Marian Radke-Yarrow

- Born 3/2/1918 in Wisconsin; died 5/19/2007 in Maryland
- B.A. (1939) University of Wisconsin, M.A. (1941) and Ph.D. (1944) both from the University of Minnesota

Major Employment

- Chief, Laboratory of Developmental Psychology, DIRP, National Institute of Mental Health: 1974-1995
- Instructor, Massachusetts Institute of Technology: 1956-1974

Major Areas of Work

• Developmental psychopathology, social and emotional development of children, environmental influences on development and behavior

SRCD Affiliation

 Secretary (1961-1965), Nominating Committee Member, Publications Committee Member (1965-1967), Child Development Editorial Board (1971-1977, 1979-1987)

SRCD ORAL HISTORY INTERVIEW

Marian Radke-Yarrow

Interviewed by Carolyn Zahn-Waxler At the National Institute of Mental Health May 1993

PART ONE

Zahn-Waxler: The first question under general intellectual history is to describe your family background along with any childhood and adolescent experiences that may be of interest, like where were you born, where did you grow up, what was your schooling like and your military or early work history? So it looks like they want to start from the beginning.

Radke-Yarrow: So you start out with where you started. Okay. Well if I'm to bring you up to date on my early history I suppose I would start with my family. And I guess what is most salient as I think about early childhood or middle childhood is that I grew up in a very happy, stable family. And this was in a small town in rural Wisconsin that was in general an environment that was far gentler and -- what did Bush say?

Zahn-Waxler: Kind and gentler.

Radke-Yarrow: Kinder and gentler than environments today. I had one sister, a lot older than I, nine years older than I, so that in a sense I grew up almost as an only child. And if I think about my childhood in terms of the categories we now use to think about families I guess I would say that my parents carried out very traditional male/female roles, and that was very comfortable. My recollections, which keep coming up over and over, are of early to middle childhood when I would go to meet my father coming home from work. I'd go down the street with the cat to meet him and he would pick up the cat and put it on his shoulder and we'd go home, and that was repeated many times. And then with my mother I think of really tagging around with all of the "female" tasks of housekeeping and being a mother! I think those were very strong imprints, and pleasant ones.

The school I went to was a public school and, believe it or not, it had a preschool. So I started school at between three and four years, so I had two years of (I suppose you could say) kindergarten.



Zahn-Waxler: That would have been very unusual then.

Radke-Yarrow: Very, very unusual. And I remember it had a huge amount of space, so that it was wonderful.

Zahn-Waxler: Were there many other children in the preschool?

Radke-Yarrow: Well, all the children of the town of that age. So there was nothing unusual about it.

Zahn-Waxler: I'm just really wondering why they did that then.

Radke-Yarrow: There was never any -- as far as I know. I never heard any controversy about it.

Zahn-Waxler: But there wouldn't have been any kind of agenda for the importance of early schooling necessarily, or it wouldn't have been because women were working outside the home then, so there wouldn't have been that pressure to --

Radke-Yarrow: It was not a matter of women working; there were very few women working. The kindergarten or preschool teacher was the same woman who had been my sister's teacher, my father's teacher. You know, it was tremendous stability. Well I guess as I see the school now, in relation to current education in that same town, as well as in Bethesda, I see an amazing advantage to what I recall. Teachers were very personal. In high school we would regularly have trips scheduled for 50 miles to go to Milwaukee to go to Shakespeare productions. You wouldn't find that now.

Zahn-Waxler: No. No.

Radke-Yarrow: That's just one little example.

Zahn-Waxler: And also being from a small town in Wisconsin I was very struck with the quality of education there, when I compare it to now and in a big city, even in reasonably good areas, and I think we did very well.

Radke-Yarrow: Very, very well. Right.

Zahn-Waxler: You mentioned the traditional roles of your mother and father, and I see reflected in you both in terms of your strong professional interests, and also your strong interests in skills in organizing and running a home.

Radke-Yarrow: Yes, I guess. I guess.

Zahn-Waxler: Well, I think of all the things that you've taught me how to do, I mean in terms of wallpapering and picking our home furnishings, etc.

Radke-Yarrow: Right. Well I spent --

Zahn-Waxler: -- and I bet that you learned a lot of that from your mother?

Radke-Yarrow: I think I spent more time in childhood sewing doll clothes than any other thing, or making dollhouses, or I mean very domestic kind of orientation.

Zahn-Waxler: Right. And weren't there people in the family like that did upholstering and things like that?

Radke-Yarrow: No, that was a man that we hired. No you're thinking of Hardy.

Zahn-Waxler: But I thought that there were some of those kinds of skills that you learned there too?

Radke-Yarrow: That kind of thing I never learned. It was really cooking, baking, sewing, keeping a house. And I think I was about 12 or maybe less when I was given an allowance, not for me, but it was to buy the family groceries for the week. So I learned, you know, and what I could save was mine.

Zahn-Waxler: And you mentioned your father in a traditional role. What did he do professionally?

Radke-Yarrow: Well he was in the mid-management of John Deere, which was then Van Brunt, but it became John Deere, so that he traveled some but not a great deal. I think much of his life was his avocation, which was conservation.

Zahn-Waxler: Right.

Radke-Yarrow: And so very early I was introduced to the environment and, you know, importance of that and, you know, he restored all that wetland in the Horicon Marsh.

Zahn-Waxler: Right. Right. Somehow I had thought that that was actually part of his employment.

Radke-Yarrow: No.

Zahn-Waxler: And I didn't realize that that was all in addition to his regular work.

Radke-Yarrow: He was engaged in that, and he was also very concerned about the farmers not getting a fair shake, and so he did a lot of work in trying to get the farmers to organize themselves, and actually he came to Washington -- it must have been in the '20s, maybe '30s.

Zahn-Waxler: Now, what about your early schooling, both the academic part and your relationships with other kids? What were those like in terms --

Radke-Yarrow: Well at that time --

Zahn-Waxler: What were peer groups like?

Radke-Yarrow: Yes, what were peer groups like then?

Zahn-Waxler: Were there bullies, were there --

Radke-Yarrow: Well I was afraid of one little boy in the neighborhood, and I don't know why I was afraid of him, but I know I was. But I always had very close pals, a pal or two pals, and so much of the time was spent in very close peer-ships.

Zahn-Waxler: Like in small groups of girls?

Radke-Yarrow: A single pair. Well first it was with -- yeah, and they would kind of change, but they would be with -- first it was Katie, then it was Rhoda and you know it was all the time. Then, beginning at age ten, when a new Presbyterian minister moved into town with three children, one my age and twins two years younger, that became my set of siblings really. And the two families, I think I've mentioned to you before, dealt with all of us kind of as siblings. And needless to say, or maybe surprisingly, they are still that.

Zahn-Waxler: That's interesting. Yeah.

Radke-Yarrow: So that's a long time.

Zahn-Waxler: I remember you talking about having a sense of enjoying playing a leadership role relatively early in your life and that that was something that started with your peers.

Radke-Yarrow: Well I think to address that I think I have to say something about the town. It was in a sense made up of two social classes, only I never thought of them as social classes.

Zahn-Waxler: Right.

Radke-Yarrow: But there were the people who came into town who lived there to be the workers of John Deere, you know, the laborers. And then there were the people who were like management or ministers or lawyers or bankers and so on. Though there was a lot of intermingling at the child level, this was the town.

I think from the time I was in kindergarten, we always, in school, had endless numbers of plays and productions, and onward and onward for every holiday there was. I was over-picked for everything that came up, whether it was to be the angel in the Christmas play or the leading role in Sunny of Sunny Side or Mrs. Minnick, you know, as I got older and older. And so there was a real imbalance, I mean it just wasn't spread around.

Zahn-Waxler: Well there were probably a number of different reasons why that happened.

Radke-Yarrow: Well I didn't mean it as just social class, but I think it's funny why I put these two things together. I think that did have something to do with it, not that there were any -- as I think of it, not overt kinds of discrimination, but it could have been differences in ability, I mean if I just say it bluntly.

Zahn-Waxler: Right. And I'm sure that that -- and a recognition on the part of others. And you're right, I mean, a lot of this may not happen at a very conscious kind of level, but children are groomed for roles from very early on.

Radke-Yarrow: That's true.

Zahn-Waxler: Is there anything else that you'd like to talk about in terms of family background and where you were born in a small town in Wisconsin?

Radke-Yarrow: My family was comfortable financially. I know it was hit by the Depression, but it came back and you know all of that. And there were lots of relatives, aunts and uncles, not so many cousins that were peers. They were all older. But it made a big, big group of relatives. Reasonably close, but not completely

Zahn-Waxler: What about early work history, it sounds like we're moving into young adult development. You mentioned doing the shopping for the family groceries. Were there paid jobs that you had in high school at all? Or like, when did you first start working?

Radke-Yarrow: The highest status job to get every summer (for all high school -- not all high school students, those who were lucky) was to work in the canning factory.

Zahn-Waxler: For me it was picking cherries or working in the canning factory.

Radke-Yarrow: Right. Yes. And this meant sitting there -- this was a funny mix because you'd sit at these conveyer belts where the green peas would come along --

Zahn-Waxler: Or else it was cherries.

Radke-Yarrow: -- and you would have to pick out little things.

Zahn-Waxler: Yeah.

Radke-Yarrow: And that was real peer-ship then because you had a big group of kids and that was fun.

Zahn-Waxler: Would it go on late into the night sometimes? I remember they had different shifts because they had to get the processing done.

Radke-Yarrow: They had older people there too. They had adults there. I don't think we ever stayed at night, but maybe. I don't remember that. But just going back to peers, I think, basically through high school, the close peer relations were always with very small numbers of people. And there were differences in value systems as you might guess from my earlier discussion of the kind of class differences. Our family did not "drink," as it was labeled, and yet there was a lot of beer drinking and so on with some families.

Zahn-Waxler: Right.

Radke-Yarrow: So that kind of split peers all the way through. I mean at school there would be mingling and so on, but somehow

Zahn-Waxler: But in terms of social activities there would be certain things that one just wouldn't get involved in.

Radke-Yarrow: Right. Right. Yeah. Sounds like your family --

Zahn-Waxler: Well, except ours were the drinkers.

Radke-Yarrow: But you see there was drinking, the kind where the father would get boisterous and ugly, and that, you know, you didn't get anywhere close to that.

Zahn-Waxler: Right. Right.

Radke-Yarrow: And so --

Zahn-Waxler: And where children would be abused. I can actually remember now seeing it as a child, I mean seeing drunken fathers slapping their children around and not thinking of it as anything other than that this father was kind of mean.

Radke-Yarrow: Right. Yes.

Zahn-Waxler: The whole sort of concept of physical abuse wasn't in our thinking.

Radke-Yarrow: Something that I think has some bearing on later, there were very clear distinctions in the town on religious lines. There were Catholics and there were Protestants and that was it.

Zahn-Waxler: And then weren't there also differences within Protestant religions?

Radke-Yarrow: Yes. Yes. Yes. Well there was sort of a status hierarchy --

Zahn-Waxler: Sure.

Radke-Yarrow: -- so that the Presbyterians thought of themselves as the top, you know.

Zahn-Waxler: I can imagine each church thinks that it is on top.

Radke-Yarrow: Right. Well but you see they would have the people that had more money.

Zahn-Waxler: I was going to say in terms of how it's linked with finances and contributions.

Radke-Yarrow: That's right. And they had the bankers and the lawyers and so on. And yes, there was Presbyterian, Methodist, and Lutheran.

Zahn-Waxler: Yeah.

Radke-Yarrow: German Lutheran and English Lutheran.

Zahn-Waxler: Oh, that's interesting I had never heard of English Lutheran.

Radke-Yarrow: Oh, yes.

Zahn-Waxler: I mean where I would come from it would be German Lutheran and Norwegian Lutheran. That's interesting. Why don't we move on then into early adult development and the question of college experiences and what kinds of early adult experiences you felt were important to your intellectual development?

Radke-Yarrow: Early adult experiences probably are very closely tied to college.

Zahn-Waxler: And probably graduate school too. We will be coming more to who were your mentors and significant colleagues, but maybe this part we'll try to restrict to intellectual development when you were an undergraduate.

Radke-Yarrow: Okay. Well I think one big shift was going from a small town to what then seemed like a huge university of maybe ten thousand people, and to a much more heterogeneous population. I had never known any people from New York and, you know, it was just a very different culture.

Zahn-Waxler: I had never known anyone who was Jewish.

Radke-Yarrow: Nor had I.

Zahn-Waxler: Or who was black, or any other kind of ethnic origins.

Radke-Yarrow: No, that's right. Well I may have known some people but not in a peer relationship.

Zahn-Waxler: Not in any kind of intimate way.

Radke-Yarrow: Right. So that was very different, and it meant kind of a sudden expansion of the world in all respects; kinds of people, kinds of places, what you were expected to do or not do, you know, that meant a lot of growth. And when I went to college I hadn't the faintest idea where I was going, what I was going to do. I could think of only three kinds of vocations: teacher, social worker or nurse, and I didn't want any of them. And so that was a real dilemma. And the university didn't help very much at least at the start, because you were given an advisor or something, and he was a Professor of Greek, so he had nothing to offer me. I had no interest in Greek at the time.

Zahn-Waxler: Was it always just implicitly understood that you would go to college and that you would go to the University --

Radke-Yarrow: I think so.

Zahn-Waxler: -- and that you would go to the University of Wisconsin?

Radke-Yarrow: I think so.

Zahn-Waxler: And not with the idea in mind that there was a particular career that you were preparing for, but just that somehow --

Radke-Yarrow: Just going on.

Zahn-Waxler: -- thinking it was good to have more education.

Radke-Yarrow: There was a little discussion and exploration of colleges, you know, liberal arts colleges, but not very serious. University of Wisconsin was the thing that one wanted to go to.

Zahn-Waxler: That was the same in my family.

Radke-Yarrow: So for experiences there, I think I began -- I got caught up in causes kind of early there. One was in race relations.

Zahn-Waxler: Oh, that's interesting.

Radke-Yarrow: And actually I can't credit myself with that so much as the young man that I was going with then was very idealistic. And, you know, he introduced me to Black students. And so this then became kind of a direction, nothing fiercely activist, but, thinking then you know, there were not many Black students at the university and someone -- so that was one cause. And then the other wasn't exactly that I got in the cause, but University of Wisconsin had a very liberal reputation in those years and the President was accused of being a Communist and so on. And there were demonstrations for Russia and all this, and think of when that was.

Zahn-Waxler: Amazing.

Radke-Yarrow: I mean that was in the '30s. So these were two kinds of things that I got very interested in.

Zahn-Waxler: Do you think that interest in race relations planted some of the seeds for some of your future research?

Radke-Yarrow: Yeah, I guess. I mean I have no idea. But yes, I'm sure it laid that sort of foundation. And then of course -- see, I don't think I had an adolescence until I got to the university. I mean I was a little girl. And so my adolescence at the university was to change from Republican to Democrat in no uncertain terms, and the usual thing of questioning all religious things for a while.

Zahn-Waxler: Did you stop going to church?

Radke-Yarrow: Oh, well, no, that's right. Even though I was questioning I became a trustee in the church. So, but that was a wonderful social organization. Do you remember Pres House?

Zahn-Waxler: Sure. Sure.

Radke-Yarrow: Yeah, well that was it. So that --

Zahn-Waxler: I mean I think a lot of that kind of questioning of one's faith can be done in the context of remaining in a religious group.

Radke-Yarrow: Sure. And the people there probably knew that most of the students were questioning.

Zahn-Waxler: Sure.

Radke-Yarrow: And so, you know, it was a --

Zahn-Waxler: Nurturing kind of an environment.

Radke-Yarrow: -- a healthy kind of thing, right. I -- you know, I felt after about two years I really had to come to terms with where was I going. So I went into zoology.

Zahn-Waxler: Oh!

Radke-Yarrow: But I hated cutting frogs and I soon left zoology. And so I began to take courses in psychology, I had been taking, I guess, some sociology, so --

Zahn-Waxler: Do you remember any of the people that were teaching psychology at that time?

Radke-Yarrow: Oh, do I. Yes, indeed because they were very influential. There were three people: Kimball Young, who was social psychology, he was more sociology; Hulsey Cason, an experimentalist; and Harry Harlow. Now Harry was then maybe an Assistant Professor, but he had a lot of influence. And so when I found myself getting a degree in psychology, in the senior year, Hulsey Cason said, "You better join our graduate group," I mean they had a seminar at his apartment. And so that was -- you know, I was then being oriented to graduate school.

Zahn-Waxler: This was during your senior year?

Radke-Yarrow: Uh huh. And I remember that seminar; it was something I didn't like at all in content. It was very experimental psychology to the nth degree, but nevertheless it was important. Then Cason also said, "You better start making applications," I mean he was a real mentor in that sense. So I replied, "Where should I apply?" And I honestly think he suggested child development, because I don't remember making any conscious choice, as I think kids around here seem to, they want to go into something or other.

Zahn-Waxler: It seems so different doesn't it now?

Radke-Yarrow: Yeah.

Zahn-Waxler: I mean they know somehow. It's just so very different now. I know my experience was very similar too. I didn't have a plan. My professor suggested graduate school. He suggested child development and I'm very grateful.

Radke-Yarrow: Right.

Zahn-Waxler: But it just was a different era, and women didn't proceed so planfully in career development then.

Radke-Yarrow: No. So anyhow I applied to the three institutes that were suggested: Minnesota, Iowa and Berkeley. There mustn't have been much competition because anyway I was accepted in all of them and I decided -- how did I decide on Minnesota? Not on any intellectual grounds. I just have to be frank about that. It was close; I could come back home, there was someone I liked who was going from graduate school in Wisconsin to Minnesota. And that was kind of it. So I got to Minnesota.

Zahn-Waxler: Did you have developmental courses as an undergraduate at all?

Radke-Yarrow: One course.

Zahn-Waxler: But that interest didn't start then?

Radke-Yarrow: No. No.

Zahn-Waxler: -- so much as in graduate school?

Radke-Yarrow: It was just the one course, that's all.

Zahn-Waxler: At the undergraduate level did they have courses where you did actual research very much; you designed experiments and that?

Radke-Yarrow: There was something vague that I have -- oh, gracious I have something in mind, yes, because it had something to do with what was then called "feebleminded." And I know I went to -- or was that Minnesota. No, that was Minnesota.

Zahn-Waxler: Okay. Unless there's something else that you wanted to say about the undergraduate college experience, you could move on to graduate school. You've talked some about the origins of your interests in child development, but was there more that you wanted to say about that or also about individuals important to your own intellectual development? You've talked about professors that you had as an undergraduate, but in terms of the graduate school, and then you did post-doctoral work at lowa? Who your research mentors were both at Minnesota and lowa, and who were some of your significant colleagues? That's the area I'd like to move into.

Radke-Yarrow: Colleagues, wow. Other graduate students?

Zahn-Waxler: Well, probably at that time --

Radke-Yarrow: I can't think of a colleague. Let's see, I guess I can, but --

Zahn-Waxler: Well let's start with mentors.

Radke-Yarrow: Maybe I'll think of colleagues. Yes, I can think of some colleagues now.

Zahn-Waxler: Sure. But just starting in the graduate school --

Radke-Yarrow: Okay. In Minnesota at the Institute of Child Development, well John Anderson and Florence Goodenough were the big names there then, and my interviewing and getting into Minnesota was always with John Anderson, and I liked him a lot. He decided that Florence Goodenough should be my advisor, but I was his assistant, so in a sense I had both. But I felt much closer to him than to Florence Goodenough, who was a very -- I experienced as a very distant person, not unpleasant, but distant. And so I think he influenced me a lot more than she did. He had the most wonderful seminar that made you think about research. He would give out -- the assignment would be, let's say, three different articles that appeared in the Journal that month or whatever, and three people were assigned to each article. One had to really elaborate on the research question, and really, not just what the author was saying, but where it came from and what you do with it, and somebody had to take the methods and somebody had to take the interpretations, and this was wonderful training. And that was for every single year there. So that was a good experience. And then we also had the chance to pick someone that we -- another part of that seminar was to pick someone in the field that we would learn about in depth and report on that person, and I picked Kurt Lewin.

Zahn-Waxler: Oh, I hadn't realized where that interest had started.

Radke-Yarrow: Yeah, and then just kind of jumping ahead, Kurt came to visit because he had a daughter in undergraduate school there. And Dale Harris, who was on the faculty, mentioned to Kurt

that I had done this paper. And Kurt was then looking for a post-doc, and I remember on a Saturday morning having an interview with him in the area of the student union and that was it.

Zahn-Waxler: Oh, that's so amazing.

Radke-Yarrow: Yeah.

Zahn-Waxler: Because I mean it's sort of fortuitous that you happened to be able to meet him there at the time.

Radke-Yarrow: Yeah. Right. Yeah, the whole thing was just -- that was kind of interesting.

Zahn-Waxler: And where were you in graduate school then, was it close to the end?

Radke-Yarrow: That was the -- then I was close to the end of the graduate school, I had a thesis, but I hadn't finished the thesis yet and all that. I think Minnesota, you see, was in the war years and so a lot of things were hard then. And I think back -- how hard it must have been for John Anderson who had two sons, one in the submarine service, one in the air force, twins, and how hard it must have been for him and his wife.

Zahn-Waxler: Was the Institute building as we know it now, was it on River Road, I mean I know that there's been an extension of it, but --

Radke-Yarrow: The one with the big arch, Pattee Hall was the Institute.

Zahn-Waxler: Oh, so there must have -- because I think that's an education building now, so it must have moved over then in earlier years.

Radke-Yarrow: Yeah. It was Pattee Hall and then there was a building just to the right as you entered it, kind of downhill a little bit, that was the nursery school.

Zahn-Waxler: But it was on the side of the campus near Dinky Town I think?

Radke-Yarrow: Right. Right. Yeah. So I think Minnesota would have been different, you know, in a different time, but there was a lot of wartime stress. And then I guess partly as a result of that (I had some free time) I took Russian, because I thought -- and that's why then the idea was that those of us who were proficient (I never got that good), but those of us who were proficient would then be able to do translating. And that was a real fun experience because the teacher was I guess you'd call a white Russian, you know, was a patrician type, and so he introduced us to all kinds of Russian culture like going to the Russian Orthodox church.

Zahn-Waxler: Oh, wonderful.

Radke-Yarrow: I can't remember where but we had this tea with the big samovar in it and so on, and it was really very nice.

Zahn-Waxler: This was all in Minneapolis.

Radke-Yarrow: All in Minneapolis. It doesn't seem like Minneapolis, does it?

Zahn-Waxler: So back to college where you took your foreign language exam then, did you take it in Russian, or did you take it in some other language?

Radke-Yarrow: No, actually I took it in German and French. Yeah. Because I think I had that all out of the way.

Zahn-Waxler: So who were some of the other professors there then, other professionals?

Radke-Yarrow: I'm blocking on his name but who -- Paul Meehl, and who did he always write with, you know they wrote this article.

Zahn-Waxler: Oh, isn't that Kenneth Mac Corquodale and Paul Meehl.

Radke-Yarrow: Kenny Mac Corquodale and Paul Meehl.

Zahn-Waxler: Oh, okay. They were both there when I was there too.

Radke-Yarrow: And they were somehow ahead because we did take courses in the psych department.

Zahn-Waxler: Right.

Radke-Yarrow: And there was a wonderful teacher there, who was interested in history of psychology. His name was Tinker, Miles Tinker. And he really got history in the personal sense so he knew all about the people not just what their theories were and so on.

Zahn-Waxler: So was Paul Meehl teaching there yet?

Radke-Yarrow: I can't remember. You know I can just see him though.

Zahn-Waxler: Were there any other women besides Florence Goodenough?

Radke-Yarrow: Well Marion Faegre was in the education part of child development, and she later moved to -- she was in Washington when we moved here, so there's kind of a connection there, but not really as a professor in theory or method or something else. But there were no other women on the faculty.

Zahn-Waxler: And what about when you went to lowa?

Radke-Yarrow: Well then Iowa was another really interesting place at that time. It was at its height, both in the psych department under Spence, and in child welfare under Bob Sears. And so there was Bob Sears, Sears was there; Kurt Lewin was there; I don't know if you know these names.

Zahn-Waxler: I have. It must have been a very exciting time.

Radke-Yarrow: I can't think of their names now. And somebody in physical growth and Beth Wellman.

Zahn-Waxler: Was there much interaction amongst the different individuals?

Radke-Yarrow: It was a very -- Iowa was entirely a different sociology from Minnesota. There was a lot of interaction and that was within the Institute. There were very bad relationships between the Institute and psychology. Not all around, Sears and Spence spoke the same language of Yale learning theory, but Spence was very derogatory with regard to Lewin and very prejudiced. And there's no hiding it, I mean it was very open and clear and this was not good.

Zahn-Waxler: With those kinds of exceptions were there good relationships?

Radke-Yarrow: It was a really nice -- yes. And I think there was much more mingling of the graduate students. There seemed to be a big graduate group there. Oh, I know what the other thing was. This was the time of the ASTP, don't ask me what that meant.

Zahn-Waxler: What was it about?

Radke-Yarrow: It was the Army training of graduate students.

Zahn-Waxler: Oh.

Radke-Yarrow: So there was an enormous influx of young men.

Zahn-Waxler: Well was it like ROTC?

Radke-Yarrow: No, it was not ROTC. For instance Norm Garmezy was one of them, was there. Scientific -- I can't --

Zahn-Waxler: Oh, Army Scientific Training Personnel, or something of that --

Radke-Yarrow: Yeah. I think so.

Zahn-Waxler: So Garmezy was there?

Radke-Yarrow: He came with the ASTP, that's when I learned to know him.

Zahn-Waxler: Oh, for heaven's sake. See that I didn't know.

Radke-Yarrow: There were lots of others there then too. So it was a kind of life that was very unusual, given this was wartime. And while we were there it was also the time when many of these men were shipped out, and next we knew they were on the beaches of Normandy.

Zahn-Waxler: Yeah. But if you have to pick like people that were most important to your intellectual development there, who were they?

Radke-Yarrow: Well it would be Lewin.

Zahn-Waxler: What parts of his thinking were you most influenced by?

Radke-Yarrow: Well I think I was -- I guess you would either, I'd say, love Lewin or think he was strange. I mean either you were on one side kind of or the other. And I really just found him extraordinarily creative and fascinating and a wonderful human being. And that part of it -- touched back, if you like, to what I mentioned earlier on race relations because I was again in the situation: well what direction is my research going to take? And so he was very influential in talking about intergroup relations, and that of course became a lot of my activity from then to when I left MIT. He was so different from Minnesota in terms of theory, you know, I had to struggle at Minnesota to be theoretical. I mean it was very --

Zahn-Waxler: Right. Dust-bowl empiricism.

Radke-Yarrow: Right. Right. And so it was real intellectual change. And his mentorship was entirely different. I don't know whether he was trying not to be like the Herr Professor, I think that's really true. He was trying not to be. So he would -- you would suddenly find, well, he can't come to the class this week so would you take over his class? And you know, you were suddenly in to something that was too -- was beyond you.

Zahn-Waxler: But was probably a good learning experience.

Radke-Yarrow: It was good. And he was very personal, so you became part of his family.

Zahn-Waxler: One of the things that I associate with him are these wonderful paradigms for studying the social ecology and natural phenomena.

Radke-Yarrow: Yes.

Zahn-Waxler: -- and how gifted he must have been in terms of crafting those paradigms.

Radke-Yarrow: Yeah.

Zahn-Waxler: -- in terms of what they evoked. And I think unfortunately a lot of people don't have that image so much as they think about a page in a textbook where there were these force fields where he tried to sort of use physics as a model for describing human interaction, and unfortunately, I think that that's the part that gets remembered by many people.

Radke-Yarrow: And as I see it now, it's given so out of context. There's nothing that looks terribly creative about it.

Zahn-Waxler: I think a lot of theories suffer that way when they're introduced in brief textbook descriptions or lectures.

Radke-Yarrow: But I think of the way he influenced paradigms for studying psychosocial behavior.

Zahn-Waxler: Right. Right.

Radke-Yarrow: Students, if I can sound bad for the moment, students these days have no sense of history. They don't know where some of these ideas come from and never bother to look.

Zahn-Waxler: And it's not just that they don't know, they're not being taught.

Radke-Yarrow: They're not being taught. So the students and the teachers, and the teachers before them are not historically oriented.

Zahn-Waxler: I agree.

Radke-Yarrow: And I think that's one of the biggest criticisms I have, if one has to list criticisms of the current field. Well see, in Iowa City, which is small, one always went to lunch with other people, and there was one little restaurant that was really for the students. And they catered to the students and it was called something from *Alice in Wonderland*. I can't think of the name of it now.

Zahn-Waxler: Something having to do with the Mad Hatter and the tea party?

Radke-Yarrow: Mad Hatter. Mad Hatter. That's right.

Zahn-Waxler: In Iowa City?

Radke-Yarrow: Yeah. Once a month Lewin had a meeting there, it was called Kwasl-glrippe, and I still, to this day, don't know how to spell it, but I do know what it means. It means you kind of pour out what your thoughts are and it was a very lively kind of thing. And so if you were thinking about doing such and such a thing, you'd say it. And it could only be kind of a half-baked idea. But it was supposed to be very informal.

Zahn-Waxler: And nobody was going to try and put a damper on it?

Radke-Yarrow: Jump on you.

Zahn-Waxler: So it was an environment that it was hospitable to feel like you could explore new ideas?

Radke-Yarrow: Right. Right. So then that was nice.

Zahn-Waxler: That's interesting.

Radke-Yarrow: I'd love to know whether such a word exists.

Zahn-Waxler: It sounds like it must.

Radke-Yarrow: Right.

Zahn-Waxler: But who knows. Is there anything more in terms of Minnesota and Iowa that you would --

Radke-Yarrow: Well, Minnesota and Iowa were contrasts in every way of -- think about the intelligence question at that point. Here was nativist Minnesota and then environmentalist Iowa in a very -- what seems now a very primitive way, but that was something. There was the non-theoretical, the theoretical, there was the Scandinavian kind of culture, and I don't know what Iowa was. It was a tremendous mix of cultures, at least in the faculty and in the students too. I think at that time Minnesota got more people from close by. It wasn't such a national center as it is now so there was much more homogeneity.

Zahn-Waxler: So should we move on to the next question, and this is, again, still part of general intellectual history. Or did you want to go back to something?

Radke-Yarrow: Yes, there's the post-doc when I went from Iowa to MIT and I'd like to fill that out --

Zahn-Waxler: Oh, okay. That would be good.

Radke-Yarrow: -- because this is a big change in Lewin's emphasis or interest, and I was obviously carried along with it. So when he left Iowa after the year and a half that I had been there and went to MIT, I went along. At MIT I think I was called an Instructor rather than a postdoc, but he had moved in another direction; he was never in a sense a child psychologist, though the child was important. At this point he had moved very much into social psychology and was understandably very much influenced by the events of the time and his own escape from Hitler in Germany. And so that had a very strong influence on what research one was going to do. And MIT is a very different world now from what it was in the 1940s. It would have been kind of unthinkable to think of child psychologists at MIT then, so you really took on a new coloration of social psychology.

Zahn-Waxler: I see.

Radke-Yarrow: And then what Kurt did was to bring there (I guess -- would that have been the closing years of the war when --? Let me think. I don't know). Anyway, he brought there people that he had worked with before like Ron Lippitt and Dorwin Cartwright, and I can't think of anyone else but there are others. So there was -- he was forming a Lewinian group in a way. And Roger Barker was then at Worcester, so there was a lot of -- a new group of colleagues at a much more advanced, sophisticated level of graduate work. I mean these people were all past graduate school obviously. And that was a period in which I developed. You know, all of my research then turned to intergroup relations, to race or culture. And at that same time Kurt set up what was then called Commission on Community Interrelations in New York City that introduced me to New York. Stuart Cook was then the Director of that, and then all of that was what Kurt was calling action research, dealing with social problems. And so that was a very heavy step. Some of that -- see the group went kind of in two directions: groups

dynamics in one sense (it was not culture related), and then the other which had to do with cultural studies. And at that period, right after the war, it was not fashionable to study race.

Zahn-Waxler: It's interesting because the next question I have, I think you really already talked about it: what political and social events have influenced your research and writing?

Radke-Yarrow: I was very much influenced by the war in the sense of the basic ugliness of the Holocaust and the prejudice. And then it was at that time that the study of kindergarten, first-, and second-grade children was initiated looking at their perceptiveness with regard to cultural factors, and that had some pretty practical issues at stake.

Zahn-Waxler: Now we're moving more into an area now that concerns personal research contributions, and the first sort of issue here is -- question is discussion of some of your primary interests in child development at the beginning of your career. When you started to do research, what kinds of things were you studying? What were your primary interests?

Radke-Yarrow: Well the first research was a master's thesis.

Zahn-Waxler: Was that a study of discipline?

Radke-Yarrow: That was the PhD thesis actually. Before that, it was a study of feeble-mindedness and it was an experimental study.

Zahn-Waxler: Were you working at one of the institutions for the mentally retarded?

Radke-Yarrow: Well, I had to go out to whatever this place was.

Zahn-Waxler: There were a couple different ones.

Radke-Yarrow: And I remember constructing or having constructed certain kinds of puzzles.

Zahn-Waxler: That must have been a long tradition because I can remember myself at Wisconsin and at Minnesota going to institutions to do studies of delay of reinforcement with the mentally retarded, and all of these things we were doing with different M&M's for rewards and just stuff like that. And then the dissertation was on --?

Radke-Yarrow: On authority relations in the family. I used multiple measures and actually it was a decent enough dissertation, I guess. It was very empirical. I can't even -- it was really very atheoretical and I wouldn't be able to tell you what the introduction even sounded like.

Zahn-Waxler: It's hard to imagine something like that being atheoretical.

Radke-Yarrow: I know it. I know.

Zahn-Waxler: Because I'm presuming that there were different kinds of discipline that you studied, and that -- weren't you already working with more notions of, I don't know what the language was then, but notions of power assertion and authoritarian parenting versus more reasonable forms of discipline?

Radke-Yarrow: Yes. Yes. And then I was getting what the father was doing and what the mother was doing --

Zahn-Waxler: Oh.

Radke-Yarrow: -- and I tried to get the young child (these are preschoolers) -- get their perceptions of it. So I was getting it from the parents' side and the child's side, and there were some amazing discrepancies in all that that were very interesting. And the dissertation was not finished when I went to lowa, and I would have to go back and look at it, but by the time I took the thesis there then Kurt was already having a lot of influence. So by the time I got to the end of the dissertation it begins to sound the more like Lewin. And that really didn't go at all with -- actually, I don't really want to put this in, but I talked about perceptions of parents, and that simply was a "no" word in the learning theories.

Zahn-Waxler: Oh, that's right.

Radke-Yarrow: And so it wasn't so much a "no" word in Minnesota as it was at Iowa with the learning theories.

Zahn-Walker: It was such a rigid and traumatic time in our history of our psychology I think.

Radke-Yarrow: Rigid! Oh, just hideous. You know, you couldn't talk about the parents' perceptions.

Zahn-Waxler: You couldn't talk about thoughts --

Radke-Yarrow: No.

Zahn-Waxler: I mean the closest you could get would be something that was called rg sg's, which were conditioned internalized responses in learning theory terms

Radke-Yarrow: Yes.

Zahn-Waxler: When you think about it now it's ludicrous.

Radke-Yarrow: Yes. It's pretty bad.

Zahn-Waxler: But there are these hills and valleys I guess.

Radke-Yarrow: Right.

Zahn-Waxler: Well why don't you talk about work beyond the dissertation and some of the core studies at the beginning of your career. Are there others that you'd like to talk about?

Radke-Yarrow: Other studies?

Zahn-Waxler: I better tell you what the next questions are that we're going to be dealing with. One has to do with the kinds of continuities in your work that you view as the most significant, and what kinds of shifts occurred and what events were responsible for that, so moving into maybe some of the next research contributions or areas. Of course I suppose that's linked up with moves to different work environments too.

Radke-Yarrow: Right. Well there are obvious continuities in the sense of an interest in socialization all through my career and the -- if you want to put it broadly -- the complexity of the environment and what impact this has. I think -- I didn't mention it earlier -- but I think Roger Barker had an influence too. And I think he has just been kind of overlooked by our discipline. He was the one who talked about ecology, he developed that, and that's seldom mentioned. And I think that obviously he was much influenced by Lewin. So anyway, that's a continuing interest. The content became different over the years in many ways; no longer studying, you know, white children versus black children, Catholic versus Protestant, Jewish versus -- and so on, those -- that content was concentrated in the MIT and lowa

years. And not so much by plan as by what an environment, wherever you happen to be working, what that affords you.

Zahn-Waxler: Right.

Radke-Yarrow: And after I left MIT, when I got married to Leon Yarrow and went to Denver I didn't have much professional opportunity there, I was teaching at University of Denver.

Zahn-Waxler: How long were you in Denver? I had forgotten about that.

Radke-Yarrow: Two or so years. Lee worked with John Benjamin.

Zahn-Waxler: Where did you meet him?

Radke-Yarrow: In Iowa. I didn't do any research in Denver. I was finishing all kinds of things that were hanging around to be written up, but I didn't have anything really great in Denver. But it was a wonderful place to live. And I guess the next place for research was in Washington, D.C., and that first job didn't really offer what I was greatly interested in. That was the civilian Army job in the Human Resources Research Office.

Zahn-Waxler: And how long did you do that?

Radke-Yarrow: Oh, the shortest time possible, probably about two years. And I was assigned to study -what do you call the place that you put soldiers? (I never got very into the army) -- stockades. And that's where I met Seymour (Sy) Feshbach, who was my Lieutenant, Second Lieutenant, because I couldn't go certain places without having someone accompany me.

Zahn-Waxler: Really I didn't realize that your relationship with Sy went that far back

Radke-Yarrow: Sy and I have many memories. So anyhow, I studied men who went AWOL.

Zahn-Waxler: And you don't consider that to be a primary major scientific contribution?

Radke-Yarrow: Right. Well, and then I came to NIMH.

Zahn-Waxler: Okay. And when you came did you start working on mental health research right away?

Radke-Yarrow: There was a study of families of mental patients, headed by John Clausen. As I recall, the study, when I came, was barely structured; it was just being structured. And I knew nothing about mental patients, zero. And so there was a lot of learning at that point. The only thing I could do was sort of carry over what I had learned from Lewin, so I said, "What is the cognitive structure of the family?" and so on, and a lot of this worked out in an interesting way and it was a good study.

Zahn-Waxler: It's so interesting to think back about how families of mental patients were thought about in that time versus now, and some of the changes in some of our conceptualizations of causes of mental illness and, at that time, the general focus was on the families causing the problems for the patients?

Radke-Yarrow: No, it wasn't that way at all in our study. It was really what was happening to the family as a result of this disaster, to speak. And to my utter delight I saw the one article (we put together a whole issue of a journal), on "The psychological meaning of illness in the family," cited by Mike Rutter in an article just a couple of years ago. So it was really seeing its impact; remember this was a sociologist, John Clausen, who had initiated this and so it was a very different emphasis. And these were hard-core (I guess that's a reasonable term) patients, long-term patients.

Zahn-Waxler: Chronic schizophrenics mostly.

Radke-Yarrow: Chronic schizophrenics, dementia, these were patients at St. Elizabeth's Hospital.

Zahn-Waxler: So when you came to NIMH it sounds like you got involved in some collaborative work and then you must have fairly quickly started some studies of your own. I mean I'm thinking of the study of the racial integration of the summer camp.

Radke-Yarrow: Yes. I forgot that. John Campbell and Lee, the three of us actually set up the study. It was just when -- when was that?

Zahn-Waxler: It must have been right after the Supreme Court desegregation decision.

Radke-Yarrow: Right. Right. The Family and Child Services, which was a big private agency in D.C., had the summer camp regularly, and this was the year, the first year they were going to try to integrate it racially. So we designed a study which went two weeks at a time. The first two weeks it was all white children and the second two weeks it was all black children. The camp was integrated with black and white children together for the third two weeks. We lived there all that time. It was a very difficult. It was very hard.

Zahn-Waxler: The kind of energy and dedication that it would take to do that kind of study at that time in history --

Radke-Yarrow: And then when we were about to write it up -- I can't remember the title we gave it, but we felt (I won't say compelled, but I'll use) "compelled" not to give a title that had race in it. And I cannot think of what the title was.

Zahn-Waxler: Did you do it as a monograph or a --?

Radke-Yarrow: Yeah, it was a journal issue, so that there was the whole journal of a given issue and then there were separate parts to its -- some of the cultural issues have been interwoven into my experiences here and elsewhere, but most of the time here I suppose, because I've had more time here, they're very interesting culture-science interactions. Now, you know, that's about all I can say.

Zahn-Waxler: Are you talking in terms of the content of what you studied or the people that you worked with or all of that?

Radke-Yarrow: I don't know, see it's hard to reconstruct now why we didn't call it race, but we didn't call it race. Government research was to be more value-free.

Zahn-Waxler: You might want to mention some of the other sort of areas that you've worked in, because the next question is what are the continuities, what were some of the shifts in research emphasis, and what were the events that were responsible for the shifts? And I think that has implications for a different working environment at NIMH when we were part of the Laboratory of Socio-Environmental Studies. You might want to talk about some of that and how it impacted on your work and the continuities in that work.

Radke-Yarrow: See I think there are underlying continuities that are methodological that went all the way through. The content obviously shifted and became more mental health, in the mental illness sense of the word, over time with children. And I'll go back to say what are some of the influences, why it took that course. The methodological interests were constant in a sense. The orientation of multiple influences on the individual behavior rather than a single variable kind of approach to life I think is a continuity. There's one kind of brief period in which that was sacrificed.

Zahn-Waxler: You had a flirtation with the univariate approach?

Radke-Yarrow: I had a flirtation when Carolyn Waxler came, and she brought so much Minnesota with her from that era.

Zahn-Waxler: What was that?

Radke-Yarrow: Well remember we did modeling studies, generalized imitation and social reinforcement of children?

Zahn-Waxler: Yeah. It was so dominant then.

Radke-Yarrow: Right. But at that same time we managed to do that retrospective study in the nursery school in D.C., and at that time -- and I haven't mentioned some of the other influences on my career, namely gender. I was so naive as to not know that there were such things as sexual discrimination in academia, good ivy-covered academia. I didn't know that. I think the first time I really came up with it was at MIT when there weren't any other women and I couldn't belong to their faculty club, I was with the dames.

Zahn-Waxler: That must have been very isolating.

Radke-Yarrow: Very. And their medical examination was only set up -- all the questions were male questions. So that was my first taste.

Zahn-Walker: So you're treated as a non-entity in one sense?

Radke-Yarrow: Pretty much. Right. Then I didn't sense any sexual discrimination in Human Resources or in Denver. The only thing at Human Resources was this protection they thought I needed, but maybe I did. I don't know. But NIH was a different thing; there was sexual discrimination, clear. And one could feel it in meetings where you would meet with the Director of NIH if you happened to be on a committee, and the rest of the committee was males, who were listened to. It was very clear. It was also clear in funding, so that when a colleague of mine and I both needed funding for research inside the halls of NIH, I was told to keep the funding to four digits, in other words less than ten thousand dollars, when at the same time the colleague was given 160 thousand dollars. That was sexual discrimination. But out of that nine thousand dollars I managed to have we managed to do research that made use of an entire nursery school, which would have cost thousands and thousands of dollars.

Zahn-Waxler: That is where you had a contract for --

Radke-Yarrow: Had a contract for nine thousand dollars, which gave us access, not only to the current nursery school, but to all their records, which made it possible to do a retrospective study. So maybe if I just pursue the sexual discrimination a little more, the next big discrimination was to hear the Director of NIMH say, when I was recommended to head a laboratory, that "over his dead body would there ever be a woman lab chief." At that time there were at least 25 labs and all were headed by men, and at that time I didn't become one. And when I became a lab chief, 12 or so years later, I have to say to his credit that he apologized to me.

Zahn-Waxler: Well it's been very slow in changing. I think it's starting to do so, but it's been very slow.

Radke-Yarrow: Yeah. So what are we on?

Zahn-Waxler: Well, the next question that would be interesting to talk about is when you did become the head of the Laboratory of Developmental Psychology in the mid-1970s. That represented a significant shift.

Radke-Yarrow: Right. That has a kind of state of the science and state of the culture aspect to it too, because up to that time or in the '50s and '60s, the mission of NIMH was extraordinarily broad, so that everything was relevant. By the '70s when I took over the lab, there had been a very clear shift to more targeted areas, so that our mission was to study the major mental illnesses. Those major mental illnesses were, and still are, rather narrowly defined, but nevertheless that was an important shift. So that in evolving this laboratory, I was trying to be responsive to that change, and at that same time to hold on to some normal child development interests. And what I dreamed up as a way to try to do this for myself and Staff Fellows and so on that came in, was to design a longitudinal study which allowed me to look at children who were at risk and children who had very normal families. In that we'd begin to focus a lot of things both theoretical and methodological and science putting it all in one study. And then I think the rest of the lab developed around that.

Zahn-Waxler: That's right, and it really fit very much within the tradition of the emerging domain of developmental psychopathology --

Radke-Yarrow: Right. Right.

Zahn-Waxler: -- if you think about it. That's what you were doing almost before the phrase was coined.

Radke-Yarrow: Right. Yes, I think. Yeah. That was 1979.

Zahn-Waxler: I mean that would be my interpretation. Anyway, the next question concerns -- it would like you to reflect on the strengths and weaknesses of your research and theoretical contributions, the impact of your work and its current status.

Radke-Yarrow: That's like saying, "How good are you?"

Zahn-Waxler: Right. Where do you feel like you've made your contributions?

Radke-Yarrow: -- by persisting on certain issues of methodology that are not independent of theory. And what I'm concerned with now and have been concerned with is this attempt to shift away from group differences, you know, talking about what influences what on the basis of a group difference, and shift away from that to what I'll say are more clinical, much more person-oriented issues, if you want to talk about Magnusson's terms, and I think that's the way the field has to go to get beyond simplistic explanations of human nature and behavior. So anyway, that's what I'm happy about and I think that the study that I've spent a lot of time on, the longitudinal study, allows for that and it's beginning to address those things more and more. I think the worst part of the career was the study of reinforcement and imitation. But that was true of the times.

Zahn-Waxler: I do think it was like another one of those low points in our developmental history, and it was all part of that same era that we were talking about earlier, how Spence and Hull developed learning theories where you didn't talk about thoughts or motives or emotions. You just assigned initials to those internalized processes and called them conditioned responses, for the most part. Since most of the learning studies were based on animal models, it probably was easier to do that then.

Radke-Yarrow: Right. Yeah. See I think another thing, just to talk about direction of research, I think I've tried very hard with this laboratory to bring psychiatry and psychology together. And that hasn't been very simple, and I think in the universities as a whole, I don't know how much over the years, maybe now, but over the years there's been very little cross-talk between psychology and psychiatry in child studies.

Zahn-Waxler: Right. Right. I think that that is more recently starting to change.

Radke-Yarrow: Yes, but not everywhere.

Zahn-Waxler: No. No. But I think that that interdisciplinary perspective is something that you've fostered and is valued. And I have the sense also that in some of your more recent work that you're trying to build in assessments of some of the biological contributions that interact with environmental processes to affect developmental outcomes.

Radke-Yarrow: Yeah. Yeah. And some things are possible and relevant from biology at this point, which would have been nice to know in 1979, but we didn't. But we can still do some of the things that -- like brain imaging and the like. And I think in the long run if the longitudinal sample is kept intact there will be more opportunities for that.

Zahn-Waxler: It's an extraordinarily valuable sample.

Radke-Yarrow: Yeah. Yeah.

Zahn-Waxler: And as you say there are some things that you need to await the development of particular technologies.

Radke-Yarrow: Right.

Zahn-Waxler: Okay. What would you say in terms of what published or unpublished manuscripts best represent your thinking about child development, and which of your studies do you think of as the most significant, publications that you sort of feel are most important, that you take the greatest pride in?

Radke-Yarrow: Well it isn't a journal publication, but it's the accumulation of publications around the longitudinal study. And there's a little essay that I wrote for Robert Hinde, I think I tried to present my methodological orientations, and I liked that even though it is in essay form.

Zahn-Waxler: What about the book -- well there have been several books actually, but I'm thinking about the one that's the retrospective study on child-rearing methods --

Radke-Yarrow: Well I think that has had an influence.

Zahn-Walker: I think it's had a major influence. I think there are many articles that have.

Radke-Yarrow: Well that one. I think a study that I did while at MIT, but in the Philadelphia schools, on the influence of prejudice on children had an impact. It was entered into the Supreme Court decision, through the North Carolina route I think, I've forgotten.

Zahn-Waxler: What does that mean, "Through the North Carolina route?"

Radke-Yarrow: Well see different places brought the case to the Supreme Court.

Zahn-Waxler: Oh, I see what you mean is in terms of which way it was tried. And that was a monograph? Was that published as a monograph?

Radke-Yarrow: Of social perceptions of children. Imagine talking about perceptions back then.

Zahn-Waxler: Okay. There's just one more question in this section on personal research contributions, there's one more question that has to do with reflecting on your experience with the research funding apparatus over the years, and you might also want to comment on any kind of

participation that you've had in shaping funding policy, implementation, like on study sections and committees and councils, and also how you've gone about securing support for your own work.

Radke-Yarrow: Well, I think I've had an unusual kind of experience. I have not been much involved in funding, that is, as a person, as a staff person in the intramural program. We are rigorously reviewed but we have a continuing budget, which -- when I say continuing it obviously changes, but it's not like getting a grant each five years or three years. In addition to that, I was a recipient of one of the McArthur Network Funding Awards for ten years and that too has been very helpful. In the intramural program I don't think that one is expected, or allowed, to maybe get involved in the funding policies.

Zahn-Waxler: Well this might be a good stopping point. I think we're about half way through the interview in terms of the questions and we'll take it up again next week.

PART TWO

Zahn-Waxler: This is part two of the interview. And in the first part we had gone through the general intellectual history and the personal research contributions. Then on reflection we realized that there were several areas of research that had not been touched on. So before we move on, we'll go back and review some of the early research contributions. And I think we had said that there was work in the '70s and '80s that would be important to elaborate on.

Radke-Yarrow: We had talked about where something that was wrongheaded. I remember that term. So that was sort of the middle '60s and late '60s when there were some excursions into social reinforcement, and I think the one study of social reinforcement with Phyllis Scott, which was an attempt as I recall to reduce the negative behaviors of a preschool boy, that led to what became a pretty extensive experimental, semi-experimental study that took me into the whole area of pro-social behavior. And that was about 1965 or 1966 that that began. That was our translation of social reinforcement in a very broad sense. And we soon left that theoretical orientation pretty much. And I guess what I remember that study for, well at least two things; one, that we were designing an experiment that was really not a simple marble dropping type experiment, but where there were interacting variables that one was introducing, and I think that whole approach is something that I feel I've carried on through the next couple of decades. And I remember discussions, if not controversies, with a member or two of the staff at that time who were very much imbedded in social learning theory. The discussion was that experiments must be clean and simple, and I was taking a different point of view, that you have to retain the reality of the problem that your dealing with, otherwise there's not a great deal of point in doing an experiment. So anyhow, that study sort of reflects continuing interest in attention to interacting factors rather than single influences on behavior of children. And I remember in there that we developed numerous mini experiments of distress for children (people were bumping their heads and dropping things and I can't remember the others), but these designs then persisted into a new wave of work on pro-social behavior when you came on the staff. And I remember sitting for some weeks with you and Bob King, who was a child psychiatrist, a clinical Fellow with the lab, and we were trying to come up with an approach that would allow us to get at behavior that was not really accessible in the laboratory. And then a throwback to Florence Goodenough was very, very helpful to us. Her early study on anger, where she used the mother as the reporter, well that was a kind of stimulus for us.

Zahn-Waxler: Right.

Radke-Yarrow: And so with that as an approach, and with the carryover then from the earlier pro-social study with Phyllis, we then took these mini-distress experiments into the home. So I think that was an innovation in the field in several ways; the method, for which we got a lot of flak, but since then has been used considerably. The method was one thing, and I think the data that we got in those early studies, which then you replicated and expanded upon in a finer way later, really were strong challenges to what was then current thought, that young children really weren't capable of concern for

others in distress and that you had to have a certain level of cognitive ability and so on. Your longitudinal work on the development of concern for others in the first years of life helped to dispel these incorrect assumptions. Grazyna Kochanska, a postdoctoral fellow in the lab, also looked at early moral development by studying the origins of conscience.

Zahn-Waxler: We were being very much influenced by Lois Murphy in that time too. She had studied sympathy in young nursery school children at an earlier point in time.

Radke-Yarrow: Right. Yes. And Lois was here in the D.C. area then.

Zahn-Waxler: And we would consult with her.

Radke-Yarrow: And we did talk with her. We used some of her experimental procedures too. So that the topic, which was not very prominent when we started, was somehow beginning in the zeitgeist of developmental psychology, but at that point it was mainly in social psychology.

Zahn-Waxler: Right. And there were people doing studies of pro-social behavior, but not with young children. I think it was interesting too that around the same time we were doing that work that Martin Hoffman had developed a theory about early empathic development.

Radke-Yarrow: So there were lots of things that began to come together.

Zahn-Walker: Starting to bubble.

Radke-Yarrow: Right. So that was pretty satisfying. And the interesting thing is how it persists, how over the years one is still drawn into that whether researchers or practitioners or clinicians, or goodness knows who, continue to be extremely interested in that field.

Pro-social behavior then, in my own energies, kind of decreased. I guess that coincided with taking over the laboratory, which meant one had to think more broadly about a programmatic direction for many people. And at that time, that's the mid '70s, National Institute of Mental Health was proclaiming very strongly that the concentration should be -- research should be on major mental health problems. This was really drawing in from where psychology had been in mental health before that, because people were doing many interesting things but across a very broad range of problems. So the interests that evolved were then interests in using the advantages of the Institute: to begin to set up longitudinal studies. I began with one but then that began to permeate the lab, too, in a larger sense, and to think about children's problems as well as normal development. And I think Tom Achenbach's influence was really important in that. Tom was here for a few years and he was one of the first people to say, "Developmental psychology doesn't talk about problems, doesn't think about pathology," and of course the Child Behavior Checklist was his concentration and major contribution to the field. But out of that I think -- out of that influence and a lot of others came the longitudinal study which really for me then was a big change in direction toward -- I think a big change toward child problems, toward developmental psychopathology and very much a continuation in a sense of the conviction that one needed to develop research designs that were not necessarily simple univariate designs, so that one could look at multiple contributing factors to child problems, and hence then again, they attempt to bring together naturalistic and experimental advantages in a design. And there was much investment in how does one deal adequately with individual differences and still come away with some universals?

Zahn-Waxler: Could you describe the focus of the longitudinal study?

Radke-Yarrow: Okay. All right. The longitudinal study was set up to look at children whose parents were affectively ill, who were depressed, unipolar and bipolar depressed. That was in the context of many depression studies in psychiatry at NIMH at that time, and it also allowed, obviously, the study of normal development in a comparison or control group. So children were selected on the basis of the family's pathology or wellness, and through observation and a long list of the standard measures that

one would expect to use -- interviews and so on, through observations, these children then were followed from two years to adolescence, or close to adolescence, each with a sibling also followed from five years to college, and that's where we are in '93.

Zahn-Waxler: So you're doing the psychiatric assessments of the parents and the children?

Radke-Yarrow: And the children's development and the family dynamics. I don't want to generalize about NIMH studies, but I think in developmental work, this may not have been the first study, goodness knows, but it was one of the early studies that really made a strong attempt to bring the strengths of psychiatry and developmental psychology together, which initially were not easily brought together, but I think it worked out very well.

Zahn-Waxler: Or even of clinical psychology and developmental psychology, I think it's been a long time before people have started to get training in both areas --

Radke-Yarrow: Right. Right.

Zahn-Waxler: -- and for example, you mention Tom Achenbach, I went to graduate school with him, and he was one of the few people that was getting training simultaneously in both areas.

Radke-Yarrow: Right. That's right.

Zahn-Waxler: And now we're seeing much more of that and much interdisciplinary interest.

Radke-Yarrow: Yeah, that was 1979, I think, when it began and there were not so many studies like that. That kind of fills in what we didn't talk about.

Zahn-Waxler: That's right and it speaks to your continuing research interests.

Radke-Yarrow: The interesting thing is if you think of the longitudinal study that was a focus on the family, these were families that differed somewhat in their cultures. As the laboratory developed around that study and with other studies, we then began to move again into cultural context, the effect of inner-city violence, and the stresses that parents bring to their children, and so on. And so it kind of drew again from earlier research; I think of the other research in the laboratory that other people, other investigators, like yourself and Pamela Cole, who studied preschool children at risk for conduct problems. Also the work of Frank Putnam and Penny Trickett and their work with sexually abused girls. Virtually all of the research conducted in the lab was longitudinal in nature, in order to assess multiple contributions to developmental outcomes. As we began to assess biological contributions as well there was the work of Elizabeth Susman and Editha Nottleman on the role of hormones in pubertal development.

Zahn-Waxler: Did you want to say anything about the nutrition study? That was a big initiative in the '70s when David Barrett was here and I remember spending many months with a woman from India, Dr. Ramalingaswami. I don't think that the collaboration actually ended up being with her, but didn't the interest start there and then you and others carried it through?

Radke-Yarrow: Yes.

Zahn-Waxler: Weren't some of the methodologies that you developed from our earlier work used in that research?

Radke-Yarrow: Right. I had forgotten that. That was another branch of energy that went into the study of nutrition and behavior.

Zahn-Waxler: Was it in Guatemala, is that where David Barrett went to collect the data?

Radke-Yarrow: Well it went in two ways, yes. We were going -- we did follow up the earlier work that had been done in Guatemala. The interest that we had was to see as these children had gone beyond infancy and early, early years (where the first studies went), whether any of their early deprivations were apparent say six, seven years later, and we were interested in how the different villages influenced the affective behavior of these children. And I remembered David writing more about this than I did, but there was a village that was so barren, that had nothing, and a village that had a nice, verdant surrounding, and the whole ambiance was different and the children's expressions of affect in our little experiments reflected some of that. That reminds me that as part of the '70s, I guess, we also had in the lab sort of a carryover from the early Lewinian study of creating different climates. We did that first in a field study somewhere in a camp or something.

Zahn-Waxler: That's right.

Radke-Yarrow: And then that matured into what Mark Cummings then did, and you too, on studying environments of anger between adults and examining the effects on children. And that was connected too with our early pro-social studies because it looked at how children's pro-social behavior was affected as well as their aggression. This extends the autocracy-democracy design of Lewin in the 1930s and simply giving it another flavor, which is kind of interesting. But back to the nutrition, that then led to this collaboration with USAID and the University of California at Berkeley on an international study of nutrition and behavior. And it was a valiant effort by AID, a conservative department in government, to assess some aspects of behavior. It was hard for them ever to get beyond cognitive assessments, but they did some. And so there were assessments in Mexico and Africa and Egypt.

Zahn-Waxler: It's still very timely with what's been going on in Somalia and Sedan and --

Radke-Yarrow: Oh, my. I think Marian Sigman and Ted Wax have really come out with some interesting things all out of that study. So, there we are up to the present again.

Zahn-Waxler: Okay. Up to the present. And that brings us to an area that's called personal contributions to institutions. And the first question I think is -- really that one has been covered already, but we may want to revisit it, because the question is the different institutions in which you have worked and when and in what capacity. I think a lot of that actually got discussed in the first session.

Radke-Yarrow: I think so. I think so, yeah. And so much of the career has been at NIH, NIMH, ADAMHA, back to NIH.

Zahn-Waxler: And we'll be talking -- we'll probably be going into that in more detail. Oh, yes we will. So why don't we just go to NIMH then, and one of the questions concerns the kinds of changes that you've seen in NIMH over your time here in terms of the objectives that have been pursued. Also, something about the kinds of achievements and frustrations encountered, and the role that you believe this lab played in the history of child development research.

Radke-Yarrow: Well certainly NIMH has changed from the 1950s, when it began, to the 1990s. For the whole period under Bob Felix it was a very open approach to mental health that almost any problem dealing with behavior, in a broad sense, was mental health, was relevant to mental health. And so one was then immersed in a psychodynamic atmosphere as far as psychology and related disciplines were concerned, and there was much more psychology and social science in the Institute (cultural anthropology and sociology, for example). And so that one studied the culture of the mental hospital and the family of the mental patient and so on. And that continued through (what -- oh dear, when would that have been?) into the '70s? Early '70s. Yes.

Zahn-Waxler: Around that time the focus shifted so there was less interest in environmental processes and greater focus on biology, genetics, and brain research. It was around then that the Laboratory of Family Psychiatry was disbanded and was replaced by the Laboratory of Biological Psychiatry.

Radke-Yarrow: Yes. There was obviously a sharp change in the direction of psychiatry, so that dynamic psychiatry went out and biological psychiatry came in, and that became even more focused and stronger and more dominant in the total NIMH culture. And psychology -- social science almost disappeared in the whole program, and psychology became neuropsychology basically.

Zahn-Waxler: But there always was a Laboratory of Neuropsychology, so what you're saying is that the Laboratory of Psychology also became progressively more focused on neurobiology

Radke-Yarrow: Right and then the Laboratory of Developmental Psychology was created which I was asked to head. And I think in the years of John Eberhart and Robert Cohen as Directors of the NIMH Intramural Program, they bridged the psychodynamic to the biological and had an appreciation of developmental psychology. And I think our lab became quite strong in terms of having some impact on the field and having some identity here. I think in the '80s neuropsychology just got a very swelled head (you know, all the world is the brain). So one has had to try to assert the fact that there are other things to be considered. And I think that one has the great feeling that, well things aren't quite so totally molecular, there's this whole issue of environment-gene interaction in a much more sophisticated way than, to me, seemed to characterize the science as some of it was carried out at NIMH.

Zahn-Waxler: So one frustration for you would be of being one of the lone voices for a different point of view.

Radke-Yarrow: I think so. I think so.

Zahn-Waxler: This has also been changing in our field.

Radke-Yarrow: Yes. And that has some satisfaction.

Zahn-Waxler: Right. That would be one of the achievements.

Radke-Yarrow: Yeah, right.

Zahn-Waxler: Unless you have something else that you want to consider on that topic, the next question concerns any experience you've had as a teacher of child development research or as a trainer of research workers, which I think would be more like the training of research assistants and post-docs. We're back to the question of experiences as a teacher and the kinds of courses you might have taught. We're talking here about training of research workers and there's an issue having to do with a possible tension between teaching and research in the field of child development.

Radke-Yarrow: Well, we don't have a teaching institution here in the usual sense. Obviously, there's a lot of training. And I think one thing that came into being while I was at -- well while we were at Building 10 actually (probably this was in the '60s), the whole training of post-doctoral people came into being, and that has been extremely satisfying and important and rewarding in many ways.

Zahn-Waxler: We'll resume the interview. We stopped momentarily for a storm, which seems to be abating a bit. And you were talking about training of research workers and talking about the Staff Fellow program here and some of the opportunities that that has afforded.

Radke-Yarrow: Yes. That's been, I guess, the primary official training avenue, but in addition to that we've had any number of students from the universities who come here. The training is research training, it's not training in the sense of course work. And then think of all of the students who have worked here between their B.A. and going to graduate school, as well as guest workers and other volunteers. We unfortunately have never kept a log of who all of these people have been. There probably have been hundreds.

Zahn-Waxler: I would think so, especially when you include students that come in from local universities to do their master's thesis or dissertation research. There has been a great deal of research mentoring and close interactions between the lab investigators and the students.

Radke-Yarrow: Right. And we had any number of people from abroad, from Europe and from Japan and China, and let's see, France, Poland, Hungary, Germany, Italy, Spain, England, Canada.

Zahn-Waxler: And no one from South America I don't think.

Radke-Yarrow: I don't think so.

Zahn-Waxler: And Pedro is from --?

Radke-Yarrow: Well Pedro is from -- yes, the Dominican Republic.

Zahn-Waxler: If there's nothing else on that, then also I'd like to see some discussion on whether -what your experiences has been in what is referred to as "so called applied child development," research. I'm not sure what why they say "so called" --

Radke-Yarrow: Why is it "so called?"

Zahn-Waxler: -- and why it's in quotes. But I'd like to see some discussion of your role of putting theory into practice.

Radke-Yarrow: Well to go way back, I think the study of young children's awareness of intergroup prejudices had a very practical application as evidence that was entered for the Supreme Court decision on desegregation in the schools. I think the issues of emotional development and the sensitivity to the environment was also translated from the nutrition and behavior research.

Zahn-Waxler: And the camp study as well.

Radke-Yarrow: And the camp -- that's right, the study of the first desegregation of a summer camp in Washington D.C., which just followed the Supreme Court decision. Those were -- those are very clear applications of one's discipline.

Zahn-Waxler: Yeah. I also think that study, Learning Concern for Others, that you and Phyllis Scott did, and I came in more on the tail-end of that, that the kinds of procedures that were set up there helped to inform intervention procedures for other people who were designing curriculum for enhancing pro-social behavior. And I remember that you were doing some consultation with a group at some point about that.

Radke-Yarrow: Right. That was research at the end of the '60s. Last week ('93) I was at this meeting of a small group of Foundation people and scientists and persons who were engaged in intervention in the public schools, where the topic was "How to Address Emotional Learning in Children." And the reason for being was to address issues of pro-social behavior. So I think the issue of application shouldn't be set off somehow like that. I think it's long past the time when scientists need to sit back and think they're somehow divorced from the society. We aren't.

Zahn-Waxler: It would be interesting to think about the work that you're doing right now with offspring and depressed mothers. It doesn't have an applied venue at this point, but some of that work will ultimately inform intervention programs.

Radke-Yarrow: Well we just published an article addressed to pediatricians, for example, pediatricians and others who have contact in a professional way with young mothers, not necessarily always young mothers. We're trying to sensitize them to depression in these mothers and what kind of implications that would have in the care of the child. It's published in the most recent *Zero to Three* newsletter.

Zahn-Waxler: So the next area that we'll be talking about is your experiences with SRCD, with the Society. Like when you joined SRCD. Like what some of your earliest contacts were with the Society, and who were some of the people that you had contact with then? Do you remember the first biennial meeting that you attended?

Radke-Yarrow: I don't know what the first meeting was, but the people that are conjured up by this question are people like Roger Barker, Bob Sears -- oh the physical growth man, I can't think of his name. Oh, he was so well known. Walter -- and then his son later was head of the Aging Institute.

Zahn-Waxler: Oh, it'll come to us later.

Radke-Yarrow: Yeah. But I think as I go -- well Howard Meredith -- it was more interdisciplinary then, if you just counted proportions, than it is now. I mean many disciplines are represented, but it's still so overwhelming psychology -- Greulich is the name. There was much more participation by the physical growth people, pediatricians, I guess anthropologists. I don't remember psychiatrists involved, but there could be. It was a different era.

Zahn-Waxler: -- and the effort to keep that part of the Society viable, which is now a real effort, was a very natural kind of thing then.

Radke-Yarrow: I don't know what the first meeting was, if I had to make a guess.

Zahn-Waxler: What were some of the early ones?

Radke-Yarrow: I can't even remember where they met, and I think that's probably not to the great interest of SRCD, but I think Division 7 of the APA and SRCD just kind of blend in my memory.

Zahn-Waxler: I remember Howard Moss saying that one of the first meetings he went to there were only about five hundred people there. And now at the last meeting I think they said there were 42 hundred or 44 hundred people.

Radke-Yarrow: I think I'm talking about SRCD meeting in Berkeley when William Martin was the Editor of *Child Development*, and I think that's when Dick Bell presented that paper on bi-directional effects in parent-child interactions. That was about 1968. I don't think that was the first meeting, but it had some distinguishing features.

Zahn-Waxler: Do you think some of the early meetings were at universities?

Radke-Yarrow: They were on university campuses.

Zahn-Waxler: So the settings must have been quite different too.

Radke-Yarrow: That's right. That's right.

Zahn-Waxler: By the time I was going they were all in big cities.

Radke-Yarrow: I remember meeting at the University of Minnesota, whether that was SRCD -- I guess it had to be.

Zahn-Waxler: There was one, and it was in the early '60s, and the reason that I remember is because it was the first one that I ever went to because I was a graduate student there.

Radke-Yarrow: Yes. I remember it coincided with the first racial marches, and where people were --

Zahn-Waxler: The civil rights activism. That's right. What about your history of participation in the activities of the Society?

Radke-Yarrow: Again, and it's just all blended with Division 7.

Zahn-Waxler: With Division 7. It's hard to disentangle.

Radke-Yarrow: Yes. I know I was Secretary and President in Division 7, but I think I was Secretary for some period in SRCD.

Zahn-Waxler: On the Governing Council.

Radke-Yarrow: I think so, and then all kinds of committees, but you don't really keep them in mind.

Zahn-Waxler: So you won't be able to say then much about the major problems and issues that you confronted during your time there?

Radke-Yarrow: No.

Zahn-Waxler: Well actually there were a couple of those study groups that you were involved in. One was one that Bob Cairns organized in Chapel Hill in the early '70s that was on methodology.

Radke-Yarrow: Observational methodology, right. Well it was that and SRCD.

Zahn-Waxler: That was one of them. And then there was the workshop that we did in the early '80s on pro-social behavior and aggression.

Radke-Yarrow: Aggression -- oh, my goodness. Yes.

Zahn-Waxler: I thought those were good opportunities that the Society provided.

Radke-Yarrow: Right. Yeah.

Zahn-Waxler: What do you think are the most important changes to occur in SRCD and its activities during your association with it?

Radke-Yarrow: Well obviously the size is something you commented on early, it's become almost a substitute for the APA for a lot of people who come from psychology. I think the domination by developmental psychologists has been pretty strong, and I think the effort to do something about that and shifting who can be president every other year, in order to reflect different disciplines, is very nice. I mean that does something to it. I think the level of the science in SRCD is really good and high in comparison to some other meetings. I think it just stands out as very good, and I suspect that has been true throughout its history, but it's certainly very clear now.

Zahn-Waxler: You really become aware of it when somebody that we know from another discipline has reason to come to our meetings --

Radke-Yarrow: And says, "Look, oh, this is so different."

Zahn-Waxler: That's true. And to some extent we take it for granted.

Radke-Yarrow: And I don't know, were students always so much a part of it? It seems to me they are a lot now in a very nice way.

Zahn-Waxler: Right. Right. And I think probably having the poster sessions facilitates that too because it allows opportunities for more people to present, and I think it allows opportunities for students to have more interaction with greater numbers of individuals and get more feedback on the early scientific work that they're doing.

Radke-Yarrow: Right.

Zahn-Waxler: Unless there's something else you want to talk about, about your experience within SRCD we can move on to sort of a more general discussion of the field. I would be interested in your comments on the history of the field during the years that you participated in it, some of the major continuities and discontinuities that you've seen over time. And possibly something about events that might be linked to that.

Radke-Yarrow: Well, I think I've commented before that we should go back to the early '40s when child development was a thing apart from psychology to a great extent. I mean, there were Institutes of Child Development, and so I suppose initially child development was pretty a-theoretical. There were a lot of creation of norms, physical growth norms, other kinds of norms, that whole Gesellian movement and so on, and that was to establish, you know, what children are like in terms of physical development. There were books I remember from the University of Minnesota, Happy Childhood and Healthy Childhood, and you know they were really very descriptive. And yet at that same time there were things going on about institutional influences on children, for example the work of Skodak and Skeels. They studied infants and children raised in orphanages where they experienced a great deal of social and sensory deprivation, which stunted their development in many ways. In a kind of practical way, theory came in. Then in the '40s some of the Institutes (well I guess I'm talking about Iowa) got leaders like Bob Sears who came with strong theoretical bents, psychoanalytic as well as the Yale learning theory. So then there was this bridge and this beginning of a bridge between research on children and psychology. There was a tremendous resistance. Goodness knows how long it persisted, but in the '30s I'm sure, because one heard people talking about it, but in the '40s, too, that it was a little beneath a lot of people to deal with children. Eventually they did studies with children that used the same kinds of research designs with children that were used with rats to study cognition and perception. Then, research with children came into psychology in any big way.

Zahn-Waxler: Not a very grand entrance.

Radke-Yarrow: Not a very grand entrance, but I think that whole feeling, well children are, oh, for dogooder ladies to be concerned about, and that permeated a lot of the administration. If you think back, Institutes weren't really exactly a part of the whole faculty structure, they were after a while, but they were apart.

Zahn-Waxler: How much do you think that that's changed? I mean, if you think about how child development is viewed in relation to other parts of psychology in universities, do you think it's achieved a greater stature over time?

Radke-Yarrow: I think it has.

Zahn-Waxler: Is there also still a kind of a continuity where there is still less psychological research on children than adults?

Radke-Yarrow: First it was children aren't so important, you can't learn a lot about children. But then when -- see when the grand theories were dominant, children came in in certain kinds of departments through the psychoanalytic door, so you'd have people like Spitz and John Benjamin and so on dealing with young children, and David Levy. I mean there was a whole psychiatric group that -- you could name a long list.

Zahn-Waxler: Right. I also was thinking of Selma Freiberg --

Radke-Yarrow: Right.

Zahn-Waxler: -- but that was maybe a little bit later.

Radke-Yarrow: Right. But in academia -- see, I don't know academia, I didn't live in academia for a long time, but it seems to me that as I see Institutes now, people have joint appointments, and you think of people like Norm Garmezy being in the Psych Department, as well as in the Institute of Child Development. But the names of the Institutes changed from Child Welfare Research Station to Institute of Child Development or something of that sort.

Zahn-Waxler: That's right.

Radke-Yarrow: And the other interesting thing was child development research was conducted in departments of home economics in many universities; Cornell, for example.

Zahn-Waxler: It still is in some places.

Radke-Yarrow: Right. And that just fits the notion that this is a ladies kind of thing, I think.

Zahn-Waxler: I think it still continues to be a fear of some psychologists, though, that as more and more women become developmental psychologists, that it will become increasingly a discipline led by women.

Radke-Yarrow: Well maybe, but I doubt it. And I would think men shouldn't have to fear that. But I think when theories became more scattered and little and so on, then development became a variable. It was -- obviously had been with Gesell, but I'm saying theoretically it has become more a variable in other people's research. Then when you talk about psychopathology, which of course has all of the status of being important, and you've put that with development. Again I think then developmental issues, or child development if you like, begins to get attached to different kinds of contexts. I think neuroscience is now much more considering developmental issues than it once did, not everywhere, and not every person, but developmental issues are certainly in the forefront when you begin to talk about the plasticity of the brain and the effects of environment on brain structure, etc., then it becomes part of those sciences too.

Zahn-Waxler: That's right. Do you have a sense that your own views have changed about what's been more or less important over the years?

Radke-Yarrow: I don't know. I think it's just a natural process that you kind of incorporate what was there before into the present and you -- it's not so easy to extract an earlier period. I don't know, I don't think I have anything special to say about that.

Zahn-Waxler: What are your hopes and fears for the future of the field?

Radke-Yarrow: Well must I have hopes and fears? Well I think the integration of child development into many sciences, to the extent that that's taking place, is a very strong and hopeful kind of direction. I think that as society has problems that are overwhelming with regard to its future -- what kind of workers, what kind of students, what kind of theories -- science and society have to have some pretty

close relationships, and I think that's important for the field. When a public education system has practically collapsed in this country as it has now, it means there have some considerations of what's gone wrong, what's happening to these children, and so that too is, I think -- well you can say it's a hope and a fear.

Zahn-Waxler: Right. It's a question mark.

Radke-Yarrow: Right. But many social institutions, medical institutions in society have to become more aware of children. So I think that has an influence on science as well as on society.

Zahn-Waxler: The final set of questions -- we're coming to a close -- it has to do with a section called personal notes and wanting to know something about your personal interests and your family and especially some of the ways in which these kinds of experiences have had a bearing on your scientific contributions, if they have.

Radke-Yarrow: That's a vague question. That's a vague kind of question.

Zahn-Waxler: Yeah. Maybe just starting with your personal interests and not start thinking on how it has had an impact on your scientific contributions, but what other kinds of things do you like to do?

Radke-Yarrow: Well, it sounds kind of silly to say -- well I like music, I like plants, I like dogs and so on. I don't know. I find that it's a hard question and one I can't really get very close to. I really can't. It's funny but I don't know what to say about it.

Zahn-Waxler: When I think about how much -- but you're right, it's hard to say it without sounding trivial.

Radke-Yarrow: Right.

Zahn-Waxler: You like gardening or whatever.

Radke-Yarrow: Yes. Right.

Zahn-Waxler: And how does that bear on your scientific contributions?

Radke-Yarrow: I don't know, when I'm working with my plants I think about science? That's not true.

Zahn-Waxler: Well actually I remember Carolyn Saarni talking about when she gardens, she has her most brilliant insights. I don't know, when I garden, I garden.

Radke-Yarrow: That's right. I think I said to keep some of it compartmentalized, I don't know.

Zahn-Waxler: Okay. Well unless there's something else that comes to you that you want to talk about this really brings the interview to a close, and I know I've really enjoyed having the opportunity to do this.

Radke-Yarrow: Well thank you. It's been interesting to reflect on the past