[Video: IMG_1259.mov]

INT: Let's with your name and how you are affiliated with the UW now, and how you got involved with the Gender Studies program.

BEREANO: My name is Phil Bereano, more formally Philip L. Bereano and I'm a Professor Emeritus now. I came here in 1975 and Women Studies was not a department then, it was an activity or something just starting. I had been involved in feminist issues previously. I came from Cornell and I had only two contacts here in Seattle, they were both women who were students of my former wife. One of them invited me to dinner with her housemates and at that dinner— these people were very plugged in to the Seattle women's community, the progressive political community, everything. I began to meet people, and one of the people that I met was Chris Bose. And Chris Bose was in the Sociology Department and was involved in some of the Women Studies activities early on with Sue-Ellen, for example. Chris and I became friends and in fact, by the end of the first year that I was here in the Spring of '76, Chris and I bought a house together – a big house to have a kind of group house situation. We put the capital into it, it was down in the south end, in Mount Baker.

I was interested in some of the things that Chris was doing and then got involved in some of the things that Women Studies was doing, just hearing about it and everything. And she was very interested in the stuff that I was doing. My field is Technology and Public Policy, and in particular the assessment or evaluation of technologies – for example new technologies – as to their likely impacts and the way different social groups will be affected differently. So I had done that at Cornell for five years before I came here to UW. My appointment was in an interdisciplinary program called, at that time, Social Management of Technology and it had a board of Deans that it reported to and the Chair was the Dean of Engineering. So structurally in terms of the university, I was on the Engineering

faculty – that is relevant later in the story. Do you want me to just ramble or do you want to—?

INT: I think rambling is great.

BEREANO: OK. One of the areas of work that I was heavily involved in is when new technologies are developed even though they may be marketed – and I don't mean only in terms of buying/selling but I mean in terms of PR and all the rest – as being universal, as being this and this and so forth. In fact, almost all technologies have very differential impacts on different groups. One of my own areas of work over the years – and of course it got much more intense after this early period that I'm talking about – was to talk about the distributional impacts and effects and consequences of new technologies.

I'll give you an early example: a colleague of mine still at Cornell did a study on Logan Airport in Boston, and we are talking now about 1973 or 1974. So at that time, Logan Airport, if you've ever flown into Boston, is pretty much in the city – it's surrounded by residential neighborhoods. And at that time the overwhelming majority of people who flew on airplanes were men, and they were well-to-do men. And the people who lived in the neighborhoods right around Logan who were complaining about the noise and the air pollution tended to be women and children because it was a working class neighborhood and the men would be out at work, the kids would be at school and the women at home. And they tended to be ethnic, mainly Italian and Irish, whereas the people flying were largely WASP or whatever. This very early study in terms of Technology Studies was one of the early— that a colleague did, I didn't do— explorations of the differential impact. So in order to put on planes – larger planes, bigger planes, more powerful, whatever it was – that would largely serve the needs of, let's say, Harvard and MIT professors, these working class Irish and Italian women and kids were getting more pollution, more noise, more air pollution and stuff like that. So that's

a paradigm, it is a simple example for me.

Almost every technology you can imagine—so computers come along and they say, “It will be universal to everyone's benefit,” and all the rest. And it clearly is not. One of my current things has to do with apps on the mobile phones, 40% of Americans don't have a mobile phone. You would never know it if you read the newspaper – the business sections, or if you read a lot of the “promotional magazines” I’ll call them, within the IT industry because they make it sound like it's universal and it's not. So different apps are developed for people who have mobile phones and what it all is, is gives you a competitive position that's better than other people, it's all about getting ahead. There's nothing really democratic or equalizing about a lot of these technologies. The IT technologies in particular are very, very differentiating, they're very stratifying, but they fly under an ideology of equality. So while what is talked about uniformly are the benefits of these technologies, of course the promoters don't talk about the downside. The downside being… let's take the easy ones for computers: the privacy issue for users. Certainly they don't talk about the downsides for non-users, so the whole thing with non-users is an amazingly important part of assessing any technology, which almost no one ever does.

So Chris knew about this stuff, we would talk about the work that we were doing. And somehow, and I don't know which one of us first suggested it, maybe she had come across a book and I had mentioned some of the early books that we used here. The gender differentiation on most technologies is extreme, if you think about it, no one ever thought about it. No one ever thought about it. The result of no one ever thinking about it but Chris and I was that we developed the world’s first – and it was the world’s first – university course on Women and Technology. It was widely written up and everyone in the field had never heard of any such a thing, and so forth.

The basis for my connection which was then called the Women Studies Department was this course. And there were a few students that I wound up advising because they were interested in these issues. And there were students who mainly had come to me through other routes who got involved in this, including one, a women called Ellen Balka who has been a professor at Simon Fraser who did her PhD in Women and Technology having to do with various unions in Canada and has been teaching in this field ever since, and researching internationally and everything. And it's a field that has grown up. And it is very bizarre to think about—

So what happened at the beginning? So Chris and I decide to put the— I want to talk about the course and then I want to talk about research, OK? And you should interrupt me at any time if stuff is not clear. Alright?

INT: OK.

BEREANO: I've already talked about the differential impacts of technologies but one my other areas of work is, "Where do technologies come from?" The irony is that almost no one asks that directly, assuming that it's sort of natural. But it's not natural because by definition technologies are not acts of nature, right? They are acts of humans. And especially modern technologies take a lot of human organization – money and organization – to effectuate; to try to see if they work; research and all the rest of it. Who defines those needs? Who defines what areas are going to be researched to produce technologies? And guess what, they are almost all men, traditionally.

So Chris and I are talking about this and joking about it…and at that time you couldn't get away from it, it's totally different now for lots of reasons. But all the ads of television for all the myriad of household products always showed happy women in the kitchen. And of course almost all of the industry that made the

dishwasher, the disposers— were men, from the highest executives down to the mechanics. So men were defining what women needed and wanted. My general paradigm is that – very simplified – technology and society are interactive kinds of spheres. In some of the old studies, as I was saying, it was like, "OK, here is the technology. What are the effects?" In studies that looked at, for example, government funding of research it will be looking at a societal activity that resulted in technology, like people who studied the atom bomb program – those were all social kinds of decisions that resulted in a technology. But there were very few situations where people looked at it dynamically or dialectically and looked at the interactions and so forth. We started saying, "Wow, we could do some work in the area of Women and Technology that would look at both of these things and try to look at them simultaneously." "Are women's needs being met by new technologies?" and that of course is associated with the question, "To what extent are women involved – or feminist issues, or feminist concerns involved – in the shaping of new technological programs?" And the reverse: "In what ways are women differentially impacted by new technologies?" We didn't started from any subjective—we didn't say, "In what ways are women made worse by new technologies?" or anything like that.

One of the first things that we looked like was an early book by a woman named Susan Strasser who was a— I think she is in one of those colleges in New York – called *Never Done: A History of American Housework*. And we said housework is a great area for us to do research in because it's definable, people feel they have some sense of it and everything. And we had no resources, so we're not going to start with Boeing or something like that. So first we worked up the course.

[0:12:56.7]

INT: In what year was this?

BEREANO: I'm trying to remember when the course was first given, I don't know. My guess is

around 1980, '79 or '80. And it would be offered by our program, Social Management and Technology, it would be offered by Sociology until Chris left it was jointly listed, and by Women Studies, usually. So I was made an adjunct professor in Women Studies as a result of that – the course and the research. And the course was given generally every other spring and probably was given a total of about eight times. And then, for variety of reasons, I was having difficulty keeping on doing it because I had other things and no one else had emerged. Chris left, she wasn't going to get tenure here, she went to SUNY Albany where she got tenure and has been nationally known in Sociology and Women's Studies and so forth, UW's loss. Anyway, no one had emerged to take it on, that's what happens with this things. And we can talk about the course in more detail if you want, but let me start with more overview.

One of the developments from this was that the department – what's now the department of American Ethnics Studies – got a big curriculum grant from the Ford Foundation and they gave me a grant to develop a course in ethnicity and technology on the same things. And we did that, and that course was only given one or two times. You see the point was, I couldn't by myself do that and the other courses and the work I was doing. And for whatever reason— and in retrospect I really wish that—maybe I should have put more energy into it or the Chair or someone on the department should have put more energy into it, because I think both of this things, it's a real loss that they vanished. The whole idea was intellectually very exciting and valid and uncharted territory and all the rest of it.

[0:15:23.5]

INT: Were students really interested in it as well?

BEREANO: Students were really interested in it, but the reality is that not a great number of students wound up able to take this. As I say, Ellen, my former student who went on and did this work up in Canada of course has had—I have had derivatively

through her much more impact on Women in Technology than I had directly, you might say.

Let me talk a little bit about the research side and then we can go into whatever kind of details that you want. I knew people at the National Science Foundation in the program on Science Technology and Society/ Social Sciences and Technology, the director of it was a woman named Rachelle Hollander. And I wrote to Rachelle, Chris and I worked up a small— not a proposal but an idea piece, a one-pager on women and household technology and sent it to her. She was interested, she understood, and she said, "I have no idea what reception this is going to take," but she encouraged us to apply. So we sent in a formal application. And some place I have the return, because of course even by then under the Freedom of Information Act, the National Science Foundation was obligated to send you anonymously all of the things. It's almost unbelievable but so believable what they wrote. I remember there was a guy in Anthropology, you don't know but it has to be a guy, who went on and said, "How can we spend taxpayers' money on this sort of nonsense?" just went on and on. Now, we are talking household technologies represent billions of dollars of industry. This is a major industrial sector. And the companies in it spend billions of dollars trying to research what's going on, and he thinks that it's absurd to look at what women think about these things. The comments were so sexist it was unbelievable and Rachelle couldn't fund us as a result, so we got zero money.

One of the things we wanted to explore was whether there was much ethnic variation. We did a small internally funded – I don't know if we got any money internally – with a grad student, so I don't know if she did it for credit or if we had— maybe Women Studies gave us small— someone in the Provost Office, but I don't think so. We did a questionnaire among Native American women and we were going to do different groups, Scandinavian American women and whatever, but we just had to drop it. I mean, there was no money, there was no funds, you

can't go very far without it. We did some other attempts at getting money and it didn't pan out.

So the irony is, and I've made this point with my students very often and it sounds—I don't want it to sound immodest, I want it to sound descriptive. There's a story that I tell which apparently is true, that in the McCarthy era the guys who had fought for the Republic in Spain, the Abraham Lincoln Brigade who went over to fight in the Spanish Civil War were, in the '50s, dragged before the House on Un-American Activities Committee and the question was very hostile. And at one point one of the men says to the Committee Chair, "Mr. Chairman, I don't understand what this kind of hostility seems to be in the air and why it exists," he said, "We fought against the fascists. We we're anti-fascist just like everybody else in America." And the Chairman – the story goes – looks down at him and leans down and says, "But you were prematurely anti-fascist." So in an area like this, I feel we were premature.

We saw it and it's not that there's a huge thriving research area now, but no one, no one would make any of— If someone had the background and put together the kind of application now that we put in to the NSF now it would stand a very good chance of getting funded. And Ellen's experience in Canada where she got funds from unions that mainly had women members and then went on and on. She's been a visiting professor at University of Bergen, Norway. I mean, the Scandinavians, they are heavily unionized, women have traditionally played a much larger public role in terms of— etcetera, etcetera. So it just seems to me that there would have been—we were just prematurely feminist in this area, I don't know what to say. That's the story, I could elaborate in a hundred different ways.

[0:21:02.8]

INT: What kind of information did you teach in that course then?

BEREANO: Here's the course outline. We read this version and it changed over time that's why you might want to look at a—

INT: —a newer one, yeah.

BEREANO: A book by Barbara Garson, I haven't seen her stuff around a long time but she was a progressive writer called *All the livelong day*, 1977. David Dickson who is a British guy, I use some of his early works – *The Politics of Alternative Technology*. Barbara Ehrenreich who has become quite well-known and Deirdre English in a book called *For Her Own Good*, 1979. And then Suzie Strasser's book, 1982.

By the way, what's her name from Evergreen became well-known in this area following up Strasser. Why can't I think of her name? I'm blanking now, it will come to me. But she's done op-eds in the New York Times in recent years. And the whole area of what's going on in the home these days, all of the discussion of women balancing—

Everyone that we talked to including most colleagues said, "Strasser suggests that people – women – are spending as much time doing housework as their mothers and grandmothers." Now, to most people this is a totally absurdity. I remember conversations with some of my colleagues in Engineering, women, who would say, "But I have a washing mashing in my house, my mother had to scrub." What has happened is that as quote "labor saving devices" came along, expectations about additional tasks were piled on. So the mother and grandmother didn't drive kids to ballet school and to soccer practice and to etcetera, etcetera. And it turned out that household labor— and of course depending upon class many people had

servants or part-time, or relatives – an unmarried old sister or a maiden aunt who were living in the house who were doing a lot of this work.

Everyone sort of presupposed, "Oh no. The machines are doing it now. The vacuum cleaner," and there's no doubt that those things make those particular tasks, in addition what happens is, when you have a washing machine you wash clothes much more often. People used to wear underwear, believe it or not for a week in the 1890 – it's hard for us to believe that, right? We go through several pairs a day, you go to the gym—So, this whole thing that it's a dialectical, that social mores change as technological capabilities change and vice-versa, that it's interactive. Most people don't have any real sense of that, and of course we did. And this is was my work not only on this area but in many other areas that I've been involved in.

Strasser makes that suggestion and when we went further into the literature you find that it's really true. I mean, there weren't at that time many studies but it certainly has been verified. So if you think of the controversy today, all the books especially by women about how to handle both the household role and the professional hold and everything—that woman from Yahoo…Sheryl—it was a best-selling book just recently – *Lean In*? Anyway, all of this is a recognition of the fact that more and more expectations get piled on women and one way or another the excuse seems to be [inaudible: 0:25:39.5] and unspoken but, "I got you a washing machine dear, why are you complaining?" or, "Doesn't the nanny do that?" It's all class based by the way, that's a whole other dimension that you have to look at.

So we read these things. The first session we showed the movie *Union Maids,* it had to do with the fact that women have been working for a long time and that were dealing with different technological formats for a long time. The first part had to do with stuff that was a kind of condensed and summarized version of what

I used to do in my introductory course over ten weeks. We talked about mainstream views about technology and society, this one-way stuff and all the rest of it. Then radical views that it's interactive, and we looked at, in addition to Dixon, Murray Bookchin, who is an anarchist writer, great power and was making a considerable impact at that time. Then the third unit was 'Women, Technology and Society: pre-industrial and industrializing societies.' Women have used technology all the time, as men, but technology doesn't just mean something that is elaborate and that you go out and buy and doesn't have an instruction book with, right? We found, especially in the anthropological literature, stuff that had to do with early cutting tools and stuff like that. Then we looked at industrial societies having to do with early factories and women, of course.

Here is an example that just occurred to me, I had totally forgotten about this. At the time that we were doing our work and for generations before, people had sort of assumed— certain occupations became sex-stereotyped. Of course we all know this. Like secretarial work was considered women's work. There has been some swing-back now, but if you go into the history of it and you think about in Dickens' time the stories that he was writing, the people who worked in the offices were men – the scriveners, they were all men. And what happened with the development of the typewriter – and this became a very important paradigm – was that the change in the technological structure, or the thing, the introduction of a new thing – because technological can be organization as well, I don't want to get into that right now. But the introduction of something like the typewriter to replace the pen and ink becomes an opportunity for the boss to also do something about costs. And the typewriter was brought in, and if you go back there were explicit advertisements that you can get rid of your highly-paid men and hire women doing this. And it's all the stereotypic things: their nimble fingers. All of the sexist stereotypes were used to not only bring a new artifact but to change the gender of the operation – totally amazing. So that is why these industrializing things—

And of course by this time in the '70s and so forth everyone was in a very conscious and militant way – not everyone – opposing sexism. But most people, myself included, had no real idea how do these things become gender associated to begin with? There's nothing about a typewriter that's particularly feminine if you think about it. Any of the classical sexist images of what femininity is. But it was a feminine job.

Anyway, we looked at a bunch of that and then we looked a technology and values, the nature of rationality. And this gets in to stuff that has to do a little bit with the right-brain/left-brain, with masculinist linearity and feminist more organic stuff. Some of that stuff always struck me as potentially a little bit sort of new-agey "woo-woo" but research seems to bear out some of it. Even at this stage, we presented it, we didn't particularly endorse it as indicative or as provocative. Does the rationality, the masculinity as rationality of technologies even correspond to more innate feminist modes of thinking and operating? Feminist sensibilities. And there were a few early things out, some of the early Firebrand work. Here's Shulamith Firestone on the *Dialectics of Sex* - totally dynamite, anyway. And Susan Leigh Star's paper on right and left and examination of sex differences in hemispheric brain asymmetry. Then we looked at a section called 'The Technological Elite' which has to do to with the role of technology in exacerbating social stratification. And a couple of very powerful articles there, Hannah Arendt did an incredible piece after the Pentagon Papers were published and that raised these issues. Another Ehrenreich and English. Then we looked classically at the division of labor, the workforce in the nineteenth century and the effects of technology and introduction.

If you move away from gender issues, one of the things that technology has done in the work place—at the same time I was developing a whole course on technology and work, which went really into this intensively. But one of the

things that technology has done in the workplace is enabled managers, bosses, owners to divide complex tasks into ever smaller tasks – the division of labor. And reduced the pay accordingly because you don't need someone who knows how to do twenty things, they only need to know how to do two things. And this is different from specialization which has to do with having a very particular skill, like a playwright. That's not a good example, it's not an industrial example but the fact is that there are some things that depend upon creativity and other kinds of things that you can't divide up this way. But division of labor and all of the classic—Marx talked about this – so everyone was already aware that this was one of the facts of technology introduced into the work place. So we bring that in because of course it also has to do with technologies in the household or in other places.

Then we did a section on vignettes and participant observations of contemporary women's work. And then moved to a section on theories and descriptions. Here's an article by Heidi Hartmann, *Capitalism, Patriarchy and Job Segregation by Sex.* So there were some things out there that we could pull together and put in a different framework, a framework that it was really of our own making and quite original. Here's a very standard one, Francine Blau and Carol Jusenius, *Economists' Approaches to Sex Segregation in the Labor Market: an appraisal.* It's probably a review of dozens of articles in a Labor Studies kind of area. Then we turn to the history of housework and Suzie Strasser's book and a bunch of others.

I'm sorry, Susan Strasser is the woman who was at Evergreen, it was Ruth Cowan, we have to correct that earlier and I think was Ruth Cowan who she studied under. And Ruth was in New York. So here is Ruth Cowan in 1976 an articles, I would love to read it now again, *Two washes in the morning and a bridge game at night* [sic] in a journal called *Women's Studies*. Molly Harrison did a book, *The Kitchen in History*. Even with not having Google and all the rest of it, if you did some

research using some of these keywords it was amazing what you could find using library indexes. We found old British texts which were talking about heating stoves and books written on such stuff as the history of the stove. Anthropologists: Evelyn Reed, *The Productive Record of Primitive Women*. Then there was really, really interesting stuff, Suzie Strasser's thing was called *Never Done: A History of American Housework* and that was 1982 and Ruth Cowan was—.

I was just about to segue into working conditions of housework…There had already started to be some stuff on housework, very little though. A book on the sociology of housework, 1974. Then Chris and I and a grad student, Mary Malloy, did an early paper, *Household Technology and the Social Construction of Housework*. Some of these things are just fascinating. One of the Ruth Cowan's early pieces is called *A Case Study of Technological and Social Change: The Washing Machine and the Working Wife*. And then we raised the issues, which some feminists were raising at the time, called Wages for Housework: housework is work and it should be waged. And a woman that I was quite friendly to at the time who did her master's thesis at Cornell actually did it on the notion of Wages for Housework. And what she did was, I'll give you an example, "So the typical housewife, she takes care of kids. What do childcare workers make per hour? She drives the kids to soccer and ballet, what do chauffeurs make per hour?" And through this techniques – this is totally, totally simplified but you get the idea – she came up with what the value of a wife, a housewife is.

INT: Wow.

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BEREANO: Frankie Whitman [?], we used her materials. That was very early stuff and a lot of that stuff has fed in to issues of wage— the disparity used to be 69 cents on the dollar and now it is 77, we are slowly creeping up. If you begin to research the

history of those kinds of things we get these fundamental bits and pieces. We put them together in a different way from the way other people were doing it. And then we looked at consumerism, starting with reading Marcuse and so forth. The fact that—how this stuff was actually sold to people so that they believed that their lives were easier than their grandmother's life.

INT: That's so crazy.

BEREANO: I mean, their life was easier in a way but they were doing things that their grandmother would never—This is what all the pressures are from working women that we all well know this day and age. You see it in your relatives; you see it in your friends. They have all these gadgets including smartphones and you know what? They are still stressed out. We are talking mainly about quote "housewives" here. Of course then you could get into the changes in family structure, which we didn't have chances to get into. So that is the coursework and the fact that the research that we wanted to carry out and that we were really prevented from doing.

Women Studies graciously kept me on as an adjunct faculty member. I used to joke – Shirley was Chair at one point, this was before David Allen became Chair -I was one of maybe two men. I said, "It's just looks good, I know." We used to joke around about that. But there would be from time to time students would be doing some work or someone over here would send them over and say, "There's this guy Phil Bereano you should talk to him about this." So it made some sense.

It's one of these things that, like other things, if the UW had cared more – and this is part of my own larger assessment— This program I was in, Social Management of Technology, was cut in 1983 there was a bit budget crunch then. And all of the units had to sacrifice stuff, including the Business School and the Engineering College, both of which were getting 7% increases in the next year but they still

had to lay up on the alter the offering. So we were cut from the College of Engineering and we made all of the rational arguments: that we were tenured and the Faculty Senate had demanded it and the University had agreed not to fire any tenured Profs. They wound up cutting us and they saved one half of one secretary salary at a time when the Engineering College that we were part of was getting a 7% increase.

A lot of these choices were going on because, for example, the Dean of Engineering was not at all supportive of any of this kind of work that I was doing. Why? Because he was getting big bucks from a lot of the new IT industry people and everything and the last thing they want is people who are going to raise any kind of questions. Any kind of questions, they just don't want it. If you are not going to be part of their PR campaign then get off the bus, you know what I mean? So there was a lot of stress and strain there and part of that, undoubtedly spilled over, not that it affected the Women Studies directly – but the larger allocation of university resources.

It wasn't that someone at the Provost's office said, "Wow, this is an interesting area, we could be ground breaking, well-known, renowned." They didn't want it because the first person to tell them to turn off the spigot would have been the Dean of Engineering. So we knew what we were up against, we made a valiant try and it is what it is, you know? If you look at current literature you see a number of these things are there now. They are not part of an intellectually unified whole which we tried to produced and which we did produce. That's what's not there, a kind of intellectually unified whole that would have provided an impetus for really structured studies and stuff that would have had an impact. So of course I don't regret for a minute what we did and in a better world it would have been a better result, so that's the end.

INT: Great, well thank you so much. Lots of good information.