

Stella Chess and Alexander Thomas

- Chess
 - Born March 1, 1914; died March 14, 2007
 - B.A. (1935) Smith College, M.D. (1939) New York University
- Thomas
 - Born January 11, 1914; died January 29, 2003
 - B.S. (1932) City college of New York, M.D. (1936) New York University



Major Employment

- Chess
 - Associate to Full Professor in Child Psychiatry, New York University Medical Center: 1966-present
 - Visiting Psychiatrist, Bird S. Coler Hospital: 1958-1966
 - Chief Psychiatrist/Mental Retardation Clinic and Psychiatrist-in-Charge/Child Guidance Clinic, Flower Fifth Avenue Hospital: 1950-1966
 - Coordinating Psychiatrist, Northside Center for Child Development: 1947-1956
 - Instructor to Professor of Child Psychiatry, New York Medical College: 1945-1966
- Thomas
 - Assistant to Full Professor, Department of Psychiatry, New York University School of Medicine: 1948-present
 - Assistant/Associate/Full Attending in Psychiatry, University Hospital: 1954-present
 - Director, Bellevue Psychiatric Hospital: 1968-1978
 - Assistant to Associate Visiting Neuropsychiatrist, Bellevue Psychiatric Hospital: 1951-1968
 - Assistant Clinical Neuropsychiatrist, University Hospital: 1948-1953

Major Areas of Work

- Psychiatry and psychiatric disorders in children, temperament and development

SRCD Affiliation

- Chess: *Child Development* Editorial Board (1970-1974), Distinguished Contributions to Child Development Award winner (1993)
- Thomas: Distinguished Contributions to Child Development Award winner (1993)

SRCD ORAL HISTORY INTERVIEW

Stella Chess and Alexander Thomas

Interviewed by Nancy B. Rossnagel
May 20, 1998

Rossnagel: Okay, you've seen the interview questions right?

Thomas: Yes.

Rossnagel: So I'm going to start with them but please feel free to elaborate as you go ahead. The first one asks you to describe your family background along with any childhood or adolescent experiences that might be of interest. Where were you born, where did you grow up, what was your schooling like? Do you want to start?

Chess: Yes, I was born in a snowstorm, which made the obstetrician late, in the Bronx—I don't remember the exact address—so the obstetrician got there a little late and finished up. The obstetrician later turned out to be into pediatrics and was a pediatric teacher at NYU when I was a medical student. That was 1914, March 1st. What was the next question?

Rossnagel: You grew up in the Bronx then?

Chess: Not really we moved to Manhattan on Manhattan Avenue at 104th Street and by the time we went to school I went to Ethical Culture School which was a trolley car ride, the trolley car being on Central Park West at that time, to the school.

Rossnagel: And the school was located in lower Manhattan, is that right?

Chess: 64th Street and Central Park West.

Rossnagel: Okay, where were you born?

Thomas: Also in the Bronx. My parents immigrated here when they were both young adults so I was the first son, the first child of the family on my father's side which was the big dominant family. We were in an area of the Bronx which was stable but a lower working class family, so our family was basically a poorer one than Stella's. I went to public school all the time; Stella went to private schools, that's the difference. I was bright in school. I graduated from high school at fourteen and from college at eighteen. So I was the favorite of the whole family because I was the first son, the oldest son, and very smart in school. I worked after school. I went to decent public schools in the area at the time. Now of course they have deteriorated in their level. I went to a sort of elite public high school at the time called Townsend Harris which had a curriculum for three years instead of four years and had very high academic standards. If someone didn't do well the first year they were out. Then I went to City College—now City University—which was the first free college in the country in an urban area. It was very good. Stella went to Smith College, by contrast. It was a great school at the time because applicants were accepted with only an 88% in high school and it was called the proletarian Harvard at the time. Just parenthetically, there was a great campaign for open admission; unfortunately the level of the college has sadly deteriorated, that I know. I worked evenings through most of my college years; I worked 48 hours a week, 5 pm to 1 am. Anyway, I went to medical school in 1932 to '36 at NYU.

Chess: I entered in his senior year.

Rossnagel: You met at college?

Thomas: I was a senior and that's where we met together and so forth and so on, and got married in 1938. At the time I was an intern and Stella was still in her third year of college.

Chess: It was between my third and fourth years; that was the only time he could make it.

Rossnagel: The only time you could find! Understandable.

Chess: Right.

Rossnagel: So did you do your internship at NYU then as well?

Thomas: No, Mt. Sinai which at that time was the elite internship in the country for Jewish students. I couldn't get into Presbyterian or Cornell but I got into Mt. Sinai which was the most competitive and was a great hospital at the time. The hospital is still good but its level has deteriorated to some extent. For example, while my son was going to medical school for internship he didn't apply to Mt. Sinai for an internship because it wasn't as good as the other ones, so that's that. Then I started in

practice in general medicine but became more and more interested in psychiatry, first as an intern, a medical and surgical intern. There was no psychiatric department there, but I got more and more interested and also in patients. Then World War II came along and I enlisted as a medical officer at an air training base near Champaign in the center of Illinois. I had a chance to go on psychiatric service after a month. I presumably started as an internist, psychiatry was under internal medicine, and they needed a psychiatrist so I volunteered. I became a psychiatrist. Then got my resident's training to get the credentials at Bellevue.

Rossnagel: So you did the residency after the war was over at Bellevue?

Thomas: Yeah, all I needed was one year because all the credits I had from my psychiatric assignment during the Army, being a medical officer in the middle west—that's where I was before. I came back to Stella periodically and at least it was a very interesting and useful experience during the war. I was discharged in 1945 and our children arrived—

Rossnagel: So Stella, you did medical school at NYU—

Chess: Well, I think I should go back and fill in. I lived, as I said, on the west side. My father was from Bessarabia. He belonged to a club which he founded with some others called the Bessarabian Young Men's Association, never thinking, of course, that they would grow up. So until he was in his sixties he went off once a month to the Bessarabian Young Men's Association. My mother was from, some part—I don't remember—of eastern Russia and she came here at about—I don't remember—one was 15 and one was 18 and which was which I don't know. She started at public school and learned English and when she felt she was ready she wanted to jump a couple of classes and they wouldn't let her. So she registered herself at another school and she moved on up very quickly until she was in the proper class, and then her two older brothers—one older, one younger—became doctors. There were eight kids, four boys and four girls, my mother being the oldest girl second to her oldest brother. The girls all—it was a very unusual family because everyone went to college except one boy who didn't want to. He was a hooky player and a gambler, a very nice person.

Thomas: I just wanted to inject that I had two brothers and one sister; all were basically as smart as I was and the two brothers and I went through college, called City College, but the girls in a poor family didn't go to college. So she was smarter than we were but she had to go to a commercial high school to be trained as an office worker.

Rossnagel: That very unusual for—

Chess: Yeah, right. So he didn't want to attend college and he went into the family business. He was good at it, it was a furrier business. My mother went to Hunter College—it was called the Normal College then—and trained to be a teacher, so did her other sisters. She was a really very unusual person. She was a very, very good teacher. She used to pride herself that no child left her class not knowing how to read. And the method she used she didn't call total token economy, she called bribery! And she would keep a kid who wasn't reading either after class or at recess and feed them pennies for doing things. Trained them on a passage that was like two weeks ahead until the kid could have read it falling off a cliff or whatever and then call on the child, you know, going around the room and say, "Will you read this" and deadpan let the kid be introduced to the class as a competent scholar, and then she'd call the mother to the class and say to the kid, "Just say I want to see her, don't tell her why." It was kind of a little surprise, a secret, and when the mother would come, presumably thinking it was something to complain about, she'd say, "I just want you to hear this," and again have the child read the one passage that he'd been trained on. She would take other children from other teachers who didn't want to be bothered with this and train them. And then at one point when she became pregnant with my younger sister the rule was—

Thomas: She became a celebrity in the *New York Times*.

Chess: She refused to resign. My father who was a lawyer was her lawyer. Now he wasn't very good, he was plodding, honest and bright enough, but kind of dumb. In any case, they all expected to lose but they wanted to make a point and just before she lost one of her friends who was a principal, put her on his rolls so that when she came back she would have a place. Then in a year when she went back—but she paid for it because she wanted to be a mathematics teacher and she stayed an elementary teacher, which she enjoyed but she would have wanted the other. And actually she wanted to go to medical school but there was no chance. That I only learned when I decided to go to medical school.

Thomas: Stella's saying that she refused to resign when she became pregnant and was therefore fired in a sense. There was a big headline on the first page in the *New York Times*, "School teacher saves one to give up 32 children," and there was such a fuss that it caused the Board of Education to change its rule.

Chess: When she died Alex called the *Times* and arranged, without my knowing, a little obituary and the kids, the four of them, said, "Grandma did that?" You know, they had this quiet unassuming woman who bribed them to eat their food or to play the piano until I realized what she was doing. All right now I should go back, where did I leave off?

Rossnagel: You were talking about how your mother and her brothers all went to college except the one; that's very unusual.

Chess: The eldest son became a physician an ophthalmologist. He went to Vienna and studied for six weeks and came back. Harry, the next one, became—I forget what medicine he went into, but he became a physician too. The next one, as I said, went into the family business and the youngest one, who was really the family brat, became a chemical engineer and worked on dyeing furs. My mother's sisters all became teachers. One was a typing teacher, another was a cooking teacher, one was a guidance counselor. Fanny, the guidance counselor, has a real story. When she was a guidance counselor in the Bronx she realized that parents came in and said, "They won't take any of our kids, they won't take any of the black kids in Needle Trades." And Fanny went down to see the principle of Needle Trades High School and said, "Why won't you take them?" and he said, "Well, the employers won't take them." So she went to the employers and she said, "Why won't you take them?" and they said, "Because they're not trained." She said, "If I see that they get trained will you take them?" and she made them write it on paper because she didn't believe it. So she got her kids, she picked out the ones whom she thought were capable and got them enrolled and she had to fight every step of the way in Needle Trades and they went on. And you know what happened the next year? They transferred her and said, We'll give you an easy school. She said, "I don't want an easy school, I like it here," but they transferred her anyway.

Rossnagel: She rocked the boat.

Chess: She rocked the boat, she sure did. I'll pick up at medical school. Alex was in his fourth year and I was having quite a time with biochemistry. In college the advisor had said to me—

Thomas: At Smith.

Chess: Yes, at Smith. "Take all the culture you can because you'll never have a chance again." It was terrible advice. I managed, but it was very hard. I had taken physics because I liked it. I had taken chemistry, biochemistry which I find very hard and then I took American cultural history and sociology and French literature and a little bit of geology, but I had never taken biology. I don't know how they missed me. I had taken advanced comparative anatomy and advanced physiology but never the other, it was a paradox. So I was having trouble with some of them, I looked around the student lounge and I found that Alex was the one who was most interested and most willing. So I interrupted his game—was it hearts or bridge that you were playing? It doesn't much matter, he was playing cards at any rate, and he would interrupt too and make the explanations. From this came our attachment to each other.

Also, there was one girl, a student who had been a close friend before, and to my amazement she sort of would have nothing to do with me, whereas somebody else who wouldn't let a distant acquaintance made it her business to kind of guide me through and I had a great time. I developed a group of friends, male and female, and when it came to the final exam the rule was that if you had a high enough average you didn't have to take the final exam. Alex never had to take it but I did because, well, I'd be studying anatomy and then my microscopic anatomy would fall back. So I had to take it and my friends mobilized. My sister was a chatterbox and so she would just tell me just one more story. I was in despair, I couldn't study. So I told my mother I just had to take a room downtown, and she ran interference with my father who thought it was a terrible thing. So I said I would go to the Martha Washington Hotel which is a hotel for women and as I came in with one of my friends carrying my suitcase, everybody was in the lobby and that's where you saw your friends. Well, no way could I study there, so—you know, they must have thought I was a prostitute! So I went up the street and found a vacant place, a lovely room overlooking a garden, very lovely people and I explained it and they said certainly I could have my friends there and I said I would call my father every night so he would be assured I was all right and I started my studying. They were remarkable, they spotted how many people had come to help me and they would come up with tea and cookies in the middle of the afternoon and kept checking on how I was doing. It turned out they had a son who was in college and I passed, finally!

Rossnagel: With the help of your friends!

Chess: With the help of my friends indeed, yeah. He was at Sinai at that time so he didn't participate, he was teaching.

Rossnagel: And where did you go on and do your internship then?

Chess: I applied only to Brooklyn Jewish for pediatrics. I knew by this time that I wanted to be a child psychiatrist because I had listened to Laretta Bender. She was at Bellevue giving a lecture and I had asked her whether I could spend time on the unit. Now she was a remarkable woman, as you know. What she said is that "only two things I demand," and I said, "What?" and she said, "If say you're coming you come on time." So I worked out my schedule and announced and would come in and put my coat on and then go up to the huge school where the children were.

Thomas: Stella had a marvelous opportunity to start child psychiatry as a medical student under the head of Laretta Bender who is one of the greatest child psychologists of that period.

Rossnagel: I didn't realize that you'd worked with her.

Chess: Oh, from my junior year in medical school.

Thomas: She became her mentor.

Chess: Yeah, I would put my coat on and go up and I realized that I lost fifteen minutes so I asked her did she want me to check in. She said, "No, go right on up there," and I mean she had the same feeling I did, so I'd go straight to the room and she'd call me if anything special happened like Dr. Schilder coming in. He was in charge of Grand Rounds and he would be picking a case and she would have me come down, and then I got interested in the language disorder children and at that moment I realized that I had been language disordered myself. I couldn't read until after my second grade. The teachers kept saying to my mother, Well it will come, it will come, and finally, being a teacher she was back teaching. Being a teacher herself she would have none of it, so she'd pull me in from play about three times a day. By the middle of the summer I was an accurate and fast reader by the phonics method, but I never learned how to spell. I still—Alex, you know, has to correct my spelling, although I am much better and at the conferences I would always amaze people who were there because I would stop and say to one of my staff, "Well, how do you spell it?" It might be an ordinary word that had slipped my mind or an ordinary medical word, and they would calmly tell me and people would think I

was crazy or else I'd write it phonetically in the margin and wait till later. So I developed my training and then when I finished medical school I went to Montefiore where there was a rotating internship in pediatrics, medicine, tuberculosis, and neurology with three months on each and from there I went to Grasslands Hospital for my residency. I sort of took a protractor and drew a circle up to Poughkeepsie to check out psychiatric hospitals. You know, it was amazing to me: We have a quota on women and Jews and we have fulfilled the quota and you can't come. The two possibilities I finally had were Manhattan State, where I knew the director because his daughter had been in class with me at Ethnical Culture, and I had visited but finally the Grasslands Hospital came through and that was much more convenient. One of the other residents had a car and we would drive up or else I took the train and went there. So I had my residency at Montefiore then to Grasslands and from there I went to Pleasantview College School which was not officially, but became officially, a training center.

Rossnagel: Which is two blocks from my house!

Chess: Oh is it?

Rossnagel: Yes, small world!

Chess: At that time it was not for disturbed children, it was for children who had gone because mothers had tuberculosis and fathers couldn't keep them. But they did have children who had problems, like fire setters or bed wetters, and so they did need a psychiatrist, but it was a three-month interval between the last psychiatrist and me and when I got his records I was appalled. All he had down were interpretations. I couldn't see a living breathing child. There was not one description, it was only psychoanalytic jargon. And until I saw the kids come in I didn't know what they even looked like. So I determined that never again would I ever write anything that didn't show a live breathing child. And while I did take some training in psychoanalysis—this was an eclectic school with Bernard Robbins and Bill Silverberg and Judd Marmor and others. I did take psychoanalytic training with them because it was an important theory to know, but although I have it in my CV I do not consider myself a psychoanalyst.

And then I added another job. They called it then the Colored Orphan Asylum; it's now called the Riverdale Children's Association. It was the only place for Protestant black kids, the Catholic places had their mix, but this was the only place for them and I was their psychiatrist. I went up twice a week. The first patient was a very bright girl who wrote beautifully, was skilled at drawing, who was a loner and wandered in the woods with a knife to protect herself; very bright kid, said not a word. Then when I was ready to go she followed me down the corridor and walked me to the train—this was the Riverdale Station or the St. Vincent's or the next one—chattering all the way, and after she left the Asylum I'd find her waiting at the gate, she'd walk across from her new high school, and it ended up when she went to college I lent her money. She paid me back absolutely meticulously. She'd come in and slap down the bills with such satisfaction, and I helped her through college and it was paid back, every cent.

Let's see where am I—I'm at, oh, then after that I went to Flower-Fifth Avenue where I became the Head of Child Psychiatry. We developed a child guidance clinic. Simply a couple of other people who were there: Why don't we get together? And they asked me to lead it and it grew into a clinic, and then when Al Freedman became Chair of Psychiatry I worked out a child psychiatry training thing and a liaison pediatrics, and in 1964 Sam Wortis asked Alex if Stella would like to come down—

Thomas: He's the chairman of psychiatry at NYU.

Rossnagel: At NYU.

Chess: Alex promptly said—Alex said, "I will ask her." He did and I phoned him and said, "Well, I'll come down next week." He said, "Come tomorrow." So I canceled everything and I put down a list of what I wanted to do and when I came in the only difference between our lists was the order of

urgency, forming the pediatric liaison which is what he and Saul Krugman, head of pediatrics, wanted to do. Saul had gotten a grant for a comprehensive care clinic to get all the services. The parents used to have to wander from each building to the next building, so they organized it all in one place.

Rossnagel: And what year was this?

Chess: 1964. And I organized the pediatric-psychiatric liaison and insisted to Wortis that it be located in the pediatric clinic. He was worried about that because he had lost a psychiatrist to rehab because he went there and so rehab took him. I promised and I kept the office where we were doing the NYLS study, and so I could have used roller skates!

Rossnagel: You went back and forth—

Chess: So the first year the pediatric department had great suspicion of psychiatrists and it took a while. At one of the conferences one of the pediatricians, trying to pull my leg, he had a baby with failure to thrive and the infant was blue with cold and he said, “Well, what should we do, should we give him tender loving care?” And I said, “Yes, try that with rocking and so forth.” You know, it was kind of fun locking horns, and by the time the year was over they really did trust us, because we found them, even on stairwells, that if they gave us jargon we’d say, Now tell us what the problem is just in plain words. You won’t get an answer if you say, ‘Psychiatric consultation please,’ and you don’t tell us what it is; we’ll give you some dumb full psychiatric thing and it won’t answer your questions. So after a while I began going in and out of rooms and saying, “Have you referred a case recently? Have you received feedback? Did it help?”

Thomas: Stella.

Chess: What?

Thomas: It’s really important that you say that at Northside Center for Child Development there was a rule that there would be no waiting list for the kids. Traditionally every children’s mental health clinic would have a long work-up and then on a waiting list.

Chess: Yeah, I did insist, and what I would do is in the summers I’d come in and get the cases worked up and all ready. It wasn’t any great problem at Northside because we were just starting the clinic. I started with them. They had just closed the Children’s Orphan Asylum down—that’s another story which there was some commotion that the chaplain made. He demanded a higher salary which the administration felt he didn’t deserve. He managed to get a piece in the Harlem paper, the *Amsterdam Newspaper*, and it made quite a scandal. It was really quite disgraceful. And I had to see all the children to do a psychiatric—and Mamie Clark, that’s where I met her; came up to do psychological tests and that’s where I met her. I had seen the piece in the paper about their starting a child guidance clinic, at which I started as a volunteer and made sure from the very beginning that there was no waiting list. Also, some of the volunteers really didn’t know their business. There was one of the psychotherapists who was encouraging an adolescent boy to ventilate his feelings of anger; he backed up his mother to the window and she almost fell out. At this point Mamie asked me to please become chief psychiatrist and become responsible for therapy quality and safety.

Thomas: The history of NYU that is of interest. The medical school at NYU in the 1920s and early 30s it was a second rate medical school compared to Columbia and Cornell and it has a highly respected admission. Very few Jews, very few Catholics, very few women, and no blacks and that was the rule at most of the medical schools. In 1931—I guess I was admitted in 1932—I knew the dean, who was a second rate at everything, retired and a new dean who had been a cardiologist, not of special distinction but he was a Quaker, and he decided that the admission should be entirely open and entirely on merit, not like City College open, but merit. So that first admission year including me had almost one third to one half that were Jewish instead of two or three. A number of Italian Catholics

who previously couldn't [gain admission] and more and more women and I think one or two blacks. So he transformed the medical school—

Rossnagel: In just one year.

Thomas: In just one year. The result of it was, as the students who had been accepted on merit finished with the right training, a number became junior staff members. And over the ten or twenty years NYU billed itself as one of the best medical schools, and rightly so [because of the quality of] the junior teachers and researchers, so on and so forth.

So here we are we have our family, we bought a house in the suburbs of Riverdale. And four children, two were adopted, the first two, and the other two are biological.

Chess: Home grown!

Thomas: And with Stella's parents we lived in a big house and the kids grew up very well, it wasn't exactly the closest suburb of the city and we both wanted to practice, but both of us were resolved that we wouldn't go on in our careers as just private practitioners and make more money that way. So we spent a lot of time on the staff of a medical school and hospital, volunteering at first and finally with a salary attached to it and private practice only part of it, which was also interesting at different populations, so on and so forth. And both of us gradually took promotions in academic positions and greater responsibilities and our decisions were, of course, very wise ones. I can remember twenty or thirty years after that when a few of my colleagues in the residency program who stuck to the private practice, primarily psychoanalysis, would come to me and say, I'm getting so bored with just doing private practice, with this limited kind of profession, could he get a decent position on the staff in the medical school? It was too late because at his age to get a junior position that didn't fit, for instance, he wouldn't have a real long career. And then our next step together was research.

Rossnagel: And that's probably what we should turn to. We have you, you know, kind of established in the psychiatric practice aspect but how did you get involved in the research?

Chess: Well, we began—both of us—we did a lot of talking.

Thomas: I would say one thing, we always had mixed academic, clinical work and even a bit of research from the beginning. When I finished my internship at Mt. Sinai in medicine I wrote several clinical research papers that happened to be on a particular kind of suppurative pneumonia which later became unimportant because penicillin came in and changed the whole thing. Stella did her first paper when she was still a medical student.

Chess: That was the one on language with Dr. Bender who said, "You are obviously going to write papers so you might as well start now." I kind of gulped, you know, I had been working it up and I said, "But who am I to differ from Dr. Orton who had done a ten-year study on language and I found in my study that some of Orton's conclusions didn't concur with mine." So she gave me the remarkable rule, she said, "You say who you are, you say what you think, and you back it up."

Rossnagel: And that's very key advice, isn't it?

Chess: And later on when we were both talking on schizophrenia she said, "Now, Dr. Chess, who comes after me, is probably going to differ with me and I'm proud of her being one of the students who doesn't feel that she has to agree with everything I say." She was very testy with anybody who fawned on her, who didn't speak up and give an opinion, but with anyone who was honest and disagreed if they could back it up she was very nice. She made some people's lives miserable but there were others of us who she supported to the very end. Now as Alex and I went on we became more and more disturbed that there was something missing in understanding people, kids and adults, and finally, as we thought of our own children too, we realized that each kid behaves differently and that we, in response to

behavior, behave differently. An example would be one of my kids, Joan, was a yeller and when she yelled I couldn't tell whether she was dying or she had just scrapped her knee and for a while I'd run out after her and then I got so I'd listen. And one time even I thought it was nothing and she came in dripping with blood and she had fallen from the jungle gym, but when I mopped it up it was just a little thing and it was very hard to tell. Whereas with Rick, he was a kind of a blabbermouth and I knew when he was exaggerating. Len, if he yelled I knew it was serious.

When I started the pediatric-psychiatric liaison clinic, the pediatric department's chief, Dr. Saul Krugman, had been requested by the Department of Health to investigate the physical consequences of congenital rubella. Rubella during pregnancy allows the virus to penetrate the placenta. It thrives, interfering with the development of every organ, from the time of its transfer through the placenta on. The pediatrician in charge soon noted parental complaints of behavioral problems. I was asked to investigate. It became clear that the problem was so manifest that a separate study was required. It was Alex who really wrote the grant. We worked out a grant and it took about a year for it to be funded which meant that the kids were already two and a half to five. Now, if we had started immediately I could have picked them up at birth. And I also did not get very good cooperation from the one who was the head of it, so out of the 243 I should have gotten I was only able to get 213. They had promised to brief the parents and they didn't do it so I had to sell myself.

Rossnagel: But still 213 out of 243 is very, very good.

Thomas: I couldn't participate because I was becoming director of the hospital administratively so Stella took care of the rubella study.

Chess: Well, I organized it, we got a deaf interpreter and we did our interviews. We followed these kids from the first time until they were adolescents and right now we're doing a study through Columbia. Patricia Cohen, Ph.D., had done one on the deaf young adults who were average or above intelligence and now she's delegated a Dr. Brown and Dr. Susser, who's an epidemiologist, and they're doing a study on schizophrenia with this group and so I'm meeting with them, so it's still going on. And in the meanwhile I had gotten a letter from the Forsight Foundation in Australia. The plaque is here—they had written to me—someone had given my name and they were following up their rubella kids with defects and finally I sent them a final report because I wanted somebody to make use of my work. They made me an honorary member and sent me a plaque of honorary membership. That's one of the nice little things that's happened to me.

Thomas: I had a point about the development of the NYLS that's Jacob Cohen, Ph.D.

Chess: Oh, yes.

Thomas: Herb [Birch] insisted that he [Jacob Cohen] was great, the statistics besides everything else. He was close to being a genius that I ever knew personally but he had so many—I guess some geniuses do—so many unfavorable personal characteristics, but one thing he did that was a great contribution when we got the first big grant—I guess it was in 1960. We had enough money for a really good statistician and Herb somehow realized—actually there was one basic approach that he had done incorrectly in the quantitative analysis and he refused to admit that he was wrong even though I kept pointing at it and pointing at it. But he really knew and he couldn't find the answer so he recommended us to—his name was Jacob Cohen, if you know his name.

Rossnagel: Oh, yes, well known.

Thomas: So I got in touch with him and presented him with this first problem. In a half hour he had solved it, so he was our consultant for quantitative problems. He was wonderful and all the programs and special analyses and so on and besides being great quantitative solutions. There are very true statisticians but Jack who had respect for quantitative issues. Whenever we met together and he reported his analysis, the first thing he did was to turn to us and ask whether it made sense to us. He

made certain that the quantitative aspects of the study were intertwined in both our questions of him and the analyses we made cooperatively.

Chess: Yes.

Thomas: Unfortunately he died just a few years ago.

Chess: This year.

Rossnagel: And Pat was involved as well, or became interested?

Chess: She became the head statistician for the rubella study.

Rossnagel: Okay.

Chess: And was invaluable as far as that was concerned.

Rossnagel: Now you've had some other investigators—

Chess: Yeah, Sam Korn was an investigator, I mean a statistician, and he was a help but briefly. He really was quite lazy and he worked with me and Paulina Fernandez on the rubella study.

Thomas: She was lazy too.

Chess: Yeah, she was lazy too.

Rossnagel: A personal interest of mine a little bit. Tell me about the Puerto Rican sample. How did that come in?

Thomas: Well the first one was Margaret Hertzig.

Chess: Yes, Margaret.

Rossnagel: Oh, of course.

Chess: When she was a student—you know she subsequently married Herb—when she was a student she was working with him and subsequently it came out that all the things he took credit for she really did, and she started a study of low birth weight children in relation to temperament, which somebody else is picking up now and carrying ahead, and she and he worked on the temperament study, not all the time but with us. Sam worked on the study of mildly mentally retarded children. Those are the hardest ones to get. The public schools allowed us access; the private schools absolutely denied that they had any mentally retarded children, only emotionally disturbed children. So we got started at least with some and by word of mouth we got enough. I wanted 50 so I got 52 thinking that some would drop out and none of them did, and we found that it was pretty much the same pattern as with our average children on the Puerto Rican study. The Puerto Rican study did show more sensitivity to distractibility and—what was the other thing—I think activity level, yes, higher activity level. It was a very interesting finding. The middle class children when they were high active—

Thomas: The reason we did the Puerto Rican study was we realized that the NYLS was for middle class and the findings would be limited. We decided to organize a study of Puerto Rican children of working class parents in contrast to the middle class NYLS.

Chess: Also, I needed it because the clinics I worked in, like Flower Fifth Avenue and then Bellevue, there were many Hispanic patients and it was important. There were a number of times when a pediatric resident would come to a conclusion and since I knew the child care practices—I mean, there

was one infant, for example, the pediatrician was gung-ho thinking he had found an infantile depression and the poor mother—she was a child herself—the kid was just retarded. She said the kid takes solid foods and the resident said he couldn't. Well, I said to the mother, "You put the cereal in the bottle and cut a hole in the nipple don't you?" She said, "Yes," and I said, "That's a very good thing," and so here we had a slightly retarded kid who didn't have a depression and he just didn't know how Puerto Rican mothers manage. We followed that group through adolescence and had a wonderful, wonderful head, Olga Mendez, who worked for the Office of Puerto Rican Affairs and came to us and she could help the fathers with jobs, write job letters and so forth. She is now the Senator from the Puerto Rican district.

Thomas: For the last ten years.

Chess: And that's why we weren't able to keep up the Puerto Rican study because she's more important where she is now, but we had to stop it when she left. But before she left we did a good deal of work. When she brought behavior problem kids to me for diagnosis she'd get them by cab because as she said, they would otherwise come by Spanish time. She'd usually say, "Stella, do I have something to tell you!" and she'd hug me and by the time she finished I'd have absolute rapport with the mothers and we did a kind of interview three way with Olga interpreting. And one time we found ourselves with the mother turning to Olga but we finally got it straightened out.

Oh, yes. I had gotten side tracked from it. For the high activity kids in the middle class, parents would move to the suburbs with a big yard or get a bigger apartment with a big play room. The Puerto Rican families of course couldn't afford this.

Thomas: In public housing.

Chess: Yeah, it was public housing that decided how much space they had and they couldn't take the kids out unless they were there because they'd be afraid they'd be hassled by the adolescents and/or they'd run out and get hit by a car. So these high activity kids were chained in the house so to speak and pretty soon they went off to school, you know, they shot out of the house and into the school, round and round and the parents and teachers began to complain and put them on Ritalin. And the other thing that happened was we did a follow-up—Olga was doing it, she was writing a thesis at the time—and found that a number of our children were in special classes and she looked at our records. A number of these had perfectly normal IQs so we had them retested, and sure enough they were normal, and I wrote the most bombastic letter I could on official stationary saying that they were part of the study and we would see to it that they were brought up to academic level and we would have them tested when they were ready. So we got a bunch of kids back to their regular schools. We wrote this up in one of the *SRCD Monographs* which Olga and we authored. Now we got our kids back into place but of course there were a number of others who didn't. They misquoted one of the authors, I forget her name now, but they quoted Dr. O'Neil as saying that the Puerto Rican children's IQs went down.

Thomas: I thought so too.

Chess: And we tracked her down in Puerto Rico; Dr. O'Neil had never said such a thing, what she said was that with poor teaching their attainment went down but she didn't say that it was because it was the children's doing. I think that takes you to the end doesn't it? What more have we to add?

Rossnagel: To summarize—

Thomas: It was a very interesting contrast in ethnic and class differences and actually the differences in temperament as such were very minor differences but it was the environmental differences that made differences. As more and more people became knowledgeable about temperament several programs were set up. The most prominent was by the Kaiser Permanente HMO pediatric and

psychiatric programs and the videotapes on temperament—one set for professionals and one for parents—these were made by the Preventive Ounce in Berkeley, California.

Rossnagel: “By the 1990s the significance of temperament had flowered and was accepted in the professional fields to the extent the Leon Eisenberg commented that our insights had been so thoroughly incorporated into the mainstream of theory and clinical practices in psychiatry and pediatrics that it may be difficult for students to recognize how revolutionary they were thirty-six years ago.” It’s a nice saying. Well, that’s what I was going to ask you about is to go back to the notion—you’ve talked a little bit about the mechanics of getting the research done, but your reflections on the contributions of the findings and your thoughts and the evolution of the goodness of fit notion to try and explain what you were saying about temperament. If you wanted to reflect on that a little bit.

Chess: Yeah, somewhere—what was the date—it was the *Temperament Development* book I believe, 1968, that we first thought of the idea of goodness of fit. I was the one who—it dawned on me—

Thomas: It was your idea.

Rossnagel: That’s what she said, it was your idea. Stella’s creative idea.

Thomas: Then we elaborated it and so on, but the creative idea came from Stella.

Chess: So as we’re thinking of it the fundamental concept has to be that if you’re taking care of a child and want to have the child develop most productively there has to be a good fit between the kid’s temperament and the parental handling. Now I get calls from graduate students who want to do a thesis and who said, well a good fit is when the two have the same temperament. And the way of making it clear, I said, “Well, imagine you’ve got a difficult child in terms of a temperamental constellation and a pepper pot mother or father. Do you think that would be a good fit?” So that makes it clear and I’ll be able to say it doesn’t matter what the parent’s temperament is, what does matter is that the parent be able to understand in discussion or independently that a child who is either one with a difficult constellation or slow to warm up and any new situation needs to have a very gradual exposure and not to be protected, but shown very gradually, like in a new school, taken to the building before the kid starts the school.

Thomas: That was Andy.

Chess: That was Andy, our grandson, he’s the one the phone call was about [referring to a call she’d taken earlier]. They’re going to be away on Memorial Day weekend and they wanted to make sure we’ll be here so he can come to dinner. So when he went to the public school down the block here and Alex took him to the school, walked him around, found where the teacher was. The teacher was glad to be introduced and before he went to school he had a week where he was just peeing all the time, every two minutes. He said, “I’m not nervous,” but there he was feeling this tension, and finally when he went to school after a week he was fine and, you know, his mother is Cuban and he knew Spanish then and very often he was interpreted as a newly arrived Puerto Rican or Columbian, or whatever they were, child for the teacher; they did have an aid who spoke Spanish. So it was a real life experience and we worked out the other ones too that if there’s a child who is, let’s say, easily distracted the need is to learn. Doesn’t matter whether it is five minute intervals used for learning, then a ten minute interval, with repeats, the important end result is to gain knowledge. If you go to a physician the important end result is that he or she be competent, rather than whether the skill is learned in long intervals or short five minute bursts. One of our parents could never accept that. His kid was the youngest in the class and he said, “My sons have to be the first in the class,” and the kid could have learned well if he had been allowed to have, let’s say, five minutes and then an interval. He wanted to learn but the father would never accept that, and at this point he has grown into a real con man. He tried to borrow from his parents, his father, who is dead, has left the money in trust. His brother sees to it and it’s doled out to him and he’s always going to make it big as an actor, as a singer and he

did have talent in it but he never did any real work. We have had many successes. Do you want another illustration?

Rossnagel: No, I think the practical illustrations are there. How about the way you see the impact on the larger research community and whether you feel that that—

Chess: There has been a group of temperament clinicians and researchers who get together whenever there was enough material. Those who were doing research would get together and finally one person would host the next one and it would be about eighteen months, every two years. One such meeting focused on the current biochemical corollaries of temperament. They worked only with the emotionality part of it, mood and so forth. I have suggested to Megan Gunner, Ph.D., and some of the other researchers that they work on things like attention span and persistence but they are not as easy to obtain data and not as interesting for biochemists to research. Bill [William] Carey gets very angry about their downplaying of clinical work, and he organized a conference at Lake Como which was an international conference. We met some of the international people who were doing work especially Savita Malhotra, M.D., who is from India, and we became rather good friends; she stays here when she comes to visit. She's done some very good work in India and her husband too. Who else—Michael Rutter, M.D., worked with us when we started. Herb [Birch] had gone over to give a lecture at the Maudsley Hospital on temperament and he was a young psychiatrist then, had a fellowship to come to the United States and spend half his time working on temperament and half going around checking on the most recent research in child psychiatry and that's why he has a couple of papers with us. They are on twins and sibs and unrelated subjects and worked out the similarities, the lessening similarities, in temperament as genetic relatedness grew less.

Thomas: That is Sir Michael.

Chess: Yes, that is Sir Michael. Anne Mari Torgersen, Ph.D., of Norway also worked on that and a number of others. Matti Huttenen in Finland has worked on that project and who else? I can't remember.

Rossnagel: So it has had—the temperament work has certainly had a tremendous impact.

Thomas: We got a letter from someone in China. As well as a temperament project with Dr. Sato in Sendei, Japan, and Dr. Hsu in Taipei, Taiwan

Chess: And Margo Prior, Ph.D., and Frank Ober Klaid, M.D., in Australia. He was actually quite ill with leukemia and then successfully had a bone marrow transplant.

Thomas: Oh and Holland: Geldolph Kohnstamm, Ph.D.

Chess: And his wife Rita who was the editor of what's the equivalent of *Psychology Today*, who gathered about eight thousand interviews from a magazine. It's not scientific but an extremely impressive accomplishment.

One of my textbooks, *Introduction to Child Psychiatry* has been translated by Peter Kim, M.D., who was one of my psychiatry residents, into Korean. And there have been other translations into Italian and Japanese, either sections or the whole book.

Thomas: There has been a translation in Germany and one in France.

Chess: This is the temperament part.

Thomas: I know you want to discuss the SRCD.

Rossnagel: Let's talk a little bit about teaching. You've obviously had fellows, residents—maybe we should go back and say you've spent most of your life at NYU, right, associated in an institutional capacity with NYU?

Thomas: Well, I'm retired now. In 1968, Dr. S. Bernard Wartis, Chair of Psychiatry, asked me to become Director of Bellevue Psychiatric Hospital. I had to think it over because it meant that it would be a tremendous job. Bellevue Hospital was both famous and notorious. I decided that I was skillful in management, tact, and determination and figured that I would do a much better job than the previous director. Looking back on my personal, professional, and research life, which was tremendous, nevertheless the most gratifying accomplishment was my ten years as Director of the Bellevue Psychiatric unit.

Rossnagel: They talk about the changes in the unit that occurred while you were there that you were responsible for, and what objects you pursued and you definitely made an impact.

Thomas: Yes, especially the prison ward. It's a big story by itself and I was threatened with contempt of court with jail.

Rossnagel: Because of the conditions of the prison ward.

Thomas: Yes, and my reform of it, you read the story—

Rossnagel: I'm not sure I did because I wasn't in New York at the time.

Thomas: I came back from the meeting and told Stella, she half believed I was in jail.

Chess: What Alex did was to say that he would admit only a limited number of prisoners.

Rossnagel: Because of the overcrowding.

Chess: Because of the overcrowding, and his intention was to cut it down and the judge said he would be in contempt of court and at the point at which the first refusal came they phoned and Alex was on his way home so I said, "No, he meant it." They said, He'll be in jail and I said, "All right, I'll bring him his dinner." And of course the judge backed down because Alex explained to them that nobody would do any work, you know, if he was in jail. Gradually Alex was able to bring the census down to a reasonable number.

Rossnagel: Well, to some extent it's foreshadowing a lot of the issues with overcrowding in prisons that we're seeing today that you just can't sending—

Thomas: There are certain times in certain situations you have what's called the moment of truth; either you stick your neck out or give up.

Rossnagel: Take a stand.

Thomas: Or else you'll back down and make it in the wrong way. There are many times I didn't make changes because it was really impossible. But if you know when it is the right time it makes a tremendous difference, one person can make a difference. The previous director he would holler and holler and holler at all the public officials and the judges, it was terrible with the overcrowding. I realized he didn't do a thing, he just hollered.

Chess: Let me add just one thing, I had my own dilemma when Marvin Stern, M.D., Professor of Psychiatry, asked me to be the director of the social psychiatry. Alex and I had just come back from England when we learned from John Wing, M.D., that their much larger community policy wasn't working, moving patients from hospital to community care. That what happened was you had to spend

just as much time with the patients if anything is going to work, but the Americans wouldn't believe us. We even had the book he gave us just off the press, the first copy. So Marvin asked me because everybody else was scared and so I became head of social medicine and we organized one of the single occupancy rooms so the nurses, the visiting nurses, covered them. The church opened its groups to the patients, the residents went over to give out medications and they worked together with a nurse because if there was a scared psychotic patient sometimes they, you know, trusted the nurses. We bedded the patients from Bellevue to go there to make sure that it was right. At one point somebody committed suicide and everyone there was appalled at what they had done so we got a suicide watch going and it really was a very good operation, of course our program was put together gradually. The psychiatric residents in the program are very talented. Alex had wanted me to give up child psychiatry because I was too busy but no way was I going to give up on it, so I kind of skidded back and forth.

Rossnagel: Because your identity was really tied up with it.

Chess: When I had my first hip replacement when I was allowed to go the first thing I did I went back to the liaison and I kept my private patients for later when I was a bit better. You had asked about education.

Rossnagel: As I said, what about teaching and you know—

Chess: One of the very good people, a professor of special education at UCLA, Barbara Koegh became interested and she did a study of temperament of children in their special education and came up with the results that teacher's perception of children depended on their temperament, for instance, a kid that was slow and working that would be perceived by the teacher as stupid whereas if they allowed her time of course she really could do it.

Thomas: Roy Martin, Ph.D.

Chess: Yes, Roy Martin in Georgia at Atlanta also has done splendid work on this; there were some other people—

Thomas: His temperament dissertation.

Chess: There were some other people who worked with Barbara Koegh, Ph.D., Professor of Special Education at University of Southern California. At any rate there have been some substantial work done on special education and temperament and it still goes on. Edmund Gordon, Ph.D., an educator now retired from City University in New York did some of that particularly with taking kids in the ghetto and getting them educated and then Alex was consulted by him.

Rossnagel: So maybe we should move to SRCD, your experiences with the Society for Research in Child Development.

Chess: Well most of the things I reported there was the rubella material. And I had met Katherine Meadows who's at Gallaudet College, in Washington, D.C. In trying to understand the rubella patients I finally found a wonderful book by K. Meadows and Katherine Schlessinger which really introduced me to the idea of signing which was the big controversy. Signing was initiated when the Spanish nobleman were going to lose their lands and money if their oldest sons couldn't sign documents. There seemed to be a strong hereditary deafness in interrelated families, so they sent their sons to the monasteries of silence where the monks had worked out ways of signing to each other. The monks educated the sons of the Spanish nobility so they could communicate and understand and finally sign their names. The British took it over, Gallaudet, he went first to England where they had an idiosyncratic sign system which they refused to teach him because it was a secret. He went to France and learned that sign and that's the basis of American sign. And K. Meadows is at Gallaudet College so that I worked with her there and Katherine Schlessinger helped me understand the deaf kids.

Thomas: And you were a consultant.

Chess: Yes, I was a consultant at Saint Francis de Salles School for the Deaf in Brooklyn, run by the sisters and had a marvelous relationship with one of them. I remember one time when I was late because I put off some subway trains and Sister Joanne was appalled when she heard I had been riding the subway. She was scared to do it. I explained that I never had any trouble.

Rossnagel: Did either of you have much contact with the Society itself apart from its publications. The Society for Research in Child Development.

Chess: Yeah, they gave us a call.

Rossnagel: Award for scientific—

Chess: It was an award for our work in temperament—

Thomas: But Stella was involved, you had the—

Chess: Yeah, I said that I thought that the range of articles in the journal of SRCD really was very narrow but then it began to have these opinion pieces by people like, what's his name—

Rossnagel: Zigler?

Chess: [Edward] Zigler, and Urie Bronfenbrenner. The first paper I authored had so many critics on statistics that I realized that I wasn't up to this so I never authored another paper, but I did present the rubella study at meetings. And then later American Psychiatric Association awarded me the Adolph Meyer and the American Academy of Child and Adolescent Psychiatry gave me the award for my work on developmental disabilities and mental retardation.

Rossnagel: Okay, so you had several—

Chess: Your awards—

Thomas: A number of the awards were joint awards but a number were for Stella alone because she was involved, not only with NYLS (New York Longitudinal Study), but also the mental retardation and rubella studies, and pediatric-psychiatric liaison—important so she would get the special like the American Psychiatric Award.

Chess: Yeah, but Alex received an award from Bellevue Hospital for his work as Director. I was invited to give a lecture on temperament at the Developmental Section of the Academy of Pediatrics. I got there early because I thought I'd get lost and there was a youngish man there looking worried and he said he was part of the Chapter of Infant Pediatrics and he had heard Leon Eisenberg the evening before discuss about how much change can go on in children after thirty months of age, and was it true? I said, "Well, I'm sorry but I'm going to get you even more worried," because while I could imagine what Leon had said I was also going to assert that changes occur throughout childhood.

Thomas: That was Eisenberg, Chair of Social Medicine at Harvard Medical School.

Chess: Yeah, Leon Eisenberg and the poor man said, "But here I've been learning that the first thirty months are all important." So I just went and gave my lecture. That was the Aldrich award and lecture. They never printed it because the editor who was a friend of mine and lost the damn thing.

Rossnagel: Speculating a little bit, where do you think the field of child development is heading right now? Do you see good things or bad things for its future?

Chess: Yes, I see good things. Of course, Berry Brazelton was the one who advised on the ill-fated health initiative headed by Hillary Rodham Clinton. But what I do now in reading literature—I'll just finish it up—what I do now I follow SRCD, the *Journal of the American Academy of Child and Adolescent Psychiatry*, I guess that's it except various newsletters, I read the summary and I read the conclusion and those articles I find interesting I read in their entirety.

Thomas: It's a good journal.

Rossnagel: I was thinking even of the field more broadly not just the Society or the journal but some of the changes in the field of developmental theory.

Chess: Mary Sheedy Kureinca has written *Your Spirited Child* a splendid book and she has now written a useful workbook. People call her and then she refers them to me. I still get calls and try to refer them to people around. I never am certain which psychiatrists work in temperament or not but I just do the best I can. Some I do help, and sometimes I even solve it over the phone. I get silly little things like a mother who called about a kid who was crying all the time and she wondered whether it was a temperament problem. After listening to the mother's account I suggested in place of therapy that she simply safety pin a pacifier to the child's pajamas. She phone weeks later to report the problem solved.

Thomas: I might mention William Carey who was the pediatrician who started the various questionnaires and wrote a number of papers on temperament related pediatric problems such as colic. He has written a very good book, *Developmental-Behavioral Pediatrics*, now in its third edition. Dr. Carey, Sean McDevitt and other colleagues have worked out a program for temperament profiles for stages of childhood. They are using it to train temperament counselors.

Chess: James Cameron, Ph.D., Head of the Preventive Ounce also has a child temperament program in addition to the one he designed for Kaiser Permanente. He's in Oakland, California. Corporations have asked him to participate in their meetings to discuss temperament which they find very useful in the work place.

Rossnagel: Maybe we should close now, I was going to say one final question. You talked about your grandson, Andy, and how temperament has kind of been seen in your family but my impression is that its temperament was something that informed a lot, you know, the idea got partly worked with or observing your own children. Tell me a little bit about, you know, the next generation and just where they are. You know how it bears on your—

Chess: Our children and grandchildren in New Orleans, our son who is an oncologist and Pat, his wife, who has a doctorate in parasitology. She's now teaching at a community college in biology and anatomy training people who want to change their jobs who want to go into nursing or respiratory therapy. Nathan is an unusual kid, his father is 6'2" and he's already 6'3" and he's thirteen. He's very bright, constantly looking with a vague look on his face and knows everything that's going on. He's quite popular. At first he was really very highly active and when he went to restaurants I would take him out for a walk and then bring him back. The kids love him because he's always got ideas for them. He's not very well coordinated but he's on the soccer team and he did try gymnastics and—

Thomas: He's busy with his computer.

Chess: Sarah, his sister, is quite a gymnast.

Thomas: She's fifteen.

Chess: She had juvenile rheumatoid arthritis which was cured and she's now a gymnast. She is teaching at the place where she goes into various contests for fun, thank goodness. Her teachers are very good about that. When somebody gets a new accomplishment, like when Sarah first did her splits,

they will stop everybody and say, Watch this, and everybody claps; it's a marvelous place. Now our oldest son Rick has three children and they live in Yonkers. One of them, Amy, was a spitfire, as far as I'm concerned the most interesting and the smartest of the lot. Rick is a pretty bright kid and Lori is the third, smart and a charming child and they are all doing well, and we now have a great granddaughter who is seven months old and I visit her to be sure she gets to know me.

Thomas: We've been lucky except for one tragedy, our oldest child. She was adopted, very bright and expressive and when she was three years old she developed a very, very severe meningeal encephalitis. Influenza meningitis is always 100% fatal, but she survived and was left with severe handicaps, not intellectually but she had hemiparalysis and brain damage and psychological vulnerability. She started college but the stress was too much. She lived alone in her adult years because she was determined to be independent.

Chess: The amazing thing was how competent she was even to the end. We had worked out with her various ways of doing things and she could take care of herself. She wanted to live alone so we allowed her to move into her own apartment nearby.

Rossnagel: So she lived independently for your supervision monitoring.

Thomas: Our youngest son, Ken—it was interesting—he was very bright and he went to Horace Mann School and at his graduation he got the Thomason Prize for character and academic excellence.

Chess: And sports.

Thomas: He was determined he would not go to Harvard because automatically four or five of the Horace Mann students were accepted to Harvard but he was determined not "to be tracked". His son is Andy.

Chess: He's a clone, he's just exactly like his father.

Thomas: Andy has similar athletic skills; soccer, tennis, and the bike.

Rossnagel: Grandpa doesn't have to take him—introduce him to the place so he can warm up slowly.

Thomas: He's slow to warm up. My favorite is Andy—

Rossnagel: Is there anything else you want to add.

Chess: I don't think so.

Rossnagel: Okay, it's been a long day.