

**Interview with Milton Friedman**  
**By Claudia Goldin, Dept. of Economics, Harvard University and the NBER**  
**and Lawrence F. Katz, Dept. of Economics, Harvard University and the NBER**  
**San Francisco, California**  
**August 16, 2002**

---

---

Claudia: ...the home of Rose and Milton Friedman here in San Francisco. And it is August 16th [2002], Friday in the morning. Do I have that right, Milton?

Milton: You're right.

Claudia: Okay. And Milton is going to begin by telling us about how he got to the Bureau and how he got to the Bureau from going to Columbia. And so why don't you begin wherever in the '30s you want to begin.

Milton: No, I really got to the Bureau, I'm sure, by virtue of the undergraduate...my undergraduate in Rutgers, because Arthur Burns was one of my teachers at Rutgers. And so it was through Arthur Burns that my connection with the Bureau developed. And then I went to Columbia, but that really had...actually, the only thing that happened at Columbia was that, of course, I took a course from Wesley Mitchell. And so I got to know Wesley Mitchell and Wesley Mitchell got to know me a little. But beyond that, the... but then I went to Washington. And I worked in Washington on the New Deal for...at the National Resources Committee.

And about this time, Simon Kuznets had gotten involved with...had been involved in estimating the national income. And as part of his work on national income, he had collected a bunch of data, a bunch of questionnaires from independent professionals as part of his work of getting the data for national income. But he thought those data required an additional analysis. He started on that analysis but he got tied up and he got too busy and he wanted to hire somebody to help him. And I think Arthur Burns suggest me to him. And that's how... and so Simon, I don't remember the details anymore, but he offered me a job as an assistant to him at the Bureau. And so that's how I got to the Bureau.

Claudia: You mentioned something in *Two Lucky People* about the conference on Research in Income and Wealth.

Milton: Yeah. That was one of my assignments at the time. The main purpose for which Simon hired me was to work on professional incomes. And we did complete ultimately the book on *Income from Independent Professional [Practice]*. Now, as you know, that book was a source of a great deal of controversy. But going back to what you were saying, a secondary duty was that at the time, Simon was organizing a conference on research and wealth and income, which was bringing together the various people who were getting involved in this very rapidly growing field of estimates of wealth and national income. And so I served as secretary or something of the... my main function was to edit the proceedings of the success of meetings.

Claudia: Right, but your role on it began when you were on the NRC [National Resources Committee].

Milton: Yes, I was on the National Resource... well, my role on it, in that sense, if I remember rightly, I attended one meeting. I attending a meeting as a representative from the NRC because the NRC also was producing material that was relevant to the national income estimate.

Claudia: Was that the first time you met Simon?

Milton: I believe so. I don't guarantee that, but I think it was the first time I met him.

Claudia: Okay, and then Arthur comes to you and suggests that you work for Simon?

Milton: Well, Arthur I think suggested to Simon, and Simon got in touch with me and offered me the job.

Claudia: Right. And then that was September of '37 when you went to the Bureau to work with Simon? Something like that.

Milton: You're better [at] that than I am, because the date is in that book and I'm sure that's about right.

Claudia: Right. And...

Milton: And then as I say, one of the... we started analyzing the data that he had gotten from the professional incomes. In the course of a year or so, I wrote a bulletin about it. And ultimately I used this as my dissertation, my Ph.D. dissertation. Now, so far as the conference on income and wealth was concerned, I think it played a very important role at that time, and has ever since, in the business of the various estimates of national income. I was involved with it for the first...I think I edited the first three volumes of the... and they say later on that they're the ones that came out in the same year in which the conference was held.

Larry: That certainly would be rea-... sounds reasonable. They take a lot longer now.

Milton: And that was an education for me, I must say, because it exposed me to a range of issues and problems that I would not otherwise had any connections. But it was not a field that appealed to me particularly, as anything of any interest for my own work.

Claudia: And then in between doing that, of course, your main job was working on this data with Simon...

Milton: Yeah, it was a full-time job. These were...this was a very large collection of data, and there were a lot of data, and there were many interesting problems, both statistical and economic. And it was a field in which very little had ever...had been done. Essentially, the whole problem was one of human capital, I didn't realize.

Simon had written a kind of a draft, an initial draft, before I got on it, which consisted mostly simply of [inaudible], as I remember it, and very little analysis mostly. It was a statistical summary of the relevant material.

Claudia: And he...and that was mainly to fit it into national income accounting to fill in for this big hole in *Income from Independent Professional Practice*.

Milton: And that's why the data was collected for that reason. That is, you had figures for almost everything else but there was no real source of figures for independent professionals. And so as part of his project at the Department of Commerce, Simon had arranged for a survey, to collect a sample survey of the independent professionals. And he had used it to make the estimate and what was involved in... and that was what essentially I started with, if I remember rightly.

Larry: So how did...do you remember how it transformed from measuring the incomes of independent professional practitioners to fill a national income account, to a sort of modern human capital analysis of, you know, are these equalizing differences, why professionals earn more than other workers as opposed to sort of rents and the role of the AMA [American Medical Association], which clearly is what he's remembered for now?

Milton: Yeah, well I think... I had... remember, my background was largely economic theory. It was statistics as well, but the main reason I had really gotten involved in statistics was because that's where jobs were. But my basic interest was in economic theory. And I had stayed at Chicago before I had gone to Columbia and before I had gone to the National Resources Committee and before I had gone to the Bureau.

And so it seems to me it was very natural, as a student of [Alfred] Marshall, as someone who was interested in theoretical issues, to raise the human capital question. That was a question that was obvious. And I have no idea, I have no recollection of anything other than that kind of a...because I don't believe... you know, I think it just came out of the prior interest in theory. But it was a very... it did... I realized at the time that it was...both Simon and I realized at the time that it was not exactly a widely used approach at the time.

Claudia: And because Simon's interest, it was clear that Simon had an interest in distribution. And this fit in so...

Milton: Yeah. The other thing... and that's... see, one of the other things I was involved in the Bureau is a study in Delaware, state of Delaware.

Larry: This is using the tax records from Delaware [inaudible] distribution.

Milton: Yeah. Excuse me. Pierre du Pont was tax commissioner for the state of Delaware. And he had money of his own that he was willing to spend over and above what the state provided. And he decided that the only way he could get a satisfactory income tax was by requiring everyone to file, whether they were subject to tax or not. And he paid the extra cost of that out of his own pocket, as I remember it.

So that was a body of data which had no counterpart in the rest of the country. And I've forgotten who was down there. There was some... somehow there was a group in Delaware, I used to go down about once a month or something. That was very important because it was during the war, and I was able to bring back...or it was before the war or just before the war. And I was able to bring back for Rose nylon stockings, which were available only in Delaware.

Larry: Mrs. Du Pont, out there?

Milton: Yeah. They were very precious at that time. Though today, she would tell you, they were very thick compared to the stockings you get today. And yeah, Simon was very much interested in the subject of income distribution, and the Delaware project was one project directed at that. And there was also a project in Wisconsin, using the Wisconsin tax returns. And again, that was part of an attempt to get data on the distribution of income.

Claudia: Right. Do we have any other questions on Simon?

Larry: I guess, you know, their issue was...clearly there was controversy developed in this book over the conclusions concerning physicians, medical practitioners versus dentists. And, you know, I understand there were many years it took for the publication to come out because of [inaudible].

Milton: Oh, yes, it was delayed about...what? I think it was completed...let me see if I've got this right. I think it was completed, the book was essentially completed I think by 1940, early '40.

Larry: And it comes out in '45, I think.

Milton: And that delay was entirely due to this problem. No, I no longer remember exactly the same, but it's described in detail in our book. So I don't really think that...

Claudia: Right. That's fine.

Milton: And, you know, so I don't want to let this go without expressing my admiration for Simon. He was a... you know, it would have been very easy for him to have taken the position that "Well, we don't want any trouble with this. Let's get rid of this junk." But he didn't. And he was completely supportive. You see, I was responsible for this junk, of course. But Simon's position was always one of being supportive and going as far as he possibly could to make sure that we weren't prevented from saying what we felt was right. And Mitchell also was very supportive.  
Claudia: Right. Let's just...

Milton: I think it's a very unusual episode in a way because under those circumstances, you know, I was very naïve at the time. But after long experience since then, the temptation is always to compromise, to give in.

Claudia: Right. I mean, it's a wide group of directors. In part, this policy is a good policy in saying that books would be reviewed by everybody and anybody has the

right to dissent. But because the people on the board are representing different groups, they're advocates. Then it's not all scholarly and then there could be a problem, as in this case.

Milton: Yes, in this case. Well, you've been going over this. I'm curious, have there been any many more cases of that kind?

Larry: I think given the *Monetary History* and...

Claudia: But the [inaudible] *Monetary History* had an odd one. And I re-read that dissent, and it's almost a real chuckle because the person has great admiration and respect for what you and Anna and wrote. And somehow he wanted to dissent and it was clear exactly what the dissent was. I don't remember any other...there's some other dissent.

Larry: Yeah, but certainly not in the past 20 something years. While there still are board members representing different constituencies, they aren't very active in reviewing. Technically, it's still any Bureau book has to be approved by the board of directors, but I have no memory of anything being held up at that level in many years.

Milton: When and why?

Larry: Yeah, it's an interesting...

Milton: I mean, why should there be a difference?

Larry: You would think the AFL-CIO has a representative, you know, they would have an interest in potentially things that, you know, come out on trade positions, for example, very different than they...I don't fully understand.

Claudia: I think it's possibly the professionalization of the field that then separated it from people who were represent...who are advocates in representing various groups.

Milton: But the members of the board are still advocates.

Claudia: That's right. But I think that they give in, in some sense, to the scholars and the academics and the professionals, and they'll distance themselves and say, "Well, I don't really know that much about this."

Milton: But why didn't they do that earlier?

Claudia: That's right.

Larry: The question is what outlets, because now those same groups, when they're not on the board of directors, have, you know, their organizations in Washington that go to the press and release reports on all these different issues. But they don't seem to view this as the arena for playing out that, that in a way they apparently did at the time, you know, for 40 years...

Milton: But of course the Bureau has become so much larger. There are many more publications per year.

Claudia: Right. I think it may also be that this was still in the period when the Bureau served an extremely important role that was in between the world of academics and the world of government, which it does not play now. And so therefore, this became a huge contested area. And what the Bureau said, what the Bureau did was far more important. That may be why.

Milton: Maybe.

Claudia: And so therefore what you were saying, the Bureau put its imprimatur on this and therefore the people on the board of directors said, "Do we want this to be viewed as the opinion of the Bureau?" And now all of our books say that they have a disclaimer that, in fact, the Bureau has nothing to do with this. And I don't know when that was said, but maybe that's part of it.

Larry: I think it's an important part of the history [inaudible ].

Claudia: Right. Do you have anything that you want to say apart from what you've said elsewhere about the relationship between *Independent Professional Practice* and the *Theory of the Consumption Function*, that you view your work with Simon as being quite pivotal in your work that came after on the consumption function?

Milton: Oh yeah, I think... oh sure. I think the income profession...from professional practice was very important in the future...certainly the consumption function is derived almost entirely from it. The whole notion of permanent income versus transitory income comes from the professional income study. But I think that's inevitable. You take any scholar and his work is going to be cumulative. What you did in your first study undoubtedly influenced what you're doing here now, and it's influencing what you're doing now in one way or another. Now what's interesting about this, perhaps, the role of the Bureau in my own case is much more important in a different way. It's the main reason why I ended up spending most of my time and money.

See, if you go back, professional incomes wasn't about money. I started out as a pure-price theorist, in Jacob Mincer's term. And from prices, then I went on the consumption function and had nothing to do with money. Now, I'm not sure. The Bureau was not solely responsible for my interest in money of course, because I wrote about it when I got interested in that largely as a result of being at the Treasury during the war and being concerned with inflation. And so I wrote my first pieces in the field of money during that period before I came and got involved in the Bureau. But then it was the request by Arthur that I undertake the money project for the Bureau that was responsible for my devoting so much attention over the next 30 years or so to the field of money. And so that's certainly the main way in which the Bureau influenced me.

Claudia: Right. Let's get into that. So Arthur came to you and it must have been around '49? Do you remember?

Milton: A little bit earlier than that I would say, '48.

Claudia: And said to you that the Bureau wanted to do, in its usual way, putting money and including money in the grand scheme of business cycles.

Milton: That's right.

Claudia: But was it also that Arthur and Mitchell, in their own work, had realized in their empirical work that every single major downturn was accompanied by banking distress, enormous banking distress? Was part of it that?

Milton: Well, if you go back to Mitchell's initial *Business Cycles* volume, the 1913 volume, that of course stressed the role of banks in money. After all, business cycle theory for two...well, going back to Hume was really very heavily centered on banks and money. So all along the plan, Mitchell's plan, starting from his 1913 volume and essentially then his, what, in 1926 his business cycle, his second book [*Business Cycles: The Problem and its Setting*], which was not much of a book. His first book was a real book. His idea was to develop each chapter, each section of it.

So he had, as you know, more volumes on inventories and Fred Mills on prices and so on. And one of the missing elements was money. And in view of my own interest in money, because as I say, I developed the interest in money as a result of my work at the Treasury, Arthur asked me if I would be willing to take over the money chapter of the contemplated book.

Claudia: He said take over because [James] Angell had been working on it?

Milton: I really don't remember. I really don't remember that.

Claudia: Anna said that she had begun it, she had begun this work in '41 with Jim Angell; [inaudible] you had taken a course from at Columbia in trade. And she and Angell worked on it, and of course, she was the person who was collecting the data, collecting it in the, as she said, in the Bureau tradition that monthly was what you had to do. Everything had to be monthly. And she had a set of series that she was supposed to collect, and she would work in her little cubbyhole up at Columbia on this work. And she was, you know, a paid employee of the Bureau, not a research fellow, not a research assistant as you had become. And she labored at this. And then Angell wasn't that interested in it and left the project. She didn't say exactly how much she had done but she had worked for a very long time.

Milton: But in addition, she had worked with [Arthur] Gayer on the...

Claudia: Of course, on the other project.

Milton: That's right.

Claudia: Right. And that's what gave her a sense of what you had to do to the Bureau...to do it in the Bureau business cycle fashion. Right.



Milton: And then, you're right that to bring that up because when Arthur came to me, he told me that Anna had been doing or working on and essentially offered me to have the services of Anna and to start from her work. So she was an essential element in the...and she was, in a way, the Bureau's contribution to me.

Claudia: Absolutely. And in many ways, vice versa, because as you must know from Anna, her view of economics was never the same after the two of you met.

Milton: Well, I suppose that's so. But she...

Claudia: Yeah, in many ways this wasn't...

Milton: No, it was a very good collaboration, there's no question. We complemented one another. I really never would have had the patience to go through the accumulation of all the data which Anna has. She's a real economic historian, which I am not. And on the other hand, I think I complemented her in terms of the theoretical aspects of the subject. So it was a very good collaboration. And, you know, we worked together for, what, 25 years or so or 40...well, from 1948 or so to 1985. That's pretty good.

Larry: Yes.

Milton: And as I said, it was a very good collaboration. We never had any fights, never had any arguments. I don't mean to say we didn't have any differences of opinion, but we never had any personal arguments.

Claudia: But as Anna said, if you had any differences of opinion, they would have been expressed in writing.

Milton: That's right.

Claudia: Because she did...

Milton: We were in two different places.

Claudia: You were in two different places and telephone calls were somewhat expensive.

Milton: That's right. But, you know, it's interesting. One thing that interests me currently is the extent to which there is multiple authorship. Apparently, nobody ever publishes anything on his own.

Claudia: Few people, yes.

Milton: Very few. Very few. Why is that now? Now, I mentioned that because I think collaboration can be very useful at a distance, but also it seems to me as being much overdone. I can't believe that these three, four, or five person-papers make any sense. How do you explain that? Is that simply because more people want to have a longer...



Claudia: Well, I think that one has to ask whether the quality of the papers is very good and whether people are putting out papers because they feel that that this is part of this sort of grand game and grand scheme. And therefore, they're sort of going down the, you know, marginal benefit curve and sort of they're hitting it much too low now. And people are getting more than one fifth the credit if they're writing with five people, is one possibility.

Milton: Yeah, I would think that...when I look at somebody's vitae, I look for the papers they've written by themselves. They're the only ones you can really judge...

Claudia: Right. And we spent a lot of time in meetings trying to figure out what this person's contribution was. And by golly, if you want to support the person, you take all the four-authored papers and you give them full credit for it. And then another meeting in another city, author number two is being given 100 percent of the credit. So if you added up, there's 400 percent...

Larry: Probably two-authored papers are still more. Sort of the norm has gone from one to two. There are a lot more than three.

Claudia: Yeah. We do a fair amount together and our meeting, somewhat like your meeting with Anna, was a sense of, you know, an Edgeworth box and gains from trade appearing. And that's the way I view my work with Larry. I don't view this four-authored, three-authored, five-authored papers often as having very much additional benefit. It's often that author one published a piece on X and author two on Y and now we have X plus Y and we've gained nothing.

Let's talk about when you first met Anna and what you talked about. Perhaps I know that we can't reproduce that moment, but the vision that the two of you had. Do you remember anything about the first meeting or the early meetings? You went to New York, I think, right?

Milton: I think so, yes. I think, again, if anybody is really seriously interested in that, it's all documented in the letters and papers that Anna and I exchanged with one another, because it was mostly done by correspondence rather than in person. I think I may have made one trip or one or more trip to New York. Because certainly, as of that time, it would have been going to New York on and off. And of course, whenever I was in New York, I spent some time with Anna. But my memory isn't good enough to answer your question.

Claudia: Right. Let's talk about ideas. The vision that Anna had for the project, at first, it wasn't necessarily her vision. It was what the Bureau was going to do, what Jim Angell, what Arthur had wanted, what Wesley Clair Mitchell had wanted years before. But when you stepped in, when did you suddenly see what the vision was, what the project was going to be?

Milton: I don't know.

Claudia: But it certainly, it changed in various ways.

Milton: Sure it changed, but the change had nothing to do with money. It had to do

with the fact of a theoretical approach as opposed to an empirical approach. And the fact was that Mitchell's approach... see, Mitchell [was] not really a theorist. I listened to... in the year I spent at Columbia as a student, when I was a graduate student at Columbia, I attended Mitchell's course in business cycles. And I thought it was kind of a dull course because there was no theory in it. There was no...it was really all empirical, pure empiricist.

And so, any subject...you know, my natural tendency was to approach any subject, whether it was consumption or professional income, from a point of view of economic theory. And similarly, if I'm going to trade or deal with money, I wouldn't look at what is the demand curve, what is the supply curve, and how do they interact, etc. That's what naturally occurs to anybody of a theoretical bent. Now, I always felt...I felt then and I feel now, that the Bureau's great virtue is to combine the emphasis on the empirical side with a theoretical approach.

See, if we go back to the early days when I was involved there, I didn't have much use for the work that Fred Mills did, because I thought it was wholly, almost wholly empirical and didn't really have any theoretical understanding. So I don't know if there was any grand plan at all. We just started out to... well, one thing that influences very much, to begin with, as I'm sure I've described it in *Two Lucky People*, is going down to Princeton and talking to...what is the matter with me?

Claudia: Was that where Walter Stewart was?

Milton: Walter Stewart.

Claudia: Yes.

Milton: Talking to Walter Stewart, he was a very wise fellow and had a great deal of experience. He had been, you know, at the Bank of England and also at the Federal Reserve Bank. And the original understanding was that we were going to do a statistical analysis. And he really persuaded us that we needed to precede it by doing a history. And it was really Walter Stewart who was responsible for getting us to go on the historical side. Well, I really don't... if we're going to do this seriously, the thing to do would be to go back to the papers that Anna and I exchanged at that time. I think they were all down at [inaudible] in the archives. And I hesitate to try to reconstruct, you know.

Claudia: That's okay, because I think that my dear friend, Hugh Rogoff, would love to do that and will do that. Because this is one of the questions that he's...

Larry: Hugh Rockoff.

Claudia: Hugh Rockoff, who was just...

Milton: Hugh Rockoff, sure.

Claudia: You remember Hugh, who was at...

Milton: Oh yeah, he was at Rutgers.

Claudia: Exactly.

Milton: Is he still at Rutgers?

Claudia: He still is at Rutgers. They have a very good group of economic historians who do financial and banking history, three of them.

Milton: Well, Rockoff...

Claudia: Michael Bordo...

Milton: Mike Bordo.

Claudia: And Gene White. It's a very, very good group.

Milton: I had kept in touch on and off with Mike Bordo, but much less with the others.

Claudia: Right. So Walter Stewart suggests to you that the book have what you...and he must have called it a narrative, a historical narrative. And I believe that that date, from what you've written about it, was in about 1953 that you spoke to Walter Stewart, maybe a little bit earlier.

Milton: I don't remember.

Claudia: Yeah. I think in the acknowledgments to *A Monetary History*, you begin the acknowledgments with...a bit more than a decade ago. Walter Stewart expressed to one of us, and I didn't know which one, it was obviously you, that we add a narrative. And you said we had written several chapters, and I think you had almost completed the entire core of the volume without the narrative. And he said, "Add a narrative," and you added a narrative to one chapter. And then it looked good and you added another narrative to another chapter and to another chapter until it developed into the book that it is.

Milton: Well, let me see, that would have been '63.

Claudia: That's right. The acknowledgment was written in '63, so this would have putted in at about '51, '52, right?

Milton: Yeah.

Claudia: So it was fairly soon after you stepped into the project.

Milton: That's right. Yeah, it was very soon after.

Claudia: So of course, Anna, you stepped into the project and Anna probably had...

Milton: But Anna already had all the data.

Claudia: Had already had all the data.

Milton: Oh yeah. Well, not all the data but she had a lot of data. You know, she had done the major data work before then.

Claudia: Right. And could show you various aspects of them. You could make sense out of it, you could put into it more of the theoretical model, and the book began to gain shape and take form. But let's talk a little about this narrative because, as an economic historian, it is a superb and important book in history. And it must be hard for one to say, at some point, you realized that you were writing a great book of history.

Milton: Oh, no.

Claudia: No?

Milton: Oh, no. Of course not, you never do that. You don't ever think of your own work in those terms. You're just doing what seems right.

Claudia: But you must have switched on in your mind a different mode of writing. For example, in *The Great Contraction* volume...which became a volume, part of it is brilliantly written. It's compellingly written. Did you have that sense...so it's written in a very different way than the drier Bureau books and even your own work that you've done for the Bureau was written, some of it is great writing. Did you have a sense that you were writing an important compelling narrative? No?

Milton: Oh, well, hold on. No doubt I had the incentive and the feeling that the narrative was important. Not that the writing was important, but that the narrative was important. I had no doubt whatsoever that the point we were making was an enormously important point and that it would have...and had major implications for economic and monetary policy.

And it was certainly clear to me, at the time, that the bulk of the profession regarded the Great Depression as having very little to do with the...as being a failure of the business system, and that the thesis that it was a failure of the government and of the monetary system was against the grain of what was taken to be orthodox standard value. So that I understood completely, there's no question. But it wasn't the narrative, it was the events, the story, that was important.

Claudia: Right. Well, I suppose sometimes when the story is important, you write from some other part of your brain that makes it very compelling writing as well.

Milton: Well, there are...you know, Anna and I, more or less, we had no record of who wrote which.

Claudia: Yes. That's interesting. How did...going back to your times of Chicago before you went to Columbia, can you tell me how your courses and studies with [Lloyd] Mints and [Henry] Simons influenced *Monetary History*?

Milton: I never took any course with Simons. I got to know him personally and I read what he wrote and undoubtedly listened to him in the lectures, but I never took any,

formally took any courses with him. But there's no doubt, and I would say that [Jacob] Viner as much as Mints, even though I took a course from Viner in international economics and of course for Mints in money. And both of them, of course, were quantity theorists, and both of them emphasized the role of the money. And so undoubtedly, my basic theoretical understanding owed a great deal to both Viner and Mints.

And so it influenced monetary history, primarily by providing the theoretical background, the framework, theoretical framework in terms of which we tried to analyze the problem. Because after all, the whole structure of the book is one of supply versus demand. And the statistical core of it is the data on the supply of money, fundamentally.

Larry: And using that test to look at money demand?

Milton: Yeah.

Larry: I know you had worked as a research assistant for Shultz on estimating demand, sort of functions of that. Is that part of the intellectual heritage of thinking of then the sort of empirical work there, or was that a sort of...did you make any connections between...

Milton: Well, I suppose it had some connection. I have to admit that I'm not very much given to introspection, but I suppose it had some connection. But it really didn't, in a way, because it all goes back simply, you know to the... what really opened my mind was the one quarter of pure economic theory which I took with Jacob Viner. And that was really the real eye-opener that gave you a different framework in which to see things. It's like what you described of Jacob [and] Mints, you suddenly see a light. And I think Viner's course opened up that light in my mind. And that applies to everything, money, anything else, all really the same principles.

Claudia: Right. Anna has told me that she views our monetary history, one of the key aspects of it is that it pioneered the role of money in the real economy. Others, and I believe you're on record for saying this, say that it expanded that view but it didn't pioneer it. Can you comment a bit on this slight difference of opinion?

Milton: Well, you can go back to David Hume in his famous essay in which he clearly indicates that the effect of money on the real economy, when he talks about the fact that what's necessary is it'd be a slow and steady increase, and that at first...essentially, he has a modern analysis of it. So it's hard to say that anything that was written in 1960 or 1950 would have pioneered the idea of money having a role in the real economy.

On the other hand, what is true is that that way of looking at things had gone out of fashion. And so this was a reminder and re-repeat of it, but it surely did not pioneer it. But I don't know. You know, when you're writing something, you're not thinking in those terms. When you're writing something, you're writing something. In that problem now, I just saw your piece in the JP [*Journal of Political Economy*] on the...

Larry: The Pill?

Milton: What?

Larry: On the Pill?

Milton: On the... and now, before you sat down to write that, did you think about what anybody else...what the current state of thinking was about or whether you were pioneering something or anything? No. You just had a problem and you went and you tried to solve the problem. So I really don't have anything to say about that.

Claudia: Right. One other thing about the use of history. When you began to restructure the volume with history, did history...and you, somewhat, you and Anna both sat down and read an enormous amount of mainly secondary literature, okay? Some of the greats, some material that you later found lacking, some material that you had to accept because you weren't going to go back to the primary sources, did the historical work, what we'll call the historical narrative, change what you were doing in any way? Did it turn on lights? Did you see something that was different? Can you remember any of the episodes historically in which it had any grand effect? Or was it to sort of make it more interesting?

Milton: I find it very hard to answer that question, because once we got started on the line of making it a narrative, everything developed together as you came to the episode and trying to understand them. So I really don't know to answer here. That's too hard a question.

Claudia: Right. It must have been enormous fun reading all these secondary sources.

Milton: Yes, sure it was. Sure. And, you know, Anna did most of the historical work. I read what she told me to read, but she did a much broader reading than I did.

Claudia: Well, it's always very good to have an extraordinarily good research assistant or colleague who will read everything and then say this is what's important, and then you go out and look at it and then it turns lights on for you. And that's extremely good.

Milton: Well, she was a collaborator and a colleague, not a research assistant.

Claudia: Absolutely. That's why I was thinking of my own research assistants.

Milton: No, no, that's right. I remember at one stage, Phil Cagan was my research assistant. And he did exactly what you've described. I had him read a whole lot of stuff and tell me what I had to read.

Claudia: Right. Do you have any questions?

Larry: I guess I have a... if I think of the three major projects you did with the Bureau, they come from *Independent Professional Practice*, *Theory of the Consumption Function*, and *A Monetary History*. They're all different but they all seem to have a style of a strong analytic theoretical framework organizing them. But then, rather

than going out and getting one body of data and doing a specific type test of the theory, I would sort of say there is a collage of evidence of a wide range or implications of the theory, you know, looking at whether it's budget studies and time series like consumption function, cutting the data different ways in income professional practice, looking at it historically as well contemporary in monetary history. I mean, much of empirical research [inaudible] simply has become very Bureau on a specific test where you had this...

Milton: No, no, I understand, I understand what you're...I've always been very skeptical and narrowly based there, because of the fact that statistical tests are significant. Or really, as a limited use because they're always the best of so many. And if you massage one body a day, you can always get some good statistical results. But it's useless. And so I've always tried, I've always had the preference for trying to see if you could get a broad range of material. Try to get different countries or try to get different periods of time or something else. But don't depend on any single analysis. It's good to have the statistical analysis, but it's a very, very shaky basis on which to stand. So I think what you're describing has always been sort of part of my modus operandi.

Larry: That's sort of a good lesson for economics today where often this...many of these co-authored papers are on very narrow questions [inaudible].

Milton: I know. I think so much of today's...I find I can't read most of what comes out today because it's so narrow and so much of a detailed...of an overanalysis, over-statistical analysis. I've thought that the journals today are making a great mistake. They ought to insist on relegating more of the mathematics to the appendix and having more of English in the article.

Claudia: Right. And then they would say that they didn't have much of an article and then they would demand more.

Milton: And then they would have thinner journals.

Larry: Yes.

Claudia: Right.

Larry: But they have actually...the number of articles has not increased in a typical journal, but the number of pages per article has gone up despite the fact that they seem to be more narrow.

Claudia: Right. Just in conclusion, you said in your book with Rose that, "The Bureau opened a new world for me." And you said some wonderful things about the Bureau about the attitude towards research, about the fact that...and you said, "It was a role...it was one that was to play a large role in shaping the rest of my academic life." That's a very strong and very complimentary statement.

Milton: Well, but surely, the fact that these monetary studies that I did, the *Professional Income* and *Consumption Functions* were relatively limited in both size and duration. But after all, I spent something over two or three decades on A



*Monetary Study*. And if it had not been for the Bureau, I would not have been doing those. And had it not been for the Bureau, I would not have had the collaboration of Anna. So it's clear that it did play a very important role in my academic life.

Claudia: Right. And it all begins with your undergraduate days at Rutgers and you made it with Arthur Burns, whom you greatly admired as a teacher.

Milton: He was a splendid teacher. Arthur...that's a very difficult subject. But Arthur was a great teacher and certainly one of the major educational experiences I had was this seminar in which they were, what, two or three people, two of us, I think only two of us, going over Arthur's doctor's dissertation on production trends. And that was a real education. But as you know, the problem is that I got into some difficulty with Arthur when he was in Washington over his support of price control.

Claudia: Right. One last thing I...

Milton: But you know, I don't know, did you [know] Arthur at all?

Claudia: I met Arthur on one or two occasions that I remember. I didn't know Arthur so much as an academic scholar than as I did as someone who would deliver comments at conferences ... probably in the early 1980s.

Milton: Because Arthur was really...he was an excellent teacher and he was the first great economist in every respect. His book *Production Trends [in the United States Since 1870]* was an important book measuring business cycles. It was an important book, though it was subject to criticism as not having enough theory in it. But Arthur himself, interestingly enough, was capable of theoretical analysis. He was very much of an admirer of Marshall. And I was first introduced to Marshall through Arthur, by Arthur.

But on the other hand, he was in some ways more interested in the politics of the things than he was in the economics of it. Thus I think he was, he was not a good chairman of the Fed, unfortunately. When he was appointed, I wrote a column in Newsweek saying, "The right person, at the right place, at the right time," and I was just wrong.

Claudia: Of course you were close with Simon, you were close with Arthur. Do you have anything to say about their differences at the Bureau?

Milton: No, I observed their differences. They really were not compatible personalities. And they did differ a good deal. I guess that's why Simon really left the Bureau on that account. But I never got involved in their personal discussion.

Claudia: But how would you summarize briefly their differences, that they have very different personalities?

Larry: Do you think they were largely personal, or do you think they were also substantive over what research direction the Bureau should be going?

Milton: I really don't know. I don't think they were personal though. I think they were

over the, what the Bureau should be doing because... no, I shouldn't say that. I really don't know. You know, I'm not very good at that kind of thing. And as you know, at the time I knew them, Simon was living in Philadelphia, and Arthur, of course, was living in New York. So there was not a great deal of personal contact. Their contact was mostly at the...what's happened to Rose? Excuse me, let me get this.

...pretty close to Arthur and Helen Burns in a way that we were not. And we were close...we were intimate and we knew very well Simon and Edith, but we didn't have the kind of contact with them that we had with the Burnses. The Burnses and we spent the summer up in the same part of Vermont and New Hampshire every summer, so we saw a lot of them. And so I never observed very much the personal interaction between Arthur and Simon.

Claudia: Right. And I think that the major break came earlier in '47, when Simon wanted the Bureau to go into a more comparative direction and Arthur stayed more with the original mission of the Bureau, which was the foundations of the U.S. economy. But let me just conclude this by thanking you enormously.

Milton: It's all right. I'm glad to do it. Pleasure to see you.

Claudia: Okay. Thanks.