



Oral History of Joseph “Joe” Thompson

Interviewed by:
David C. Brock

Editors:
Frances Corry
David C. Brock

Recorded February 19, 2018
Carson, CA

CHM Reference number: X8499.2018

© 2017 Computer History Museum

David C. Brock: Joe, thanks again for taking the time to speak with us today. I thought we could just begin with the very beginning and ask you what your full name is and your birth date.

Joseph “Joe” Thompson: Okay. Joseph Walter Thompson, January the 10th, 1933.

Brock: And where were you born?

Thompson: I was born in the city of Baltimore—Baltimore, Maryland.

Brock: And could you tell us a little bit about your family of origin?

Thompson: I wish I could. My father I think was mostly in Maryland, but my mother’s family was from Norfolk, Virginia. I never met my great-grandparents, but I used to go to Virginia with my mother. She would go during the summer. She would stay with her sisters, my aunts. This is my sister and myself would be going. My grandfather, he actually ran a restaurant. I would go there and eat the food that he had his cooks make. So, that was fun. I just loved going to Norfolk.

And my father was—Maryland mostly. I never met my grandparents on my father’s side. But I had lots of aunts and uncles. One of my uncles was—he lived in New York. I had aunts that lived, still lived, in Maryland in Baltimore. Growing up as a kid with your aunts and uncles. During the summer sometimes, I would go and stay with my uncle in New York. Sometimes, I would go and stay with my aunt, which is aunt on my mother’s side, also in New York. I forgot the name of the area. But she was also a nurse. What was interesting is that she had the same birthday as me. And I could never understand why she looked older than I did. But she was also born on January the 10th.

Brock: You mentioned that your mother was a nurse and that her, when we were speaking before the camera was going, that your mother and all of her sisters were in nursing. Is that right?

Thompson: Right. Yes. Yes. And as I say, I don’t know whether my mother caught some kind of a problem while being a nurse to cause her to pass away so young.

But, it was fun. It was. In fact, I have an aunt—well, she just passed away, but she used to come and sit with us when we’re doing—the last few years I would ask her, “Why did my dad send me and my sister to live with my aunt and uncle in—you know, away from us?” She said, “I don’t know, but your mother was a very neat lady. She would at least make sure everything was clean. And your aunt that you’re going to, she was also very clean and liked to make sure everything was clean and so forth.” But at any rate, my aunt, the one I was talking about, she lived to be long—she just died a couple of months ago at 102.

Brock: Wow.

Thompson: She was quite a lady. Yes.

Brock: And what did your father do for work, or what were his major activities like?

Thompson: Well actually, he worked on the shipyard. I don't know exactly what he did for loading and stuff. But he also worked on the side job at a—I know it's a place where they had meetings and things. I can't think of the name of it. Ones where they had celebrities come by, and they would serve them. In fact, my father would often bring things home for us to eat or to drink. So, that was kind of neat.

Brock: Was your father a part of a union, or was that part of his life working at the shipyard in Baltimore?

Thompson: I think that was a union, right.

Brock: Okay.

Thompson: The other area where he worked as a side job, I don't know how that was for. But it was for celebrities. They would take care of a celebrity that would come visit there. I don't know the name of the—I forgot the name of the place that he was at.

Brock: And what were the major activities of your parents, and in your household? Was religion a big part of your household, or politics, or music?

Thompson: It's hard to say. It wasn't so much politics. It's probably music. I think the Bible was read a lot, but I don't remember really going to church that much. You know, this is all my early years.

Brock: Yes.

Thompson: I know when my mother died, and I was sent to live with my aunt and uncle in Boston, I attended church quite a bit. In fact, I was confirmed as a Roman Catholic while in Boston. And interesting enough, when I was born, I was Christian, baptized as a Roman Catholic, even though we were Episcopal. I always thought that was interesting. But I don't remember so much about what was happening. My sister and I, we spent a lot of time playing outside with other kids and things. I don't really remember a lot of the activities.

But one thing is interesting. When we went to live with my aunt and uncle in Boston, and I was really almost petrified, I didn't understand why I had to go live with my aunt and uncle. My mother just passed away. So, I never did get that answer exactly why we were sent there. But any case, my sister was very, very bright. She graduated, but actually she skipped a year in high school. She graduated number one from her college. When she went to college she was graduate number one.

Brock: Wow.

Thompson: She was very bright. She ended up also, not so much a nurse, she was sort of like I guess a caregiver, or maybe you say a nurse. Because kids would bring to her—she took care of them, make sure they're okay. One of the experiences she had was that one of the kids there, he seemed to be always

hungry and not taken care of. So, one day, she decided to go visit his family and see how come he's not getting food or bringing lunch to school, or not to school, to where—I guess she was in school. And the family didn't care. They just didn't. She said, "At that point, I just decided to give up being a nurse," or whatever it was she was.

Brock: Wow, caregiving job.

Thompson: But as I said, she died young. She died when she was 50 because she had Bernard's disease and sickle-cell problem and lupus. So, she didn't last very long. But she was very, very bright. Yes.

Brock: Were you and your sister big readers when you were young?

Thompson: She was, me not so much. I became more of a reader once I went to Boston, and going to the school. It turns out I had—I still do—had a heart condition that required me—well actually, it didn't require me. I could not engage in sports or the gym classes. During that time, I did a lot of reading. I loved to read. In fact, I've gotten several books my teachers assigned me as a wonderful reader. So, that was good.

Brock: It was at age ten that your mother passed away?

Thompson: Yes, I was age ten.

Brock: So, that was—

Thompson: My sister was 11. Yes.

Brock: That was 1943 then.

Thompson: Right, right.

Brock: Had you gone to the public kind of neighborhood school in Baltimore up to that time?

Thompson: Yes.

Brock: Could you talk about what your community was like in Baltimore? Were you living right in the city, or—

Thompson: I remember we moved several times. And the last time was—I remember the name of the street. It was Etting Street, which is in Baltimore. It interfaced with North Avenue and was pretty much I guess Afro-American, if you can say it that way, or black, whatever, oriented. There was no mixture. It wasn't that it was a problem. It was just that we didn't mix with other groups. Although, I did because,

when I moved to Boston, of course, it was quite different. Neighborhoods were mixed more. But they weren't mixed that much where I was in Baltimore.

Brock: We were talking about when you moved to Boston that it was much more kind of a mixed neighborhood.

Thompson: More mixed, right, right. I went to school, of course. I was like I guess a sort of a nerd in a way because I just loved books. I loved to study. I was also a defender of one of my neighborhood kids. The kids would pick on him, and I would defend him because he was my friend. And so, they left him alone. I was not big. I mean I'm not a big person. But it was good because I was just into books. I loved books. I did a lot of reading when I was not able to go to gym or to do sports.

Brock: Right. Was there an area in your reading that particularly grabbed you? Fiction, or non-fiction, or what—

Thompson: Yes. It was—oh, gosh. Then a memory went away. It'll come back to me. But yes, it was one author I liked. I got most of his books. It was—

Brock: Were you reading any science fiction in those years?

Thompson: Some, not that much, no, not that much. It's mostly books—but I just loved to read. So—

Brock: And in what area of Boston were you living?

Thompson: Roxbury, it was a suburb.

Brock: Roxbury.

Thompson: Suburb, yes. That's where we lived, in Roxbury. And my uncle was called a master barber. And so, once I got adjusted to being there, I ended up being a shop boy, where actually I would walk to. It wasn't that far from the shop. I would walk to the shop, and what I would do, I would sweep up the floor, hair and stuff on the floor. I would brush off the customers. I got tips. I would put on my favorite station, which was some of these, the old stories, adventure stories. I can't think of the name of the—

Brock: Right. Sort of radio plays on—yes.

Thompson: Right. I ended up getting—also, I ended up later got a shoeshine stand where I would shine shoes.

Brock: At your uncle's shop?

Thompson: At my uncle's shop.

Brock: Interesting.

Thompson: And I remember one day, this fellow came into the shop to get his shoes shined. And I shined his shoes fine. When I left, everyone said, "Do you know who that was?" "No." "That was Count Basie." It turns out that across the street from the barber shop was a large place there they called Hi Hat where they had entertainers. It's a restaurant and I guess entertainment facility. That's where he was performing. And he came over to get his shoes shined. But I spent a lot of time, obviously, in my uncle's barbershop. Then once I graduated from high school, then of course I got interviewed for MIT and that.

Brock: I'd like to hear a little bit about your high school experience, where you were going to high school and how your interests were developing.

Thompson: Well, the Boston Technical High School was the name of the school. It's just a matter of liking the teachers. That was important that I was good with the teachers. Sometimes, I was sometimes high above my class. Like sometimes, we would have special groups. Because of my knowledge, I actually went off to the closet area separately where the teacher came over and talked to me separately because I got more information to give her than the kids who were in the class. I was just a—you know, I got all As in school.

Brock: Was there an area that you were really excelling in? Was mathematics special for you, or was it language, or—

Thompson: It was everything. I can't think of any particular. When I was in school, I learned—back there, I learned German. I liked German, at the time, and what was the other language? It's mostly German. Then when I came out here later, went to school out here, it was mostly Spanish. But I just enjoyed school, I guess.

Brock: Did you have any particular mentors or teachers that you were especially close with?

Thompson: Well, I always think of the one teacher, Mrs. Green, because I had several classes. One was ancient history. That's when she actually gave me a book she assigned because of my interest in ancient history. There's other teachers. I can't think of their names.

Brock: Was the Boston Technical High School a place where people were coming from sort of like across the Boston area and commuting into the school? Or was it for a particular—or was it for Roxbury, or—

Thompson: I don't know.

Brock: Okay.

Thompson: I don't know.

Brock: How was the Second World War a presence in your life in those days? Was it really affecting the community or what was it like?

Thompson: Interesting because I was like a shop boy at my uncle's shop, which was during that time period, there were a lot of military people coming in to get haircuts. I would shine their shoes and talk to them. They would give me tips and all that. But I never got involved in any military stuff. Because of that time, if you were a certain age, you had to go and be tested to be inducted into the service. Well, I'm 4-F, so—because of my heart.

Brock: Oh, your heart.

Thompson: Heart problems. So, I never went into the service. My uncle, the one who had the shop, he was a merchant marine. And my dad never went into the service. I'm not quite sure what the problem was. But I didn't get too much involved in military stuff except for those coming into the shop, my uncle's shop.

Brock: I know some barbershops can be almost like a social club as much as a place to get one's hair cut. Was your uncle's shop kind of like that? Was it social?

Thompson: No, it was a more come in there, get your hair cut, do your talking while you were in the chair and goodbye.

Brock: Yes. Okay. I know you couldn't participate in sports. Were there any other school activities that caught your attention?

Thompson: I know there was a special class we took, and I can't remember the name of it. When I wasn't in gym or sports, I had to do something. I know I did a lot of reading.

Brock: Right.

Thompson: But I think there was a class I had gone to, and I don't remember what it was. But I don't think anything's—I don't think we had anything special. As I told you before, my memory is not that good. <laughs>

Brock: It seems very good to me. Well, maybe we could talk a little bit about as high school was getting toward its close, what were you thinking about doing? Did you have any particular career aspirations that you held to?

Thompson: What's really weird I think is that—in your high school book, you write down what you want to be. And my ambition was to be a barber. <laughs>

<clock chimes>

Brock: Okay.

Thompson: Obviously, that's not the case. And then right away, that's when MIT came and interviewed so that there was no really much of a time period between graduating from high school and going to work.

Brock: Well, let's wait until it—

<break in audio>

Brock: Well, we were saying that no sooner had you written down in your yearbook that you were interested in becoming a barber that you got connected with MIT.

Thompson: Right.

Brock: How did that connection come about?

Thompson: Well, I think they were looking for—I don't know how they'd arrived at the decision to do that. But they, at MIT, were looking for bright young kids who were not going to college. So, they interviewed kids from all the surrounding high schools. Then I got picked as the first one to do that. And so, that's how I got involved. I've never had to look for work since.

Brock: Do you remember how that interview went or what it was like? Do you have a memory of that?

Thompson: No, I don't know what they asked me.

Brock: Yes. <laughs>

Thompson: You know? But whatever it was, I guess it worked out fine.

Brock: Was it the case that they were offering you—so, the idea was that you could come, and you could both work and study at MIT? Was that the—

Thompson: No, no, it was just to come and work.

Brock: To come and work.

Thompson: Yes.

Brock: Okay.

Thompson: But then after that, I ended up going to the MIT night school.

Brock: Right.

Thompson: But that was not part of the—

Brock: I see.

Thompson: The transfer.

Brock: Was it the case that they interviewed you, and then they offered you specifically this job with the Whirlwind computer? Or did they offer you different choices of what you might do there?

Thompson: No, it was a job offering a computer in the MIT computation lab.¹ The lab was down the street from MIT. It was a separate building.

Brock: Right.

Thompson: And so, that was the deal to work there. It's a separate thing from MIT itself. It was a computation lab where they did a lot of work for different groups, different companies.

Brock: Had you had any exposure to computers before this time? Did you know about computing and computers?

Thompson: No. It's all brand new. No, it was just a learning process. Yes.

Brock: And so, this was at the computing laboratory? This is 1951 now?

Thompson: Mm-hmm.

Brock: And it's in the—is it called the Barta Building?

Thompson: Right, yes!

Brock: Yes.

Thompson: The old Barta Building, that's right.

Brock: Which had been a factory beforehand or something? And then they—

Thompson: I don't know what it was before that.

Brock: Okay. You were commuting in from Roxbury then?

Thompson: Right.

¹ [Editor Frances Corry's note] MIT Servomechanisms Laboratory.

Brock: Okay.

Thompson: Right. Actually, taking a bus.

Brock: Okay.

Thompson: Because I didn't drive. I was using the bus to get to work.

Brock: What was the training process like for you coming in? Had there been other operators for the Whirlwind computer before you?

Thompson: Well, they had people who were getting their degrees. They were either in their master's or doctorate degree, and they would actually do some of the work themselves. So, they had no, what you're calling an operators. It was just the students, grad students, who were coming and running—for their stuff.

Brock: Right.

Thompson: And so, I was the first to—as a—you know, to see if it would work. I guess it worked well. I think then they hired more.

Brock: So, you were the very first person trained to be the operator.

Thompson: The very first, yes, trained.

Brock: Now, who was training you, and what was that like?

Thompson: Well, that was Jack Gilmore, and I don't really remember. I know he would look a lot at the screens, and I would sit down and look there. I just got used to the lights and the sound and using— learning how to read in the paper tape and then learning how to understand what was on the paper tape through reading it. Then because where the holes were punched, what is this? So, you had to learn the whole system. You had to learn the computer cards, IBM cards.

Brock: Right.

Thompson: It was a learning process. I actually did a lot of talking to the people who worked there doing things. I just mainly just absorbed all that as I was doing my work as an operator. So—

Brock: Was there a period of time where you were learning, and then they kind of said, "Okay, you know, you're operating the machine on your own now," or—

Thompson: Well, there had to be because I ended up doing that.

Brock: Yes. <laughs>

Thompson: And I guess it worked out fine.

Brock: Well, I would be curious to hear more about what you just mentioned about the blinking of the indicator lights and the sounds of the machine. Were all those things, the patterns of the blinkings and the different sounds that the computer itself would make, could you tell if the computer was operating properly or having a problem?

Thompson: Right. Yes, you got used to it. If you're going to load in these programs, and you know what it's for, and you get to the point where you understand what they're doing, and you understand the sound because the sounds are different for the different operations. When you're operating, whether it's putting in tapes, or cards, whatever, or use magnetic tapes, you get to know the names of what's going on, and the sound. If something doesn't sound right, you realize something's wrong with the computer or something else. You can actually stop things. You can actually even look at your tapes and see if there's a problem with the tape, or the cards, or something. So, it's a learning process you went through.

But it's something that I guess I enjoyed. I just enjoyed doing the work. It's just...I don't know. It's hard to explain, I guess, because in a way... I guess I must have done a good job because that's why RAND wanted to hire me to train their operators and then to learn programming.

Brock: I mean clearly, you had to understand how these paper tapes were formatted and what the different perforations would mean. Were you also learning what the different—you were kind of having to learn a bit about the programming, then.

Thompson: Right. Right.

Brock: I guess what I'm trying to ask is, like did you study programming as part of being an operator, or were they considered separate?

Thompson: I would talk to the people that were there and get to know them, and they could explain things and answer my questions and what have you. But because we're so new, it was a learning process. You end up just learning as you went along. Sometimes, you end up putting holes in a tape just to see what would happen, and you try it yourself. So, you experimented with some of your thinking and see how it worked out. And I don't remember at all how I ended up writing programs. <laughs> I don't remember how I did that. But at any rate, it's a learning process. I guess because I just enjoyed doing it, it was great.

Brock: And could you talk a little bit more about what was actually making the sounds in the computer? It's an electronic computer, so in once sense you think, oh, well you know. What would the sounds be? Would it be the different tape drives going?

Thompson: You've got all these vacuum tubes and transistor and stuff.

Brock: Hums.

Thompson: And I don't know what all was causing the noise. I just know that once you get used to a particular program that's being processed, because it wasn't at one time, the program would come in many times as they were—as whoever it was testing stuff. If something didn't sound right, you may even stop it and look at, maybe did the tapes get in properly? Did the cards get in properly? Are there some problems with the tape? It just is something you just get used to the sound. If it didn't sound right, then something's wrong with the input, or maybe they have to change a vacuum tube, or replace this, replace that. You have to have technicians come in check things and see if that's the problem of getting a different sound.

Brock: Right.

Thompson: It's just been one of those learning things I guess.

Brock: What were your working hours like? I imagine they were trying to maximize the time on the computer that people could run jobs on the computer. Were you working in the day, or in the night, or different times?

Thompson: I ended up being alone working in the morning hours.

Brock: Okay.

Thompson: I would go in and end up going to school. Then I'd leave school, go to work and be there. And then I guess around six, seven o'clock, or whatever it is, I'm finished. And then I'd get the bus and go home, kind of thing.

Brock: So, you were finished by seven o'clock in the morning?

Thompson: Yes, because I worked the morning hours.

Brock: Okay. So, you went to the evening school at MIT.

Thompson: Went to evening school, right.

Brock: And then went to work.

Thompson: Went to work.

Brock: Okay.

Thompson: Right. And then worked and then left there. So, it was a pretty busy time.

Brock: I can imagine. Could you describe your memories of just kind of what it was like physically working with—operating the Whirlwind computer in the Barta Building, what it was like in the building. Did the computer make things hot? Was it cold? Was it a loud environment? Any memories you might have of what it was—was it dark?

Thompson: I can't think of anything negative about working in the morning hours. I was used to a different sleep pattern. I was used to working those hours and going to school first and going to work. Because I enjoyed what I was doing, it was not a negative thing for me. It was a very positive process for me. I just enjoyed doing it. In fact, I wasn't sure I would enjoy working in the daytime with a lot of people running in and out. Basically, I was there, and I had control by myself. There weren't that many people around. You had to get things done and make sure everything is okay.

Brock: Right. Were there particular people in the program that you interacted with more than others? Any people stand out as particularly important for your experience?

Thompson: I can't think. It was more for people who were actually physically at the facility because I could sit and ask them questions about what's going on, and they would explain things to me that they're doing. It sort of made my work more and more interesting. Of course, they were there at crazy hours also.

Brock: Right. <laughs>

Thompson: And so, it's just good being able to interact. Then of course in the morning when—before I'd leave, I would interact with those who were coming in and would just sit and talk. It was just good communication.

Brock: Could you characterize what it was like to run a job on Whirlwind, to run a program? To the extent that you can recall, what was actually involved? Were you going to a cabinet to pick up paper tapes? To the extent that you can remember, what it was like to run a job.

Thompson: I'm not sure. Normally, if I can think, I always had everything I needed for that particular task. I had the paperwork and everything. I had all the cards there or would have the paper tape there. You have to make sure that when you feed the cards in, they're going in the right way. <laughs>

Brock: Yes. <laughs>

Thompson: But everything was there that I needed. I didn't have to stop to go get anything. Everything I needed to run that job, I had with me. I either had it on the cart I brought out, or whatever. But it was there with me. I could not stop in the middle of a job to get more paper tapes or more cards. Then during a magnetic tape, I'm not sure quite how I did that, how it always got recorded on tape. I had to run that way. But in any case, I didn't stop. I had to keep going until the job was finished.

Brock: Were the results typically output to additional paper tapes? Or were there paper printed—

Thompson: They were printed out.

Brock: Paper printouts.

Thompson: Most of the—yes, printed out. Sometimes, you may have to generate other tapes and stuff. But basically, the results that you wanted would get printed, and then—the person who came in to get their job—get their cards or tapes back and the printout of the results. Then they can go check and find where something went wrong. Sometimes, when you're reading in the cards, something doesn't work. You have to make a notation of that and indicate on the printout what happened and why you had to stop loading because there's an error, and you couldn't continue running. That happens quite often.

Brock: And there were other people working in the laboratory who were responsible for obviously getting you everything—all the cards and tapes you needed for the job.

Thompson: Actually, by myself.

Brock: Oh, you did—you would—

Thompson: All by myself, yes.

Brock: You would assemble all those things?

Thompson: Yes. This is a solo job.

Brock: Okay. I get it.

Thompson: No.

Brock: So, you were an operator for Whirlwind from 1951 to 1955, is that correct?

Thompson: That's about right, yes.

Brock: Okay.

Thompson: I think it was four and a half years I was there.

Brock: Were things fairly consistent over that time, or was there a lot of change?

Thompson: Mm. I can't remember other than technology being changed—changing and going from paper tapes to cards to tape to magnetic tape or a hand inputs because sometimes we could put stuff in their hands in the different push buttons.

Brock: Okay.

Thompson: There were things you can actually key in and get things going. You had to learn that too.

Brock: Right.

Thompson: Yes.

Brock: What the most common thing that went wrong <laughs> when you were operating the computer? Was it people having made errors in their programs or was it hardware problems, problems with tubes? You know, if you—

Thompson: Oh boy.

Brock: Or what were some of the common difficulties?

Thompson: I don't remember. It seemed to be more of the person making the problems. I don't remember much about the machines going down. Occasionally, I said, you get the problem with the vacuum tubes and transition stuff stop working.

Brock: Right.

Thompson: But basically, it was problems more with the person trying to run that job and then something happens there and you have to make a notation, what happened and give it back to them, they'll fix it and then bring it back.

Brock: Okay.

Thompson: Yes. But, yes, this is going back a lot of years.

Brock: It is. It is. <laughs> Yes. I'm just looking at my question list here. Could you talk about the other operators? You were the first but other—it went well, so they trained other people to be operators of Whirlwind.

Thompson: Right.

Brock: Do you remember just in general terms, you know, like what the other operators were like? Were they young people like yourself or?

Thompson: Well, I think they hired more high school kids. <laughs> But I really don't remember much about the other operators to tell you the truth.

Brock: Okay.

Thompson: You know, I don't know how they performed. I don't know how long they stayed. It's diffic—

Brock: Because you didn't overlap very much.

Thompson: No. I mean you would meet obviously, but because you had to exchange, one to the other, but I don't really remember much about the other operators. It's to me more of my talking to the workers there, the adult who I'm in charged of certain areas, I would sit and talk to them or to kind of get more feedback as to what they're doing and what I could learn from what they're doing as opposed to talking to an operator. So, I don't know much about the operators.

Brock: At the Computer History Museum we have a collection of—today, we have a collection of over 700 paper tapes that are from Whirlwind—

Thompson: <laughs> Oh, wow. Oh wow.

Brock: —and some of them date to the era when you were operating it. The earliest ones we have are from 1954. And—

Thompson: My goodness.

Brock: —all of them seem to have some sort of a long inscrutable kind of number on it. Do you recall if there was sort of like a library of paper tapes or was there—there seemed to be some sort of numbering system for these different programs. I wondered if they were just a numbering system for the different jobs that people would make or.

Thompson: Yes. There might be but I don't remember. I just don't remember.

Brock: Okay. Yes.

Thompson: It's—

Brock: Okay. I was just curious, because we're searching through documents to try and figure out what some of these, you know, index numbers mean on the paper tapes.

Thompson: Yes.

Brock: But so far we haven't figured it. One thing that we have been learning from going through some of the documents is about this “comprehensive system of utilities” that I guess was—

Thompson: About what?

Brock: I think it was called the “comprehensive system” or the “comprehensive system of utilities”—

Thompson: Utilities. Okay.

Brock: —that were, I think were on the magnetic tape drives.

Thompson: Oh, okay.

Brock: It seemed to be a library of routines for different—

Thompson: Yes. I'm sure that's the case. Yes.

Brock: Yes. I was just wondering if you had any memories about that, if that was something that you needed to almost like change the system utilities for different jobs or if it was using a common system.

Thompson: I don't remember. I remember tapes and things with IDs and all but I don't remember exactly what I did with them.

Brock: Okay.

Thompson: I just don't remember that.

Brock: Sure. Yes, it's a long <laughs> time ago. Let's see. Some people who were on the research side, I guess you would call it, of the Whirlwind Project who we've had the chance to talk to, have done a little bit of describing the community of researchers associated with the computer and social activities. I was wondering if you and the other operators were part of that community of researchers who couldn't have been that much older than you.

Thompson: I don't remember being involved in that sort of activity.

Brock: Okay.

Thompson: I might have been, but I don't remember that.

Brock: <laughs> Okay.

Thompson: Yes.

Brock: And when you started as an operator, were you the youngest person in the Barta Building?

Thompson: As far as I know, yes.

Brock: Yes.

Thompson: Yes.

Brock: And were there any other African-American people working in the laboratory?

Thompson: I was the first.

Brock: You were the first.

Thompson: As far as I know. I don't know. Only time I saw an African-American come in when they had tours, groups come in from maybe different colleges and stuff.

Brock: Yes.

Thompson: As far as working there, I don't remember any one at any time before, you know, during the time I was working until later. And I don't remember how later that was. But I was the first.

Brock: Do you—

Thompson: As far as I know, I was the first.

Brock: Right. Do you remember what the African-American staff member who came after you was doing?

Thompson: No.

Brock: Okay. I'm hazy about the timing of it, but I know that at some point in here the Whirlwind activity, you know, is kind of going also to Lincoln Labs and that that Lincoln Labs program is really getting going. Were you going to Project Lincoln or Lincoln Labs [Laboratory] at all during your time at MIT?

Thompson: Lincoln Lab is very familiar, but I kind of associated them together. I'm not—

Brock: Yes. I think it's many of the same people but their designation just kind of changed.

Thompson: Yes. Yes. I can't really put it together. I just seemed like they're all kind of interrelated in a way and I don't know how to separate them out.

Brock: Well, I think it was when they were—yes, I think it was very interconnected—but I just wondered if you went out to Lincoln at all. Well, maybe we could talk about how the job offer or the recruitment to join RAND in Santa Monica came about. Could you tell us a little bit about how those discussions began and what the job was that they offered you?

Thompson: Not really. They came because they were doing work and so I would obviously was programming—not programming, I was running their jobs getting them results. I guess over time they just felt that I could be of help to them if I was working for them, and that's when they made me the offer. I don't know how the offer was made. Obviously, it had to be good because I left and went to work for them. You know, salary wasn't what you call that great at the time, but it was just an interesting, you know, I guess experience. Because obviously had worked with them in terms of running their jobs, I was familiar somewhat with the personnel.

Brock: By the time that you came out to RAND the decision had been made to, you know, to develop Whirlwind into the SAGE [Semi-Automatic Ground Environment] system and—

Thompson: Yes.

Brock: And that RAND was going to really take a leadership role in that effort.

Thompson: Right. Right.

Brock: Had you been to California before you arrived for work?

Thompson: Never until—when I joined RAND the condition was that within two years I would be transferred to California. That was a condition of the hiring, is to do what I had to do, and then within a couple years I would be transferred to California with my family, if I had a family at that time. And, fine.

Brock: Did you go right away, however? When did you come to California?

Thompson: Within two years after I joined RAND.

Brock: Okay.

Thompson: Yes.

Brock: Maybe you could describe what RAND was like when you got to Santa Monica, and what the environment was like in which you were working, and...

Thompson: That's tough, because obviously I liked it because I stayed and I was familiar with. Whatever I was doing I was doing okay. They decided that obviously I was doing okay. They would not have sent me back—or sent me to California to start work there. But I don't remember all the things <laughs> I was doing.

Brock: Yes. Right.

Thompson: You know?

Brock: When you got to California, and you got to RAND, was it then that you started to move more into programming as opposed to operating?

Thompson: Oh no, I was programming at RAND and then when I was transferred California I did not do operating, I was strictly programmer.

Brock: Okay. And could you talk about what it was like—so you were programming for, you were working on the SAGE programming effort.

Thompson: Mm-hmm.

Brock: Okay. Could you talk about just what that was like? Were you using pencil and paper, or coding sheets? Or were you punching cards? What was programming like? You know, were you sitting at a desk writing things down?

Thompson: Well, a lot of it was sitting, knowing what you had to do, and then I would sit and we would discuss it and what I would do is do like a flow diagram that I would develop to show the sequence of things and how they interacted. Then I had to write a program that would perform as the flow diagrams said in order to then get converted back onto cards or tape or something and see how it worked. It was a discussion up front, flow diagram the entire process, understand the entire process, and then annotate, which you had to annotate to show how you're changing things, and then program.

Brock: Was this programming in the kind of like the assembly language of the SAGE computer, or?

Thompson: Whatever language—we had a special program that would convert all this called, I can't think of the name now. But there's a program would convert all the stuff you had and you would get it out on tape or whatever and you read it then and there could—oh boy, and now my memory is bad. <laughs>

Brock: Yes. Okay.

Thompson: I—oh, gosh.

Brock: But it was a long turnaround to—

Thompson: Yes.

Brock: —to iterate on your program it sounds like if you had to go through all these steps.

Thompson: You had to go through, and you had to, and then you had to write it all down and then you had to get it tight and whatever and then develop to be picked up and do the job. I wish I could remember all that. Now I can't remember it.

Brock: When you made the move to California, which I guess must have been by 1957 or so then—

Thompson: Yes.

Brock: —had you gotten married by that point?

Thompson: Yes, we were married in '54.

Brock: In '54.

Thompson: Yes.

Brock: Okay, while you were working in the Barta Building.

Thompson: Yes. And we had three young kids.

Brock: Wow. By the time you moved.

Thompson: Yes.

Brock: Yes. And you were renting a house in Santa Monica close to work.

Thompson: Right. Right. Yes.

Brock: And do you rem—

Thompson: I actually started renting before that in LA and then eventually end up renting a house in Santa Monica.

Brock: And—

Thompson: Like I still remember the number. It was 1511 A 16th Street. <laughs>

Brock: In Santa Monica.

Thompson: In Santa Monica. Yes.

Brock: And it's quite a change from Boston. <laughs>

Thompson: Oh yes. Yes.

Brock: In the programming, the SAGE programming effort at RAND, you know, how many people were in your organization? How many people were working on programming would you say at this time?

Thompson: Had to be hundreds because—

Brock: Hundreds.

Thompson: Because, you know, there's so many different areas. I started out and work and then I became a, what you call a unit head. I probably had like, I don't know, five or six people working for me. Then I became a section head and more people. And I became a group head with more people. And I became a branch head with more people. I had probably 20, 30 people working for me. But it was a long process you have to go through.

Brock: Yes. And what was the composition of that programming group like those hundreds of people? Was it mostly men? Were there some women? What about the racial diversity of the group?

Thompson: Well, there weren't that many African-Americans or Hispanics, whatever. But my experience with RAND SDC [System Development Corporation] was very positive. What I really liked about the company, they made no distinction between male and female. If you were doing the job properly you got approved and promoted to run an activity and make sure that you were running it for the company, not for yourself and that you're—you were not—color-blind. What's very interesting—this is a side story.

Brock: Yes.

Thompson: But when I was, I think at that time I was a group head, and there's a young man from Texas. He was using to me derogatory terms for black people—Afro-Americans.

Brock: To you.

Thompson: Okay. One day he was in his office. We had a lot of single offices. One day he was in the office. I went in, closed the door and talked to him about getting his act together. And we became the best of friends. When I called him it was, "Hi, Tex," or something. To me, it was a case of what you learn as a child, and if no one interrupts and gets you involved in something else you will continue to do that which you learned. To me, this was a beautiful experience working with Tex and not as every director or his supervisor, but as a friend. I thought that was neat. But with the people, we had cases where women were promoted and salaried same or higher level as men, based on their performance. To me, that was something that's not being done enough today.

Brock: Yes.

Thompson: But in my environment it was a case of everybody was performing and being awarded based on their performance. And what we did—we had a process where we had to go for a review.

Brock: Yes.

Thompson: We'd get reviewed by our immediate boss and then that writeup goes to the next level and that's reviewed and then the next level up.

Brock: Right.

Thompson: So we got reviewed up the ladder and make sure that everything was progressing well. To me, I felt that being part of RAND SDC was a very, very positive experience.

Brock: Do you think there was something about the nature of that programming work where it was somehow clearer to see who was performing well? That their programs worked or something <laughs> like that? I'm just wondering what were the factors involved where it could be an environment where

people's performance would be clear, and it could be kind of gender-blind or color-blind and people's performance could be more visible? I don't know. Do you know why it was like that?

Thompson: I'm thinking because we just had a lot of people doing work and doing it well and enjoyed working together. There weren't that many negative interactions. We had problems, of course, nothing, you know, no one can go without having some problems. But in our early days we were all like one big happy family. I think as time progressed you kind of spread out and had other problems. But we did so well, I think, as a company.

Brock: Were all the programmers together in or was the whole software effort together in a single building, or were you spread out?

Thompson: It was in different buildings. We had—was it Camarillo and Santa Monica—and other places we programmed. We got together and made sure everything worked together fine. You know, I'm trying to remember now. I don't remember any major problems with trying to integrate everything together, making sure it worked.

Brock: Right.

Thompson: Yes. Obviously we had problems, of course, but we seemed to be working pretty well together.

Brock: Did you need to get a security clearance right at the start of when you joined RAND, or was that later? Or when did that come into the picture?

Thompson: I don't remember when I had to get it. I just know that as I progressed I had to get it because of the work we were doing was a secure nature. You had to have proper inform—performance—proper credentials in order to just continue working on. Because it wasn't just the programming, it was discussion of what you're doing and why you're doing it, why this work, why this didn't work, what you had to do to change it, until you're really deep into what you're doing to make sure that everything's going okay. Yes. So.

Brock: And, let's see. Did you feel any pressure on this project because of the place of SAGE in the national defense, and what was going on with the Cold War? Was there a feeling of pressure or urgency within the group?

Thompson: I didn't feel that. I think we had a schedule that we tried to meet and we had to—I think one of the things that we did as we progressed up the line—well, I know I did. I had a lot of discussion with the military, where you had to go in and discuss what you're trying to do, what they're trying to do, and the part that you're doing. Does it fit in properly and make your job easier, or is it something we're not doing that we need to fix?

What was great about that is that—well, I'm not sure great. But because of having a high level of security, which I had to have, you could freely open and discuss things. In fact, we would often be invited to a special presentation in a special tape, to see what's going on. We could appreciate the activity that we're—you know, if you got all this to do, we're doing a part of it, but that part is very critical to the whole process. To see how what you're doing how it's helping others, and while it's progressing, and while you have to change maybe this or that to be more involved in other activities. I know I just enjoyed doing be able to sit and talk be open—

Brock: Right.

Thompson: —with the military. You know, we weren't playing, "Yes, Sir. No, Sir," you know type thing. It's a case of we could just talk using first names if you wanted to, and not necessarily Captain or Major, but using first names.

Brock: Right.

Thompson: And able to discuss things and see what's the best approach to get something done. I don't know, I just, I guess I just enjoyed it. It's—

Brock: And were most of those interactions with the military happening with organizations that were here in the Los Angeles area? Because I mean I imagine that from the experience with well, with SAGE and all the activity going on that a lot of the work was related to aerospace, so a lot of the organizations would have been out here or—

Thompson: Yes. No, we worked aerospace and we worked with—was it—Sunnyvale Air Force Acad—Air Force.²

Brock: The satellite command up there.

Thompson: Yes. And then we worked with the group here. I don't remember all the names. But we worked together I think very well. And because I had a very high level, I had a level above top secret. That was important. I could discuss openly with the people all the aspects what was going on. We would share things, and it made life so much easier to do this. When we met, we met in a separate facility. We did not meet with the regular set of people. We had to be off in a secure environment to talk about what we were doing and how things were going. But I just enjoyed it.

In fact, it's kind of funny thing. When we had to go occasionally and discuss things. I said, "I have to go in for an operation," whatever it was. And they said, "Well, you know, you can't go and have an operation. That's when my people are there watching, and make sure you don't say something you're not supposed to say." I mean not that they would do that, but that's what they were saying.

² [Editor Frances Corry's note] Sunnyvale Air Force Station.

Brock: <laughs>

Thompson: That was interesting.

Brock: Oh, from the anesthesia or something.

Thompson: Right. Right.

Brock: Yes.

Thompson: Yes, you can't talk about what you're doing, you know, and so got to make sure that someone's there, make sure if they—if you do, then they can take care of it. Yes.

Brock: Wow.

Thompson: But anyway, that's another story. But it was good.

Brock: Well, it's fascinating. Now at some point in time I guess it was during the SAGE effort, SAGE programming effort, the programming group within RAND became the System Development Corporation.

Thompson: Right.

Brock: Was that in the early 1960s? I don't know when that occurred.

Thompson: Had to be pretty early because once we went to RAND and found that we were just growing too big, had to separate. It had to be in the late '50s, I would think.

Brock: Yes.

Thompson: Near that.

Brock: Did you need to move the operation to new buildings, or?

Thompson: Yes, we had to go to another building. Try to remember where did we go. I don't know, it's just so much going on, I don't remember. Yes.

Brock: Was your impression that it was a big change going from RAND to System Development?

Thompson: Not at first. Just something I'm learning. It's just a just a learning process.

Brock: Right.

Thompson: I mean because it was the same, you know, it was called RAND then it's called SDC, <laughs> but it's the same people and the same organization. There's really no change except maybe location.

Brock: Right.

Thompson: You know?

Brock: Okay. I was interested to ask about, in the '50s, what was the general or broader computing scene like while you were—you know, you get out here, 1957, at RAND. What other organizations in the Los Angeles region were into digital computing at this time? UCLA [University of California-Los Angeles], the aerospace companies? Did you have any interaction with other—

Thompson: I got more involved with aerospace and TRW and I don't remember all the... 'Course RAND, but I don't remember. I just can't remember all the different—

Brock: Sure. Well, shifting gears, I wondered if in this time of the in the '50s into the '60s, you know, what did you think made for a good programmer? Was there a particular personality type, or a background, or was there any commonality to what made a good programmer?

Thompson: I would say one, they had patience, and they were smart.

Brock: <laughs>

Thompson: Because one, if you didn't have patience you couldn't get the job done. Because there are times we got so frustrated by something not working. If you got to the point where you just couldn't handle it, you don't need to be there. You had to learn to accept failure, to accept the fact that you will get the problem solved and get it working. Don't be discouraged by the fact that what you—what you thought was okay is not okay. To accept what people are saying and evaluate it in a point of, "Does it help my job or does it make it worse?" And don't be afraid to speak up and tell somebody no.

You know, it just to me, it was just I enjoyed the fact that you could openly talk about things and—forget all the secret stuff, but just normal stuff, and get response and be able to talk to people. And just get things done. What's sad though, in a way, is that sometimes because you are in charge of an area and there are problems you got to look at the problems and try to resolve it instead of worrying about getting the job done for work.

Brock: Right.

Thompson: Sometimes I'm home and I'll call someone from home and find how they're doing and what's going on and what can I do to help. Then the other thing is when we lose—and this is difficult to talk about. But when we lose a person that we've been working with for so long and then that's really tough.

And then what we found is that their family will come back to us with cards of thank you for what we did. Sorry. <sobs>

Brock: Oh no. Please.

Thompson: Yes. It's just beautiful that people appreciate what you do and who you are. The fact that they were part of that and you get the work done. Anyway, that's probably the worst part of that is that sometimes I'm told by my boss, "You got to call Person X and tell them they are no longer hired. They're going to be fired."

Brock: Yes. Right.

Thompson: I had to do that at least two or three times. That is very, very difficult, because I feel that's not right in the sense that they should be facing you and you should be able to tell them face-to-face. But that's not always how it can happen.

Brock: Right.

Thompson: And that's tough. And then I remember—and I get off the subject here, but—

Brock: No, please, please.

Thompson: —I remember one time it was I'm coming into work, and this fellow's coming in and he's saying, "I need to talk to so and so." And I wonder, "Why is he asking me that?" He said, "Because I'm FBI," or whatever he was. Who knows, some agent. And he didn't come out because then they have to take him into jail or wanted.

Brock: Oh my gosh.

Thompson: And I'm saying, "I'm not going to have my person come up and"—not they had to be working for me but—

Brock: Yes.

Thompson: And then come out and then they take the person off to jail. That happened once and I and came back and I told the person what was going on. And I said, "It's up to you. I cannot do this." The person went out and talked to the person. I guess they went off and did what they had to do.

Brock: Wow.

Thompson: But that to me is one of my worst experiences is that kind of thing. And I—yes.

Brock: It sounds like you put a lot of, you know, attention and care into the group so you could, you know, have that cohesion so you could get the job done. Were there are other people who were in the organization who were as involved with their people as you were or were you different or?

Thompson: Oh yes. Oh, oh yes. Yes. I think we were a person group, and we all got together very well and worked okay. And I remember, I still have it. My group—I think at the time I was probably group head. I'm not sure. Maybe branch head. I guess Christmas-time I got this little life-like little doll. And it had in one hand a whip and another hand—and another hand a book or something.

<laughter>

Thompson: It had a note and it's—and this was a Christmas present, one of the kids. And it said, "You know, you're tough, but I like you." Something like that.

Brock: <laughs>

Thompson: Now I still have it hanging up in my den, this little character. Yes. But you had to be—you had to let your personal problems not get in the way of you responding and helping people that are working for you, or that you're working for. It's important, you can't let that mess up getting the job done.

Brock: Right.

Thompson: I just enjoyed working for RAND and SDC. And it was tough to see the changes coming along as the years went over. You know, was not—it didn't have that personality sitting—friend sitting the talk. It just seemed like it was, "Do this, do that, do this, do that. Don't bother me. I'm too busy. Do this, do that," kind of world, and that to me was bad.

Brock: Do you think that was just because of the changes in the organization or was it in changes in sort of the work that the organization was doing?

Thompson: It was probably both.

Brock: Yes.

Thompson: I don't know. It could've been me, too. You know, being so used to the other way and then seeing it's different, you know, and it just—it's tough.

Brock: This was a question I had: at some point, the SAGE installations get built and the software is running, but I wondered how much for System Development Corporation, and perhaps for you personally, was there a lot of continuing development of the SAGE system, or software maintenance sorts of work? Were you on SAGE for a long time while it was deployed and—

Thompson: Yes, yes.

Brock: Okay.

Thompson: Yes, I was involved, and we would actually do the work, and then we would actually go to the Air Force base and visit. You can sort of watch and see how things were going. To experience a launch or something and that's going—of course, we have to program software that we utilize in some of the satellites. Just to be able to see that. Of course, we had to have access to get in, you just can't walk in. <laughs>

Brock: Right, of course.

Thompson: But it was good. I just enjoyed the fact that SDC was so person-oriented. When Unisys took over, I just felt a lot of the togetherness sort of disappeared somewhat. It was like too much of a business and less of a person kind of thing.

Brock: Right.

Thompson: I can't complain about having a job, but it's just a different kind of environment to work in, you know. I guess, you have to do that because you can't afford to be—you've got to get things done and you've got schedules, and you've got to just do it. So I know it's tough, you know. Yes.

Brock: I was curious about—so, you're at SDC and you're working on different kinds of software efforts and programming efforts across the '60s and then across the '70s. There's a lot going on in computing in those years! <laughs> If could you just comment about, in this time as higher-level programming languages are coming in, and things like time-sharing, and computer networking are coming in. How did that change the world of making software?

Thompson: Well, I'm sure it changed a lot and the problem is I never got involved in it enough. What's interesting, when I was at SDC and RAND and we were at a training operation, what have you, I had my son come in and I got him involved to get training and stuff and see how he would do. He eventually left and went to TRW and then some other places. He now works for Oracle and he is engrossed in all the top level—oh, god, I couldn't even understand the things he's talking about. But I'm not. I'm like way down here.

<laughter>

Thompson: You know? And I don't know if I could have adapted or not. But I guess, fortunately, I had to be terminated because of my illness. <laughs> I think that's a big plus, because I don't know that I could've actually adapted properly and to be effective as a programmer or as a person with the change in the technology.

Brock: So, as you took on these larger responsibilities for groups, you were getting farther from doing any programming yourself.

Thompson: Yes, right.

Brock: I see.

Thompson: Right, right.

Brock: It was more talking about the requirements and schedules—

Thompson: “It must be done—” schedules on time. “You can’t do this, you’ve got to do that.” You have to change your way of thinking, in a way, and how you go about and conduct business and in working. Now, when I was going to work I’d always go work more than the normal so-called eight hours. I just spent a lot of time at work. But when you are married and having kids you just can’t keep doing that. You have to take care of your family at the same time.

Brock: Right.

Thompson: It’s not like when I was just starting out, where I could just spend hours and hours and hours, and then go to school and come back, and spend more hours, and enjoy what I was doing and then getting things done. It’s not the same world anymore. Plus the world advanced.

<laughter>

Thompson: It’s like a funny thing: when we were growing up with the kids, we had a lot of word games. We would get together, and we would play the word games. Well, now they don’t play word games, they’re on the computer. They’re looking—they are playing on the computer. It’s a rarity that they would actually play a word game.

Brock: Yes.

Thompson: Even the word games have now been modified to work—well, you have to work as a computer. I mean, it’s totally changed. And, so, I’m too old-fashioned. I could never survive, I suspect, in today’s environment. Well, of course, I’ve got vision and hearing problems, but that’s not an excuse. It’s just that the world has changed, and you’ve got to be able to adapt if the world is changing. And I just did not do that. So, in a way, it was a blessing that I stopped working when I did.

Brock: What year was that that you had that medical retirement from Unisys?

Thompson: It was probably—see, I was 59 when I—so, it was probably, like ‘61 or something?

Brock: In 1991 or something like that? Right? Would that be right? Thirty-three plus 50 is—

Thompson: Well, I started working—oh, okay. I started working when I was 18—and 59—so, that would have been 41 years. I worked 41 and a half years. So, if I started working—

Brock: In '51—yes, so '92 or something like that.

Thompson: It was in the early 1990s.

Brock: Right.

Thompson: Yes.

Brock: Well, do you think that—even though you weren't programming anymore, you were still working with programmers. Do you think that the same characteristics that you thought were important for being a programmer—of being smart and being patient—was that consistent across that whole time or—?

Thompson: Well, I think you've got to be smart and patient, but then you have to be able to operate different equipment and you have to be able to be smart enough to know how to key in stuff, how to use a computer in a different manner, how to use this, how to use that. It's just a whole new world of a learning process, I guess. I don't know if I could do it or not. I'm sure I could not do it.

Brock: Well, I was also curious about that time of your working life from the '50s to the early 1990s. There are big changes happening, you know, culturally in that time. We have the Civil Rights movement, we have—I mean, that's a huge change in society and culture. I just wondered your reflections on that. How did those changes in our broader society manifest in your professional life or in your personal life? I would just be interested in your thoughts.

Thompson: From a personal point of view, it didn't change. It just made it frustrating, because I couldn't do certain things, because I had not learned how to use it. Like my kids, you know, they could sit at the computer or have their hand calculator. They can do all this stuff and I wouldn't know what they are doing. And, so, it's not like I could interface today as I would've done 20 years ago or whatever. It's just not the same environment to work in. You're not worrying about paper tapes, cards, or magnetic tapes or stuff like that.

Brock: Right.

Thompson: You can just get in and get the results and look at it. It just works fine for you. Like, if my son takes me to a doctor, he has his knapsack and it is in that knapsack is his keyboard and, so, he can sit there and do all his work while I'm being processed by the doctor, so to speak, and get things done. Even though he's not at work, he's at work. In fact, his office is in his house! It's not going to an office in downtown somewhere. He actually can operate mostly from his home. You just can't do that in my day.

Brock: Right. I guess—yes, in addition to those technological changes, I was just wondering about the social changes, too, that were happening in the country, like in the 1960s and how that—did you see that reflected in your workplace? Like, around women's rights or around Civil Rights? It already sounds like you were in a pretty open organization. I'm just wondering how those big social movements were reflected in what you saw in your part of the computer world.

Thompson: Well, in my world, interestingly enough, I did not see the presidential aspect of women not being treated fairly or some particular races not being treated fairly. I didn't see that happening, maybe because there weren't that many involved in it. <laughs> But I didn't see that happening that much in my time environment when I was working.

Brock: Right.

Thompson: Now I'm sure it is, just from what I'm seeing. Even though I have a problem with all this recently, with the ladies attacking these men for doing something that they shouldn't have been doing, and I kind of wonder, "Well, why now? Why so many?" And it's not like it's not bad. It's bad. It really is. My question now—I always keep on wondering, "Are they all real?"

You know, I keep thinking back to my church—and this was many years ago—and they were being accused by some kids of doing stuff on the altar with people, and that they were doing other things that they shouldn't be doing and then when it got all checked out, these kids were just lying. They even had people come in from the city to check our altars to make sure it wasn't covered with blood! You know, it just was ridiculous. And then to have all this done because the kids just wanted to have fun.

Brock: Mm.

Thompson: And then every time I think of them <inaudible> being blasted in the TV, I say to myself, "Is this real or not real?"

Brock: Mm-hmm.

Thompson: Now as far as women are concerned, it's got to be real. There's too many of them—

Brock: Yes.

Thompson: —that says that it's not real. There may be some there that might just be faking to get money, but I think these are major problems.

Brock: Yes.

Thompson: It's kind of sad to see this, because why can't you be—you know, when we worked—and we had a lot of people—lot of women who were working or in charge and they never had this problem of inadvertent aspects of the work. They were treated as a worker.

Brock: Mm.

Thompson: To see that change in this environment, it is awful. But I also wonder are they all real? You know? And I just—that's just me. You know, and it's real enough that it needs to be changed. There's no question about that.

Brock: Right. Well, what were the sorts of projects that you were involved with, like big software projects after SAGE? If you could generally describe them, were there military projects mostly through your career at SDC and then into Burroughs [Corporation] and Unisys? Was it mostly government work?

Thompson: It was mostly government work, yes. We interfaced it with aerospace, with the military, like, from day one, 'til I left, because we had to make sure that things were working right. I spent a lot of time on the phone with the military. I spent a lot of time going down—face-to-face with the military. That was not my enjoyable times. I am not a telephone person. To have to go and talk to the military—and yet we had a very good relationship. It was not a problem of being able to get on the phone and talk to a person on the telephone. It's not a problem.

In fact, when someone retired I would go to the retirement party, which was in a park somewhere, and then they just all friendly—just great. It wasn't so much that we were enemies; it was just adjustment to change. But it worked out in most cases pretty well. Yes, it was good.

Brock: Let's see. And as you look back on your career in software and with computers, what do you think were greatest successes and your greatest failures professionally?

Thompson: I think the greatest success was that I would tackle a problem—I would get the problem done on time, and I would get the problem done that it worked. That was a plus. I think that's why I got promoted the way I did, because I was able to handle and work with people well and address well, interface with no major problems, and get the job done.

The problem I had was sometimes I felt as it went up the ladder of supervision, that those at the upper level we're not aware of all the things we had to go through and it often was important to sit and talk with a above-supervisor and explain what we're doing, why we're doing it, and what we see as problems.

When I was in the SAGE-SDC-RAND environment it wasn't that large that we couldn't just go and talk. But as they get out and started growing and growing and growing, it was difficult to always go to the right person at the right time to talk. The thing is when they go in different areas—like, I spent a lot of time going to Camarillo where we had office and things, and I would go to meetings and discuss things and I couldn't discuss where it was in Santa Monica. They kept moving the facility—

<laughter>

Thompson: —and personnel away up in the Valley. That made it difficult. The driving—I really hated the driving, to keep driving and driving in—oh, lord. You know, so, that was something I had to get—I had to adjust to. But when we'd go to, like, yearly parties with the anniversary parties and then I see people I've worked with in the past, it's all very, very friendly. There's no animosity floating around, even for those you may have fired or had to let go for whatever reason. They're still a good family, in a sense. It's just neat.

And I wish I could remember the names of people, but I don't. I even get stuff from people and I say, "Who is that person?" You know, I'll get birthday cards or I'll get a Christmas card, and I don't do that anymore, because I just can't—now because of my vision and other things, I just can't. And I say, "My goodness, wow." You leave a good impression. I think that's important that you whatever you do, you do something fairly, you do it with proper vigor and with proper—like I said, the words that explain why this is not what it should be, or that it's good.

Brock: Mm. I wanted to ask you about the kind of makeup—like, the makeup of the computing community over time. It seems like there was an era where the participation by women in computing was better than it has become more recently, which is a discouraging trend. It also seems that there has been an ongoing challenge about African-Americans participating in computing across this whole period of time. I was just interested in your thoughts about that: why that is, why that has been, why does that continue—

Thompson: I don't know.

Brock: —what you think about it.

Thompson: I don't really know, because a lot of the work is done at home or—and you don't necessarily see the personnel. I mean, I don't know, because I'm not involved anymore. It's hard to say. It's just that when I talk to my kids, at least, the ones that are involved—like, my son and my daughter—they're involved with all kinds of people in their work environment and I don't get a sense of discrimination. It may well be. I just don't see it, because I'm not involved in that anymore. I don't see that's happening. It's hard to say, because I just—you know, I just don't know. I don't interface with anyone, you know, to speak of.

Like, when I would go to meetings away from work, so to speak, the makeup is a reasonable makeup of personnel, of backgrounds, gender, you know, beliefs and things. It seems pretty much shared. So, I can't say how that would be at a work environment. I just don't know. When I see what's on TV it appears that women are getting short-changed as well as some of the minorities, but I don't know how it's really working on a day-to-day thing. I just don't—because I'm not involved in that.

Brock: Right. And it seems that you were working in an environment for your career that was maybe especially good on some of these issues.

Thompson: Well, it was my experience in my gender—was based on performance and not based on how you looked.

Brock: Right.

Thompson: And, so, I don't know how to answer that except I just wish we had more of that, where you work because you're good, but you also are a different gender and you're a different racial composition and I don't know. Maybe it is happening somewhere.

Brock: Yes.

Thompson: But I don't know if that's the case.

Brock: Well, thank you. I also had wanted to ask you just about to reflect on Southern California as a place for computing over time. Because it's my impression that in the 1950s and 1960s, especially the greater Los Angeles region, was a leading center for computer work. And, certainly, computer efforts continue very strongly in the Los Angeles region, but maybe not at the kind of prominence that it had had in the '50s and '60s. Any thoughts about that, the story of the region in computing?

Thompson: No, I can't—what I see they're so much of the individual stuff that people just have their computers with them and they do their thing with the computers at home, on the road, and in travel. I just don't know how their environment is, as far as the company itself.

Brock: Yes.

Thompson: I just don't know.

Brock: Okay.

Thompson: Like, my son, he does his work in his home. He has his office up in his den.

Brock: Right.

Thompson: Pretty much. When he has to go to work, which he does occasionally, but that's not the norm. So, I don't know how it is for all the others. I'm sure there'd have to be a collection of people at offices somewhere getting jobs done. But I don't know how it works. I wish I could—I am just sort of blind to all that stuff. Yes.

Brock: Well, then the last questions that I wanted to talk with you about have been your interests and activities outside of work. Obviously, you spent a lot of time working very hard at work, but in your retirement and before that what were the other parts of your life like?

Thompson: Okay. I mentioned earlier that Marriage Encounter, which is something I've been in, good lord, since the early '80s and so—forever. It's a group of people, different denominations, but who make good marriages better. We're not as active as we were three or four years ago, but it's a very important part of our life.

Also, we've been in this house 52 years. We had a Neighborhood Watch for, like, 30 years. Very, very active and beneficial. In fact, the last post of work, we're supposed to have worked out where the president and vice president and secretary would maybe have a three- or four-year thing and then we vote for—okay, well, it hasn't happened. I am the president of our Neighborhood Watch. My friend down

the street, he's the vice president. Our neighbor across the street, she's still the secretary. Nothing's changed. <laughs>

But we had a wonderful—we haven't done much in the last four years for many reasons. One, getting enough young kids, and the ones who are doing it are aging, but in the old days we would have monthly meetings, I would collect a dollar per month from each household and I set up a bank account and that'd go in the bank account. Now that money was used if a particular member house—if a neighborhood member died, we would take some money and use that to have a card that all the neighbors signed and maybe other things we can give to the family.

Or it was used to support—like, we had a special Halloween party. We would decorate the garages. You would have special things for the kids and we would give out prizes to whoever had the most scary garage that you go through. These things like this we did. It was a very, very beautiful experience. And not only getting kids to take over, but we had families moving out. Then the kids growing up moving out. So, we have not been active. But that was a very, very active environment.

Then other things, like, when I was working for SDC, as we left the SDC-RAND aspect, they were very beneficial in letting me do things. For example, the company had a group of people who did what was called a "Youth Motivation Task Force." We would go to the various schools that had some problems, and we'd go along to the eighth grade and we would talk to the kids and try to convince them of staying in school. At least get your—at least get a high school education, hopefully go to college. It's very interesting: once I went and the instructor was trying to get the kids to quiet down, and I went over and I said, "Please leave."

<laughter>

Thompson: And I took over the class. That was wonderful. We got a lot of things done. Another time I was going through and there'd just be no instructor there and this one kid he came to me—he didn't come; I was walking through their room. He said, "You know, I make more money doing what I do than you make at work." I went, "What?" "I sell drugs." Good god. Can you believe that? He couldn't be more than 15 years old or 16.

Then another kid in another room, while I was talking, he drew a sketch of me. He gave me a picture. It was a beautiful picture. Don't know where I put it. And this is the experience at Youth Motivation Task Force. And then another time, I went and the kids were disruptive and I tried to get them to quiet down and this young lady stood up and said, "That's it. Quiet." She sat down and everybody was quiet. So, that's an experience you get outside of work.

Brock: Yes.

Thompson: But the problem was—it wasn't a problem, the beauty of it was that work allowed me to do it. They allowed me to take off hours of my time, their time, to go talk to young kids. Now that's a beautiful experience.

Brock: Yes.

Thompson: So, I can't knock that. That was just wonderful for—so, I did a lot of these things outside of work. It just kept me busy. Well, not just me, but Cynthia, too.

Brock: Right.

Thompson: Because the Neighborhood Watch, it was not just me. It was her as well. She was very beneficial. Then we had the younger kids go to softball and we would go, Cynthia and I, and play a lot of tennis with friends. Then we would go bowling and we would bowl ourselves. Then we would go bowl with friends. Then we were part of a group of adults where you would go—and Cynthia has a whole bunch of golf—golf, gosh!—of bowling trophies in the room there that she earned through her bowling experience. It's just one of those things. We did a lot of things outside of work that was very important as a family.

And then with kids there weren't anything, but something else, we went on a lot of trips together. I'm getting off the subject, I know—one of the pluses of my job, I did a lot of traveling to states for activities and I used American Express. I got American Express points <laughs> for travelling. When one of my daughters had to go—her group to go back East I was able to use my American Express cards for going back East. A couple years, a year ago, tried to go on a family reunion, I had enough points.

There's things you get if you're doing a good job, but working and you're being dedicated to the work you're doing. There are aspects of work that are a plus and I got a lot of those pluses. I cannot complain about my work environment at SDC. It was very, very good. Yes, so.

Brock: Well, I think we have come to the end of the question list that I had. What have I missed? Is there any big thing that I've missed? Or is there anything else that you'd like to share?

Thompson: Well, my—one thing that my wife—one of the things, again, American Express points. She went to Harper College and she was on the choir. The choir of that college and other colleges were selected to go sing in Carnegie Hall and she did that. Then some of her aunts came out to New York and to see that. That was sort of neat.

It's just things would evolve with Neighborhood Watch, Marriage Encounter—we were very busy doing things together. Of course, as she gets more and more—of course, she's got Alzheimer's Disease. So, it's a problem there, but before that we did a lot of traveling. In fact, had a whole thing of spoons we'd get from all the places we'd go into. I got three little cabinets full of—

Brock: Oh, I think I saw those.

Thompson: —spoons. Yes. Right now it's a sad time, because Cynthia is in—she's gone and I'm here by myself. Might have to—yes, I got to get to a smaller place and it's difficult getting rid of stuff. I go through papers and things and books and I said, "I can't get rid of that, because I'm too close to it," you know? It's a problem. I have to somehow adjust myself to get rid of paper. And I haven't got there yet.

Brock: Well, I'm not the right person to talk to about that, because I think I'm about the worst person possible for that!

<laughter>

Brock: Thank you very much, Joe. That was just—

END OF THE INTERVIEW