

William Charlesworth

- Born in Pennsylvania
- B.A. in English (1952) Muhlenberg College, M.A. in Experimental/Comparative Psychology (1958) Wesleyan University, Ph.D. in Child Development/Family Relationships (1962) Cornell University

Major Employment:

- University of Minnesota – 1974-present, Professor, Institute of Child Development

Major Areas of Work:

- Cognitive epistemic motivation, surprise

SRCD Affiliation:

- Committee for Ethical Conduct in Child Development Research, Chair (1984-87)

**SRCD ORAL HISTORY INTERVIEW****William Charlesworth**

Interviewed by Maria Sera

At The Institute of Child Development, University of Minnesota
June 29, 2005

Sera: This is the SRCD oral history interview of William Charlesworth interviewed by Maria Sera at the Institute of Child Development, University of Minnesota on Wednesday, June 29th, 2005.

Charlesworth: Thank you, Maria. Just a few preparatory remarks. I wanted to thank Maria Sera for taking time out to interview me, and also thanks to John Hagan and Joan Grusec for their efforts on the oral history project. The project's a great idea, because it gives future historians of SRCD an immensely easier job. They won't have to make as many inferences about the minds and professional careers of SRCD scientists. They'll get it all right from the horse's mouth -- horses would be totally straight talking of course, or even comprehensible and never be ascertained. Another reason why the oral history project is such a good idea is that -- can speak their minds without an editor to worry about. This opportunity to exercise free speech within, of course, the bounds of discretion and good taste is a wonderful opportunity, and a cultural achievement. As for my general intellectual history, my childhood--I grew up in Pennsylvania north of Philadelphia at the foot of South Mountain. I led a different life than all those I knew. My father and his brother had meningitis as young boys. His brother died; my father, who was three then, lost his hearing completely. My mother lost her hearing at one year of age. Her mother said it was complications from measles. My parents met in deaf school in Philadelphia. Apparently they were bright good students. When I pressed them they told me about the shock of leaving warm supportive homes for cold dorm living, and they gradually grew to resent the fact that sign language was prohibited in the classroom, so they did not learn enough of what was important. Reading lips was tough; my dad resented the fact that the Institute and some institution and some parents try to make the deaf to be like hearing and, in the process, failed to educate them for anything beyond vocational school. Dad became a printer and worked for a newspaper. Mother raised us three kids. It was tough times, the depression, my sister had polio but more or less recovered. There were many moments of quiet desperation and much frustration in communication, but ours was a loving family, and so much work had to be done there was no time complaining. I started saving money for college at age 10, 11, at least had--at least 15--I don't know--different jobs by the time I went to college working in the iron foundry, and working on a pipeline. The most challenging; dad was union, strike was called, lasted for ten years, five on picket, five years working part time here and there, when I'd take him sometimes his lunch, and trying to start a second newspaper,

which I carried around town early mornings before going to school. Big newspaper company won, union lost, and I learned about the power of big wealth and how easy it is to get emotional about it when it was used against workers. When I became 11 I hung around the Boy Scout troop in our town, and by 12 was already a hiking and camping veteran, entered the troop with enthusiasm, made the rank of Eagle Scout pretty early and acquired at least ten more merit badges. And then everything became boring, and I had to get out and go to college. I don't know how I learned to talk. And I knew you were gonna ask this, Maria. Sign language was parents accompanied by gestures and weird vocalizing. It was very frustrating. Older sister had a tougher time of it than I did. Nevertheless, she soon became extremely verbal. We inform her of that today. And she's quite artistic--was--and painted a lot as my dad did as a young man, and my mom was good in math. Younger brother, a quiet guy, also good in math and science. He went on to the University of Michigan to get a PhD in geology. He and I were the only PhD's in the family, which my father once said with a smile that it was funny. See, at family gatherings we were only hearing people there, of course, except for my mom and dad. He was quietly left aside, so he'd be sitting there just watching. So what I often did was just go and sit with him so I could talk with him. Anyway, he thought that it was funny that his two sons coming from their family and nobody else had. Both sides of the family though had schoolteachers and respected education, but none went for their PhD. Interestingly enough, my brother and I thought it wasn't a big deal. My parents' great worry was that we would not stay in the area. They were right. It was very sad, and we didn't, but then they left the area too after a while. In all, growing up under such circumstances was not an average experience, but I'm glad we went through it. It forced us to struggle at many levels. We learned how to work, and we became very aware of social injustice and minority status. My brother and I got in quite a few battles with local bullies when they mistreated the weak, make fun of the handicapped and different looking people. We never lost a battle, but once I had a very close call with the local bully. From early on I liked "foreigners," that is those people who lived across the tracks. They--different people interested me. And I also got into reading, built up a small library and discovered early that reading was a good weapon against boredom. I started writing poetry in about 5th grade and never got over it. It is a gentle pathology but makes life interesting as well as frustrating at times. My dad read a lot of history. I went to Muhlenberg College in downtown Pennsylvania because it was nearby, studied premed, then switched in my junior year to English and world lit, got a good education, won the literature prize, had one course in psych. While there, I worked four years in the library as a stack page, and that exacerbated my addiction to books. I then went to graduate school at Boston University for a semester of writing. Great teachers there. But the Korean War was on, guys were getting drafted, and my two good friends were killed. I left Boston, joined up in army intelligence not knowing at that time it was an oxymoron. Why I joined up for three years when the draft was only for two? My logic was simple. Since I was going to serve my country I may get killed. I wanted to die intelligently. Also, I was promised one year of language school in Monterey, which I never got. The school closed after I was in the army after three months. Boot camp was pretty much a breeze. Very interesting. I got to like the guys in the life of a foot slog and grunt, but not forever. Off to radio operator school in New Jersey, and then off to not Korea, where most guys went, but Germany. At that time the Cold War was in full swing, and this was the bloodless war, and what that meant though was much bluffing, posturing with guns and tanks, maneuvering on both sides of the west German/east German Czech borders. Foremost for us in intelligence gathering, counter spying, ideological propaganda, the whole enchilada was required, which despite some current condescending after the fact commentators who thought the Cold War was amusing, we did not. Keep in mind that the Berlin uprising took place at that time; I think it was June '54. The Cuban missile crisis came after the Berlin Wall and Hungarian revolution, so -- for a period of time there. I still think that it was all necessary to keep things from escalating. The Soviet Union was spending everything on its huge army that was built up during the end of World War II and needed to justify the expense. The Soviet Union was also afraid of uprisings, needed to satisfy nationalistic pressures to dominate its neighbors, and of course, to spread communism. I got sent to a special intelligence school in the alpine fortress in the German Alps where German soldiers guarded us along with cows, hear bells clanging while they munched alpine grass outside our classrooms and drove us crazy. I really lucked out. The courses were taught mostly by victims of Gulag, by refugees, white Russians, escapees from all over Eastern Europe. As one instructor said, "The fascist pig was slaughtered, but not the communist pig. You must--the free world has to slaughter the communist pig." In the school I learned about totalitarian threats to the world with current emphasis on Stalinist terror and repression, and then we had -- and so on. We're all in full swing and threatening Western Europe at that time, so there was a time then after the Korean War, a very serious war, fear of atomic war. All in all I learned a very

important lesson. After Nazis malignancy was allowed to grow and cause unbelievable death, and destruction and suffering, communism in the same period and after destruction of the Nazis was still flourishing and led to the destruction of millions of Russians and non-Russians, and it became a military -- by the end of World War II. Of course, -- could not say they were our allies, but General Patton, our hero, knew better. So as soon as World War II ended the Cold War became--came in earnest and was for real. Some of the actors--many intellectuals in Hollywood has thought otherwise and proved their ignorance of the reality of life under Soviet dictatorship. I was especially hard-nosed about all of this, because while I was at this school I had access to a massive file, archives, and I was given top secret clearance, I was permitted to enter the school's archives, and I went into many--into many evenings after class, and soon became disillusioned with the human species, so much terrible stuff on all sides. The bigger lesson I learned is, don't trust any policy maker or legislature who has not experienced a phenomena like the totalitarianism firsthand. Being there is the first lesson one must learn if one wants to understand anything about people living under abnormal, or I guess even normal conditions. In one respect this was also a valuable scientific lesson. Firsthand experience reconnaissance observation, get a picture first, and then develop a hypothesis to test. Generalizing this to more peaceful conditions, being a parent or teacher, clinician, law enforcement officer, getting to know the scene and the environment in which humans are forced to deal with difficult problems and adaptation, absolutely necessary for those working in applied research. And I think it's also important for academic teaching, laboratory settings at least for hypothesis formation. But there was a down side to all this experience. Having learned this has also--it became apparent that intense emotional experiences can destroy objectivity as well as lead to unwarranted feelings of moral and intellectual superiority over those who haven't had similar experiences. I got quite preachy about it I think afterward. Anyway, after training I spent a very interesting two years doing intelligence gathering in Berlin, Frankfurt and other places around Europe, a couple times scary, mostly exciting, challenging, routine work. The whole experience expanded my understanding immensely about human deception, aggression, fear, the need for territorial defense, for being stronger than your opponent, and the marshal aspect of surviving. More on this later, 'cause it does enter in my career as a scientist. Oh yes, once when working in Frankfurt I thought about a career in intelligence work. It was seductive, but there was too much bungling, guys showing off, blabbering at parties, stupid security violations that put people in danger. If you were caught no one was going to claim you. But spying is preferable to war; trading with enemies is better than spying, and sharing infinitely better than both. But ideal as it is, trading still involves spying; it's going on all the time, economic spying. And as for sharing, well, there are always freeloaders, cheaters and those that exit a relationship when exiting is profitable. Near the end of my tour in Germany I got married to a German citizen and lost my top secret clearance, became a reporter, a liaison contact between the U.S. army and Germans for border supply unit back again with the regular army. This time, though, I was a different guy, and some were suspicious of--the regular army was suspicious. I think they thought I was spying on them. When I got back as a veteran I was astounded that my student friends and university profs didn't know what I was talking about, or maybe they did and didn't want to hear it, so I ceased talking. Who likes to listen to war stories? When Constore took over Cuba I got talking about his connections in Moscow, and about his way of government that was going to affect the Cuban people and so on. But the academic Marxist crowd, who were still complaining about U.S. capitalism and -- had no time for me. Actually, I think I lost a lot of social points on this issue. But the great thing in all this was that I learned--I got to know and learn another language and another culture. Both had a direct effect on my research. My experience in general forced me to cognitively center as P&J would say, shifting from one physical and mental location to another. I was discharged in 1956, and by good luck and friendly assistance from Hess Hagan, psych professor in Nuremburg, I got into the MA psychology department in the Winston University, Connecticut. My mentor there was Professor William R. Thompson, and he had studied under Don Head, who was widely trained, interested in early environment effects on development, as well as behavior genetics, which I always thought was a great combination. At that time these areas were not too popular in most of psychology, especially genetics. Thompson had a very wide and thoughtful perspective of behavior and cognition. He was a speaker here at the Minnesota symposium. At Wesley I did research on the effect of visual deprivation and exploratory behavior in adult white rats, as well as published Ruth Thompson a study on the effects of maternal prenatal stress on the behavior of offspring, part of which became my master's thesis. Worked in a Wesleyan rat lab with John Watson, great guy, well known in development psychology. From there working my way up the ultra genetic--biogenetic and ultra genetic scale from young rats to baby rats to children. I went off to Cornell. John did as well in 1958 to '61 to work with Al Baldwin and Henry Yushudi, two great guys in the field. Baldwin at that time

recommended I read two books, Piaget's *Psychology and Intelligence* and Nichol Tinburg's *Instinct*. I was greatly impressed by Baldwin. I also did work on creativity and kids -- inquiry. Took a philosophy and a science course with the renowned Max Black. We called him Black Max, who never read our papers or listened to us, said once in class that no student he ever taught deserved an A. Needless to say, I guess like others too tried like crazy to prove him wrong, but failed. His assistant, who was very obedient, gave me a B, but wanted him to discuss my paper afterward. I did not. My paper was on the nature of questions and answers. I still have it, and believe it or not, it had some influence on my later research. At Cornell I did my PhD thesis on Piaget's theory of the development of the child's concept of linear order into spatial transformations, big production -- 200, too long for standard journals, never got around to showing it for publication, one of my mistakes, although I still believe the findings. After Cornell, off to Child Development in Minnesota. Those were good times. -- to get a job I don't think. Harold Stevenson was chair there, great place to be. More on that later.

Sera: Okay. So what were the origins of your interest in child development?

Charlesworth: Okay. -- I just want to --, you know, the most difficult -- enormously difficult object to study in the universe as we know it is the human brain. However, to make it even more complicated, how the brain got that way, and how it's functioning, how it functioned over phylogeny, whenever we can do that, and then how it's functioning during on targeting, how the adult becomes that way I think is the most complex problem. I had a colleague at Cornell who's in physics, and he laughed when I told him I was working in development. He said--and he just had a baby--he said, "You're in the most difficult field in the world. Good luck." And I think it is, and I think that accounts for a lot of our stumblings along and so on. And there must be ways to remedy this, but I find it just so interesting, it's hard to get away. So I believe that research --this is really preaching to the choir--is the most important, and at the time, the most complex phenomena in the world. And because of that very reason, I think that naturalistic observation, knowing what's out there, is very important as a first stage. As characterizing the development ideas, I think they were pretty straightforward, and I don't really know at this time whether there were any sharp turns I took. I think it was straightforward, but maybe my colleagues would know this better if I was. But from my past, for example, the sense of justice never left me, I did some work in that later on. But my interest in ideas, and concepts, and reading, and language, that persisted. -- I'm very interested in epistemic motivation. I'm interested; I read a lot of philosophy. I'm interested in how the mind works and so on, and I'm also interested in poetry and theory. And that hasn't changed, so there may be some conservation of interest. And of course, I don't know, you know, what do we know? Okay. Shall we--I'll go into personal research contributions.

Sera: Sure, sure. So at the beginning of your career you were interested in Piagetian issues and cognitive development. Did you do that when you first came to the Institute --?

Charlesworth: Yeah, yeah I did, I did. And I came here--first of all, I came here with interest in creativity, and John Anderson had a course on the gifted, and he said, "You can take it," and so I took the course, and after one semester of it I found there was not enough data on this. I said, "I can't teach it, 'cause I'm in week four and it's just blah, blah, talk, talk, and we don't know anything," so I gave it up. But I was still interested in creativity and productivity and so on. I got interested in cognitive epistemic motivation. What motivates us to think? And so--and I thought the stimulus unpredictability would be--stimulus contradiction, and so I thought that's one of the big epistemic motivations is that. Another one may be reminiscing about your past and so on. So I thought really in a highly unpredictable world and a world of contradictions could happen, you were stimulated to think. So I developed the notion of surprise being an indicator of cognitive expectations. And so in 1966 Carolyn Zhan--I hope you're listening, Carolyn--I did a study of child's concept of the effect of a parent violation of the law of spatial rotation, so we put pegs into a linear -- into a board, and then turned it around, and we violated it that the child had the expectation that a 180 would reverse the order, and it didn't come out where they ought to show a decline in reaction time, and they did fine with that one. And then I did a chapter on surprise as a causal factor in cognitive development.

Sera: Were these older kids that you were testing?

Charlesworth: Yeah, that's good. These were four to--about four to eight. That's good. I'm glad you asked that. We did a chapter on surprise as--in fact, maybe we even had some three year olds, but they were a bit out of it--but that surprise is a causal factor in cognitive development. In John Flavó's book of studies honoring Piaget, when John came here then Piaget really took off. He and Al Kine helped take it off, but I think John made the most substantial contribution to it. My interest in--I developed then an interest in ethology. In a 1965 -- visited the Institute and he gave a talk in Hastings--or no, in Stillwater, and I thought it was very interesting, 'cause he was -- cracking nuts and squirrels and so on like that, but he was a student of Lawrence, and you can recall that Tinburg, and Lawrence, and Fisch won the Nobel Prize physiology -- in 1973. And Ibo founded the discipline in human ethology. It was essentially applying the methods and ideas of animal comparative psychology under the conceptual umbrella of evolutionary theory. In short, it was a modern biological science being extended to human behavior. What I liked most about his approach was the need for field observation and the required focus on behavior that you had some reason to believe was adapted. That species universal behavior adaptations existed strongly suggests that all humans inherited behavior programs. In short, the whole -- comes back in the picture once again. Horrors, horrors for environmentalists, a rage for behavior geneticists who were over in the other field hoping someone would deal with behavior, and they'd always dealt with --, but whatever. But some of us interactionists and developmental types just wanted to test the hypotheses generated by this approach. And one way was by comparing people from various and non-communicative cultures and compare them with social behaviors where reactions to agonistic encounters, their facial expressions, their mothering behavior, flirting behavior, all of which Ibo spent months documenting in very remote places. He's still doing it, but longitudinally --. it was comparative in the sense of comparing behaviors of those suffering from perceptual disorders, and these were--and--which Ibo would call a depra--testing the deprivation hypothesis. If an animal was deprived irrelevant adaptive information early in life, could it still engage in adaptive behavior later, or at least learn it more easily than non-adaptive behavior? -- looked at this behavior of children born blind. I filmed children's surprised reactions to various stimulus situations and found they were not different from sighted children.

Sera: How do you --

Charlesworth: Well, I showed a--how did I test it, 'cause they had to feel objects.

Sera: Oh, okay.

Charlesworth: And then they had to put an object in a cup and shake the cup, and then it was gone, stuff like that. It was all tactful -- and then--but we had a deaf blind guy, too. He was good, too. And their expressive behavior, their smiling, their hesitating, sometimes their comments if they would mutter them and so on. Anyway, we didn't find any differences. But you know, it was strange. I found it, and I thought, Yeah, I didn't expect it. And we never--I never published it. I said, "Well, the journals aren't interested in non-differences." I had an idea and maybe it's still true --, but if you don't get any differences, what the heck were you doing there? Well, I was testing for the universal presence of something. Well, then it's just descriptive, so that argument kind of--influenced by career a lot.

Sera: Yeah. It's too bad, 'cause a lot of things do get published with similarities.

Charlesworth: Yeah, they do now, yeah.

Sera: --

Both speaking at once

Charlesworth: Well, we conclude that parent's specific behavior must be genetically programmed. How, how -- where--what part of the brain is influenced and so on? But the companies--unfortunately, the connection with Lawrence was very negative, and I taught a course here--

Sera: What do you mean?

Charlesworth: --well, because Lawrence had written a number of papers when he got a chair. He got a chair during Hitler's time at the -- which Konte originally sat in, and he got it, and people said it was 'cause he was pro-Nazi possibly. You never know, and during that time Hitler put in someone --. He was working on race differences, but mostly in appearance. He thought maybe in the brain functioning, but he thought Poles, and Germans, and Jews, they looked differently, and someone studies this. Well, this--his career was interrupted, he drafted--he was a medical doctor, got drafted and went into the service, went to the Russian front, got wounded, spent four years in Russian prisoner of war camp, came back and thank goodness his colleague, Tinbergen, who was in a hostage camp in Holland, they still maintained their friendship, and Tinbergen, god bless him, went to Germany. I'm sure he could hate hearing German spoken, he went back to Germany, started up the ethology institute with --. And these guys were good. But the ideological taint was very strong in America and still is. They're still pecking away at that, and so being an associate it's hard--it's difficult to say, I mean, to get people to believe this, but it is true, and I know, 'cause I'm in human ethology society, and that's a problem. Anyway, we looked at--we were interested--and the current irony of all this was Lawrence says it's innate --, but Lawrence studied early imprinting. And that's an experience, and he showed that if you catch a duckling early it would--can imprint on your leg or on you. You know? So isn't that learning? --. So why are you so down on this guy? And I've found that the ethologists were much broader, they would take biology and genetics and so on, and they would do field work. And there's three things I find interesting. That they took--they were more sensitive, scientists are sensitive ----scientists are sensitive to what their colleagues in science are doing. You gotta be. What's going on? 'Cause that--their work has been tested and so on, so you're sensitive to scientific work, but you should also be especially in this area should be sensitive to every day consensus about something. And thirdly, you should be aware that your experiences are an important tool, and they should enter up to criticism and so on, but let it all out. So that three pronged approach I think is very good for the scientists in our field. And these guys did that. You know, their flirting studies were great, and they said, "Try it," you know. How do you get a girl from another country to look at you? Just give her a smile but not too long and --, so you--we just did this kind of stuff. It was great. But P.C. entered the picture. And I must say this thing about --, it started off I think in a good way in the sense that it did not--it was telling people there are--there's a large percentage of our population that are dissed.

Sera: Are what?

Charlesworth: Dissed, you know, you're dissed, like the blacks say. You dissed this guy, you put him down, you -- an article --, and so you're dissing, you're condescending to people, and you're not using--you know, they're cripples and all --, and I think that very much plays a role. It can get too far. I don't know whether to say Ms.--, with colleagues I just say --. So that issue was okay. I think we had to get to that point of sensitivity to those out there. I mean, who want to be --. So anyway, I'm not --, but it got to the point now that if you ask ques--even in our field, I mean, if you--the problem with ethology -- evolution's interested in fitness -- and reproductive success. That's it.

Sera: I know.

Charlesworth: And it's not--it doesn't contribute to --. Okay. They can go nuts over that, but it's important to look at. It's very important, and also very important for governments to look at, like in Western Europe --. Okay. So you get into those issues, which I found--of course, and in psychology a lot of people stayed away from genetics, race, all that stuff. No--

Sera: And reproductive success ----

Both speaking at once

Charlesworth: --and I must say this, -- what I found open minds on this, but the--and I taught the course on ethology -- ethology, genetics and so --, but after I left it dropped--it was dropped, and someone said, "Come back," and --. And anyway, so Michael taught it for a while. It's not part of people's general program -- and so on. I got comparative training, and then I got a lot of -- and so on. So we got a meld it together without--see, cross disciplinary work can make you mediocre, and -- you can't do two--you gotta focus, you got hard stuff trying to make connections. Okay. Okay. So anyway, my interest in field

research and cognition led me to study --. How do you code for everyday problems? Now, you people in language, you already have your units to some extent--. But in ethology and human behavior we don't have those --, but we could commit an error of over precision, that is, every hand reach, every back, you know, you get down to that, which we started to do, and -- but so then we had to say, "At what level are you going to look at crucial?" Well, look at the adaptive level. What's adaptive? It is adaptive to drink water. Well, how will you discover when this person drinks water all the time? Well, you can observe drink--take a record during the day or ask them, but we think asking people is weak. You better get a record of whether they do it or not, have it somehow connected to the whatever. There are ways to hardening up, which you know all about that. Anyway, so I thought, Well, we gotta have and so on. So we're gonna look at PROBA, problem behavior analysis, I developed a whole system. It took me about five years, objective behavior units, categories, how to do it -- so on and so on. And this led me to writing an ambitious article entitled *Ethology: Understanding the Other Half of Intelligence*. And what I was saying that ethologists couldn't understand the other half. The other half is behavioral, the first half is cognitive, emotional -- and you get bicommetric measures of stage situations, but the behavioral things, it's best to look at how it operates in everyday life. And so I did a lot of that --. Anyway, alright, so we did -- class --, nursery schools, so on, but it's very labor intensive. The students --. So it's not popular and --. And I divided problems into physical problems within social. One category on the other impositions and needs. For example, a cognitive problem, an imposition is I ask you a question, and you gotta come up--a need is you don't know something, so you ask me a question. So questions and answers, and this is when I got involved with Cornell. I was -- to think about the question and the answers, and what isomorp--well, what is it -- some knowledge --anyway, so I got in that with--and a social imposition was some -- A dominates B, or a social need is B wants the presence of somebody and so on. So--and you can do this in the classroom, you can do it. So we did a lot here. So--no, and then--this is the other dimension that came and actually ultimately tied up with evolution. Why--what is the goal of all this behavior? Have we specified the goal? What would terminate the behavior? And so I said, "Let's define the goal as a resource." So if I go to college, if I go to college the resource is the prof -- she knows about it more than I do -- the knowledge -- push you and so on. That's the resource. What am I to them? I'm their resource for their career advancement, for their job, and for good teachers, for feedback. A good professor would like tough students --. But it's good to get that feedback, so a student is a resource for--a material resource for faculty, because that student helps do your research for you and so on. So that's a -- it could be a psychological --, and what the student's getting, a job possibility and all these, so you gotta find out why are we doing these things. And then is what we're looking for adaptive? Is it just approximate resource, like taking --? You get that, and you get a high for however long. There's a long term one, and as you know, you get a decent job, you know, --. So you can work, so the resource is very crucial and some are more vital than others, and that's where people fight over it. That's what's going on in the least --. Okay. So I said acquired resources are vital --. Okay. Labor I said field research is labor intensive and demanding, and especially if you're working with cognition, because we found even in this nursery school here and in other schools the cognitive resource was in short supply. There weren't--the students weren't asking many questions, and many of them were not posed questions. The best one we heard in a nursery school here was a kid said--the teacher said, "Here, look at the gerbil, look at the gerbil, look at the gerbil," and the kid said, "Why,"--this is the Einstein--"Why does a gerbil have toes and fingers on every foot?" And I thought that was good. Biologists have been asking that -- for generations. Anyway, so we thought that was the best. But the problem was these weren't--these things weren't happening frequent enough, so I turned to social behavior, and there I found out in the nursery school and in academia social behavior is a very high priority need and --. I asked students who took a seminar--honor students to take--who took a seminar with me to keep a record of their problems on a daily basis, and that was the assignment. And a large percentage of them were social, a large percentage. Now, this person didn't call me up, you know, I went--this kind of stuff, and --, he didn't do that and so on. And then I was hoping that there would be more, and there were some more, but some of the students were pretty good, and they were intellectually satisfying to be with. But anyway, this was Losu Phi, and so I shifted from looking into the first staging of situation, and even Arvin would stage something to raise the probability of a response, so had the movie viewer, and in the movie viewer is a -- remember? Children could see a comic display on a little hand recorded viewer, that is, you could see one frame if no one was turning a crank, but you could see the action if someone turned the crank and set it into motion. So -- set this up. We had a consumer or other resource, we had a turner, a worker, and then we had a person control the brake so that turn wouldn't work unless the brake was in. So we had two workers, one consumer, and a fourth person we added as the bystander. And now we create an

interesting situation of cooperation and competition. How -- for you to see, you need to have cooperation. Are these guys gonna cooperate, and for how long? How do you keep them cooperating and so on? So all of their strategies, and kids between four and ten -- all kinds--like, one kid, a Korean kid, he kept making up stories way beyond what was on the card, "Oh, this is --." This kid--another guy just pushed them around. "You play. You do this," and others would say, "Your turn."

Both speaking at once

Charlesworth: But not too long, not too long. So--and as you know, Minnesota has been known for cooperative learning, which I had doubts about, because I think we cooperated in order to compete, and I had some very deep arguments with, "It's not all cooperating. How does she -- social species and so on?" So we took this movie viewer and we tested it, and there was quite a few studies on it. And--but I took it around the world. I went to India, I did the first in Bahamas, India, we did it with some Germans. I didn't do that. A German did that. And then Malaysia, we got a student here that went and did it in Malaysia to compare the Chinese with the Malaysians, with the Indians there. South Africa, I did one with the blacks in South Africa and so on, so we did all of them. And we found patterns of alpha -- so you have alpha types who view the most--the greatest percentage of their time versus the delta types, who --. So we looked at their strategy. What a cross-cultural similarity, a lot across.

Sera: I bet.

Charlesworth: Well, first of all, boys are more aggressive than girls, girls are more verbal, right? Someone--the verbal/vocal behavior and the strategies are very similar. There's no really outstanding strategies --. I think the Malaysian kids fooled around a lot and had more fun. We did find hedonic differences between cultures, mostly because of the Malaysian. They were happier. But others were too--but mostly there wasn't that significant a difference. We thought there may be more--oh, one guy did a study just to pass his exam last December, Richard Vartesan from here --. But anyway, he found that there were less smiles in--more smiles by alpha than to delta. Okay? But that was cross-cultural as well. So we found more similarities there in a lot of things. So--and I think it's what we would call an evolutionary stable strategy. That is, the strategy is probably gonna remain for a long time. You need to cooperate, all of us need to cooperate --, so you need the help of other--but you've gotta prevent being exploited, and so to do that, then you gotta know --. And we had one guy, a young -- kid at our nursery school who took it over for about five minutes, and some girl setting there. The feminists love this, but it was true I love to report, some girls said, "We're not playing anymore, Allison." She folded her arms and that was -- backed off. And then the boy, the boy, what could he do? He didn't know whether he should keep going, nothing was happening now, because you need two to tango for --. So interesting --. Anyway, so we did a lot of that -- I did a lot of dominating so--

Sera: So--

Charlesworth: --dominating physically ----oh yeah, inequity is universal--

Sera: --oh.

Charlesworth: --I got the inequity scores. You can get them for groups, you can get means, so you compare within the center of deviations within groups on all variables --. These groups are cooperating, and oh, we did find that the South African kids, they used the resource a little bit more than the others, and I think--hypothesis, it directed to the fact that they were more impoverished, their schools are more impo--this is more exciting, stay here with these guys here, you know, hang in there, use every minute to the end --. Anyway, cooperation--it's got me to this notion that cooperation is a variant of competition. You have cooperation, you ha--there's cooperation, deception, that's a basic strategy most of us use, manipulation gets heavier, we have threat, and then outright aggression, and I think countries work this way.

Sera: So would you say those were your most significant research contributions?

Charlesworth: You know, I don't know. I mean, it's significant for me, yeah. But I don't know to the world, I--you know, I have--I must say I really don't know about that, or Prova, I don't know what difference it's made. I just don't know. I haven't followed up--and this is one of my problems I think. But friends and enemies change, needs do not, and that's my lesson, the needs don't. Resources satisfy needs, so you must have--resources will vary, the need is constant, and the friends and allies would vary, and through life we have to negotiate our way. Okay. I got--I did a number of papers on development of social justice. And what started it was when I was four years old a little boy in our neighborhood had a cleft palate, or at least a cleft lip, and he would come Saturday mornings with a bag of animal crackers, a box of animal crackers to share, and then we would play with him, so that was one of those things, right? And so we would line up, right, about 5:00 or something like that. Well, one horrible morning, which is imprinted on my --, a local bully came, saw this, punched him in the face, grabbed the crackers, knocked him down, stepped on the few that spilled, and walked off. From that time on moralistic aggression has built up. I cannot tolerate it. I've had some problems in my travels with this. My wife holds her breath. Anyway, every day--people today are just in cooperation and reconciliation. And there's a book out, *Natural Conflict Resolution*, it's popular, it's heartwarming and so on, and -- psychology asked me--it's interesting--to review it, and I did. 'Cause it was done with monkeys, a little bit with humans, but I know the guys, France DeGaul, Bonovost, peace make love, not war, all this kind of stuff, fine, fine. And they--they're--they've studied the basic mechanism of conflict resolution behaviorally in lower primates, and a lot of -- work with humans, you know, back off, don't come in close, smile, -- avoid your gaze --. But a problem is that he uncovered, and his colleague--I talked to Philippe --, he and Kardia and I know I-I mentioned it to--well, he read--Philippe Aurelia read my review, and I met him at a meeting and he said, "You were right about this." The first time -- someone said you're really right. He said, "We did not deal with what happens after that--the resolution." And I said, "That's the whole point, man. Why was it there in the first place? Why were they fighting in the first place? Somebody was getting deprived of something along the way, right? And so now they want to make, you know, want restitution. There's no restitution. You can make friends daily, and then go away -- you don't give a nickel to it, no restitution. You have to have restitution, and without that you're gonna have it starting over again." So anyways he agreed -- study everything, fine. And it's hard to know--he said--one thing I agree with him, it's hard to know what that resource was in the beginning, I mean objectively, you know? You don't exactly why he started the fight -- be grievances from way back. If you want to look at today's present situation there are grievances going way back, way back. And if we don't see what they are that goes into something I started later, the fighting that continues in Afghanistan over poppies. Well, good idea, and you're gonna stop fighting, but--in Afghanistan, but it's over poppies. What are we gonna give people who don't have poppies? You've gotta give them something to grow. They need a life. You gotta get--so they're trying -- here's something else to grow, but it doesn't pay as much as poppies. So if you want to resolve conflict you better reach why did it start and what would finish it. Okay? You've got this. There's no perfect solution. There's only tradeoffs.

Sera: So what have you been doing after you retired?

Charlesworth: -- ask this question. No, one thing research wise, I got interested in terrorism, and I wanted to know why would somebody strap bombs to themselves and get themselves blown up. I mean, that's a very interesting question, and so decided to study suicide bombers. This was in '97. And the suicide bombing wave in Israel had come--slowed down I think by '95, '96, but it was--had slowed down as--it went through the first -- okay, and that lasted for five years depending where --, but I think it began more in '89, and then went into '94, '95. But anyway, students here heard my course on --, he was a Bedouin from Israel. He was an Israeli citizen, he was a Bedouin, and then he took my--he read my paper on resources, and he wanted me to study the--wanted to join him in a study on children's concepts of justice, and he said, "I'm studying children in Gaza, studying West Bank and studying Jewish children in Israel, and they've had three different levels of political violence, and I know they did and there's evidence they did, and I would like to give them some of Kohlberg's Tests and so on, find out what their sense of justice is. Would you go on as third author?" Well, I was interested in sense of justice and so on, so I went on, and so we did it, and we found out that the children who had suffered most political violence were concerned about restitution and so on. They were, you know, they weren't going to stop just by making friends basically. Anyway, -- it's hard to get it published--it got published, so it's not a bad paper. I mean, it's gotta be repeated. I think -- come out again --. Anyway, so then he said, "I have contacts in Gaza if you want to go

there and I have contacts with people who even know about bombers there. And if we can get some money, we should go there.” And I said, “Good, let’s go there.” You know, we gotta have money--

Sera: Did you get this money from--where’d you get this funded from, who funded this?

Charlesworth: Well, the defense department. Now we’re getting into sticky stuff, that’s it, one of the defense departments in Egypt. Anyway, so they said, “Okay, we’re studying this effect. How did this come about and so on?” So they gave us money --. Anyway, we--I went there, and we had a contact there, a professor, good man, knew his stuff very well, lived there his whole life. And he had students, and the students were going to do the fieldwork, which is interviewing parents of--

Sera: Parents of--

Charlesworth: --of the bombers.

Sera: --of the bombers.

Charlesworth: And of --

Sera: Who had committed suicide?

Charlesworth: --who had committed, who --. And so--and then control, and the controls were boys that they had known, same age, roughly same history. They gave us a list of four, and I picked them at random. Okay? So we had 18 subjects, and interviewed the parents and the family, which five people were interviewed. I was going to see whether there was consistency and so on, but I couldn’t do it in Arabic and so on. Some spoke English --, so I interviewed a lot of the parents. It’s a sad, sad situation, very bad, and the whole thing was terrible. Anyway, we got the protocols in Arabic. I to this day don’t know how I ever got out of -- airport in Tel Aviv. I don’t know, the guy there--whatever, I mean, my intelligence work helped a little bit. I don’t know, luck. So we got the stuff back here, had it translated and so on, went through it, and I insisted on another one. I was not happy--

Sera: On another set of interviews?

Charlesworth: --another set of questions, my set of questions, and we got that done, and there was money involved and so on. Anyway, the study basically was--the results were that these guys were normal, although I met leaders of Hamas, who are college professors. One was professor of nursing, and a leader of -- the general, and I met a Gehad guy, and they all had different stories and so on, very interesting --. Anyway, the results were basically these boys, all 18, were relatively normal, there was no pathology, out of jobs, did some community work, some were religious, others weren’t, some--

Sera: What about education?

Charlesworth: --education, through high school -- tried to go to colleges, no -- and so on. So they were kind of average guys in a way. What the pathology is there, I don’t know. I mean, -- and as scientists we all know there’s a lot of, you know, truth telling and so on, but there’s a lot of consistency across things, and the parents’ reactions were different. Some fathers said, “Well, he did it for us.” Question of being paid, we didn’t get a nickel -- and so on. Anyway, on and on, the study’s published. You can find it in --. It got pub--I came back, went to the state department, did my paper, and gave my results, and they rejected it.

Sera: The state department?

Charlesworth: No, the people, not the state department, but the people in intelligence --, and--yeah, I could say that at least. This was an inadequate study --. So anyway, I thought, Well, I tried my best. You know, I even asked for more money. I wanted to replicate it on the West Bank, and I had contacts there. Things started to heat up, and I--

Sera: What time did you--when did you publish that?

Charlesworth: --this--oh, the publishing? Oh, it took a while. I did the study in '97, and then the publication was delayed left and right and I got paranoid. I sent it--oh, I sent it to the people that rejected me, I said--I don't know, they never answered. Anyway, I worked in intelligence, and in some ways I knew better than some of those guys I talked with. I was on the ground and they weren't, and I don't care what you say. Anyway, anyway, it's published, it's out, and I looked at--then it came out--I think it finally came out in 2002 or 2003, and I sent it around and got some reaction to it, not much. I don't know, I haven't been on--I don't get email or I'm not on the Internet, so I don't know, but I think anybody who's--and people are interested in terrorism since then. It seems like it's become a big deal, right?

Sera: Yeah.

Charlesworth: And it's different today than it was then. Ask me, I'll tell you what ----

Both speaking at once

Charlesworth: --but the guys who did it are different, right? And then I interested in different DNA, so I checked that out, and someone said there may be some--my model basically is father genetic, genetic, that is, there may be tendencies -- genetic things, guys that will go to any extreme to achieve a goal, and that may have developed -- and so on. Now, these fanatics here who just go and get killed, and that may be adapted for the group, okay, maybe they are genetically different. Okay? That's that part. I don't think so, but I don't know. -- then you got early environment, you got early socialization, deprivation and so on, and then you got the second phase, which may be starting at 15, 16 where indoctrination, propaganda, schooling comes in getting you ready for this direction or that direction, -- take advantage of your anger and your frustration. And then up to a point where you get recruited or you go yourself -- recruited. The recruiting process is very subtle and clever. I found that out, and I don't want to compromise these guys, but it's--I think they know now already what it is, so whatever. And they find out, and then --, but anyway, so then you get them recruited, and then there's a point of no return where you can--

Sera: --

Charlesworth: --well yeah, yeah, and if you make a mistake, well, yeah, you're threatened, and then of course you have family --. So I think recently these guys that are doing it left and right, there's just no point of return --, because they're in Iraq, and they're recruiting guys who are in it for the money, whatever, you know? But anyway, I was interested, and I still am, and I keep -- newspaper clippings and so on, but I'm not -- anything new. I'm interested in new --, yeah, like they love their mothers too much, or you know, or they always were aggressive as school kids--

Sera: Or rejected--

Charlesworth: ---- yeah, yeah. And that--

Both speaking at once

Charlesworth: --yeah, yeah, I don't, I don't--yeah, I don't know. It's open for you guys in the future to get this. Anyway, that was it, and then, to top it all off, peacefully I looked at a cultural study of Amish and the Gypsies, okay? I thought both of these groups are reproductively very successful, they're very different, but they must be doing something similar. Whatever they're doing, they're out producing--reproducing their surroundings. And so I did that, it's my final -- no it's not--it's my second gave that at a meeting -- ethnologists in Belgium --. Okay. And then my last one, which I cannot believe I did, but a friend dared me to do it, is the early entrogenesis of spirituality.

Sera: Hmm, I haven't heard this.

Charlesworth: -- Anyway, it's appearing in an encyclopedia. I don't think it's what they asked for, but they were stuck with me, and I tried my best as a scientist. Weaknesses, strengths and weaknesses, can we go to that?

Sera: Yup, yup.

Charlesworth: We doing okay time wise?

Sera: The strengths of your research--

Charlesworth: Okay. I think my weaknesses were ignoring theory in the early phases of field research -- and collect everything. In an essence I mentioned this. I fell into the trap of misplaced precision. I wanted to be very precise about, okay, that's another one -- oh yeah, okay, let's do the early field research and so on, collect everything, misplaced precision. That influenced me--when I got here I started--I did experimental studies and so on. That was good, but then I began to feel, hey, am I connecting to the real world on this, and so I went more towards ethology and so on. And then I--what was wrong headed about it at least from a professional point of view and from a student point of view--there are two students want to mention as yet, it's a good idea I think what we were doing, and I believe so labor intensive. It burns up, you know. And I had two hard working good guys, one of them, Don -- he came on the scene, and Steve Antonello, so we were gonna publish a paper, Shiketti Antonello, and Sharsworky, and anyway, we did it -- we never really--a couple said we should never finish, it was too--and we--there's a lot of films, they were filmed, and I think Don Dee has some of them and so on. But we filmed it, see, that was the mistake in a way. We could have done it straight in the field, but we were afraid we'd lose too much. This is preaching to the people in the field -- lose too much, and I always felt film very specific events and still was overwhelmed, but he would just mother and child for the first half hour -- flirting, just the first five minutes --. So he did that. He got all this other stuff, which he put aside. Well, we tried to do that with the movie viewer in a little bit, but then it was--we were filming people's response, you gotta tool using study of retarded and handicapped kids -- so we got into that. And it was not finished, and I'm sure it was a good training item, but I don't know that it was good for their career. Well, Donte and these guys, they both just went on--

Both speaking at once

Charlesworth: ---- see him around here I gotta tell --. Anyway, so that was an error I think on my part, because it didn't lead to many publications and if it did, it would lead to descriptions. We got one--I got two graduate students, not from this department, looking at emotionally disordered kids. They published it in a journal, because we were looking at their ecology in the school, what was happening in the school, and we just had two--one--we had a control tool with just two subjects, but they saw the value of doing in depth work and comparing it to what the teacher said and so on. So these two students took -- tool, and they can do it and so on, so that got done. Well, that was other stuff didn't get done. So anyway, this was the problem, and I feel bad about it, but that's the way it goes. I hope they learned something. We grow old and they move on to better things, so I feel I owe them something. The other thing was I was--this may sound crazy, but I was less interested in publishing than learning. I just wanted to learn things, and after I learned it, then I compared it, and then -- yeah, well, I gotta move on, you know, --. And so I got bored pretty easily, and so on, and I think this childhood thing ----when I was a kid in our gang, I was the storyteller, and that put enormous pressure on me to come up with a new story every day. After a long day of fighting whoever we were fighting we'd crawl under the spyrea bush and sit there sweating and trying to eat something that we had scrounged somewhere, and I would have to tell a story. Well, that got my imagination going, and it's never stopped, and so you think of all possibilities and so on. Anyway, and as far as my impact on the field, I don't think it was very great. I just don't know, -- but I don't think it was very great. That's all I can say. I got reprint requests. Well, then I thought, Well, that's very self centered, because this may be--you don't--maybe this is the way that things are in the field, that very few people, after they get a reprint request, come back and say, "You know, we had a great idea, --," there's not that much communication, at least in my experience at that time. I don't know what it is today. You don't get much feedback. As long as you get your paper approved by an editor that you respect, right, and it gets in--

Sera: -- negative feedback. Have you ever had anyone take one of your papers and say that it was wrong and, "Publish another paper on it," and--

Charlesworth: Okay. That's actually--this is your --, did you ever take that seriously and redo it?

Sera: I've looked at what they said and--

Charlesworth: And did you change your behavior?

Sera: --no, I think that I was still right, but I'm gonna do ----

Both speaking at once

Sera: --you know, what the answer is and kind of--

Both speaking at once

Charlesworth: Yeah, yeah, yeah. Okay. Okay. Yeah. That's a good adaptive response. You took it seriously. -- yeah. I had a couple times I did that--

Sera: But I think that's mostly negative feedback that you get about your work, even though it's--

Both speaking at once

Charlesworth: ---- cross that out. Anyway, I didn't take it seriously enough, so I really don't know. I just don't know. And what was wrong headed? I think that was, that was wrong headed. As far as--can we go to research funding influences?

Sera: Sure, sure.

Charlesworth: There's a question in there--

Sera: -- reflect on your experiences with research funding over the years.

Charlesworth: Comment on your participation in shaping the policy -- securing support for you --. I didn't--in the beginning, I didn't have any problems, and I always felt it was fair. I worked hard. That was, like, the first 20 years.

Sera: Did you get funding from NIH--

Charlesworth: Yeah, yeah, yeah, I did -- some place I really did the job right was I was too concerned with the--that there was--that their work was not done carefully enough. I'd find flaws, and it was impossible to get--to go around them. I'd found that many of the researchers had to be watched very carefully if they got labor intensive. -- in fact, it's been bad, it's been bad, and I preferred a mercenary, that is, a non-student that you could just pay and say, "It's gotta be done this way --," -- students, it's the kind of different thing, you're there to educate them, and their goals are different than yours.

Sera: Sometimes you have to let them make mistakes.

Charlesworth: Yeah, you let them mistake, but not at your cost, at the cost of you, or at the cost of your research you can't let that happen. And I found that, that's -- issue is very tough to get around, and I got to be a stickler about that. And I know that stuff wasn't done right, I just know it, and -- and I'd just trust in my work, and I just couldn't write the funding agency and say, you know--it was hard. I did standard stuff. I contributed a few--I was an editor or a reviewer "occasional consultant" for a lot of standard one. I did a lot of consulting for the American Journal of Mental Deficiency and other reading material that--I did it 'cause I thought it was necessary. Standard stuff, you do it, you try to do best at it with the journals and so

on, and as the funding--yeah, generally--it's a good question I think. I don't think I influenced the research funding policy study section or anything like that. All I know is that sometimes I'd have a negative influence. I remember when Kennedy became president. This is way back in the '60s, so when I got here. I guess he got in in '60--yeah. And then--but when--they had a retarded child in their family, the Kennedy family, and all of a sudden studying retardation became a top hot issue, and all of a sudden I heard people say, "Yeah, I am interested in that." "Well, I didn't know you were." "Well, what are you doing?" "Reaction time to X, Y, X." "Well, how does that fit?" "Oh, it fits in," there were a lot of very good--you know, and I had a guy that I trusted -- and he said--he was working--he said, "I wanted to retire," -- professional guy, a well known guy, and he said, "Some of my colleagues are working with rats." I found out it was cheaper working with retarded, 'cause you didn't have to take care of them. You had to take care of the rats. So there was this kind of opportunism that comes in, but that's characteristic about many fine scientific fields, physicists, atom bomb, how about all these guys -- standard physicist -- got a bomb there -- , so I'm not--you can't judge, I mean, this is where the money is and where you're going. But I tried to-- whenever I could, 'cause some of these people I knew were on study sections and so on, and I said, "Look, if you don't know what you're talking about you better study the handicapped." In the homes of the retarded, for example, find out what's going on there. How can you make--in education especially, how do you know this is going on unless you're there? And educators today are still asking parents, and asking teachers, and say, "Okay," and that was one of my driving messages, and I don't think it's been--I don't know, I don't think --. And then sharp turn -- for your work and related--okay, that's it.

Sera: Alright. You want to take a break--

Charlesworth: Sure.

Sera: --before we-- Okay. So--at what institutions have you worked and--

Charlesworth: Coming back to your -- my first and last job, okay, sounds odd. Anyway, I came to the Institute in 1961 as assistant professor, stayed on until I retired in 1995, new job possibilities came up on occasion, but none that could match ICD for its intellectual qualities, so on. Also, Marie and I independently set ourselves the task of listing the pros and cons of moving from Minnesota. We came up with one pro only. Stay in Minnesota, it's a good place to raise children, and all of them, as Garrison Keeler has pointed out, are above average. If the two of us couldn't make them above average at least the state of Minnesota could make them above average. So here we were, and we decided to stay, and whether they're above average I'm not sure anymore, but you know, it's always nature/nurture, so you can never pull those apart. Minnesota prides itself on being superior to most states, and very nice in addition, so much so I would like to say that Minnesota could very well be the current leader in reputation inflation. Texas or California may be ahead of Minnesota, but not by much. I don't know. Self-praise is a good -- for improving your performance, and praise from others is even better. But that's not where I come from. Where I come from praise is in short supply, and only passed out to really deserving where they deserved it, whether they wanted it or not. Okay. That does fit in a little bit here. The other thing I found changed as the U.S. moved into the '60s was great inflation. This is where I thought the -- was getting into the picture too far in Minnesota, but this probably happened elsewhere. And as I was here committee work seemed to increase, more emphasis on cooperation and so on, and I figured, Sure, okay. But don't put the crimp on the real bright competitive guy, even if he makes a fool of himself, those guys--this is their only hope, here or industry, which will misuse them. But I really believe that the bright, not too pro social guy, whatever he is, should--he--that's the criteria for universities, status and remaining --. And I felt that the times being politically correct made it--just made an important role, and I'm glad, I didn't think I ever --, I don't think we hired people because they were men and women or whatever, I just don't think we did. All I remember -- then go by the quality of that person's research --. At the institute I did pretty much what was expected in research, teaching, community servant. I preferred research, but was a softy for student problems, so I put much time in them, especially undergraduates, which in retrospect I think that was a professional mistake as far as having enough time to do get big grants and do research. I do not think it's possible for there being a great teacher and a great researcher. Very few can do it. Great researchers can be great talkers, and we need them to give great lectures. But teaching is not only lecturing. It's guiding students, etc., it's all kinds--it's meeting their needs and so on, you gotta care for them more than you do for research. So that's it. I got grants, especially during the first 20 plus years, and from the standard

places, got teaching awards and so on. I think if you live long you'll get an award sooner or later. Anyway, I think institutions are a necessity, but an institution like the university, it depends on hard creative work and smart mavericks, creative ones and so on, and so a university has to balance conforming and compliance against independence and dissent, language decorum and free speech. How do you convince an agency, especially a public funded one like the university, to pay for mavericks who could easily become trouble makers and so on? So there is this preaching thing I'm making. In the old days if you weren't an axe murderer or a blatant philanderer you could probably keep your job. But now, boy, if you look at somebody or say something wrong you'd be in trouble. So the centrist of being put into line, and I think that's unfortunate. They should learn better manners, but still--also, funding a university is heavily supported both by government and private industrial interests, which have priorities and goals that may not be those of the institution. This can energize research in a socially needed direction, but can also create problems. We all mentioned this I think. Pure research based on intellectual curiosity and willingness to pursue ways of satisfying it often no matter what the personal cost are is extremely important for furthering disinterested research. You just have to do that where the going's good and leave the editors decide where this person's going off into an overly precise direction, which--but even then you can't tell, because -- can be very boring and labor intensive, and you need people to do that tool. So we have to give place for letting the phenomenon take researchers to where they want to go, not what institutions try to make --. And if it's publicly funded, industrial funding you better know the direction. Collective decisions by institutional bodies may be important to help solve health and social problems, but such collectives can easily be swayed by political and ideological pressures, and I can say that for -- genetics -- both disasters. And I'm now wondering whether future historians will view the post World War II investment in behavioral psychological research as biased by environmental governmentism. The -- I think has had too powerful an influence in much of what we do.

Sera: And what do you think the institute--what's the--what do you think--how do you think the institute's role in the field has changed over time or has it?

Charlesworth: Over my time? I don't know how it is today. I'd be interested in knowing. I can't figure it out except by reading the annual report, which comes out every four years now.

Both speaking at once

Charlesworth: But yeah, yeah--oh, I think it's--you know, the institute--I think it's maintained its--its subject matter obviously has changed. I think it's become much more sophisticated and professionally much more developed, more developed. The only thing that occurred it seemed to me--it started in the Vietnam War where there was an emphasis--it was student oriented emphasis and there was concern for student careers and faculty careers, enough being--and thereby taking some of the pressure out of -- of mastering an area and becoming a pro about a certain area. So when I heard that people were preparing for job talks I must say this, I thought, Oh g**, help me. Listen, a good scientist wants you to be clear, state the facts, state the reasons, we can all do this, it doesn't matter what you wear, or whether you stutter, or whether you don't--you say some things that are socially unacceptable, but are you telling the truth as best as you--and this sounds maybe idealistic, you're looking at me in a way I can't interpret anyway. So give us the facts, what's your best go on this on the material. We can talk about -- other stuff. Okay? And I felt we were moving more in the direction towards career orientation rather than solving the tough problems in the field, and there are many. And I think--no wait--oh ----oh yeah, I have to say, this ties in with my final--the final lecture I gave when I retired. You probably don't remember that.

Sera: I -- do you have any favorite courses that you've taught?

Charlesworth: Yeah, all of them. No, I didn't think of that. I loved intro, I loved genetics behavior, I love--I taught a course in--I loved the methods course, the cognitive course, and then of course, the ethology course. And then I picked off when June Tappesser Sole passed away, I took up cultural--her cultural course as a challenge. It was the first time, you know, I was one chapter ahead of the students, but I did it 'cause I really wanted to learn about the cultural --. So I liked them all. I just did, and you know, academics is an interesting place to be.

Sera: Well, did you take any sabbaticals while you were at the institute?

Charlesworth: I did, I did. I had two -- my first sabbatical was to -- psychiatry unit, great place where I could have studied at Amdex where they were, but I wasn't working with geese and ducks, so traveling all the time, psychiatry dealt with kids, so great place. A good way to fund research. It was funded by Volkswagen and by the government, few other foundations funded it; great place, because researchers just went there and did research, and they had weekly--the government -- they had weekly colloquial talks where people got up, and I just found it was so oriented around problem solving, and it was relaxed, and--but there were high standards, and -- good friends with -- director there and some of the other people. But on the personal side, we left almost on the day the Russian army answered the--I think it was the day before, but they had the -- they had the Prague Spring, and the Czechs were now getting out from under the yoke of the eastern bloc, and just before we left--the day after we were on the boat, the Russians of the east Prague countries invaded Czechoslovakia, and my father called, he said, he said to me --, he said, "Something's gonna happen over there. Don't go anywhere outside," and like a good son I said, "Yes, father." But as soon as I got there -- a lot of the staff there were at the meet--at the--they had the nice house people come, they had an evening open house -- good guy had open house, and most of the people--there were, like, 35 guests -- mostly Czech scientists, mostly psychiatrists and --, and who were on research or studying -- and were afraid to go back. And so I said, "Well, I'll be glad to go there, 'cause I'm an American, and they're not gonna get me." And they said, "Good. We'd like you to get X, Y and Z for us," and I said, "Fine, we'll go right off here. No problem, you know, and I'll just take the train. Give me your list." And so I went. I thought, Now, I want to see if Riske changed any. Well, he didn't, he looked just like he did when I saw him in Berlin the poor Riske soldiers, and at that time--these are the--Mrs. Robinson was being sung on tapes by the youth there. They were totally playing this loud music in front of the Russians, and it was the weirdest interesting time, and they had -- where they prayed for all the dead at 3:00 in the morning and all that stuff. It was very interesting. So anyway, it was very interesting, I had a little bit of trouble, especially getting out, and I picked up most of the stuff I was carrying on, typewriters, books, papers. But the rule was they'll never look in your breast pocket. For some reason -- whatever, and they interrogated and so on, and you gotta, you gotta have experience with people who want to get you, that's a good way to sharpen your wits, and I had learned, boy, and this one was good. You gotta learn how to lie and --. And anyway, I got out and then they took--but at least I had letters -- and I mentioned this because it gets back to this reality of the world. A lot of people in this world are living this way with road blocks, they're living, I mean, they're living under situations that are --, and power, so I must say, I'm glad we're the most powerful country in the world, at least momentarily, because it makes life much easier and, you know. So--but anyway, I got excited, and reinforced all my negatives about--the attitudes about communism --. Cuba was there, it was '67, '68, Cuba was behind us -- it was a big mess, it was getting worse and -- and I thought, I was right from the beginning. Anyway, this whole thing got me very interested in deception and power and so on. And--okay--

Sera: Okay. What about your applied work?

Charlesworth: Yeah, I was waiting for you to---- I haven't done much, and I did some observation in the school and so on, and then I worked at -- we'll call it --, so that wasn't--that's not much of what I did. Oh, excuse me, one thing, there was clinical work done at the Wilder Clinic where parents would come in with children who had behavioral problems, and I had some students who were interested in taking this -- and getting a record of when the--what the kid did at home every day, 'cause we--you'd ask the parent, and they said, "Well, he did some of it," and we just said, "We'll call you in the evening, and ask you, 'how many times, was it two, did you keep record?'" "No, I didn't." "Okay, thank you --." Right? And so we got numerical numbers, we got numerical evidence of the kid's problems, things that were turning the parents off. And then we found out--this went on for a couple of weeks, we were finding out that the problems disappeared. Now, I'd like to take credit for it, but you know, it's like the parents who were aware of what was causing the problems, and stopped beating the kids or something like--I wondered what was happening. But anyway, they said, "We don't need you anymore. They're not -- everything's okay." So that took care of that, and I thought, Well, it's possible that we had an effect.

Sera: Right, just having to report it.

Charlesworth: Having to report--yeah, making them aware, having to report and so on, it didn't--and maybe they didn't want to, I think they wanted to solve the problem. I must give the parents credit -- okay.

Sera: -- Okay. So when did you join SRCD?

Charlesworth: Oh, I must have joined it right back in the '60s, right after I got out of Cornell. I attended the SRCD meetings and liked them over the years, but the organization got too large in a way, and I think when this happens too many people have too much to say in too short a time, the inevitable thing happens; you get overload. And I didn't find that scientifically as useful as--maybe now and then a big talk, but as reading -- as I say, I prefer reading. And so this fit in well with my library. I'm a very close friend of libraries and reading, so I think it mostly it influenced me through its monographs.

Sera: Did you do any governance and that sort of thing?

Charlesworth: No, I had none of it. I think--and then they--yeah--they were nice to me even after I dropped out. But I just didn't find that--and generally I don't find these meetings as useful anymore, but I did take very seriously their monographs and many of the things that the leaders in the field had to say. So I wasn't out of it that much. I the desiderata for SRCD at that time--I don't know if it's changed, is one that I apply to an organization I still belong to, and I'm playing a minor part in International Society for Human Ethology. That--the meetings ended up being monologues by many times important people, and I'd prefer the forums where people discussed ideas and so on, and then there'd be more interaction with the audience --. Maybe that's happening today, I don't know. But in general, though, my connection with SRCD has been with the years has become less and less until now.

Sera: Do you want to comment on the field and how it's changed over the years?

Charlesworth: Boy, do I. No, you know, when I left the field--I left the institute ten years ago. I did a departing lecture to my colleagues, and it was kind of interesting doing -- would've thought that that would be a -- to sit there and receive a gold watch. But anyway, this lecture I gave on May 17th -- kept a copy of it. But I figured I'd give at least 4,100 lectures since--in the three or four years I've been at the institute. And the--so I had quite a bit to do with teaching. What interested me mostly over these three or four years in the field was that I also was aware of historical changes going on, and especially the micro changes, say, occurring during the 35-year period--maybe a 50-year period. But one thing that struck me as rather odd was that during the period, especially post second World War, the problems with young people seemed to become more pronounced and more varied, -- crime, decreasing age in which children commit crimes, the victims are the children in poverty hooked on drugs, alcohol, sex, so on, teenage pregnancies, abortions, prenatal care. And it struck me over the years kids were at risk, especially in this country, and I talked to some colleagues. They said, "Well, that's just 'cause we have better recording methods now, and they never talked about these things in the past," and so on. But I do know a lot of people who figured their child was -- they were just tough times for growing up in life. No, guns in school, and--anyway, so if you kind of drew a graph of the number of problems that kids have since, say, 1955 up until now, and you do a graph I think you--it would find an increase in the percentage of kids who have problems, and it may even be with the recent years too with other problems, but health problems, social crime problems, etc., etc. And then you do a corresponding graph of the amount of research money and the number of child psychologists around and so on, and it's--that's increasing as well. So now you have two increasing trends here, one is supposed to negate the other, but they seem to be going together, and it seems like--and this may be heretical, but it seems like the field itself is not having a significant impact on reducing problems, at least holding them on their own. And this would be an interesting -- topic to talk about. And I think I mentioned to you before, maybe in this conversation or not, but I think scientists have three sources of information. One is, of course, the other sciences and working within science, working within the paradigms of conceptual issues, working with scientific method, looking in empirical data, and so that's one source. And that -- should be the main one. But there are two others, and one is social consensus, people outside, they call it folk psychology. I think that's a bit patronizing, but whatever. That the average person -- parent whatever, people out in the world working and having to deal with children, and what they think and what their consensus is -- lawyers and whatever. And then the third, of course, is your own familial your own experiences and what you see, and I think these last two sources I think support this idea

that children are having a tougher time of it now. And this raises the question of, have we addressed the right problems, or do our--what we have to say make really any difference to policy makers, or are we just simply working against general tendencies that we don't understand yet and we're never going to be successful in dealing with these problems until we understand them? I don't know. But it does bother me, because a lot of money has gone into child psych research over the years. I've seen it grow, and I'm amazed at the amount of money that some researchers are getting for topics that I can't believe -- never been any interest to me, but there--here they are today. And yet, when you look at children and their fears and their problems and so on, so okay, maybe it's another factor involved here. Does this go with affluence and--I don't know what it is, but that was one thing that I have found changed in the field while I was there, and today it seems to be no better. How -- I think--and this I think for a lot of scientific -- behavioral sciences, that they're not sufficiently self-critical. And where does criticism come from? Criticism can come from inadequate methods you use and so on, but it can also come from people saying, "You're not addressing the correct problem or, if you are addressing the correct problem, you have no clue as to what solutions are there for children until you get to know them a lot better, and even then you may have trouble, but you have to get to know them better, which means you have to be more multidisciplinary in your knowledge -- you have to pay attention to a lot more things," just like ecologists have. And I think that would help enormously if the field ----now, I may be totally outdated on this, and I'm not going to pursue this, but -- that trend I have noticed. As fears, I have here two fears, is that right?

Sera: Yeah, what are your hopes and fears--

Charlesworth: Okay. Yeah, the fears is that those who are having empirical problems or funding and have agendas to push through have really seemed to become much more powerful recently, maybe because of the precarious international situation in which the U.S. finds itself. But some of the things that I think these political powers are doing are detrimental to society and to children. There's an interesting tendency to resist scientific experts -- well, you know about kids, we know more about them than you know. They don't trust them. They feel that science--people at universities have hidden political agendas. They may be partly right. They think it's mostly liberal and so on, they may have an ideological agenda, and universities are known for that, so you have to send your kids to a university that doesn't espouse one side or the other. But this is what people on the outside of universities are thinking and doing, and when they see me, where I'm coming from, I'm already have preconceptions about how I'm gonna vote, and what I think of children, and punishment, and etc., etc., and I don't think that they made up -- I think this is part of our image that we should be sensitive to. And to be sensitive is to be sensitive to the criticism of it. Now, obviously scientists have to conform in order to preserve what funding they have. They have to conform to--you know, if we want to totally -- war basis, and everybody's gonna be doing military research. And child psych is a soft science in the sense that, well, if we don't solve it today we can solve it tomorrow. But today we gotta solve a military problem. There are people losing their lives, and I'm just thinking about it now. Physics for example, during the end of the Second World War, and then after that--

Sera: --the interview with William Charlesworth. Bill, you were talking about the field and your hopes and fears for the future.

Charlesworth: Yeah. Yeah, the hopes, I really -- things get better. I think they will get better if people in child development, researchers, do the empirical work the way they think it should be done, and it's comprehensive enough, and include the variables and so on, and not give in to pressures to solve particular immediate problems for which they are not prepared, and stick by the scientific method. I remember when I taught methods course and Anne Pick and I agreed on this, we thought that was maybe the most important course a student could have, because it would shape their thinking to be scientists. And yet I also have a fearing of students have less regard for that than they did substantive courses where it was much more interesting substantive material, and learning the methods was like learning how to count and so on, you get a few of those basic things down, but it won't dominate your life. But I think it's important that it does, and I hope the field reminds students, because there's enormous pressure coming from the outside to--for -- . So often I heard that cause and effect connections made on the radio between experts and other people, which are really not causal. They're just correlational. They don't talk about select examples, so you know, there's no discussion of the sample population at all, and you--except you--in medical studies you get some of that, which is good. Medical studies they gotta do it. People live or die by it, but with children

and education I find they were quite subject to public pressures to get rid of a certain problem, and of course we want to get rid of the problems, but you have to know the full nature of the problem. For example, I was interested in bullies. Why were they bullies? I mean, we don't want kids bullying, but why are they? And this may take some research into their backgrounds and family, what's happening and so on. I gave a forum of that in Plum City one time at a church group there about children and violence and so on, tried to show a connection between that and abuse and violence at home. But the question is, how do you know it's going on at home, and can you be intrusive? So there are a lot of problems that come up --, which is why many of us may not pursue these areas, because we know it's impossible to get the right information, or there are laws against it and so on, or legal implications. So I don't know how some of that problem is solved, but if we want to be of relevance to society and to our funding agencies, whom I think hope for the best--they're spending taxpayer money and so on--is we have to keep our scientific status as high as possible. Now, there's a lot of talk--maybe these are the circles I hang around in--relativistic notions about politics, religion, anything moral, it's relative. And I can see the relativist's point of view, but if you have to make a position on something that's for the good of children, being relativistic, saying, "This is good or that,"--I've heard someone say it's good for kids to sleep with older adults, and it's good for boys to sleep with older men and so on. Oh well, okay. Give me your evidence for that. So there's a kind of politically correct issue here that is very important. -- child developments will harden their science, and avoid -- pressures against doing good science, and if necessary--this is all heretical maybe--stay out of educational issues unless you really know the facts -- educating parents and school teachers. Now, we really don't know for sure --, and it depends a lot on the kid's background and so on. I think it's good to educate, and I think it's good to know, and I think a scientist's job is to know, and to educate as a value system that --, and SRCDD, of course, could do a very nice job in influencing its members about some of these issues. I hope this has already been done, and if it has, then forget what I said. Okay?

Sera: Okay. So do you have any personal information that you want to share about your family--

Charlesworth: Yeah, well--

Sera: --and how they affect your--

Charlesworth: --I don't--this is the consequent variable. You get all these antecedent variables, and now you get to the consequent--now you get to the effect -- study developmental causes -- so now you want to see whether they're normal or not. --. Well, I, you know, I'm interested in a lot of things. I've been married for 50 years now this year, and we have three girls and six grandchildren, and I must say, I think I lucked out. I really lucked out, and I--you know, I can't remember happier times than now. I'm very busy, involved in a lot of things in Wisconsin, land protection is one of them. And I also became a Catholic, which may sound really weird, because I find it intellectually and emotionally very satisfying. Socially it has its problems, but that's another issue. I -- 19th century --wherever Catholic sun doth shine there's always laughter and good red wine, and that's my experience. That's what I've experienced. It's not -- outside of church -- then there's a lot of nice good things there. Anyway, yes, what else? Oh, one thing with the family, I look at the antecedents. My dear wife, who grew up under Nazi Germany, and what she and her family had to go through and so on, and her early--her first 12 years, and mine--and I would say it would be very hard to predict that we could even talk to each other on the basis of knowing that. But we do, and we're the best of friends, and I just wonder now whether we have not studied personality long enough in the field, and that--some of the hard wired aspects of it, which could be derailed during early childhood, but even then--and I've talked to people from different cultures, and some are really different from ours, and I can rap with some of these people in ways I can't even rap with people I grew up in high school with. And so what's going on here? Is it intellectual compatibility, personality compatibility--and if so, what's determining it, and why is so resistant to cultural phenomenon? This to me is an interesting topic, and therefore I pay attention to behavior genetics, and I just wish that some of my colleagues who are more on the environmental cultural side would do that as well. As far as the geneticists, I don't know if there's any hope for some of those guys. I know a lot of them, and they're looking at the correlations and so on, but that's not my field, but I know here at the institute we had a discussion about early attachment and the effects and so on, and that colleague from outside--from the psych department said, "Well, why couldn't you just do your studies with identical and fraternal twins, and then we'll see what we got there?" It's a very easy methodological thing to do, and so you combine -- look at--you combine these two different

pre-ontogenetic set of factors with ontogenetic factors, they're two different disciplines, you combine them in your studies and I think we'll get some clear answers on both sides. You'll see--and just saying interaction, interaction, I'm sick of them saying that, of course, no one does not believe interaction. I mean, and yes, let's study it, and then the way you study you gotta include these variables, and I'm looking at a childhood, a childhood of my daughters in fact, and I just think there are so many discrepancies from what I read in textbooks about how cultural influences make a difference and so on, and they do in some ways. But in other ways it seems like there's more hardwire things going on than we in developmental want to recognize. They're probably recognizing them. The brain is to a great extent hardwired, and so--and this to me--the big nature/nurture problem is still around. We should combine it--these and get to a study of interaction, not just saying it, but you just usually neglect one over the other, and so looking back I can see, even in my childhood, if you'd seen me as a kid running around the way we did, you would say, "This guy--you know, what's gonna happen to this guy, you know?" And--or my brother, a quiet young guy sitting there off to, you know and--but the personality and other factors came through, and so they're important too. And that is it.

Sera: Okay. Thanks a lot.