very soon, I shifted to business cycles and stayed in that area ever since. I became assistant to Geoffrey Moore, who was the Associate Director of Research at the National Bureau. And whose are of study, of course, was business cycles.

Now I worked first a two-volume book, edited by Geoffrey Moore, on business cycle indicators. And I contributed three chapters to this book. One chapter on "Cyclical Aspects of Incorporations and the Formation of New Business Enterprise;" the second one, on "Cyclical Changes in Business Failures in Corporate Profits." And that was also with Lionel Lerner, the son of Abba Lerner, who was at the Bureau at the time.

And finally, the set of these papers, and the one that I spent most time on, is "The Timing of Manufacturers During Business Cycles." So these three chapters in *Business Cycle Indicators* of Geoffrey Moore was my first contribution to business cycles.

But even before then, I worked for a while with Ruth Mack at the Bureau. And the outcome was an article in *The American Economic Review*, which I co-authored with Ruth Mack, entitled, "Cause and Consequence of Changes in Retailers' Buying." And it was Ruth's initiative, and she sort of worked with me for this project.

And in that paper, she continued to develop the concept of what she called "shop cycles," and what we call today, "growth cycles," slowdowns, and so on. This is a concept of changes that are more visible in growth rates, or in the intended value than in levels.

Claudia: Where on your CV is the [inaudible] paper?

Victor: It's on page eight.

Claudia: Okay.

Victor: Not the complete one.

Claudia: It's under "short articles."

Victor: No, no, it's not a short article. It's under "books and articles." But it's early, so it goes in there at reverse time order. And that was published in March 1958.

Claudia: Can you put your finger on it on your copy? There it is. No, that's the Business Cycle, oh, that's one with Ruth Mack, right.

Victor: You have that?

Claudia: It's not on this one.

Victor: Oh, maybe that's a shorter...

Claudia: It's okay, I think it's a shorter one, that's why. It's okay.

Victor: It's not showing there somehow.

Claudia: That was mine.

Victor: All right.

Claudia: Okay.

Victor: But on that, I worked with, it was Ruth.

Claudia: One second. Don't worry. Yeah.

Victor: And in a sense, it was also in business cycles, if you would.

Claudia: Right.

Victor: Right.

Claudia: So by then you were a visiting assistant professor at Columbia, and lecturer. And I take it that was through...Burns must have introduced you to faculty?

Victor: No, I think so. I don't think that Burns was involved in this one. It was Victor Fuchs.

Claudia: Yes?

Victor: Who you should, by the way, also interview.

Claudia: Of course, I will interview him [inaudible].

Victor: Because Victor was my namesake, right? Victor. He was at the School of General Studies, and that's where I was teaching at that time, and so was he. So it was at Columbia University School of General Studies. And I'm not sure what I was teaching exactly there, but it was economics. It was macroeconomics, probably. Okay, so it was through Victor Fuchs.

Claudia: I take it you went there to teach part-time, you'd come back to the Bureau and worked on these various projects.

Victor: Well I was somehow full-time at the Bureau, and part-time at Columbia. So Columbia was definitely sort of...I devoted much less time to it compared with the Bureau. In the Bureau, I was full-time.

Claudia: Tell me about much of the work that you were doing after you came back from Harvard. Of course you worked with Ruth Mack, but much of it appears to be the work that was on business cycles that came out in these volumes that Geoff

Moore...

Victor: I think less than a year after I came back from Harvard I started working with Geoff at the Bureau. And I was his assistant, but I must say, very early he gave me a chance to work on my own. And the first chance he gave me, it was connected with a book he was writing, or editing. I mean he has contributions to that book as well as editorship. And he just let me do what I was interested in. He suggested what indicators I should look at.

He was interested in leading indicators. I mean he revived the work of Burns and Mitchell, or Mitchell and Burns. That went back, I believe, to the first effort indicators at the Bureau was in 1937, '38, when Secretary of Treasury [Henry] Morgenthau asked him to construct a list, and they did. And it was a list of leading indicators of the recovery, because they were waiting for the recovery in '37, it was the relapse from the Great Depression.

And the second effort was actually Moore. And Moore, by that time, had an [inaudible] paper already on the leading indicators, and that was more general because the [inaudible] the recovery and the Recession. And then he edited this book of "Business Cycle Indicators," two volume. The first volume is test, and second volume is data, the collection of data of indicators, and I was working on that book at the Bureau.

Claudia: So at the Bureau, the business cycle project was an extremely large part of the Bureau, there were many research assistants who were working.

Victor: That's right.

Claudia: And there was...

Victor: Well I don't know how many. I mean, the whole Bureau was not that big. Right.

Claudia: But there was sort of a protocol that you used. Can you talk about what people have referred to, and Bob Lipsey claims that he still has a mimeographed sheet about the protocol? I don't think this is apocryphal, about the protocol that one used in taking the series, and looking at it in terms of business cycles.

Victor: Well the protocol for business cycles was really a big book, and that was *Measuring Business Cycles* by Burns and Mitchell. It was kind of bible of business cycle procedures. And there were additional materials. There was no computer, but there was a calculator, it was Friedman calculator we worked on. We ran regressions. We calculated regressions, for example, on that manual calculator, which was very time-consuming and sort of tedious work. But it helped to understand it from the ground up, I think, what, for example, are regression and [inaudible].

And many people think that this was very helpful. Although as I say, tedious. And so we did that, but we followed the procedures of *Measuring Business Cycles*. But the procedures are different from today's computer procedures, or computer expert

procedures. Very different. They allowed, I think, for a much larger role of judgment.

For example, the turning point programs that were developed, they existed. And again, they didn't exist at that time yet. And so it was done largely by judgment, but by trained judgment backed by a lot of experience after a while, you work with so many years. And I find, today, that I do the same thing. I get a turning point list from the computer, and never accept it as it stands. I always look at the chart, because that's what we have done then, and that's what I'm used to.

Without a chart, a lot of times, I'm not going to do anything. I have to look at the chart. The chart is after seasonal adjustment, and we look at the [inaudible] of seasonal adjustment too. We paid a good deal of attention to it. And then we looked at...now we look at the turning points designated by the computer, and sometimes we overrule the computer.

For example, a computer, even though it is instructed in the [inaudible] procedures, to do more or less what we did before, it doesn't always do it exactly. If there is a plateau, for example, if there are two competing turning points, peaks or troughs, if they are alike we were told to take the latter one. The later one of the two. And the computer will not always do that.

And the previous one will be slightly higher, and will be taken by the computer, we'll tend to take the later one, for example. This is just an illustration. And that's how we proceeded, in fact. We had these rules, but we use our judgment. And the rules, themselves, might have been overruled if that seemed to be the best choice. But we always worked together.

So for example, there was an unwritten rule but much followed, where when we made this kind of decision, somebody else independently did it. We invited somebody to do it. And we spent a ridiculous amount of time sometimes on discussing these decisions when we disagreed. But I think that it was probably justified. At least I like to think that.

Claudia: Go back to the earlier data on business cycles to Burns, Mitchell, others had worked through the older data, and then you were then picking up and sort of adding to it. Did you ever go back to the older stuff and say, "What would I have done?"

Victor: Very recently, I did something similar. What I did here is to look at our circuit index of Composite Index of Coincident Indicators, of which there are four. There was: personal income, personal income less transfer payments, and manufacturing and trade sales again adjusted for inflation, the Index of Industrial of Production, and then [inaudible] employment from an establishment survey.

The combination of these four is the Coincident Index and I wanted to see how all the old dates of the NBER hold up after many revisions that were made in some of these. Not as many as in GDP, but there are revisions. And I looked at GDP as well. And there are deviations, even though the dates are not revised. But they are not very serious as far as the Coincident Index is concerned. The only serious one was a lead of six months. I believe a lead. The rest is all zeros, that means exactly coincident or plus, minus one or two months. So that is negligible. And there was one large one.

In GDP, there was three leads of one quarter each. Which I don't know how they arise, but it must be due to revisions. Because we looked at both these ones, the Coincident Index and the GDP, as well. Anyway, so it's holding up pretty well, but not exactly.

And I have my doubts that the present data are better than the judgment then made by, what I like to think were skilled observers. Because that could be due, for example, to the deflators, the [inaudible] chain indexes. Why that should matter 40 years back? I'm not sure why that should mean rewriting history, in a sense.

But I simply don't know. That is an interesting subject for study.

Claudia: And did you...when you were working at the Bureau and thinking about the broad sweep of business cycles, and of course that's what Mitchell did, he and others sort of tried to push the envelope of data for the U.S. To push it back into the 19th century, way back into the 19th century. Did you...

Victor: And earlier, but except the earlier ones are not monthly, they are quarter.

Claudia: Did you sort of hold this stuff in your hands and your head and say, "Ah-ha, this is how I would tell the story of the American economy using these business cycles. Now I see." Did you ever have one of the eureka moments when you say, "Ah-ha, now I understand," or did you always say, "Business cycles are difficult. They're unique. There are some aspects that are similar, but we're not going to do a very good job at telling the history of an economy on the basis of these business cycles." How did you view that?

Victor: I think they are different. They are complicated, but there are common threads. There are common elements. And I am convinced, myself, that these guys... but I didn't know Mitchell. I know him only from reading. But I knew Burns pretty well. I was very kind of happy, even proud I must say, when he asked me once, he said he has written himself out on Mitchell and he asked me to write about Mitchell for the *International Encyclopedia of Social Sciences*, which I did.

And I am convinced that they wanted a general theory of business cycles. That they tried to move in this direction, but they were extremely cautious. They thought that it doesn't come first, that it comes much, much later, after they accumulate a lot of knowledge about what happened during business cycles, as one of Mitchell's book is entitled, *What Happens in Business Cycles*.

So they wanted to know that and develop an empirical sound, somehow, and validate it, and something that can be validated with the data, a theory of this kind. But they certainly believed that while they differed, that there are common elements, and they wanted to concentrate on the common elements. They were explicit about it.

And I think if you read them closely and correctly, you'll get this impression. Particularly from Mitchell. I mean, in *Measuring Business Cycles*, they may have gone too far in going into great detail and losing what seems almost a loss of the sight of the theory of business cycles. But if they did it, it was against the intention, rather than... In [inaudible] I think he was very explicit on that, I believe.

Claudia: Right. A couple of questions for you about the people who were there, and what you thought of them, what your interactions were. Let me begin with Arthur Burns, who led the Bureau from...what was it? '47 until '67 with one small year or two when he was at the Council..

Victor: Well he was mostly elsewhere. I mean when I was at the Bureau, Moore ran things with others, and Burns was absent, generally.

Claudia: Burns was absent?

Victor: Burns was mostly absent.

Claudia: Well of course, but for the time that you were there, there was a long time when he was at the Council.

Victor: Right.

Claudia: So he was truly absent.

Victor: He was truly absent.

Claudia: And in fact, then...

Victor: I don't mean that he was absent in the sense that he would be around and neglect it. No, I don't think that. But he was absent, he was in Washington.

Claudia: But then Geoff Moore [inaudible].

Victor: He was in Washington.

Claudia: But in fifty...

Victor: And that made a big deal of difference.

Claudia: He comes back. He comes back I think when you come back from your year at Harvard. He comes back.

Victor: He comes back, right. And when he came back, he was active. He was always an active guy. He had...I was never bothered somehow by that, but some people were, very, very much by his kind of presence. And I know that Ruth was. I mean it was...

Claudia: Ruth was bothered by Arthur.

Victor: She was bothered by Arthur.

Claudia: In what way?

Victor: I saw her crying.

Claudia: Really? Because he was...

Victor: Burns could be very, very sharp and difficult in meetings and so on. Now of course, I was young, I didn't participate in these meetings. But I saw her crying, yes, and she complained that he was not rude, but extremely difficult. And getting him to understand his superiority and inferiority and something to that effect. As I say, this is secondhand for me. I never had that with him. But from Ruth, I know that, for sure.

Claudia: Did you ever hear anything about Burns's and [Simon] Kuznets's problems?

Victor: Yeah, I heard about the conflict, but again, I don't have any firsthand knowledge of it.

Claudia: But what did you hear?

Victor: That they were not good with each other. And I heard it simply in the context of how difficult Burns was. But I don't know the detail, I learned about the detail, and so on, much, much later.

Claudia: You knew Simon.

Victor: Oh, I knew him, of course, yes.

Claudia: Yes.

Victor: I knew him. I cannot say I knew him very well. I knew him because, among others, he worked on business cycles as well. He helped quite a bit, before in *Measuring Business Cycles*, and later, and still earlier in *Seasonal Variations*, all of that was one package in a sense.

Claudia: Of course [inaudible].

Victor: Right, right. So I knew him from that. I think that not everybody's very comfortable with national income accounts. I am not, myself, I must say. So I'm somewhat sympathetic to the critics. I deplore the fact, for example, that the government statistical agencies neglect other things to devote almost all the time to national income accounts.

And I think for some purposes, for example, dating a business, national income accounts are inferior for two reasons. They are quarterly and then they are also subject to long strings of revisions that I'm not always very clear where they lead to, or how they are justified and all of that. It's not always clear to me that they are improvements. So maybe that was behind this conflict with Kuznets.

Claudia: Well my sense is exactly yours, that some of the conflict was personality. That Burns was just [inaudible].

Victor: Yeah, Burns had a kind of an overbearing personality.

Claudia: But I think that another part was that I believe Simon wanted to move the Bureau in the direction of thinking more about growth and development. And he wanted to broaden the Bureau and the Bureau's mandate was to study the United States. I think Burns made that very clear to Simon. And before you came to the U.S., Simon had put in for funds, I think, for the Ford Foundation to do this study of multi-country, which he of course did. And Burns would not have it in the Bureau.

I think part of it was that. We'll never know.

Victor: Even today, there are people who say...I think Martin [Feldstein] himself would say "It is a national, not an international Bureau of Research."

Claudia: Yes, yet we have Japan in there, we have Germany in there. That when there's a way of getting in, Marty now has these very important relationships with India, China, now it's going to be Cuba. So [inaudible]...

Victor: And speaking for myself, for example, we, here at the conference now, are working and that's why I joined it, the conference, but on these international indicators and Composite Index. I wish there will be some kind of link with the National Bureau on that. I didn't pursue yet. I was told [inaudible] that, "It is indeed a national bureau, not international bureau of economic research."

So maybe this is not that an old and past notion. Yes, there is more of a departure in the international direction, but still not enough, as far as I'm concerned.

Claudia: I think you're absolutely right. When Anna [Schwartz] and Milton [Friedman] were working on *A Monetary History*, did you...you saw Anna because she was there. I think she had an office at the Bureau from '53, so it would have been when you got back.

Victor: I saw Anna, and saw, from time to time, Milton, as well of course. And when I went to Chicago, it was George Stigler who put... Yeah. And asked me would I go, and I went. Even though George did not work at all in my area, in business cycles, and was rather suspicious of the whole thing.

Claudia: I think he was always suspicious of the whole thing. Yes, I think you're right. But he wanted to build Chicago. He wanted to attract very good talent.

Victor: That's right. And Milton, of course, was in Chicago already. And he was interested in business cycles very much. And though I must say, I never...I mean I admired the effort, and the results to a large extent, in *Monetary History*. But I was never persuaded that this is the clue to business cycles.

Claudia: That it was what?

Victor: That this is the main, the core, the clue to the business cycles.

Claudia: Yes. So did you talk with Anna about...

Victor: Maybe to some extent. I don't remember. Probably not a lot. Probably not a lot. Yeah.

Claudia: Of course, but I don't want to defend all of the *Monetary History of the United States*, but much of the...if you take, for example, the chapter on the greatest business cycle of them all, the chapter on the Great Contraction, their point is that other forces were getting us down, so that there was...I think it's in July of '29 there is a business cycle downturn. Then in October of 9, the stock market crashed. And all of the events up until then and beyond, would have gotten us down pretty far, and then the contraction of the monies applied forward brings us to the bottom. So they're not denying.

Victor: No, no, no, they're not denying other forces, no. They're much too good for that. Right. But I mean, with others, as so often happens, some followers want to go further than the originators. So there was a good deal of writing business cycles, history in the monetary sense and direction. And more exclusively, monetary things. And probably, some people went further in that direction than Milton and Anna would do.

But it was, nevertheless, probably their influence. Anyway, you asked me whether I sort of collaborated on that, I must say, "No."

Claudia: No. But in discussion, I'm trying to get a sense of in the Bureau, it's a small organization, you're working part by yourself and part with Geoff Moore, maybe Sol Fabricant a bit, there are other people around. Do you get together? Do you have lunch together? You have the Brown Bag Seminar. Can you talk a bit about that?

Victor: Well that was very open. Of course, we...it was a small place. And the relations were, in general, good. There were some conflicts, of course, but I didn't experience that directly. And I went along very well with Geoff, in particular, and I worked more closely with him than with others. And I think the good thing about the Bureau was precisely the freedom that they gave to people, if they saw that they deserved it, that they would make good use of that freedom.

And yeah, there probably were cases where say [inaudible] forever. But that would probably happen in every organization. But I think they were interested in developing people, and letting people do work on their own. At least this was my experience, I think.

Claudia: Just about everyone who was at the Bureau at that time, and I think through till today, says the same thing about the Bureau.

Victor: That's good, yeah. And that was probably among the best features of the Bureau. Now in discussions, for example, of course people differ. And some are very strong and some are simply more timid or not so good at that. So it was probably good, not so easy for younger people, beginners in this kind of work to

make themselves heard against people like Burns and Friedman, for example.

Who are both... You know, Friedman is a debater, kind of. I don't know whether you know him from this side; he is. So it's not so easy. It's not so easy. And sometimes it was... We wrote, I remember, it with Jacob Mincer...Jacob Mincer edited a book on *Economic Forecasts and Expectations*. You may know. And we have a joint paper in there, Jacob and I.

And I did on the whole...I continued to work in this area. That was, for him, a single departure, and Rosanne Cole contributed and so on. And at the Bureau, they were always stuffy. Anything that was to be published and so on, when through staff review. And that's remarkable because there were no outsiders, and you worked with these people, and they had to pass judgment on your work.

So I remember that Milton Friedman read our paper, the paper with Jacob. And in one case, he wrote on the margin, "Nonsense," with an exclamation, or maybe more than an exclamation mark. Well we looked at it, we didn't find anything. I still don't think it was nonsense at all; it was a disagreement between his view and ours. So that was a byproduct of the work at the Bureau. You had to be prepared for this kind of thing.

Of course you could oppose, but you had to pay attention to that.

Claudia: Right. Who were the other people who were coming through, let's say, from '54 until '59?

Victor: There were many.

Claudia: Because at '59, you leave and you go to Chicago. So [inaudible]...

Victor: Right. But I left. I was still very often in New York. And I worked with the Bureau from Chicago.

Claudia: Who were the other people, when you look back on those years?

Victor: There was a guy... I have to look up the annual reports to remember their names. So there's a guy at MIT, you may know him in fiscal... I knew him very, very well. But it's years ago. And he didn't work in my area, but we were neighbors. I was a neighbor, or so, of the guy who is now....lives in Garden City, Long Island. I must look up [inaudible].

Claudia: Okay. Whatever...some names come, some names don't.

Victor: I didn't have a chance yet. So many, many names will come back when I see. And I may have something to say.

Claudia: They may come back in three minutes, who knows.

Victor: Right. The guy I mentioned from Long Island, worked on...

Claudia: If you just say what he worked on, I can find it, yeah.

Victor: That was my neighbor. I also worked, I think, on concentration. Right. And maybe another thing.

Claudia: I should have brought the publication.

Victor: That would... I didn't work with him directly, but he was my neighbor. I will remember many of these things. I'm sorry for my memory of names, that definitely deteriorated somewhat. I don't remember names. But I will call...

Claudia: And of course, Jacob would appear. Mincer, he would be there.

Victor: Yeah, I worked with him, sure.

Victor: And Stigler, I didn't work with Stigler, but he knew about me. He asked me to go to Chicago, so he must have known me very well.

Claudia: [inaudible].

Victor: In fact, when I came to New York, I remember I had an interview with Gideon [Rosenbluth], who hired me. But also with Geoff Moore and with George Stigler.

Claudia: Okay.

Victor: With George Stigler.

Claudia: What are your recollections of Stigler? And I mean [inaudible] of course it's hard...

Victor: My recollections are more from Chicago, not that much from the Bureau because we didn't work together. But of course, much more in Chicago. I knew him very well there. And he was tough, just like Friedman was and Burns, in different ways.

Claudia: In a very different way.

Victor: Very different ways. Not personally, but demanding. Expecting a lot.

Claudia: George also had a great sense of humor, and I great sense of irony and sarcasm, which Milton did not do that.

Victor: No, Milton didn't have that, no. I think he was...

Claudia: I used to go to George's lecture. I did IO and I went to George's lectures, and sometimes I would just go for the jokes.

Victor: Yeah, he was great at it. You're right. And he tried to be fair, but he had strong opinions. They all had strong opinions.

Claudia: Extremely strong.

Victor: Extremely strong opinions.

Claudia: Right, right.

Victor: That may have been a little bit on the negative side, to some extent. It's not good to be so opinionated. But strong opinions prevailed at the Bureau, there's no question about it. And they differed, individuals, of course.

Claudia: So is there anything else you want to say about the period at the Bureau up until when you, and I will still say, left to go to Chicago. Because you did leave even though you come back.

Victor: I came back, but of course I left. I was not present, physically, and this makes a difference where you are, of course.

Claudia: Right. So you were sad to go?

Victor: I was sad to go, but I wanted to teach. I knew that this should be advantageous for me, and it was. And it was.

Claudia: But [inaudible] up until then, you were still a...your title was a research assistant rather than...

Victor: No, I think it was associate.

Claudia: It was associate.

Victor: Right. I think I was. I don't remember when it started, but I was on the...they had this list of people on the covers.

Claudia: Right, and at some point you had become part of it? Right.

Victor: Yeah, of course. Right. I was picked up for it, right. But I don't remember exactly when, but all of that could be easy to check with annual reports.

Claudia: Absolutely.

Victor: I just don't remember.

Claudia: Now in 1959...

Victor: Probably not very long. My impression is that maybe two years after I came back, two or three years, and then probably no longer than that. I was working with Moore at the same time as assistant, and I was already working on my own stuff. So it was not so very clear on what it was.

Claudia: I think that Bob Lipsey said that as well when I spoke to him, and Bob was

just a research assistant. And of course, you would have known Bob Lipsey.

Victor: Oh, yes, of course, I knew... Right. I know.

Claudia: He was, I will say, sort of more of a kid because he didn't have a Ph.D. yet, and so therefore, he was sort of a research assistant. Yeah.

Victor: Right. But there was not...and that was a good thing. I don't think that there was a sense of a very strict hierarchy. Maybe with some people like Burns, maybe more.

Claudia: [inaudible].

Victor: But certain not Moore, for example. I would say that Moore was very good at that, at delegating, or picking up people and letting them do their own work. And that was my experience, because he was my boss after I came back. And I didn't have it with Rosenbluth, and with the guys from Berkeley. But this is because they, themselves, were sort of visitors, a temporary thing.

But Moore was, of course, on the staff, and as soon as I started working for him, very soon after that, I worked on these three papers. And maybe difficult to say for a while whether I was a research assistant or research associate, but it was fluid, and that came very fast. So my experience was that they let you work on your own, regardless of where you had your Ph.D. and all that, and regardless of your English.

Of course you were expected to write, so you had to be good enough in English, but it wasn't so difficult. At least not for me.

Claudia: In '59, you get this offer. It's a very good offer, right? From the University of Chicago, it's a business school.

Victor: Right, it was for associate professor, not assistant.

Claudia: Associate..

Victor: Because I was already assistant professor at Columbia, and I was 40 of years of age. So it was...

Claudia: So this was tenure?

Victor: In my farewell party, Stigler and Jonah gave talks, which I couldn't wish for better people. And I, of course, had to reply. And in my reply, I stressed the fact that I was already 40, and I came to Chicago, and I came as an associate professor with tenure. No, tenure I got two years later. Two or three years later, something like that.

Anyway, in many places, it wouldn't be so obvious that you'll get there at this age, and with my background, which was not fully American. And I think that this is a positive feature of Chicago, that they were open enough to do that. And I think it well-received, and it was meant. It was honestly and sincerely meant as a kind of counter-compliment that I had.

Claudia: It was the beginning of the one of the actual grand moments in the history of the University of Chicago, economics.

Victor: Right, but it was similar. So I was lucky, both at the Bureau and at Chicago, in combination. Because at the Bureau, it was very similar. They were open, and they accepted me for what I was worth, and gave me a chance to work on my own. It's true that I had a Ph.D., and all of that. They wanted me back in Germany, and of course I didn't. I say, "Of course," but I mean you would understand it probably.

But my German professor, [inaudible] they didn't like it because he said that I answered it too quickly. But of course, after all of that, all my experiences in Europe, it was obvious, I wanted to be in the States. And I fared well in the States, and so I answer not so quickly, and very politely, but in the negative. There was an opening in [inaudible] that Preiser wanted me to go.

Claudia: Did [inaudible], I just wanted you to know. So you moved to Chicago, your wife, your two sons. The South Side of Chicago was not a very pleasant place in certain respects. The university was the grandest place. But Hyde Park was a little dangerous. How did you adapt to it?

Victor: It wasn't so bad. It wasn't so bad. We lived very close. We lived very close, Blackstone Avenue, you would know. Blackstone and 58th.

Claudia: It's a wonderful place [inaudible]...

Victor: 58th is the axis of the university, right. So it was on Blackstone, a pretty large building and I was on the top floor, third floor, and I lived there for about 13 years. And then I built a house on the next light. It was a space between the two buildings, between this building and the next one was the university.

Claudia: Who lives there now? Do you know?

Victor: There were people, there was a physics professor there, under me. And I bought the parcel between this building and the next one was student housing of the University of Chicago. And there, I built a small house. So it worked out perfectly well. Because my wife, my late wife, moved [inaudible] there in the house, and so on, that was her. Probably worth more than mine.

Claudia: So the time you spent in Chicago was a very, very happy time.

Victor: Yeah, it was the happiest time of my life in Chicago, actually. Because I had family, I had a nice house a short walk to the work. It was very nice. I lost my wife last year to Parkinson's. It was very hard. She didn't want to come here, very much. And so I blame myself for moving so quickly and so on. But I had it good, and she understood it too. She always went with me. I worked with Moore again at Columbia, initially, but then everything fell apart.

And then it wasn't very good, until I got this job, which is a good one. But I don't know for how long at my age, and so on. As long as I can, I'll do it.

Claudia: Do you see any...we're going to run out of the film now. I thought I would just do...can you sit for just a little bit longer?

Victor: No, I'll give you all the time. I am very much interested in this.

Claudia: Okay.

Victor: As long as you want to.

Claudia: So I'm going to turn this off and put in another roll, just probably another 20 minutes. That's all.

Victor: Good, good. But you must let me, again, go, and come...

Claudia: In the office of Victor Zarnowitz on December 11th, 2001. And there are just a couple of questions that I thought you would have some interesting responses to, which is, how do you see the function of the Bureau change in the time that you were the closest to it in the '50s, then in the '60s when you were returning to it from Chicago? Forgetting about the more recent version of the Bureau with Marty, in which it has very much changed its function in a very deliberate way.

But in the '50s and the '60s, do you see the function of the Bureau changing? And I mean that in...think about the relationship between the Bureau and the U.S. government, what one was doing, what the other one was doing, the relationship between the Bureau and other private operations. Is there any sense in which it changed?

Victor: Well I know about the changes. Again, I was not involved in them directly. There were of course changes at the top; presidents have changed. There was a kind of...it was a problem mainly because of ...people were not on the spot. First, Burns spent a lot of time in Washington. And then Moore left. Fabricant became more active. Moore left also, became Commissioner of the Bureau of Labor Statistics, and then spent a lot of time in Washington. And there was some kind of an interregnum there.

And Fuchs became active. Lipsey was active in administrative positions. But there's a lot of gaps to fill in. For example, I did fill in the gap left by Moore in business cycles to some extent.

Claudia: What about the function and the mission of the Bureau? Do you see any changes in mission?

Victor: That was not clear to me that there was a change in the mission of the Bureau. There was the same interest in research, and more or less the same areas, the same people except they had become kind of distracted by other jobs, mainly in government. And then [John] Meyer came, Meyer and [Edwin] Kuh the interest changed of course, somewhat. I think there was probably less emphasis on business cycles, I think developed.

But there was still a good deal of interest in the area.

Claudia: What can you say about...

Victor: I think as far as the relationship with government is concerned, that you ask, there was an old, old rule that the Bureau was to be nonpartisan and nonpolitical, and that was observed. And it was kind of the constitution of the Bureau, and that was observed by the successive administration of the Bureau, always. It's still observed, I believe.

When the top person is active and has strong political views, be very careful to [be] speaking in his own name, her own name. And yeah, that was always the case. There was a question...there were financial problems, of course, that the Bureau had. And they would find the results in the present Bureau rather than the old one. The old one suffered from that time.

Claudia: Talk about the finances of the Bureau. When you were there, you were funded by the Bureau, the Bureau had money from the Ford Foundation.

Victor: And from others. Right. For example, for the forecasting study, I guess it was Branch [SP] who raised the money, and the manufacturer of refrigerators. What was the name? The manufacturer of refrigerators gave money for that, so it was private money. It was private money. It was not just all Ford Foundation or NSF [National Science Foundation] or anything like that. So it was money from corporations, where they could interest corporations in that.

But it was very subdued when I compare it, for example, with the Conference board; it's a much more active role. Talking with business executives and so on, of large corporations, asking for money, raising money in various ways, interesting them in what we are doing. Much less of that was at least visible to staff members at the Bureau, maybe because it was all much smaller, or maybe it was reserved to different people. It is not here. I'm asked to talk to groups of business. I never had that at the Bureau. That was not done.

Claudia: So at the Bureau, you were never asked to write a proposal?

Victor: Oh, yes. Yes, but it was all internal. It was all internal. It was not very formal, either. It didn't matter that if it was oral other than writing, I believe. It was not very formalized, but you could interest people in this or that by talking with them. And you could write it. Of course, you wrote your contributions to the annual report each year, each one who had a project. And that's how it worked, actually. I don't remember that it was much more than that.

Claudia: Now that I've received all of them, I've gone through many of them, and it's often sort of humorous to read a little blurb by yourself, or Milton, or Anna, in which they say, "During the summer of 1961, I did the following..." A little blurb. Or, "I have not made much progress on..." They're funny.

Victor: Right. That's what we did. The progress reports that we gave.

Claudia: No, no, take the microphone and cover it up.

Victor: Okay.

Claudia: That's a little bit better. Thank you very much. That's perfect.

Victor: We talked a lot. As I said, much of that was informal, at least, on the level I operated. Maybe it was formalized at a higher level. But I think that most of it found its way to the annual report, which actually staff members have written, and it was reviewed but not very strongly. What I have written, I remember, was always accepted and published in the annual report. That's why the annual report, I think, is a good source of seeing what we have been doing, or what we have failed in doing.

Claudia: We sort of worked our way up in time, and you just mentioned Ed Kuh and John Meyer.

Victor: Right.

Claudia: So we're now into the '60s in the Bureau. And can you mention anything about what happens when... Now when Ed Kuh comes in, I think that there are also some changes in the machinery at the Bureau. They're getting, I think, hooked up to a mainframe.

Victor: Right. There was, of course, yes, the computer made its advent at the Bureau. Before then, even though there were changes, there were absences, and therefore, changes. I think Fabricant was active for a while, was really running the Bureau. But there was not much of a change in substance, or in mission, as you call it. As I remember, it was very much the same. It was a continuation of what Mitchell, Burns and Moore were doing before. There was little change, I believe, in substance.

Now with Meyer and Kuh, there were more changes. There was definitely more change. But there was also a good deal of continuation there. Fuchs was very, very active in administrating the Bureau. And then he moved west also. That was his doing, I think. It's Palo Alto. And he did it very much in the old way, I believe. Even Meyer and Kuh perhaps did it in the old way, at least the scale was similar.

The main difference, I think, is that the Bureau was much smaller, the projects were much fewer, and very, very few and distinct, and everything was more or less centralized. People were on the spot and working on the spot. Or if they left, let's say to a university, they continued more or less on the same project, and would frequently appear in New York again, talk about that, or present the findings, and so on.

And later, of course, it became much, much bigger and much more decentralized. In terms of project, and in terms of funding, I believe also, because people, they raised their money at the Bureau, through the Bureau, but on their own more or less, and that was not before the case.

Claudia: Right. And that was a very big change. But what were your feelings, or

what was your sense, when you discovered that John Meyer would be the new head of the Bureau?

Victor: Well, I didn't know him well. I learned to know him pretty soon, and even though it was different, I would say, there was still much the same as far as I am concerned.

Claudia: Did you get the sense that Arthur had been pushed out kindly, maneuvered out, or...

Victor: Well no, no, I didn't, and I simply may be wrong, and maybe he was. But I was given to understand, I think we were given to understand that it was the other way around, that Burns found Meyer, and installed him. And that may or may not be the case. I just don't know.

Claudia: I don't know either.

Victor: I don't think it was.

Claudia: I'll ask John.

Victor: No, no, my impression is that Burns was looking for somebody and found Meyer. That's my impression. Now how Meyer ended up, again, I don't know. He's [inaudible at the top, I wouldn't know.

Claudia: You didn't pay attention to it.

Victor: I didn't. No. Maybe I would have cared, but I never knew about it. I never was told anything. So no. No, but what I was told, what I understood is, distinctly, that it didn't come from Meyer, throwing Burns out. It was the other way around.

Claudia: Right, I didn't think that Meyer threw Burns out, but that the board decided that it would be best if Burns were not there and [inaudible].

Victor: It could have been. Yeah, that was definitely the case. Some case, as far as believe, because Burns was simply not there, and you cannot...

Claudia: But of course, he was then very fortunate in some sense because the next year he is selected as the head of the Federal Reserve.

Victor: Well yeah, there are very mixed reviews on how he did on that.

Claudia: There are very mixed reviews on how he did. And then you were in Chicago at the time, and...

Victor: He didn't have a very good reviews at Chicago.

Claudia: He didn't have very good reviews. And Milton, who had been very close with Arthur, breaks with him.

Victor: Right, this I know.

Claudia: Do you remember that?

Victor: Again, I know it, but I was not involved in it at all in any way. Neither man, Milton or Arthur, told me anything about it. So no, but I know how they felt, because this was during all the time, of course, we talked. So I know that Milton was unhappy with Burns. This I knew directly. But what happened between the two directly, I don't know how he broke with him. I heard about that he broke with him.

Claudia: I think that it was because wage and price controls that [inaudible].

Victor: Right, I mean, this is [inaudible] in Chicago. You know that.

Claudia: Yes.

Victor: And for Milton, probably in particular. So no surprise there. What is surprising is that Burns was not more decisively against inflation, or against the threat of inflation. That is somewhat surprising, because I think he was...I think it's probably...might have been the attention to the business cycles situation, you have. But precisely, the background in business cycles, had caused that. Inflation was important as a threat, and so on, but business cycle recession was an even bigger problem. That might explain it.

Claudia: I think that's a very good insight, and I think that it's an important issue to resolve, why Arthur let inflation go, which was his downfall.

Victor: His downfall, right, right. I saw last Arthur Burns in the National Airport in Washington, by chance. And he was already ambassador to Germany. We talked briefly and so on, but I can report nothing particularly interesting.

Claudia: I met him, I think, only once, and I think it was in the '80s. And I was on a panel in a conference, and he came very late, because he was a very important person. And he came into the room, sat down next to me, he had missed all the presentations. And then had to get up and give a summary. And he looked at me and he said, "Tell me what has happened." And he leaned over, and I gave him some cogent commentary on it. He thanked me. He stood up, he went to the podium, he said some remarkably fine words. He sat down.

Victor: What do you mean by "fine words"?

Claudia: I think that he summarized, he brought history to bear on it. I dimly recall that I sat back and thought, "How did he make so much sense of what I said?"

Victor: He was a bright man, there's no question about it.

Claudia: Yes, but he was also, what I find interesting and people have said this to me, Anna said this to me, Anna said, "The men hated him. They despised him. The women loved him."

Victor: Yeah.

Claudia: And I remember thinking to myself at the time way back in the '80s, "What a charming individual." And Anna essentially said, "Aha, the women were charmed by him, but the men despised him."

Victor: He had... I met her only once. Moore lived in Watergate, actually. Both had apartments in Watergate. Moore was the Commissioner of BLS. I was in Washington on some business and Burns came over, and we had a good evening. We ate and so on. And he had a charming wife. Charming wife.

Claudia: Burns did? Yeah.

Victor: And I know [inaudible] they were all charmed by her. They all loved her. Moore and everyone. And he, indeed, he was not necessarily liked very much. He may not have cared. He was overbearing, he was difficult. But as it happens, it's all chance. I never had any friction with him or anything. Quite the contrary. I was surprised and very pleased when he asked me. Because I know that it meant something for him.

After all, he was asked to do it, and he said he has written too much about the man, which I understand. And he asked me, so I was very pleased. And of course he read it, and he approved of it. I didn't know what would happen if he didn't. Maybe he would show his bad side then. But I never knew his bad side directly. But I know about it, because I say, Ruth complained bitterly about it.

Claudia: Yes, well I think a lot of people complained bitterly about him. And there was also perhaps as a comparison, Mitchell was wonderful to everybody.

Victor: Yeah, this I heard.

Claudia: And he was a deeply, humane, kind, gentle, loving, every good word has been used to describe him.

Victor: You see now, I knew several people at the Bureau who looked to me to be like that, definitely Moore. Moore was very kind, a very good man. A very good man. He may have been intellectually, may not have been the same caliber, and some people thought so, and even [inaudible] to understand it. For example, Fabricant did. And I was sort of taken aback by that. And that was my impression. That is what I know about the man.

He was very kind, and human man, Moore was.

Claudia: You mentioned that Gideon Rosenbluth is still in New York City, right?

Victor: No, no, he was in Vancouver.

Claudia: Oh, I'm sorry. He's in Vancouver.

Victor: In Canada. He's teaching there. I saw him fairly recently on some occasion,

in a meeting somewhere.

Claudia: Maybe if I get out to Vancouver I'll interview him.

Victor: Yeah, he might. And then you should... I'll tell you what, I'll make it a point and I will try to uncover and look up the annual reports.

Claudia: Somebody named Ray something.

Victor: Or maybe, can you do it? I don't know where I have them.

Claudia: [inaudible] now.

Victor: If I did it, I could tell you a good deal more.

Claudia: I can call you up.

Victor: I remember what their names, I could tell you who to contact.

Claudia: Let's do the following, let's end this. I'll pack it up, and then as we do that, we'll talk a bit more. But are there any... You've said so much, and I don't know if there's any final comment that you want to make to this tape. Is there anything we left?

Victor: As I said before, I liked very much the Bureau as it was, and maybe that colors my senses. But that's how it is. I felt at home at the Bureau, almost from the beginning. That's why I came back. That's why I was actually somewhat reluctant to leave. But of course I left because it was the thing to do, almost in every respect, financially too. We were not very well paid at the Bureau...

But the fact that people, generally I believe, felt well and stayed with the Bureau despite that, and despite other things. Like, for example, there was probably on the part of, certainly of Burns and so on, I wasn't involved in that, but it probably existed, this sense of hierarchy, a sense of, "I'm here, and you are here," and so on. But other than that, I worked with Moore, who didn't have that. I felt that there was remarkably little of it, and the atmosphere is good, and people like to work, and they worked very hard.

And of course, it was also the sense that you work with people who do their best, and their best is really very good. People like Friedman, and Kuznets, Stigler, they are [inaudible]. They were giants, and they acted in a sense in what they do. And so I liked that, I felt it. And that was the good thing about it.

And that, in a sense, and I regret it very much, are lost in the present Bureau, through the fault of no one. It's simply the size and the evolution of the Bureau, and the decentralization, and so on. They're still probably very, very good people, excellent people working on their stuff, but they're not together and that makes a difference.

Claudia: Well you must come and visit me there, because there is a core group who

are together. Some of us are on leave for the year, we were there, we talked together, we work together, we eat together.

Victor: They may be very similar. Maybe very similar.

Claudia: It's similar in some respects. And one respect it isn't, which is that we're each working on our own project, they're not as integrated as [inaudible].

Victor: Well that, I think, needs to be corrected. I mean, there was integration in the sense that there were meetings in which we talked about our own project, and the others, from other projects, intervened. Sometimes very actively. They liked it or not, and so on, they were outspoken on that. But otherwise, it was a separation by projects, very clearly. So it was not so... And they didn't have the sense that they know all about the other projects, that they are all-knowing and so on, no. There was a good deal of specialization in a sense.

But now, my impression is much more of that, because there's a greater diversity and greater size, huge.

Claudia: I mean there's a huge diversity, there's no question. But let me just end this tape with a proposal that Victor Zarnowitz come and have lunch with us at the Bureau and join in the conversation. Okay?

Victor: You mean in Cambridge?

Claudia: In Cambridge.

Victor: Oh, in Cambridge. Good. Thank you very much.

Claudia: It's easy to go to New York.

Victor: Because we do go sometimes, yeah.

Claudia: I know. I realize it. Okay, I'm going to turn this off now.