Interview with Anna Jacobson Schwartz By Claudia Goldin, Dept. of Economics, Harvard University and the NBER New York City November 19, 2001

Claudia: And it is November 19th, [2001]; I'm at the National Bureau of Economic Research in New York City with Anna Jacobson Schwartz, and Anna is going to tell us first about who she is, and then a bit about...a lot about, I hope, about her involvement with the National Bureau of Economic Research.

Anna: So as Claudia has just stated, my name is Anna Jacobson Schwartz, and I am a longtime employee of the National Bureau of Economic Research in New York. So I have a very varied experience with this organization, from the time that I first started working here until this very day, when I sit here not so much as an employee, but somebody following my own interests in research, and supported by the National Bureau in what I want to do. And for me, this is the most central part of my intellectual life, so I'm very grateful to this organization.

Claudia: Right. And let's go...let's start with Barnard and that serendipitous event that took you from Walton High School to Barnard rather than Hunter College, where my mother went to college. And I was thinking, when you said, "And it changed my life," that my mother was a stat econ...she was a math major, I think she was math stat, but she did economics. Although she denies that she remembers anything of this, but I think she's wrong. So you went to Barnard and you did economics, and what I was

Anna: I knew...

Claudia: ...saying before...

Anna: ...I wanted to study economics from the time I was in high school, when there was a course in economics taught by a man at Walton High School. And even though this was in 1931, the very depth of the...what I later refer to as the Great Contraction, it wasn't so much of the experience of the Depression that made me want to study economics, it was the fact that the questions that we talked about in this class seemed to me so vital, that I couldn't imagine wanting to pursue further study in a subject that would not have included economics. So I went to Barnard with the full intention of majoring in economics, and although I took a variety of courses while I was there in liberal arts, my mind was essentially set, even before you had to declare your major, that this is what I was going to do. I don't think that the economics faculty at Barnard, looking back after all these years, was especially distinguished, but they certainly were serious people.

There were two women, and the third person who taught statistics -- also a woman - and the one man, Arthur D. Gayer, who was an Englishman, who had come, gotten

a job at Barnard, and it was his influence in particular that determined what I did after I graduated. He was able to interest the Columbia Research Science Council in funding a study of British business cycles from 1790 on. He had written on that subject as a graduate student at Oxford and gotten his degree -- the study he had done was unpublished -- and because Wesley Mitchell supported his interest in doing this study, that the council funded.

Claudia: Was this the SSRC [Social Science Research Council] or this was at Columbia at the time?

Anna: I think it was the Columbia

Claudia: I see.

Anna: ...organization at that point.

Claudia: And then it becomes something else.

Anna: Yeah.

Claudia: Right.

Anna: So on graduation, I started graduate school at Columbia, and when Gayer got the funding for this study, he hired me, first as a part-time person, and then when I completed all the coursework for graduate work, he hired me as a full-time person. And that was roughly from fall of 1936, until the completion of the work on the British business cycles.

Claudia: So you graduated Barnard in...

Anna: In 1934.

Claudia: Thirty-four. And then you spent some time doing the coursework and passing the obligatory exams.

Anna: And by the time I went to Washington in the fall of...no, in the spring of 1936, I had completed the coursework, and when I returned to New York and started on the British business cycle study, the thought was that I would be able to find a subject for a dissertation from my work on the British business cycle study. So for the next four years, that's what I was busy doing, and...

Claudia: Let me go back to D.C. for a second. Who found you the job with the group working on the consumer price...the consumer...

Anna: I went...

Claudia: ...expenditure survey?

Anna: ...to Washington at the urging of Clara Eliot, who was the person who taught statistics at Barnard, and was herself working on a consumer purchases study. I

don't really know the dates when she was in Washington, but she came back to New York very frequently. She had a big family, and I'm sure that the job in Washington was an important supplement to the income of the Raup family. She was married to a man [Robert Raup] who taught at Teachers College at Columbia — as I say, there were four children — and I know that problems of income for this family existed. She was interested in me and I was frequently invited to their home, but...and I maintained that connection with her even after our return to New York and was working on the British business cycle study. But that's just coincident and...

Claudia: But you don't recall that time in Washington was a very exciting time, it was just...

Anna: It was a very exciting...

Claudia: It was, okay.

Anna: ...time for me, I had never traveled anywhere, and I was sent into the field to various southern cities to make sure that the local agents were filling out these forms in accordance with the instructions that the people at the Department of Agriculture, who had designed the...

Claudia: Long ago, when I went to the National Archives, and no one had taken any interest in these schedules, and now they have, but at the time they didn't. This was almost 20 years ago. And I had a friend...I met someone who was working in the National Archives, and I asked for so many boxes, that he took me by the hand, and he did something that you cannot do now, and you really weren't supposed to do then, which is...

Anna: Was this in College Park?

Claudia: No, no, this was in D.C. in...on Pennsylvania...

Anna: Archives in D.C.

Claudia: The big, major archives, and he said, "You can be in the stacks for as long as you want." And it was a child in a candy store, and I just went all over the place, and I found this huge number of boxes, which was the 1934, '36 consumer purchase survey, and the related one from 1935 to '37 at the Department of Agriculture became involved in. All of the original materials.

Anna: Yeah, that is exciting.

Claudia: It was a great find. I'm sure that others could have found it if they were looking for it, and now a sample has been collected of them. But let's get back to...

Anna: Sure.

Claudia: And I looked at the many, many volumes that came out of it, and then was stopped because of the war, and so in fact, all the reports... As you know, the reports were never finished because the war intervened.

Anna: Anyhow, so travel to various cities in the South, meeting people from this regional area who spoke differently from me and... And I was very young at that point, so giving instructions to people who were far more senior to me struck me as a little unusual, but I suppose that's part of the experience of growing up.

Claudia: So you lived in little hotels in...

Anna: That's right.

Claudia: ...small towns and...

Anna: And now I'd never been in a hotel, and all of this travel on trains and...with government vouchers. I mean, this was a very new kind of world for me, so yeah. It wasn't just working in the Washington office proper, but being selected to go out to do this fieldwork, and then to come back and report whom I had met, whom I had talked to, what were the problems there, what advice I had given. Was it the right advice? So I know that the time that I was there passed very quickly for me, and I never had a feeling of, 'Why am I here? I should be back in New York.' But as I said, the decision to go back in New York was a personal one, and...

Claudia: So then you return.

Anna: And then I returned...

Claudia: In the fall of '36.

Anna: ...and as I say, I was...shortly after that, I had to work on the British business cycle study...

Claudia: On Gayer's study.

Anna: ...and that's what I did.

Claudia: Right, Now Gayer, of course, was a full professor at Barnard, and...

Anna: He was not a...

Claudia: He was not...

Anna: ...full professor.

Claudia: ...yeah, yeah.

Anna: I mean, these were slim...very slim times for faculty people, salaries were abysmally low, and he was regarded, at that time at Barnard, as somebody who was a comer. He was going to amount to something. I don't think that his career subsequently confirmed that belief in him. In a way he was a dilettante, but, you know, he was bright enough, there was nothing wrong with his...

Claudia: A perfect person to teach at Barnard.

Anna: Yeah. And in fact, he did very little on the British business cycle study. I don't know how he came to meet...

Claudia: Rostow.

Anna: ...Walt Rostow, but it was the addition of Walt Rostow to the staff that made all the difference in the world in the way this study was conducted, and there were other people who were hired subsequently. So, one of them was Isaiah, then known as Finkelstein, who later changed his [surname] to Frank, and Harry Eisenpress. They were graduate students at Columbia at the time, and Walt had finished his Ph.D. at Yale but had no job, so the fact that we were doing this study of British business cycles with Wesley Mitchell's interest meant that the study would be directed in the directions that the National Bureau business cycle research had adopted. So the big subjects, well, let's collect all the data that we can possibly find, time series on all the questions that you would want to be able to answer about the British economy, and then let's analyze these series according to the National Bureau...

Claudia: Right. Now, the sources — and Gayer obviously knew of many sources on the other side of the Atlantic — was the Columbia University library sufficient?

Anna: Was a wonderful collection, it's a depository. They had all the British parliamentary papers, and we were able to approach the Bank of England for data that didn't appear in parliamentary papers, but that we knew they would have. And one of the very sad things I have to report as a result of the numerous moves that the National Bureau made during the course of the time, when I was told, "We cannot move all your file cabinets, and choose what you want to save, and send...and the rest will be moved." And somehow, these precious Bank of England data that were copied for our use disappeared. And I mean, decades later people would write to me saying, "Don't you have these data?" And, no, they've disappeared, just as all the files of the National Bureau study, Monetary Trends in the U.K. and the U.S., were thrown out when we moved here. We were told, can't be saved. Well, nobody really has asked me, "Show me the datasheet."

Claudia: That's right.

Anna: "Show me the printouts back in your tables." So, in that sense, it's not a loss. I feel it as a loss.

Claudia: No, of course...

Anna: There should be...

Claudia: ...it is a loss, yeah.

Anna: ...a record of what you used, and how you...

Claudia: That's right.

Anna: ...processed material.

Claudia: I mean, look at what happened when Christy Romer wanted to go back over the numbers, for example, that Stanley Lebergott did long, long ago on unemployment, and Stan said, "Well, you can have them for a while." And he came out — as you know, my hands are spreading wide apart because that's what the datasheets would look like — and he handed them over to her. And she did much with them, to his consternation, of course, but she did... Now, so Gayer...

Anna: Was the titular head of this study, I would say.

Claudia: He was the titular head. Now, at the same time, you're a graduate student at Columbia. And was he then considered your major advisor on your dissertation? No.

Anna: No. I mean the theory was that [Arthur] Burns would be a major advisor, because it would be in a business cycle context...

Claudia: That's right.

Anna: ...even though it would be British.

Claudia: And they may have had their own rules about the fact that Barnard...

Anna: Yes, he...

Claudia: ...was a separate faculty...

Anna: ...but Gayer was at Barnard, yes.

Claudia: ...and still is a separate faculty.

Anna: The British business cycle study was completed in early 1941. We had been promised publication money for five volumes, and this is what we had produced in the course of the years that we had worked on it, and at that point the Columbia council informed us, no, there was not money for five volumes, there was money for two volumes.

Claudia: So you actually had...

Anna: A manuscript, five manuscripts...

Claudia: ...five separate manuscripts.

Anna: Script volumes.

Claudia: And these were chronological, they were thematic? What?

Anna: No. One volume had a historical narrative of the British economy, according

to cyclical dates, from 1790 to 1815, then there was a volume on price data, commodity price data that we had collected monthly... I mean, so much of our data was monthly because of the emphasis in the National Bureau tradition, that the technique was applied to monthly data. Another volume was just stock market data. Again, we had had people in London collecting the monthly stock market figures for whatever was listed on the London Stock Exchange during the period. We had a volume of data and a volume of the business cycle analyses of individual series grouped into five categories.

You know, productions, constructions — that kind of stuff. So it was a stunning blow to us that, instead of money for five volumes, we were confronted with either you will have to throw out some of the material you intended to publish. If you can reduce the size and got...get them into two volumes, fine, but it's got to be only two volumes, and for the rest, you will make the decision what to do with the other material.

Claudia: Didn't you make two, like, really thick volumes?

Anna: Yes, yes. And to use microfilm of the original data series — I mean, this is a hard luck story on so many...in so many ways — the University of Michigan had this microfilm project, and they microfilmed a lot of data. Somehow, they lost the microfilm. People, who then would have...I mean in the printed volume, you're advised, if you want the original data, at...write to Michigan...the Michigan microfilm source. They can't explain it, disappeared from there. I have the original typescripts of the data, so I'm able to pass on certainly the original commodity price series. The stock market series were not microfilmed, and they're lost. I mean, people who want to do something on British...

Claudia: Well, they've been collected again.

Anna: I mean it's just sad to see...

Claudia: Yeah, I know.

Anna: ...so much that's valuable has been discarded.

Claudia: Right. Some of the series, such as...I know the stock market data has been recollected. The big, big series on British stock market data.

Anna: And I also have the original typescripts of the introductory material explaining what the individual time series covered, what the problems with these data were, and stuff like that. Anyhow, this was 1941, in the middle of the war, or the war had just started for us, and the urgency of publishing a historical study didn't seem top of the agenda. And it was not until 1953, when Rostow went to England as Harmsworth Professor of American History, that he was able to negotiate with the Oxford University Press that there was money, but they wouldn't be losing anything by publishing the two volumes that had been sitting around, you know, for eight years. So the volumes were finally published, and didn't get the kind of attention or the kind of interest... I don't know why, in 1953, this wouldn't have been considered a major effort that should be looked into.

It got a very tepid review by R.C.O. Matthews, who criticized it for our use of the National Bureau technique. This was not the way to understand how cyclical developments occurred. At any rate, there was just this feeling of letdown. That's my experience with the British business but it's not...from my personal point of view, the debacle was even worse. Although we indicated in the published volume who was responsible for what in each of the two volumes, Burns refused to accept a contribution to...volumes with many authors as my work, and at that time already, I had begun working with [Milton] Friedman, and Burns said, "Forget about the British business cycle study." It had to be a published dissertation to be acceptable at that time

Claudia: Really?

Anna: Yeah. So the fact that it was published, it was going to be published, I mean, which was a hurdle for many people.

Claudia: Right. That's an enormous hurdle. That's interesting. So what year did Burns say, "Terribly sorry, but..."

Anna: "This is not the kind of dissertation that we accept at Columbia."

Claudia: So, what year did he say that?

Anna: Well, this might have been 1954 or something...

Claudia: I see.

Anna: ...like that. After the volumes were out. The problem was not that the volumes had been published before there had been a dissertation committee to vet what I had done. So I mean, when people look at my vita and see I didn't get a degree till 1965 and they said, "What happened?" Well this is what happened. I mean, if this...if things had worked the way we had expected in 1941 when the thing was finished, and they had been willing to accept my part of the then-five volumes, well, I would have gotten a degree much earlier, but...

Claudia: Of course, Bob...

Anna: ...didn't turn out that way.

Claudia: ...Lipsey's degree has sort of a long period in between his years as a graduate student and when he got his Ph.D., because he began as a graduate student in the late '40s...

Anna: That's right.

Claudia: ...he got his Ph.D., I think, also in '65.

Anna: That's right.

Claudia: Something like that. So, you have your degrees together. But that must have been a great disappointment, a real disappointment, since other people had Ph.D...had dissertations that were jointly authored.

Anna: Yeah.

Claudia: Right.

Anna: And, I mean, considering the amount of work that had gone into the...

Claudia: It was a phenomenal amount of work. Can you say anything about...now about Burns? Because we're going to be moving to the...to your time at...not at the Bureau but... Well, I'm sorry, at the Bureau, because in '53, you begin to be physically at the Bureau.

Anna: That's right. Once we move to the Madison Avenue office.

Claudia: Right.

Anna: But he knew me...

Claudia: He knew you. You met him probably...

Anna: I had met him...

Claudia: ...in the '40s.

Anna: ...because of this British business cycle study. We would go down to the Bureau's offices at 1819 Broadway to talk with the people in the British...in the business cycle unit, to see that we were following the rules. The idea was, we had to do exactly what they did in analyzing the series, and that our preparation of charts was just like theirs. So, in a sense, we were an auxiliary to what was going on at the National Bureau in terms of U.S. data, that we were trying to apply to our British data, so he certainly knew me as somebody who was around the Bureau for this purpose and knew that I was working at Columbia on these issues.

Claudia: Do you remember the first time you met Burns, and where was it?

Anna: I don't really remember the first time I met him.

Claudia: Could it have been at Columbia?

Anna: It must have been at Columbia, yes.

Claudia: Because he was the...he had been made...

Anna: He was...

Claudia: ...the head of your...

Anna: ...the heir apparent to Wesley Mitchell. And I hadn't taken any courses either with him or with Mitchell, but they knew me, and it was because of my connection with this British study. Mitchell once had...the three of us, Gayer, [Walt] Rostow and I, were invited to Mitchell's home, I can't imagine...well this must have been in late...the late 1930s, to meet with [Joseph] Schumpeter for a discussion of what we were doing, and what the National Bureau was doing, and what Schumpeter was doing on that business cycle study, and to me, it was a revelation. I mean, Schumpeter seemed to me so much more...

Claudia: Well we'll just put it over here, just bring Schumpeter closer.

Anna: Yeah.

Claudia: Yeah.

Anna: Schumpeter seemed to me, a much more profound person than Mitchell. The only contribution, as I could remember, to the conversation, was to repeat the National Bureau definition of what a business cycle was, and there was a breadth to the comments that Schumpeter made, that were absent...that was absent from what Mitchell was saying.

Claudia: Do you remember what Schumpeter...the gist of what Schumpeter said?

Anna: Yeah. That it was a much more enlightening view of how an economy worked than what Mitchell... As I was saying, Mitchell seemed to be offering some mechanical views about business cycles, whereas I thought what Schumpeter was saying had some economic depth, and there would be questions that you would be able to address to this kind of approach that you couldn't address to the Mitchell approach.

Claudia: But this is, in some sense, the...a clash between the data, the more mechanical way of doing things and the theoretical way, and rather than a clash, it could have been sort of a union.

Anna: Yeah, but it wasn't.

Claudia: But it wasn't.

Anna: So, my sense was that we really hadn't settled anything in this exchange. I mean, it was very exciting to be invited to Mitchell's home and...

Claudia: Where was his home?

Anna: ... 2 Horatio Street in Greenwich Village. But in the sense that it had some impact on what we were doing, I don't think so. We were sort of tied to the Mitchell view of what understanding the British...cyclical behavior was, so...

Claudia: And what did Rostow...

Anna: Rostow.

Claudia: ...say?

Anna: I mean, he's a very pleasant person to be with and is admirable in many ways. My only feeling about him, after all these years, is that he was saying, 30 years after the British business cycle study was ended, the same things that he was saying 30 years earlier. I don't have a feeling that he grew and that his understanding of the world had deepened, and in some way been enlarged. He was essentially the post-doc person that he was when I first met him, and not any different. I mean, he could be a lot of fun, I mean there's nothing wrong with him as a human being, but as an economist... As a historian, I thought he was lacking, and I really haven't kept in touch with him all these years.

Claudia: Did you get a sense, though, that he would burst on the scene with big ideas, and well, then you would...there would be some need for a large cleanup squad to figure out, well, which of these ideas are actually right, and which of these ideas should be thrown out? Was he always the idea person, throwing ideas out all over the place?

Anna: Well he had a few central ideas that economic development depended on export growth, and this was the one message that he more or less applied in all the books that he ever wrote subsequently. And take-off — I mean, the thing that he became known for in the 1950s — didn't prove to be a seminal kind of idea that others picked up and developed and... So the problem is, of course, that I got to know Milton Friedman, and that surely changed my view of economics and of what the real problems were. So in a sense, maybe I wouldn't have this kind of view of Rostow if I hadn't been so influenced by Friedman.

Claudia: I don't think so. I think that Walt's brand of economics is not as...it just didn't satisfy you, it just didn't...

Anna: That's right.

Claudia: ...make sense. They're sort of big, interesting notions but there's...there is no meat, there's no sense that you can really get your hand around it and get your mind around it.

Anna: Yeah. As I say, he hasn't played a role in what I think is my...

Claudia: No...

Anna: ...development.

Claudia: ...no. And well, neither...mine either. Now, you said a bit about Burns and Mitchell, so this was... Was this the first time you had met Mitchell at his home?

Anna: I mean, I had met him at Columbia and at the Bureau, but it was the first time I'd been in his home.

Claudia: Okay.

Anna: Yeah.

Claudia: But you knew Burns vaguely at Columbia, but at Columbia you didn't know Mitchell any better than Burns.

Anna: I didn't know...

Claudia: No.

Anna: No, because I wasn't a student of either one.

Claudia: Of either one of them, right.

Anna: I mean, I took monetary economics with [James] Angell, and if I had any link with anybody in the graduate faculty, it was with him, and it was because I was doing some work with him at the time that... He had a very brief connection with the National Bureau, that it was assumed when I was hired, that I would be working with Angell, but there was...I don't really know why, whether he was dissatisfied with the connection with Burns or whether they weren't satisfied with him.

Claudia: There was Frank Mills as well, right?

Anna: I'm sorry?

Claudia: Mills, Mills. You took...

Anna: Mills.

Claudia: ...statistics from Mills.

Anna: Yes, I had some connection with Mills, but again, not for very long.

Claudia: Mills was at the Bureau as well.

Anna: Yes, yes.

Claudia: His first name is Frank. Do I have that right?

Anna: Frank...

Claudia: Okay.

Anna: ...Frederick, Frederick Mills.

Claudia: Oh, Frederick.

Anna: Yeah.

Claudia: Okay.

Anna: But he known as Fred, yeah.

Claudia: Fred Mills. I first had it right, and then I got it wrong. Okay.

Anna: Yeah.

Claudia: So you come to the Bureau in '53, and before that...

Anna: No, I come to the Bureau much earlier...

Claudia: Right, but physically, okay.

Anna: ...but I'm not physically...

Claudia: Physically here.

Anna: ...working here.

Claudia: Right. So what year do you date this coming to the Bureau but not being physically here?

Anna: It was as soon as the British study was over — 1941. And then I was hired with the intention that I would work with Angell on the cyclical behavior of money. Angell was really working on that at that time

Claudia: Right. So when you say you sort of came to the Bureau, that meant that you were on the...

Anna: Payroll....

Claudia: ...payroll.

Anna: ...that's right.

Claudia: That's right, you were...

Anna: That's the difference.

Claudia: Right. But you were working out of a...an office or a carrel or something.

Anna: A cubicle...

Claudia: A cubicle.

Anna: ...at the Columbia Library, and I would go over to Fayerweather, which was the economics building, and see Angell or whoever in the economics department that I wanted to talk to, but essentially doing what I started to do then. I mean that was the beginning, really, of trying to put together a money stock series, and Angell had had a ...he had had a woman named Caroline Whitley...Whitney, who'd gotten

her Ph.D. at Columbia and was working with him, who had done some work in this area for him. She didn't live very long after that. I don't know what happened to her, but I don't think she was in the picture any longer when he started asking me to work with him. So it was through him, actually, that I came to the National Bureau, and once Angell was out of the picture for them, they approached Milton to ask him. He had left the Bureau after he had finished the draft of Incomes...

Claudia: Incomes.

Anna: ...from Professional Practice, and...

Claudia: He went to Wisconsin, yeah.

Anna: ...he wandered around until he was able to get a job at Wisconsin, which didn't last, and then when he would...finally at Chicago, he was asked to become a research associate. I had met him briefly in New York when he was working on the statistical project for the war effort at Columbia. It was hard to find a stroller in New York during the war, and I had had two children and a stroller that I didn't want...didn't need at that point, and they came one evening, and I handed them the stroller. But I sure didn't know him, you know, to talk to him, so essentially I got to know him once he became affiliated with the money business cycle study for the National Bureau. And then of course, my contact with him was largely through mail, because he was in New York so rarely, and then we would sort of plot out what we'd be doing the next few months or something like that, rather than have, you know, daily contact. It was unusual to use the telephone in those days. Had to be something very special...

Claudia: Very special.

Anna: ...to use a phone, so it was largely by mail. And when we finally got around to beginning to write the manuscript, again, went back and forth through the mail.

Claudia: So what year do we date? Milton comes to New York City in '43, '42?

Anna: I don't know that that's the right year.

Claudia: It's gotta be something around then.

Anna: Sometime in the late '40s, I would say, because at the beginning, as I say, it was with Angell...

Claudia: With Angell.

Anna: ...and it was only after -- for whatever reason, I don't know -- Angell and Mitchell and Burns parted ways, but they looked for somebody who would be the senior person on the study of the money.

Claudia: Right. So it's sometime around...

Anna: And Milton...

Claudia: ...[inaudible].

Anna: ...of course, had no real interest in behavior of money until he started the project here.

Claudia: Now that's interesting...

Anna: Who told me...

Claudia: ...that I didn't know.

Anna: ...that they'd looked at something that Milton had written about inflation, I think with Ruth Mack and with somebody else, and money was not important? So anyhow, and that began this very, I would say for me, intense connection with him that's lasted for so many years, so I have this feeling that my understanding of the economics really began from the time I started working with him. Whatever I knew about economics before that was not very important. I really understood economics in a new way when I began talking with him and began discussing what are we going to do on this study? And the fact that the initial effort was concentrated on the monetary history, which was, again, not something that we would have thought in advance was the way we would proceed.

I mean the idea was, we would collect all these data and analyze them according to the National Bureau technique, and that was going to be the major contribution of this work. And of course, that first paper that we did that was published in *The Review of Economics and Statistics* as part of the first monetary conference that the Bureau sponsored, did make use of the Bureau analyses of the money series and the kinds of things...

Claudia: And what year was then that...the first paper? That was in the '50s?

Anna: I think that was 1962...

Claudia: Sixty-two, okay.

Anna: ...that it was published. Probably the conference was a year earlier or something like that. And again, the astonishment of people who were at that...I mean, we were considered weirdos, thinking that money was such an important...

Claudia: That money mattered.

Anna: Yeah.

Claudia: But when you first met Milton and he comes onboard this project that you've been working on for a while with Angell, do you know what motivated him to become part of this project? At the time...

Anna: He was very close...

Claudia: ...what was his agenda?

Anna: ...friends with Burns at that time. Didn't last. But at the point, I'm sure he looked to Burns as significant for his future, and to be invited to be part of a Bureau project was certainly something that he would value. And, of course, I mean you're on the payroll.

Claudia: You're on the payroll...

Anna: I mean...

Claudia: ...and that's a good thing.

Anna: ...Milton couldn't have been earning that much money as assistant professor at Chicago...

Claudia: Chicago, no.

Anna: ...to be, you know, oblivious to the opportunity.

Claudia: But truly, but by then Milton is at Chicago, he has all of these colleagues in Chicago who have thought for a long time that money mattered an enormous amount, so when he...when Burns said, "Well, we have this project on..." And I don't know what Burns said it was, he wouldn't have said it's a monetary history of the United States...

Anna: No, I mean, Burns would have said...

Claudia: ...he would have said it was...

Anna: ..."We need you to analyze the cyclical behavior of money so it will be another chit in this big..."

Claudia: That's right, yes.

Anna: "We were going to have this enormous collection of how different sectors of the economy behave, and then we will be able to say something, in a generalized way, about business cycles."

Claudia: Yes. It's the Holy Grail view of the economy.

Anna: That's right. And as I say, I think there were financial reasons for Milton to be eager to participate.

Claudia: But when Milton came here, it...he didn't have another agenda in the back of his mind at all then...

Anna: No, he didn't have any agenda...

Claudia: ...and he had...

Anna: ...about money, we were going to find out.

Claudia: ...no agenda about money. All of his friends in Chicago didn't say to him, "Okay, now show us what's happened to velocity over time." No one said that.

Anna: No, I think that that was part of the discovery in our work. And so, I put this big effort into constructing the money data, and he participated, of course, because they were technical decisions to make, and it isn't that I was just doing it on my own. And we had a staff of people who were going to the books to get the data and put them together for us, so that was the accomplishment of the first few years that we worked together. And then deciding, well, we'd better find out why these changes in the money stock happened at the various data that we have data for, that was the origin of the...

Claudia: So you decided, at some point, well, let's start in 1860 and move to...

Anna: Yes.

Claudia: The beginning date was decided to because...

Anna: The beginning date was decided by where we...when we could find enough data, so we started at 1867 after the Civil War, even though the data were pretty scrappy at the beginning, and then became fuller and more reliable, but we always thought of the time span of the study as covering the years since the Civil War, right down to when we ended the collection in 1960, but... do two things were going on at the same time. One was the cyclical analysis — the traditional Bureau approach — but we did other things. But besides the Bureau's approach, including deciding that what was important was growth rates, not the levels at any particular day, and that was not a traditional way of operating at the Bureau, and I think [Geoffrey] Moore and Burns never really believed that that was the right way to go. I think they tolerated us in this, what they considered not a credible way of measuring money behavior, so...

Claudia: So Burns and Mitchell...

Anna: Well Mitchell was no longer...

Claudia: I'm sure Mitchell's no longer, so Burns, at the time, was not sort of understanding where money was going to fit into...

Anna: No.

Claudia: ...the economy? He didn't understand that M and P are related, and we've got to understand that changes in M and the...

Anna: No. I mean, this, to them, was foreign, and...

Claudia: Well that's why Burns got into trouble later on, maybe.

Anna: Yeah. So, I would say...

Claudia: [inaudible]

Anna: ...in general, there was not a warm reception by the staff at the Bureau; it was only when Milton started bringing in his students from the workshop at Chicago — I mean people like...

Claudia: [Phillip] Cagan.

Anna: ...Cagan, and [David] Meiselman, and so on, that we sort of had a cohort here that really believed what we were doing. I think the other people in...on the Bureau staff were partly because they were all involved in their own specialized studies and didn't really pay much attention to what we were doing, except what they learned of it in a sort of incidental way, and then it wasn't a common, mainstream view, so...

Claudia: Well, one can see this in the sense that people at the Bureau are dealing with these real, tangible things — steel ingots and bushels of wheat.

Anna: Absolutely.

Claudia: And here suddenly, we move from...

Anna: Absolutely.

Claudia: ...this real economy, into this money, into...

Anna: That's right. Anomaly economy that didn't seem to them to be the stuff of business cycles, so...

Claudia: Little did they know.

Anna: I mean, I don't mean that there was an overt hostility, there was just disbelief, and... Well, it never mattered to Milton that...

Claudia: No.

Anna: ...they didn't accept his ideas, and it's because he's such a persuasive person that I'd think the profession, in time, said, "Yes, there is some validity to this approach."

Claudia: We're going to have to stop this soon, and then we'll take a little break and get back to the story, because we're now into the thick of the...your relationship to the Bureau and...

Anna: I haven't really answered the initial questions that you asked me, but...

Claudia: No, no, no, but that's the point, this is...those were the questions that were the naïve, general ones, that's how we began it. This is your story, and this is the exact story as I wanted to tell because you started at the beginning, and now we're

in the 1950s, and I'm going to stop this and then we're going to continue. How's that? Okay, I'm going to turn this off. We have three minutes to this thing, so I'm going to turn it off. So we're continuing with Anna Jacobson Schwartz, and Anna, just start up where we left off. Thanks.

Anna: All right. So I think Milton treated his graduate students as people who were his equal in trying to understand whatever issue they were dealing with in their dissertations. It wasn't the relationship of somebody who was talking down to others, and I think in that sense, he contributed something to each... I've known a number of his graduate students who earned Ph.Ds under him, that they each have a sense that their work was something that they did 'with' Milton, not 'under' Milton, and that he took as much pleasure in their success, as it obviously was in their interest to achieve it. So there is something very attractive about working with Milton;, it's the sense that he's not trying for self-aggrandization...

Claudia: right.

Anna: ...he's doing something in a cooperative way with the people who are essentially learning from him, but at the same time, able to share their views with him as if they were equals. And I think this is a very rare quality in people who are continuously nurturing younger people, but always in the position of the superior. He's not like that. So, even at the start, when he was at...really at the start of his own career, we function in a way that I think gave me respect at the same time that I certainly had enormous respect for him, because I felt I had learned so much from him. At every encounter, it didn't matter what we were talking about; he always illuminated a subject for me.

And as I've often said, sometimes when you say, "I don't understand this," and, "this is my question," Milton would reformulate his...your question in a way that made you understand what it was that you didn't understand, until he showed you what were the real problems in this particular area. So, as I say, I think I did have a unique relationship with him, but not unique in the sense that he didn't treat his own graduate students in any way different from the way he treated me, so... And the other thing I think that was special about my relationship with him was, if I said to him, "I don't think you've expressed this well, I don't think you've covered this, I think you've evaded this," he never got upset, he never got angry with me. He said, "Let me see if I can do it better."

And when he criticized something that I had done, it was in the same spirit. He wasn't trying to belittle me, he was trying to improve the product, and I appreciated that, and I wanted to do better if he showed me in what respects what I had turned in to him was not as good as it might be. So the working relationship, I think in many respects, was one that was enriching, both for me and for him.

Claudia: So you...the two of you, you worked at the Bureau, he, of course, was at Chicago almost all of the time, and you corresponded mainly...

Anna: Through the mail.

Claudia: ...you know, by mail. He would occasionally come to New York, maybe

summer.

Anna: There was one half-year, the half-year in which Columbia awarded me the Ph.D., when he was the visiting Wesley Clair Mitchell professor.

Claudia: But that was much later, of course.

Anna: That was...

Claudia: Much later, '65.

Anna: ...'64, '65.

Claudia: Right. And all the intervening years were these years in which you wrote this very important large volume, "A Monetary History of the United States." And so you begin this, you have much of the data that you and Angell had been working on, Milton then...and you then sort of map out exactly what data you're going to be collecting. And at what point did the two of you sit down and say, "This is how it's developing. These are the...chronologically the breaking points that we want to separate it into these chapters, and this is the narrative"? And the book has a grand narrative. And so what's amazing is that it starts out as, "All good economic history," and, "economics research must," with a collection of important, illuminating data, but it winds up as a great narrative. So how did that happen?

Anna: As I say, the fundamental series was the money stock series and the way we interpreted it, so that was the great data achievement at the start. And then in addition, of course, we needed price data, and income data, and velocity data, and these were available mainly from the work of others, except that we review what others had accomplished, and in some sense, we modify what others had done because we found various problems, not of the...

Claudia: [inaudible]

Anna: ...ones, but ones that we thought could be improved. And these auxiliary series supplemented the money stock series and became the bedrock on which we built the narrative. So, the narrative, up until we had access to the internal Federal Reserve documents for the 1920s and early 1930s, were drawn mainly from standard economic histories, which we didn't always interpret the way the standard histories did, but nevertheless, they were the sources that we use. It was only when we turn to the Federal Reserve period in the '20s that we were able to present an internal aspect of Federal Reserve decision-making that became the focal point for the emphasis on how wrong policies had been during the Great Depression.

Now that Allan Meltzer has written "A History of the Federal Reserve System," in large part repeating what we had done, except that the emphasis is strictly on the Federal Reserve, whereas our view was broader than that over the whole period, and he's had access to some internal material that was not available to us at the time, but I'm not sure how that volume will be regarded in...when it's finally published. It is in the production department at Princeton Press. If Allan really succeeds in covering the period from 1951 on, which is supposed to be the second

volume of his work, I think that may have a much greater impact than his first volume would. I think even though I don't always agree with what he's written, and he knows where I disagree, seems to me to be retreading ground that's already been plowed.

But that's an incidental comment. I think the initial reception by the profession of both the cyclical behavior of the money stock in *The Review of Economics and Statistics* ... and the publication of *A Monetary History* was just amazing to the profession in general, which had not heard such views expressed, and regarded them as revolutionary in a way that they were, and didn't win general acceptance until much later. So, there was the post-publication period in which the National Bureau really wasn't involved. We were involved as individual authors responding to the sort of critical assessment that people who were...who consider themselves monetary economists expressed... And of course, there was internal dissent...

Claudia: Yes, there was...

Anna: ...within the National Bureau...

Claudia: ...there is that dissenting...

Anna: ...where a director...

Claudia: A director, yeah.

Anna: ...according to the Bureau bylaws...

Claudia: That's right. Right.

Anna: ...had the right...

Claudia: To write a dissenting...

Anna: ...to say, "I don't agree."

Claudia: That's right, and...

Anna: And that was published along with the main volume. And a lot of people, of course, felt that the Bureau sent off its volume with less than 100 percent approval.

Claudia: Well, isn't it the case that income from independent professional practice also has a dissenting opinion? And that's, in many ways, we think back at the bureau as having enormously high standards, that it had this review process that could lead to a dissenting view.

Anna: Well it wasn't only the review process, it was the idea that anything that came out under the imprint of the National Bureau had to be something that was solid, that was not just, you know, an occasional thought of the authors, not backed up by solid data, and something that the National Bureau didn't want to be associated with it. So, there was this sense that publication had to be a kind of ultimate goal. The

intermediate steps were the ones that counted, and that was checking, rechecking, making sure that every sentence in any manuscript could be backed by support. And that was the way every manuscript was treated, that it was turned over to an internal committee after research assistance had been assigned to check every single sentence.

Claudia: Yeah, the...what we, in many places call the fact checkers.

Anna: That's right.

Claudia: You must have run them ragged.

Anna: Yes. It was the people who are our research assistants who did that kind of work, but in the larger sense the main conclusions of *A Monetary History* were not subjected to the internal kind of assessment. The one comment that Sol [Fabricant]...

Claudia: [inaudible]

Anna: ...[inaudible] made, was that we ought to substantiate what we said for the U.S. by a parallel study for the U.K. Which, in the end, turned out to be not a very fruitful way for us to have spent our time, but we did try to respond to this internal... criticism. But I don't recall anybody else on the staff reading committee that challenged us in the way that the profession did about why are you so certain that money plays this...

Claudia: Such an important role.

Anna: ...critical role?

Claudia: When you were a graduate student, you must have taken a course on money, monetary theory, money and banking, who...

Anna: Yes, and that was with Angell.

Claudia: And that was with Angell.

Anna: And Angell, in many ways, anticipated what we did, except he didn't accept at face value what his own result showed. I mean, he showed that changes in money were associated with changes in nominal income, but he didn't make anything of it. I mean, that teaches me something. If you do research, you really have to be convinced yourself that what you're finding is worth attention, and I think Angell lacked that kind of conviction. That something that his book shows wasn't something that he emphasized or tried to make something of, and it eventually was, you know, just sloughed over, not really paid attention to. Whereas, we thought that was a very significant finding, and that you could replicate it not only for the U.S., but for other countries. And that's in fact what some of Friedman's students did.

Claudia: Absolutely, right.

Anna: Yeah.

Claudia: This is sort of beside the point in terms of the issues having to do with the Bureau, but do you...can you think of sort of a moment when you sort of said to yourself, "You know, I'm a monetarist"? And was there a moment when you said, "Well, I had been working on business cycles, and I had been working on Britain." I know it wasn't then that you thought of yourself as an economic historian, you were an economist who, for good reason, used historic data, like Kuznets' historical economist notion. But truly, at some point working on *A Monetary History*, you must have thought of your...suddenly the word "monetarist" must have come across in your mind.

You and Milton must have thought and discussed the fact that you had a vision of the world. A vision that wasn't sort of 'a' vision, it wasn't theory — it was coming out from the data. It was sort of backed up by a framework, it was on a solid rock, but suddenly you had a very clear view of what had gone on in some critically important moments in American history. Is there any moment that you think of that suddenly you said, "Aha, monetarism"?

Anna: Well, I think when Karl Brunner started the Shadow Federal [Open] Market Committee, when we were clearly trying to convey a message about the importance of what the Federal Reserve was doing, that I'm sure that... And he was the one actually, I mean Karl Brunner, who coined the word monetarism, that that became a tag for what the people associated with him. I mean, Friedman was never associated with the Federal...

Claudia: No

Anna: ...the Shadow Open Market Committee, but he was intensely interested in...

Claudia: But there were all these Chicago people before Milton who...

Anna: But never with this vision. So, they were quantity theory people in a traditional sense, but not emphasizing the demand for money, the supply of money, velocity, money balances, and that kind of emphasis, but certainly they believed that, you know, if you had an inflation, you better check on what you're doing with the quantity of money. But it was not, as I say, the view that you can explain a lot by the behavior of money, but you cannot explain why real things are changing the way they have. So this distinction was certainly not part of the way the Chicago quantity theory people operated, and of course, even at Chicago...

Claudia: There was no link back to the real from the nominal...

Anna: That's right.

Claudia: ...in the simple Q theory model. Right.

Anna: Yes.

Claudia: It was...

Anna: And that's really...

Claudia: ...mechanical, right.

Anna: ...backbone of this monetary history.

Claudia: That's right. Right. And that's the, you know, what Milton put his stamp on, what you put your own stamp on, was that view, and that then becomes refined and altered with Bob Lucas.

Anna: Absolutely.

Claudia: And, you know, they are the same sort of view of the world with a different framework — a forward-looking framework, a different, backward-looking framework in some sense. It has to do with expectations, has to do with the sense of...and knowledge of...

Anna: And that kind of change in our framework is what emerged in monetary trends, and it's really such a disappointment to us that that book got a bad press from Henry and Erickson for one thing, one regression in that volume, ignoring all the other parts of the study that never sort of got any kind of attention. And of course, the irony is that what Henry was correcting, from his point of view, is inadequate econometrics, didn't in one sense change one iota of our finding. His finding was precisely ours, except that by his standards, it was based on the most up-to-date econometric technique, whereas ours was backward and not really, you know... But that's another... I mean, anybody who's ever published something knows you never know.

Claudia: But the point is that, you know, it's only with truly great work that there's controversy. The worst thing that can happen is to be ignored.

Anna: That's right.

Claudia: Let me throw in...a name out of someone who worked behind the scenes at the Bureau but worked obviously very hard on your book, on "A Monetary History," is Irving Forman. Did you know him?

Anna: Did I know...

Claudia: Irving Forman, the person...

Anna: Oh, of course.

Claudia: ...who did all the charts.

Anna: I worked with Irving on the charts for the British business cycles study.

Claudia: He did those too, of course.

Anna: He did those.

Claudia: I did throw his name out because in the history of the Bureau, he will...I hope that he receives at least a page, because he deserves a lot more, and he must have been an extraordinary draftsman.

Anna: That's right. And also a passion for accuracy. He didn't want you to hand him any data to chart that had not been checked, and rechecked, and I think that when there was this kind of integrity about his work, that makes him special. He really cared about how good the data were that he was...

Claudia: Was he a full-time Bureau employee?

Anna: He was a full-time, he had his own office with all his drafting material. I mean, he was a bit of an eccentric, but anybody can be that way.

Claudia: He was so clever. I look at many of the figures in *A Monetary History*, and I believe in...you know, in the Great Compression...in "The Great Contraction"... I'm laughing because I...in a piece that I wrote on income inequality in the '40s, when the income inequality compresses, I paraphrase "The Great Contraction," I call it the Great Compression, which of course is also the...coming from the language of the Great Depression, so it's taking the Great Depression and "The Great Contraction" together. And so, in your chapter on the Contraction, there are some figures that are multiples of many, many figures. You know, there are a couple of charts in which he's graphing, you know, six different series with six...pointing to different parts of the axes — first left, then right, and left and right — and they're just brilliant ways of displaying information.

Anna: Yes, and he had that knack, so he certainly deserves a lot of credit, and...

Claudia: So you would never suggest to him, "Well, you know, we have this chapter, and if you did each one of these as a graph, there would be, you know, 122 graphs in there." And so you never said to him, "It would be interesting to condense them in the following way," he just thought about it.

Anna: Yeah.

Claudia: But he must have known the direction that the chapter was taking, so he knew...

Anna: Yes, yeah.

Claudia: ...how to put them together.

Anna: Although I never really discussed what's the economics of what we're doing in this volume.

Claudia: But he must have...

Anna: It was always...

Claudia: ...known it.

Anna: ...in terms of, how can you best display what we want to show at each point, that it supports the text that's accompanying it? And he'd had a...he had a gift.

Claudia: He had an incredible knack for reading your mind, then, because there are some wonderful exhibits of series in that chapter, in many of the chapters.

Anna: Yeah. And he was really a workman of some...I would say some excellence.

Claudia: Right. So, just tell me, let me just go back just for a very, very short while because I want to go forward in time into the '50s and the '60s of the Bureau, but you talked before about the National Bureau approach to doing business cycle analysis. Can you say just a little bit more about that?

Anna: Do I think...

Claudia: Can you just say a little bit more about...

Anna: Yes.

Claudia: ...what you mean?

Anna: I mean the guiding principle of the Bureau's business cycle project was that if we could learn something about how each sector of the economy operated at cyclical turning points, we would be in a position, then, to formulate some kind of overall view of the American business cycle. And until we had these building blocks, as it were, we were not...would not be in a position to have this general view. So, the emphasis was always on what do we know about production? What do we know about construction? What do we know about inventories? And then somebody, a master builder, would be able to take all these separate pieces and put together the big picture of business cycles.

And the only common feature of all of these separate things was that Bureau technique of how do you measure business cycles? So you marked off peaks and drops, and you divided them, the intervals, according to some fixed number of phases, and you described each one in these terms. And the emphasis in each of these separate pieces was always on what's going on within these sectors, not relating sector to something else.

Claudia: And not, in addition, being concerned with growth as opposed to cycles.

Anna: Well, that was the big rift at the National Bureau in the 1940s, after the very negative reception that measuring business cycles received — that it was measurement without theory — and it was a blow, I think, that Arthur Burns never recovered from. I mean, he was certainly the surviving author of "Measuring Business Cycles" who had devoted his whole life, up until that point, to this one approach to business cycles. Well, it's ironic in a way that younger people so many years later have thought there was some virtue to what the National Bureau's

technique did, and don't think that measurement without theory has no justification. But of course, Burns never lived to enjoy that kind of rehabilitation, but... I mean, we had plenty of theory that nobody believed.

Claudia: Right. And then there was the other stuff. But there is this moment in...I think it's '47, [Simon] Kuznets writes a proposal to Ford, I guess, and it's on...not just on growth, it's comparative. And of course, you're working for the Bureau at the time but you're up at Columbia, so you...perhaps you are...

Anna: I know about...

Claudia: You know about this.

Anna: ...this only from hearsay.

Claudia: Okay. But at the time, or later?

Anna: I think at the time.

Claudia: Okay.

Anna: But this was Arthur Burns protecting his turf. And I think the sense that the Bureau's mission was unique, it was to study business cycles, and here was a proposal to change the direction of the National Bureau in a way that I think he regarded as a threat to his own dominance of the institution. And although the title of the British business cycles study was "Growth and Fluctuations," we got 'growth' into the title, although I don't know how much growth we actually discussed. But I think that Kuznets didn't get a fair hearing, and of course, he was not dependent on the National Bureau;, they weren't going to support this program of research that he wanted to pursue. He would find other sources.

Claudia: Did you have a sense then or later that Simon and Arthur had deeper personal and intellectual conflicts?

Anna: Yes, I think... I mean, there was every reason for Kuznets to feel that he might be the successor to Mitchell, but since Burns was the one who worked so closely with him during the '20s and '30s, that may have been, you know, just not a reasonable expectation, even though Mitchell certainly had a very high regard for Kuznets. I think also the fact that Milton's participation in the Kuznets study of income, professional income, that in the end sort of dismissed Kuznets' contribution as superficial, and Milton's as more significant, also harmed Kuznets' position as a possible leader of the Bureau. But certainly Milton, to this day, is very respectful of Kuznets, and says Kuznets treated him very well.

I mean, it must have been a difficult situation for Kuznets, who was certainly more established in the field than Milton was at the time that he really rewrote *Income from [Independent] Professional Practice* than the manuscript that was handed to him, but nevertheless supported Milton's version and didn't oppose it. So where personalities and professional judgment enters, I think it's hard for an outsider to say...

Claudia: Yeah. But you never had a...any knowledge of something deeper in the sense...and once again, it's hard to figure this out. I know that, for example, Milton and Arthur became...at least Milton sort of lost respect for Arthur in '71 with the wage and...

Anna: price control.

Claudia: ...price controls, and Milton wrote a letter to Arthur expressing his enormous disappointment to that. Very different type of differences I think emerge with Kuznets and Burns. Maybe you don't know anything about this, but I get the sense in...from reading, that Kuznets...perhaps the best way of putting it is that he didn't have that much respect for Burns' intellect.

Anna: Well at the beginning, of course, Burns seemed to be the dominant one, and Milton learning from Burns, but Milton's... I mean, Mitchell and Burns had liberal in...not in the 19th century sense, but in the modern sense of liberal. They were people who did not oppose welfare state, who thought that government was certainly an important player that you should attempt to include in any kind of reforms, whereas Milton was a hardliner in the sense that the private sector was the one that needed support, and government could not be relied on to produce favorable outcomes. So, this was Milton's stance even before he came to the National Bureau, and he was certainly identified with that view, and I think influenced Burns to move to the same kind of thought that Milton had, but never was a believer in the sense that Milton was.

And I think in a way, Milton deluded himself into believing that Arthur Burns shared his views on matters that Arthur was quite indifferent to and maybe oppose, but would never have a fight with Milton to say, "I don't agree with you, and you're off the edge." You know, that kind of thing.

Claudia: We didn't say anything about Mitchell. Of course, Mitchell — you didn't see much of Mitchell — but Mitchell becomes, I think, ill around '46 or so...

Anna: Yes.

Claudia: ...is that right? He dies in '48...

Anna: Yes.

Claudia: ...I believe. The offices in New York, he must have been a most beloved individual, he was...

Anna: Yes.

Claudia: ...a person of the warmest humanity.

Anna: He was the most gentlemanly person you could hope to meet. I mean, the sense that he treated everybody with dignity and kindness — some things that you would never associate with Burns. And it's hard to understand how somebody with

Burns's personality would have been appreciated by Mitchell, and would succeed him with such a different way of approaching people and issues. But there it is.

Claudia: I only knew Burns very late in his life, when either that edge was somewhat dulled, or I saw him in a particularly good day. But I've heard from many people that he was gruff, discourteous — everything Mitchell was not.

Anna: That's right. There was a session at a Western Economic meeting...Western Economic Association meeting, at which Frank Morris, who had retired as president of the Boston Fed, talked about Burns's relation with the members of the Federal Market Committee when he, Frank Morris, was a member. He said the members of the committee hated Burns, but oddly, whenever there was some social gathering with the wives of the presidents, they loved Burns, they admired him. And the men looked at their wives with utter...couldn't understand. This guy was not somebody that... Well, he treated them all as, you know, what do they know about economics? What do they know about how the Federal Reserve should operate?

He, Arthur, was the one who had the intellect and the experience to determine questions of this kind, and these, you know... I mean he was open about it, it isn't as if he tried to conceal his contempt for these people, who were his colleagues. He showed it, and they resented it, and it didn't matter to Burns. So this tells you something about him, and that... I mean he could certainly act, you know, in this grand way with women, but maybe...

Claudia: Maybe that's what I was won over by. It hadn't occurred to me. And I don't feel that Burns's career, after he left the Bureau, really enhanced his reputation. I mean, even apart from what he did as chairman of the Fed, I think the chairmanship of the council in which his big...the big position that he took opposition to Keynesian, monetary, and consumption economics, in a sense this was something that was an outgrowth of his closeness with Milton at that time. So that I don't think this was really something that emerged from Burns, I think it was something that he learned from Milton and expressed, then, in his own way. But nothing that he did after the...leaving the Bureau, I think, has made a mark.

Claudia: He leaves the Bureau, then he comes back, and then he...

Anna: And then he has another debacle...

Claudia: ...and then he has...

Anna: ...when he comes back.

Claudia: ...another debacle when he comes back, right.

Anna: With the Ford Foundation...

Claudia: With Ford.

Anna: ...that decided they didn't want to support the Bureau the way it was organized at the time, and [inaudible]...

Claudia: What did you feel about that when you heard... We're not going to leave the '50s, we're just going to be on this tangent for a while, but it's a very important tangent. So Burns comes back to the Bureau after he's chairman of the CEA, Moore is now director of research, Burns is president, so we have now two people in this...these higher-up positions rather than just one, and it takes a pretty long time. I think it's in '67 or '66, so that's a little more than 10 years. He comes back, 10 years later, the Ford Foundation, which had been giving amply to the Bureau, comes and says, "This is too Columbia-oriented. This is a closed society, a closed group." What were they really saying? And how did you, as a researcher here, hear it and respond to it?

Anna: Well, the Ford criticism was just. You would be selected by Burns, possibly Moore — although I think Moore was more of a cipher than an equal in the decision-making process. So if Burns thought you could do something for the Bureau in some research or...he would invite you, and that was it. It was only people with whom he had contact. It wasn't as if he was searching for the best economist located anywhere to participate in whatever projects he thought were worth supporting or finding funds for, and I think Burns had returned to the Bureau thinking... I mean, here he was with a national reputation, and whatever he would seek to fund would be...find a welcome response from whatever foundation or corporate president whom he approached, and I think he was unprepared for the sharp rebuff that he had at the Ford Foundation.

I mean I don't think that it was the quality of research that was being conducted at the Bureau that was responsible for the way the Ford Foundation responded. I think it is...was in a sense that it's too parochial of an organization to be calling itself a national research thing, and that was the beginning of the change in the direction of the National Bureau. So I think the succession of John Meyer turned out to be a mistake, but that was the beginning of the broadening of the research program at the Bureau to a much wider group of economists, and had it been true before, even though... You know, when somebody at Chicago became a research associate and might have spent a year or some months here, and then gone back to teaching far from New York, it was still a New York-centered organization. And the change really came with Meyers [inaudible], and of course, much expanded after Martin [Feldstein] took over.

Claudia: Right. But, you know, in looking over the people who are researchers at the Bureau under Burns, some whom may have started under Mitchell but I know that they were...finished their work under Burns, they look...it looks as if they're from all over, but in many cases the lineage does go back to Columbia. In [George] Stigler's case, that's one case in point.

Anna: And say, [inaudible], who moves on to Michigan and so on, that they have some physical link with having worked at the Bureau, but then moved on. In a sense, the Bureau provided employment to economists at a time when it was hard to get a university job, and it was only after the war. I mean, a man like Moses Abramovitz never had a teaching position until after the war, and the Bureau was a haven for people like that. Even though he was a Columbia man, and therefore would have been typically associated with the Bureau, but it was the absence of

opportunities at universities until after the war that explains the fact that the Bureau could satisfy its research personnel with local people.

Claudia: I mean, and extraordinary local people, at that. Let's go back to *A Monetary History*, if that's okay, and then we'll do this for a little while and then my tape will go, and if you want to, we may have another half hour. Is that okay?

Anna: Yeah.

Claudia: Are you getting bored? No.

Anna: Well, I have things to do, but I was away for four days...

Claudia: Yeah. I know.

Anna: ...last week, so I'll have to wait another day to do it.

Claudia: Yeah, well, if we don't finish it now, we can finish this another time, but it would be good if we just did another half hour or so. We have 10...about 8 more minutes left on this tape, and then we'll go. But let's go back to *A Monetary History*, and then go forward a little bit. I always enjoy reading *A Monetary History*. As I said, the narrative is a great narrative, and the... Now, you and Milton were working separate from each other, but when you were working on the narrative, would you write 50 pages, send it to Milton, he would cross things out...

Anna: Absolutely.

Claudia: ...scribble in, send it back, you'd get it typed somewhere or you'd type it yourself? I don't know who was doing the typing...

Anna: In those days...

Claudia: ...of these things.

Anna: ...we had typists.

Claudia: You had typists. Good, because that was a lot of typing. And did you have it in your mind that you were actually writing brilliant English? This was readable.

Anna: No, I mean, never occurred. We were trying to get this thing done, and it was not written once, it was rewritten and rewritten, and...

Claudia: The last sentence of "The Great Contraction" -- you know that sentence very, very well, it has about three nots in it. It's the most...one of the great sentences, I think, of economic literature, I read it out loud to my undergraduate and my graduate students every year and tell them, "Sometimes you can have a triple negative for effect." I just want to tell you that I very, very much like that sentence, and many of the others in that book. So you and Milton work, and work, and work, and of course the two of you...

Anna: And eventually we turn in the manuscript.

Claudia: Well, eventually -- '61, '62?

Anna: That's the rewritten manuscript.

Claudia: That's the rewritten manuscript, okay.

Anna: Yeah.

Claudia: So the first version of it is turned in when?

Anna: It goes through the staff reading committee and the director's reading committee, and it was... Oh man, it [was the] president of the New York Fed who said, "Why don't you use the Harrison papers at Columbia?" And it was the first we'd heard about them. And then I went up to Columbia and selected the pages of these records of the New York Fed that we had copied and I brought them back to the Bureau, and we made copies of them here and sent them to Milton, and then we started working again on the chapters where these Federal Reserve documents could be introduced. So, it certainly changed the tone of the manuscript, and I think added a lot of, let's say human interest to what we were writing. But eventually we completed it, and then turned into what was the final version— and that was it.

Claudia: The addition was just the Harrison papers, or there was more?

Anna: The revision was basically incorporating the Harrison papers. I mean, we rewrote a lot and...because you always can see something could be expressed better after it's been out of your hands for a while. And we did a lot of rewriting in that sense, but not in the formal sense of having new support for the view that we were trying to present based on the Harrison papers.

Claudia: Right. So, once again, we're almost done with this tape, and then we could take a little break and then we'll just do a little bit more. So we're now around...up to the time that you get your degree — you're still at the Bureau, of course, and you're still at the Bureau now — and so I think that when we pick this up, you know, you can just sort of discuss that...about what then happens at the Bureau from the '60s to the '70s. And so we're going...going to go through the tumultuous period of the end of Arthur Burns, the beginning of John Meyer, and it was a bit of a tumultuous period. I know John, not from the Bureau, I know him from when I taught at Harvard in 1976, and met him as the John Meyer from Conrad and Meyer. And John Meyer is an extraordinary individual — there is the good and the bad — and on the good side is that he has done so many different things.

It's as if John Meyer was...is five different people. And maybe that's the downfall of anyone, is to attempt to be five different people. So let's take a little bit of a break, okay? ...this is tape three of a November 19, 2001 discussion with Anna Jacobson Schwartz about life at the Bureau, then and now. Okay, so we're sort of somewhere in the 1960s — and you can go back in time, forward in time -- but I was thinking that you can comment on the... You've said a bit about the way research was done, I know that that's always difficult to comment on, about the shops. I know Bob has

told me about the business cycle shop. Did you see the business cycles when you...

Anna: Sure...

Claudia: ...would come here? Yeah.

Anna: ...I mean, during the time when I was working on the British study, I was often in the business cycle's shop, where there was a crew busy, working on individual time series, and this was a period when there was... The codification of the way to do National Bureau-style business cycle analysis hadn't yet been firmed, so that they would do things one way and show them to whoever was in charge of that series, and there would be some discussion, "Well, maybe we shouldn't do it just that way, maybe we should modify the procedure." And eventually it got settled — this was the rule, always observe it. And each of the people in that unit would be busy every day of the week, doing an analysis of the series. And this was way before there was a computer and the...

Claudia: Right. Has someone written down anywhere what this codification was?

Anna: Yes, I mean there is a mimeograph version of how to do each step in the way of getting the final result.

Claudia: Do you know where that mimeograph...You're saying that you've seen one at some point, and...

Anna: I may even have one, so there is such a... It's what you would call "the rules of the game, and this is the way it's played, and...

Claudia: Well if you happen to find it, have someone...

Anna: Let me pass it on to you.

Claudia: Right. Well we can Xerox it, so you can keep the original.

Anna: Sure. Yeah, I'm pretty sure I've got it. Anyhow, there must be a copy here.

Claudia: Right. Well, now that I'm trying to put this archive together, there are many, many different things that I think that we'll want in it. So are there any other statements about how research was done?

Anna: In those days?

Claudia: Right.

Anna: Well, in those days...

Claudia: Sort of in the '50s.

Anna: ...as I think I've already indicated before, the first emphasis was on accuracy. One person might have been assigned to collect the data for some specific series.

That person would have been sent back to check what had been copied, another person might have been assigned to do the same job — to come back with the results to be compared with what the first person... And as I say, there was this intense concentration, making sure that every number you copied was what had been shown in the document that was its source. Then there was the next step, which was the analysis of the series, which might have been done only by the people in the business cycles unit, separate from the people who were doing the collection. And then there was the final stage, when somebody had written a manuscript, and somebody was assigned to check each statement in the manuscript, which was typed and sent to a reading committee and to a director's committee.

Claudia: And the research assistants, like Bob and like yourself, were drawn from Columbia graduate students.

Anna: That's right.

Claudia: Right.

Anna: I don't think of anybody who wasn't. I mean, there were some who were not graduate students.

Claudia: Some who were not, yes, yes.

Anna: A lot of the people who worked on the money project were not graduate students. The only one who was a graduate student — in fact, got his Ph.D. while he was here

Claudia: Who was that?

Anna: ...was Mark Whaley, who was...

Claudia: I don't know him.

Anna: ...psychologically not really a normal person, I would say, but certainly a very intelligent guy in other respects.

Claudia: And the people who weren't graduate students, what were they? They were statisticians?

Anna: They were people who were used to copy stuff...

Claudia: I see.

Anna: ...to prepare tables for you, to do all kinds of...

Claudia: Were they people who had been undergraduates at Columbia and Barnard?

Anna: Not necessarily.

Claudia: No.

Anna: Might have been recommended by somebody who knows somebody. It was a job, the Bureau had an opening...

Claudia: Wasn't Edith Kuznets...

Anna: Chris. Chris worked as a research assistant...

Claudia: Chris.

Anna: ...when she was originally hired.

Claudia: But I think that long before you came to the Bureau — somewhat before — wasn't Edith Kuznets Harry Jerome's research assistant?

Anna: Absolutely.

Claudia: And that's how she met...

Anna: Simon.

Claudia: ...Simon.

Anna: Yes, agree.

Claudia: And I always say that that was the first moment that we know of — maybe there was an earlier one — that the National Bureau was the National Bureau of Economic Romance. Which it has continued to be.

Anna: I mean, I know other couples, one of whom was a National Bureau person but not the other one, but...

Claudia: No, I can give you a list of them, but not now. So...the research process is always...

Anna: Was very time-consuming and...

Claudia: Very time-consuming, right.

Anna: ...involved, I would say, lots of people.

Claudia: That's right. I like to think of it in the mind's eye, I think of it as sort of a little factory that's called The Shop, and I sort of think of it that way. A lot of the work that you did was solitary. You would direct research assistants, right?

Anna: Yes. And they are quite a group.

Claudia: Oh okay, yeah. These research assistants would go to Columbia, get

information, bring it back, right?

Anna: That's right, yeah.

Claudia: And Milton didn't have his own research assistants at Chicago, everybody was here under...

Anna: Everybody was here...

Claudia: ...your eye.

Anna: ...yes. Nothing was done in Chicago by others. Whatever statistical work we did was here, he didn't initiate it in Chicago or have somebody working on it there.

Claudia: Now, by the '50s, there was a mainframe, someone had a...

Anna: Nothing that was used by us [inaudible]. By the time we did the monetary trends, of course.

Claudia: Then there was...

Anna: Yeah.

Claudia: ...right? So there were Monroe calculators? What do you...

Anna: That's right.

Claudia: ...remember? Monroe calculators?

Anna: That's right. Yeah.

Claudia: These research assistants would just crackerjack...

Anna: Sit there and crank...

Claudia: ...[inaudible].

Anna: ...it out.

Claudia: Yeah, that's right. My own graduate students find it hard to believe that I remember when we didn't have an easy, portable way of computing natural logs...

Anna: That's right.

Claudia: ... you know. That, well, you know, when I was a graduate...

Anna: You know, we have to look at the...

Claudia: ...you look at the long table. But I mean, I could write a program and go to the computing center but, you know, you don't want to go to the computing center to

compute a natural log. And I remembered that Bob Fogel, who was my advisor at the time, rented for me — because I was working on a project for him and a project for myself — and so he rented a calculator that was gigantic, and must of had a bit of a memory, and it computed logs and it had, you know, exponential...and that was my way out of the log table. I would also just use my high school slide rule, which I was certain I could read to, you know, five significant digits.

Anna: That's what Forman probably didn't [inaudible].

Claudia: Oh, I see, he was one of those.

Anna: Yeah.

Claudia: Okay, so enter the '60s. You're working here, Burns is...

Anna: Okay, Monetary History is out...

Claudia: Is out.

Anna: ...we're still thinking we're going to produce this volume on the cyclical behavior of money. Instead, we publish this volume on monetary statistics of the United States that came out in 1972, and we're still thinking that we're going to do the cyclical history of money, and instead of which, we go ahead and do monetary trends, and we never do the cyclical history of money. The only thing in that direction is the 1962 thing that we did.

Claudia: But by then isn't...

Anna: By then...

Claudia: ...that cyclical history is...

Anna: ...nobody's really using...

Claudia: ... an anachronism, it's...

Anna: ...National Bureau technique, and that's probably... I mean, I've never discussed this...with Milton — how come we never did it? But I think it's because the National Bureau technique had sort of been abandoned, so...

Claudia: But you sort of abandoned it yourself in many ways.

Anna: Yes.

Claudia: Yes.

Anna: Because we didn't do anything further with it. And by the time we're doing trends, of course, we're doing it with the help of computers, originally with cards.

Claudia: Right. Those wonderful cards, right.

Anna: So, we've been through the technological revolution in research, starting with hand calculation, you know, electric computers, and then...

Claudia: I think Bob was the one who told me, I can't remember, that, you know, these tables would be checked, and of course, I still check my tables the same way. That you go across, and you go down, and you make certain that the marginals add up. But these were not tiny tables, these were gigantic tables that would sit on this table, and more. So, what happens when John Meyer comes in, and the...

Anna: A lot of the computer work is done at Yale.

Claudia: So John is at Yale at the time? I guess Meyer...

Anna: Yeah.

Claudia: ...is at Yale.

Anna: Meyer is at Yale. And I've forgotten, who's the name...what's the name of the guy who was the computer intermediary from Yale, who would come to the Bureau and would bring back to Yale these decks of cards that we prepared to be inserted in the...

Claudia: I see.

Anna: And Bob would probably remember.

Claudia: Yeah. And then he'd have to come back with the output, I hope.

Anna: That's right.

Claudia: And now, that must have been terrible when you would come back with the output and it would say, "Job aborted," or something, "program error."

Anna: That's right. And...

Claudia: And you'd have to send him back again.

Anna: ...doesn't matter, you'll have to do it again. And that was an interlude, really, because John Meyer didn't last all that long, and...

Claudia: But he lasted from, maybe I've got this wrong, but from '68, right?

Anna: Yeah, to '77.

Claudia: To '76, '77. That's a long time. That's, you know, eight years, nine years, it's pretty long.

Anna: We used to have annual conferences that he organized once at Montauk. I mean, nothing like this had happened in the previous administration, that there

would be this big blowout, where we would go to some fancy resort and have a conference. That was new for the National Bureau. Meyer introduced it.

Claudia: Well in some sense, in his defense, that meant that he could take the boat from Connecticut, that ferry, down to Orient Point and go to Montauk. Maybe he was equalizing transport for everyone. Of course, people in New York would have had to go all the way out to Montauk.

Anna: That's right, yeah. And all I remember actually about his time here is how easily it was for him to get angry. Just a very short fuse, and he'd blow up. But the Bureau, in that sense, wasn't much changed...

Claudia: From Burns.

Anna: ...while he was here because the organization was pretty much the way it had been, we had the publications department, the... The way research was conducted was not very much different.

Claudia: And why do you think the board chose Meyer? I guess this is the one part of the Bureau that I'm a little rusty about. Where did Meyer appear from?

Anna: I don't know. Who was the person on the board of directors...

Claudia: On the board, right.

Anna: ...who thought he would be the right person to succeed Moore?

Claudia: He was succeeding Moore or Burns? In '67, '68 he was still succeeding Burns. Burns was not yet Fed chairman, right?

Anna: No, Burns went to Washington in '69 when it was not...or maybe it was '68. When was the election? Probably November '68...

Claudia: Right, '68, right.

Anna: ...and then he was part of the Nixon administration. I think he wasn't appointed to the Fed probably until late '69.

Claudia: Right.

Anna: Yeah, something like that.

Claudia: But my recollection of the timing is that things weren't going well at the Bureau. Meyer was going to be appointed or was appointed, and Burns, very luckily for him, Nixon wins, and he goes out in style. So it would appear to anyone looking at the history, without scratching beneath the surface, that Burns left, and then Meyer came in, without knowing that Meyer was going to come in even... So Meyers coming in as president, Moore remains as director....

Anna: Director of research.

Claudia: ...of research.

Anna: Yes.

Claudia: Is that right?

Anna: Yeah.

Claudia: Yeah. And so in that sense, things aren't going to change 100 percent because Moore is still...

Anna: It's the continuity.

Claudia: ...physically here in New York as the continuity, the continuity in...and in an intellectual sense as well. Moore is a pretty...he's technique, he's sort of technical, he's not an idea person.

Anna: That's right.

Claudia: Mitchell, of course, was a big picture idea person. Burns may be...

Anna: Not really.

Claudia: ...neither. Neither, yeah, he was... So you don't remember any discussion about, where did this guy John Meyer come from?

Anna: I don't remember if I ever knew, but it's not something I can think of now. Claudia: Right, right. But maybe it didn't matter so much because after all, Moore was still here, so it may not have been something that one thought much about. But then once he was here, what did you know about what he did? He was an urban transport person, he did...

Anna: Well I know he broadened the range of research projects and he brought in a housing program, which hadn't existed. There was also a study of the steel industry, I think. How come American entrepreneurs weren't as innovative in steel as counterparts in other countries? That was a new thing.

Claudia: Right. Well, though, steel wasn't new, but that part was, yeah.

Anna: Well, whether Alf Conrad was on that program...

Claudia: I don't know.

Anna: ...I don't know.

Claudia: I don't know. Alf Conrad dies somewhere around then, I believe.

Anna: Yeah, he wasn't here very long before that — he committed suicide — but I think he was on that program about innovation in the steel industry. What other new

research projects?

Claudia: What about people? Who did you...

Anna: Well it was some turnover then...

Claudia: ...talk to, and who were your friends?

Anna: ...from people who have...with university appointments, and [Richard] Ruggles, I think, came in at that point.

Claudia: And he would have been at Yale, but maybe he would show up at New York

Anna: Yes...

Claudia: ...every now and then.

Anna: ...that's right.

Claudia: And your own personal, intellectual contacts, social contacts here at the Bureau, were about the same.

Anna: Same, that's right.

Claudia: And who were they mainly over the years? And here, we're situating this somewhere from the late '50s into the whole of the '60s.

Anna: Well, I mean someone I've known all through the years is Bauman ??[SP].

Claudia: Is Bob, of course.

Anna: But...

Claudia: Bob's the great constant.

Anna: ...I can't say that we were really social. I mean, I didn't have dates...my husband and I didn't have dates with Bob and Sally, but we certainly knew one another, and my social activities tended to be confined to my family, and to opera, you know, concerts.

Claudia: But what about the intellectual life of the Bureau? To whom would you go if you had...if you wanted to talk through an issue?

Anna: Somehow the...there was segregated projects, so you associated with people on your project team, and you wouldn't say to somebody working in another area, "I have a problem in my area. How do you think I should approach it?" For one thing, if I have a problem, I would talk to Milton about it. There wasn't anybody at the Bureau who I would feel would give me better advice than he. So in that sense, I think projects didn't intermingle, they pretty much stayed separate from each other, and

certainly I never felt that there was a group at the National Bureau who was as interested in money as I was. And well, I didn't have to look to people at the Bureau to discuss these things, I mainly could talk to people like Phil Cagan...

Claudia: Because I was going to say...

Anna: ...who was at Columbia and could...

Claudia: ...Phil Cagan, of course, was at Columbia, right. Right.

Anna: So, whether my experience is unique in that regard, I still think that that's the way it went. That people in your area were the ones you were intimate with. You knew all the other people working on other projects, but you'd never really expect them to devote themselves to what you might think is a problem at the moment.

Claudia: Well, I think in some ways then, the new National Bureau, for all of its... And we can say a couple of words about this, and then we can...

Anna: Wind up.

Claudia: ...wind up. For all of the potential practical problems that the Bureau has today in terms... And you sort of intimated this before, that that research, you know, I have an idea, let me write, you know, a 50-page paper on it and we'll follow through later, maybe. For all of those potential problems, the wonderful thing about the Bureau is the vibrant, intellectual atmosphere. That if any one of us has a problem, be it empirical, be it historical...

Anna: Data.

Claudia: ...be it theory, whatever. A program, you know, computer program.

Anna: You could find someone in the Bureau who'd be able to help.

Claudia: Who would, you know, really want to help. And I think of that as a real plus of the Bureau.

Anna: But for me, the chief benefit of working at the Bureau is that you can follow your independent path.

Claudia: That's right.

Anna: ...and if you want to write something up or look into something as a possible way to develop something, you have the absolute opportunity.

Claudia: Right. So let's wrap up at this moment because...

Anna: You know, for many years I've wanted to do this study of earned [inaudible] market intervention, and Marty certainly supported it from the beginning. When I got this set of data from Ted Truman at...he was then at the Fed, and we've had many problems since getting the Federal Reserve Bank of New York to make available the

data on intervention for both the Fed and the Exchange Stabilization Fund, the Treasury. And I finally think we're going to succeed in getting the data. The Fed, the New York Fed provided me with a lot of data from 1961 to 1991, but not complete. And they did it very grudgingly. They did it because Alan Greenspan had expressed an interest in having this research done, but they didn't want to assign people to go to the Archives, to dig this out. If they dug something out and it wasn't complete, that was fine with them.

And we finally got Owen Humpage at the Cleveland Fed, who had been working in this area, and to whom the Fed, the New York Fed, agreed to supply the missing information that was in the collection they sent me. Maybe finally we're going to have the opportunity to do this study. And as I say, the fact that the National Bureau has permitted me to go ahead all these years and just waiting for this chance to have the basic information, for me is a boon that I can't possibly exaggerate. It's wonderful. So I'm looking forward to doing this research, assuming I'm still going to be able to work ahead. But anyhow...

Claudia: Okay, well let me thank...

Anna: ...that's the way I'm wrapping this up.

Claudia: Okay, Anna, thank you so much. And I'm going to turn this off.