

Wolfgang Edelstein

- Born 6/15/1929 in Freiburg, Germany
- Spouse - Monika Keller
- Ph. D (Philosophy, 1962), University of Heidelberg

Major Employment:

- Max Planck Institute - 1963-Present, Senior Researcher
- Department of Educational Research and Development - 1966-1984, Scientific Advisor to the Icelandic Ministry of Education

Major Areas of Work:

- Development and socialization
- Social-cognitive and moral development
- Developmental and structural aspects of curriculum and instruction
- Developmental and school related conditions of successful learning
- Conditions of successful school transformation



SRCD ORAL HISTORY INTERVIEW

Wolfgang Edelstein

Interviewed by Beate Sodian

Max-Planck-Institute for Human Development, Berlin, Germany

Part 1: October 17, 2008 and Part 2: March 2, 2009

EDELSTEIN: My name is Wolfgang Edelstein, retired Director at the Max-Planck-Institute for Human Development in Berlin.

SODIAN: The Interviewer is Beate Sodian, Developmental Psychologist at the Ludwig Maximilians University in Munich. We are colleagues and the interview is taking place on October 17th, 2008 in Berlin at the Max-Planck-Institute for Human Development in Berlin. Could you please describe your family background along with any childhood and adolescent experiences that may be of interest. The educational and occupational characteristics of your parents, where were you born, where did you grow up?

EDELSTEIN: With my particular childhood, and growing up in various places, it is going to be a somewhat complicated and long-winded story, but I guess it's better to be precise, because my biography is, in a way, a typical and yet an exceptional one. A typical one because I was born as a son of Jewish parents in Germany, in the year 1929. So that, as a child of 4, I lived through the changes, or my parents lived through the changes, and had to endure the changes, that came about in Germany when Hitler and the Nazis took power. I am the son, as I said, of Jewish parents. My father with a Ph.D. from Freiburg University was a cellist and a journalist, a music critic for a newspaper in Freiburg im Breisgau in southern Germany, and played in an orchestra, and taught music. And, of course, with the advent of the Nazis he was forbidden to exercise his trade and had to become a small retail merchandiser, or peddler. As many Jewish intellectuals, he lost the license to work in his own field. My mother was also a university trained woman, also Jewish, with a Ph.D. in economics - one of the earlier female economists with a doctoral degree from Freiburg university, losing all opportunities to work in either that or any other public field due to her Jewish origin.

I started school, a German school, at the age of 6, it must have been in 1935, and that, of course, in my situation, was somewhat complicated, although Freiburg was not a terribly Nazi-infected town, rather Catholic in orientation, so the school was not considered a very dangerous place for me to go to. Still, it turned out to be a complicated place. The teachers, of course, were mainly Nazi teachers, and

so were most pupils in their own opinion. They were, to an extent, affected by the ceaseless propaganda about being members of a nation that was being salvaged by the Nazi regime, and where hostility to others, to aliens, to the Jewish, and also to foreigners, generally was propagated intensively, even in the lowest grades of the primary school. I had a very hostile teacher when I was in the 1st grade, at age 6. I had some difficulties writing because I was left-handed, and left-handedness was considered inappropriate maladjustment. And because I had difficulties writing, I was beaten, very often, by this teacher, with a metal ruler across my fingertips. Thus, my early school memories are rather negative, and full of fears of that teacher. In the 2nd grade, that was different. The teacher was a very nice and humane man who treated me well, and so I recovered from the first traumatic experiences quite easily. In the 3rd grade, there was still a Nazi teacher, but she was a woman, and she dealt with me quite decently. So, I had these mixed experiences, and I dwell on these, because I think they probably had a relatively intensive influence on my later orientations, my interest in schools and school reform, and education. I think all that had pretty early roots.

So, these are childhood experiences that ended in my 8th year when the idea of leaving the country became very, very intense. In my family, quite early I rather suspected than knowing it, that my parents were looking for possibilities to emigrate and, although it then came as a shock to me immediately before leaving the country, I didn't really understand that until later. My father disappeared from the family scene when I was 6 or 7, which can be explained by the fact that there was no livelihood to earn in the vicinity. He joined a Jewish orchestra that played in synagogues for Jewish audiences, so to say outside public hearing. Therefore, he was very much away from the family, playing all around Germany in these Jewish underground assembly halls, or rather basements. My mother was working for a Catholic organization that provided her with some work out of philanthropy, making and collecting newspaper cuttings. They tried to emigrate to England, to America. That was very difficult in those years. The trade unions for example, in the aftermath of the world economic crisis, resisted immigration of musicians - they didn't want foreigners to enter a restricted labor market. My family, therefore, didn't find any place to go, and we couldn't enter the saving ports, except France, where refugees were accepted but also refused license to work. For some reason, perhaps the language, France was out of question.

Then it so happened that a friend of my father's by name of Ernest Drucker played the 2nd violin in a well-known quartet, the Busch Quartet. And that quartet played at a concert in Iceland. And at that time, it was in 1937, in Iceland a young businessman with name Ragnar Jónsson planned to renew Icelandic literature by founding a modern publishing house. He wished to change the cultural atmosphere in the depression-stricken country by founding a symphony orchestra, and building a music scene, and by founding a music school. And he asked the members of this Busch Quartet if they knew someone who might wish to come to Iceland and participate in this endeavor. Drucker recommended my father. When the Icelandic businessman traveled to Germany in 1937 on business errands, he called for my father, who was playing somewhere in eastern Germany in one of these synagogues, to come and meet him. My father traveled to Berlin to see Ragnar, who, after a long conversation, mostly, as my father told me much later, dealing with the Bible and classical Icelandic literature, hired him. Accordingly, my father went to Iceland in 1937 without the family. It appeared that we couldn't go with him at the time, but the following year he managed, from Iceland, to get us out of Germany. This was the time when war appeared imminent, the Germans having occupied Austria and parts of Czechoslovakia, a short while before the November pogrom made exiting from Germany nearly impossible for Jewish emigrants.

It follows that the second half of my childhood and my entire adolescence were spent in Iceland. And that, I think, I owe to Hitler. It was in many ways a happy childhood, because Icelanders looked on children, as they still do, as autonomous human beings, and did a lot for children, even under the poverty conditions of the world economic crisis, in which Iceland was still immersed in 1938, when we arrived there. That attitudes towards children were so positive meant that it was extremely interesting for a child to grow up, both in school and during vacations, which were very long in Iceland, 4 or 5 months. I had a very good time in school, kids and adults were curious about my experiences which were considered interesting. There was a lot of communication, a lot of interesting interactions, both

with teachers and students, and there was this teacher, I think it was in the 4th grade, who found that, as a child of foreign origin, I needed to make real Icelandic experiences, so she provided me with a place on a farm which was run by members of her family in the north of Iceland. The farm experience had an enormous effect on me. I became, so to say, an Icelandic country child, with knowledge of a social scene where children were important members of society because they worked. To an extent they worked independently, they were trusted to look after the animals. Iceland at that time still was mainly a sheep raising stray settlement country. Thus, farms were small kingdoms of autonomy, miles away from each other. Children had responsibilities and children enjoyed recognition. For me, this probably was a saving grace; it was extremely important. As I see it, this experience had a deep and lasting influence on my uses of psychology and why - much later - I went into child psychology.

When I became interested in child development, notions that are important in today's discourse, such as the transactions between developmental psychology and psychologically enlightened educational practices, the role of psychology in teacher education and in school reform positions were quite natural to mEdelstein: recognition of children, recognition of autonomy, and recognition of children's rights, and similar ideas. I believe that my convictions do indeed relate to this original experience, the negation of all these values in the Nazi school and my later liberation into this world of autonomous values as I came to experience them when growing up in Iceland. This is the reason why I have expanded this part of the report perhaps excessively in order to make this process understandable.

SODIAN: So you stayed in Iceland until ...

EDELSTEIN: ... until I graduated from high school at age 19 or 20. I went through the comprehensive school system in Iceland: a primary school that lasted till you were 14, and after that you joined a middle school that lasted for 2 or 3 years, and from there to the academic track schools beyond age 16. I went through these schools until my graduation from gymnasium at age 20. There we had the choice between a mathematics and science track and a language track. Because of my origin I knew German, a difficult language to learn, and therefore joined the language department, which, at the same time, aroused my interest in social science and history. At that time, Iceland had only two or three secondary schools that provided a university entrance entitlement. One of these was in Reykjavik where we lived. Reykjavik, in the late thirties, was a small town of perhaps 25,000 inhabitants or so. Today, it has 100,000 inhabitants, a modern metropolis, however small its size.

Let me spend a few words on work experience. One side of childhood in Iceland was early participation in the workforce. I had the opportunity to work on a farm, as I have mentioned. Other kids, around the age of 14, would go into the fisheries or work ashore in connection with the fisheries. I stayed on farms pretty long, but later, in my adolescence, became a construction worker. Icelandic kids had experience in the workforce from early on, and with these long school vacations, from May to October, they really earned money, they really had the experience of working, with all the competitive, but also the solidarity oriented interactions with working people. These were important experiences which at that time were very important educational influences on youngsters, and which, to an extent, may explain the industriousness of Icelanders, their habit of hard work and self-maintenance which has proved so important for the rise from a country of poverty to a country of affluence in a period of a mere 50 years or less, the time of a generation or two.

Before the present crisis, Iceland had become the most affluent country in Europe, whereas during my childhood, it was among the poorest. This, too, is one of the great influences in my life: it has led, I think, to my interest in explaining social change through the interface of the psychology of individuals with historical developments. It is an interesting kind of experience to make for someone who, from the very start, brings with him into such a social environment the experience of another society. From the very start you acquire a kind of comparative view; even as a child, you experience things as having been different, as being different. Even for the child's mind, there are obviously different ways of organizing life, organizing social interfaces, social experiences, and social interactions. And that appears to provide you with a kind of reflexive and observing mindset with a kind of inner observatory with curiosity for human affairs and for the embeddedness of human affairs in

history and society. You are granted a kind of early gift of interests that lead you into the psychology of development, into developmental psychology.

SODIAN: Before you ever started to do research on child development, you studied linguistics.

EDELSTEIN: Yes, well I went to France for university studies. There is still another aspect of Iceland I should mention in order to explain. Iceland had a powerful literary tradition. And reading and literacy constituted a kind of foundation of people's formal and informal education in Iceland. Your interpersonal reputation, to a large extent, was alimented by literary experiences. People spoke about literature, and you were expected to have literary judgment. Books were extremely important and so was history. At the end of my secondary schooling, I had made a kind of name for myself in the school environment by being a kind of early writer and translator. I translated poetry from German and English into Icelandic, and these translations were published in the school journal. Moreover, in my last year in school, I became editor of a literary journal that I founded together with friends. Therefore I thought that my path would lead into literature. At the same time, I wanted a scientifically serious, not just a conversation type of education. I was quite good in French and had earned a French scholarship, so I went to France and registered in literature and history. I soon found out that I could not be a good student of literature and history in France; students there with their formal preparation were much better. Universities were rigid and expected you to go about your studies in exactly the French way. The French had a very very formal tradition of literary interpretation "Explication de textes," and I just couldn't find any ground there. So I decided I had to switch subjects and leave the literary field and the field of history at least for a time, and look for a scientifically demanding yet less hermeneutic course of studies to get involved in, and happened upon general linguistics. The French obliged students, who benefited from a French scholarship to avoid Paris and to start their studies in a provincial town, which, for me, happened to be the town of Grenoble. There was no linguistics department at the University of Grenoble at the time, so I had to wait for a while in order to transfer to Paris to enroll in linguistics at the Sorbonne University, a rather good choice. At the Sorbonne, every student who enrolled in linguistics had to know one esoteric language, and Icelandic was accepted as a prototype of an esoteric language. At the same time, it proved an interesting first encounter with structuralism.

I became interested in the linguistic structuralism that was represented by my professor in the field, Prof. Lejeune, a well-known linguist at the time, who introduced us to the structural linguistics of the Genevan school, the work of de Saussure. This predisposed me to the encounter with another Genevan theorist, Jean Piaget, whom, however, I didn't value at the time, because linguistics seemed to be so much more rigorous than Piaget's Sorbonne talks. These were, I think, more for insiders than for students visiting from other fields. In sum, I was not particularly impressed by Piaget at the time. That came later, as a kind of hindsight. But to finish my linguistics story first: I studied linguistics and Latin. That appeared to be a complement to the discipline of linguistics, yet I studied Latin and classical languages quite seriously. I had good teachers and finally specialized on a rather unusual branch of the classics, Medieval Latin. With Medieval Latin I received still another cue of lasting influences. I chanced into the course of a most interesting teacher, that was Henri Marrou, well-known historian and philosopher at the Collège de France. He presented a renowned series of lectures or seminars on the history of education in antiquity. And since I had always been interested in education, even from my schooldays, Marrou's course was very inspiring. It prepared me for an interest in a later period of the history of education, together with a specialization in Medieval Latin, when I encountered the historical development of education in the reign of Charlemagne. Lupus de Ferrière, a letter writer in the 8th or 9th century, provided me with interesting insights into a period of transition, the so-called Carolingian Renaissance.

Around that time my scholarship ended. I had to finish my studies, and graduated with a Licence ès Lettres, something similar to a Master's Degree. And, at that moment, it must have been in the year 1953, or on to 1954 perhaps, I received an invitation to stay for 3 months in a rather radical reform school in Germany, the *Odenwaldschule*, with a new principal who had also been an immigrant to Iceland, and whom we had known in Iceland as an immigrant and painter of Jewish extraction, who had

worked in Iceland building up a school of arts and crafts, and, in 1949, had been offered a position as a teacher of arts in this first German comprehensive school for children spanning all grades from the primary school years until graduation from secondary school. I joined this school in the spring of 1954, but instead of staying there for 3 months, I stayed on for 10 years! I became involved in the school reform process. This was a cooperation-based school development process. The teachers were something like a reform-oriented cooperative. Teacher meetings had a kind of legislative function in this school. The school had a radical outlook on how children learn. Dewey, you might say, was not well known in Germany at that time, but I discovered later that this school had a pragmatist outlook and conceived child development as a constructive process, and learning as an organized process assisted and counseled by teachers, but not dominated by them. Rote-learning was not valued. I thought it was a great school, and got deeply involved.

Actually, I didn't look up until 10 years had passed. So, indeed, I had accumulated a long biography that predisposed me towards psychological questions, educational issues, and social science. I thought that I would probably stay in education, perhaps make a career in education. I would probably want to be a psychologically enlightened school reformer. This is the time when I discovered Piaget. In the process of thinking about why children learn, how they learn, and why they differ from each other, and what individual differences are, and how children deal with cognitive stimulation, how one explains resistance to learning, and all those questions that come to the mind of the teacher, we found that Piaget had dealt with these in a most challenging and interesting manner. Interestingly, the Odenwald school imposed an obligation on teachers to read literature and papers that served the school, served the development of teachers. Thus, I came to introduce Piagetian literature to this teacher group and therefore became something of "a Piaget specialist," if only at the level of the school, about which I will not say more here, although it was an interesting school manned partly by refugees who had emigrated abroad during the Nazi reign, partly by soldiers returning from the war, partly by members of the resistance, a variegated and multifaceted group that was highly motivated, dedicated to children, and educationally progressive.

I became so much part of the school that I probably never would have left it except for the action of its legal representative. The Odenwaldschule was a private school, and a set of these private, more or less progressive boarding schools with a reform agenda had a legal representative, a lawyer with the name of Hellmut Becker, the son of a Prussian Minister of Education in the Weimar Republic. Becker was born in 1913, he must have been about 40 at the time we're talking about, and had a voice in cultural politics in Germany. In the late 1950s, perhaps around 1960, he developed an awareness that educational research was missing from the school reform debates in Germany. What prevailed was the traditional history of education and the philosophy of education approach in the universities, an approach that had little to do with schools. There was practically no school research. Education as a science was the privilege of historians and philosophers. Becker's conviction was that this needed to be changed. We needed something like the empirical educational research that was found in the USA, we needed empirical approaches, a psychology of education, a sociology of education, we needed an empirically grounded science of education. We ought to be able to look into the processes that take place in education, and that account for differences in life chances. What we required was a sociology of education, an economics of education, and, in particular, a developmental psychology of education. The latter was, I think, my specific contribution to the educational science conversation with Hellmut Becker, an ongoing conversation for a number of years.

Then he came up with the idea that we needed a Max Planck Institute. The Max Planck Society represented the high tower of science, the realm of scientific recognition. We shall not be able to build an empirical science of education in the universities unless there is something really powerful in the field that people listen to, and that must be a Max Planck Institute, an excellence cluster, as it might be called today. I didn't think too much of this, it didn't concern me deeply, but I had many conversations with the man, I visited with him where he lived on the shore of the Lake of Constance, where he entertained a very hospitable house. And he had other advisors, such as the philosopher Jürgen Habermas, a friend who was to become very famous in the decades to follow. We had parallel conversations with Hellmut Becker, and, in the end, we sat down with a third man, Becker's legal

assistant, Alexander Kluge, who later became a well-known film maker, and wrote an expertise concerning the need for high-level psychological and social research in education. How should a leading institute deal with these questions on a high level proceed? What kind of institution should it be? What should its strategic priorities be? I didn't much believe in the result of such an expertise. I knew that the Max Planck Senate—the decision making body—was manned by very influential people from the science elite. Its research organization, moreover, was divided into three sections, a very conservative law section, a prestigious natural science section, and a powerful biology and medical section. Where would there be a place for educational research? For Hellmut Becker, the lawyer, it had to be the legal section. I doubted that the lawyers could be brought to a decision to co-opt an institute that was quite alien to their way of thinking. We delivered our expertise and Hellmut Becker, challenging the Max Planck Society pulled his many triggers and activated his many connections. He knew many people; he was a member of the traditional elite. He advised many Ministers of Education in the German states. Ministers of Education of the German states had to endorse every new Max Planck Institute, which the Max Planck administration wished to support with public funds. We therefore would need convincing arguments to get an institute founded. But it did happen, Becker somehow prevailed. He brought about a decision in the Senate of the Max Planck Society. He must have convinced the legal section to deliver a positive vote concerning the institute, and he must have been able to solicit the agreement of a majority of the education ministers. And there was a reason, of course! The institute was to be in Berlin. And Berlin was a city which, in the times of the cold war, with its isolation and with the Wall just up, could not easily be denied something it seemed to ask for, something that appeared future oriented.

And in Berlin there was a Minister of Education, Senator Tiburtius, with whom Becker was on good terms, and Tiburtius must have appealed to his colleagues from the other ministries of education to vote for this Institute as a building stone for the political development of the city of Berlin. Thus, against all predictions, the Institute was founded. And then Becker came to see me and told me that now I had to move to Berlin. "You cannot leave me alone now." At that point of time I was deputy headmaster of the Odenwaldschule, 32 or 33 years old. I had decided to stay at the school, and to participate in its continuing development. I wanted to be a school reformer, and I wanted to take part in psychologically enlightened school development with a political outcome, convincing other schools to transform themselves into a modern kind of a comprehensive school.

SODIAN: Did you pursue your academic studies and get a PhD while you were a schoolteacher?

EDELSTEIN: I forgot this part when we were talking about my studies. I decided on a PhD while I was working in the school. It was a tough job because the school was a boarding school. We, the teachers, had to work both as teachers and with groups of boarders to supervise; we were both supervisors and teachers. There was little leisure time. And heading for a Doctorate also meant travelling to the university and developing a doctoral program for yourself to attend. You needed a doctorate to keep your biography open enough for different options, and although I did not really plan to leave the school, I had been convinced by my father before his early death in 1959 as well as by friends that one shouldn't take the risk of being locked up in a school like that. If there came a time in which you felt that you couldn't develop further there, one should have some way of changing to another institution, perhaps to a university or back to an editorial position. I decided to head for a doctorate, went to Heidelberg, which was the closest university, and rediscovered my Medieval Latin. There was one Professorship in Medieval Latin in Heidelberg. The Institute crew greeted me like the prodigal son. I think they probably never had a doctoral student, the discipline being so out of the mainstream. The professor became interested in my topic. I remembered my last year in Paris and this Medieval Latin author Lupus de Ferrières, and we discussed the matter and I discovered Charlemagne again. And I discovered Alcuin who functioned as Minister of Education to Charlemagne, a very interesting man. He was abbot of the monastery of Tours in his later years, and for many years he advised Charlemagne on education - of course from the point of view of medieval Christianity. There were these rather modern manpower needs! They needed people to man the positions of priests and abbots. They needed to educate youngsters. People needed to understand their faith. They needed to be able to read. What the Reformation came up with 600 or more years later could be found in Alcuin's hortatory epistles and

in his advice to Charlemagne. It was seen as the challenge that the emperor Charlemagne faced, who now ran Europe. You have to change Europe. You have to make it an educated land. You have to give Christianity the educational basis it needs. And so Alcuin wrote these educational epistles, these epistles for the institutionalization of education, of reading, of alphabetization, of music. Music is very important, and that may have appealed to my musical memories and childhood experiences. I have a brother who is a music educator in Iceland. I had a father who was a professional musician and educator. That may be one reason why I read Alcuin's letters about music with great interest. And then, a very interesting insight into Charlemagne's world: Alcuin is so interested in the young. He talks about the conditions of mental and psychological survival. At his times the terms, of course, are different. They speak of spiritual survival. What do you have to do for the young? What is it that fosters spiritual growth in them? Alcuin has this idea of recognition for the young. He has this idea of peaceful caring, of solidarity between generations. All this, of course, in Medieval Latin. I decided to write my dissertation about the educational policies of the Carolingian Renaissance, especially about Alcuin's letters. The dissertation was later published as a book. That was quite a feat at the time. It is somewhat curious to read, seen from today's vantage point, half in Latin and half in German and full of sociology and psychology, a curious mixture. It took 2 years to write, every Sunday and every evening after the kids were in bed, and during vacations - not a day of leisure for 2 years. But it ended with a doctoral degree! I had a formal basis for moving on into a scientific career, because I had the credentials, which I would not have had without a doctoral degree.

SODIAN: How did the Max Planck Institute enter into this process?

EDELSTEIN: When the Max Planck Institute opened in late 1963, I moved to Berlin. Or rather, I was sent on a journey on behalf of the Institute. In late 1963 I left the school and Hellmut Becker sent me, as a kind of scout, from one university to the next in Germany to solicit acceptance and advice for the Max Planck Institute to become something like a hotbed of education and information and reform. I collected a lot of information and learned a lot about the great ambivalences that German university professors in psychology and social history and social science and sociology felt about this Max Planck Institute with its upstart notions of educational research that somehow was felt to reject all that was good in German traditions and to introduce some new fangled American ideas of empirical science into the hallowed field of education. Some very positive, some very negative experiences. I met a number of well-known people. Professor Heinz Heckhausen, the noted psychologist of motivation, who later became director at another Max Planck Institute, Helmut Schelsky, the head figure of sociology in Germany, who was totally critical of this Institute, I met Helmut Plessner who said, "It's wonderful, but never tell that I ever gave you any advice because that would make my survival in Göttingen almost impossible". I met Ralf Dahrendorf, later Lord Dahrendorf and his collaborator Peisert, who both took a very constructive perspective. It was 50 years ago. I don't easily recall the names of all the people whom I met at the time; and most of those I forget, are, of course, forgotten because they didn't leave significant traces in the history of science.

SODIAN: Can you give a little background information about the early years and the development of the MPI?

EDELSTEIN: Originally, of course, it was a very dilettantish affair. The Max Planck Society had decided not to grant us the full status of a Max Planck Institute. It had the inferior status of an affiliated Institute implying that the Max Planck Society could retreat from its decision in case it failed. So if you proved to be a failed institute, the Society could wash their hands in innocence and say that it had been worth trying. In fact, some years later, the Max Planck Society regularized our status and made the institute a full-fledged Max Planck Institute. Hellmut Becker looked for co-directors, or section directors, people with the reputation required to build an institute with a certain potential for recognition. It was not an easy thing for a lawyer like Hellmut Becker, who was specialized in educational law, to build up an institute that would be independent and reputed enough to earn recognition among those sciences it needed to be recognized by. He was a person who was extremely partisan in his own affiliations. He was the legal representative of the Frankfurt Institute of Social Science which was the Institute of Horkheimer and Adorno. Adorno advised him not to give room to

psychology at the Institute. Contrary to psychoanalysis, psychology allegedly was an institution of repression, an institution of conservatism. We should aspire to being a sociologically oriented institute. We'd have to be progressive and deny affiliation with all that is reactionary and regressive in Germany. We mustn't forget that this was the time of Adenauer and his politics, the restoration of all that was traditional in Germany. That may also have been one of the motives for the adventure of creating an institute for educational research: it was to be the institutionalization of reform-mindedness. And that, of course, calls for the dialectical opposition of all those who want to maintain the status quo. Psychology was, in a way, very conservative at the time, not least educational psychology. In sum, then, the Institute started without psychology. It started with education as a discipline directed by an expert from Israel who headed a UNESCO-based institute in Hamburg, Saul B. Robinsohn, to run the department of education. The Institute had a sociology department, headed by a sociologist of education, Dietrich Goldschmidt from the School of Education in Berlin, who may have been something of an outsider. And then there were people like me, placed in a governance position as a senior researcher, in spite of the fact that I had no research experience at all, with only a modicum of linguistic research, which was qualitative, interpretation of texts, and listening to children's voices. I had developed, with children, a grammar for children, which was rather unusual at that time. I had it constructed by children, in a Piagetian way. What we had developed was a linguistic grammar ("ungefächerter Sprachunterricht"), a linguistics developed by children, and based on their understanding of language. Although this work may have served to justify my position at Max Planck, it certainly played no role in linguistics, nor in anything scientific, for that matter. This was the kind of notion I brought to the Institute in the beginning, the idea of a strategy for analyzing teaching and learning which bore no relation to any recognized research strategy.

From early on a few highly recognized international people came to help the new institute, manning its Board: Thorsten Husén who was famous at the time as the father of comprehensive schooling and educational research in Sweden. Basil Bernstein came here, who made a sizeable impact on the institute as a sociologically enlightened linguist. Pierre Bourdieu sat on our Board. Heinz Heckhausen was on the Board. So did Jürgen Habermas. It was an interesting community, a community that enhanced one's hopes of being able to make a difference in the social system. We became quite intensively involved in the educational policies of the sixties. Hellmut Becker himself and another director from the Institute, Friedrich Edding, the head of the economics department, became members of the *Bildungsrat* (the educational council). The *Bildungsrat*, a high-level advisory council for institutional, curricular and instructional change needed in the German educational system became a highly recognized institution, publishing a number of widely read texts. We earned considerable reputation as one of the mainstays and information providing agencies for this commission for education. It was much listened to in the sixties and also gave a lot of executive advice to Ministries of Education. In part educational policy makers depended on us, and in part we became dependent on them, with their listening, their being listened to, we also became an important agency for qualified educational information. For example, the *Gesamtschulen* (comprehensive schools) were much debated, advised on, and also informed and researched by the Institute. It finally didn't help much, I guess, and did not really ascertain them positive status, leaving them with a mixed reputation, even today, in the wake of the PISA studies. But, in fact, this was a decade of development that turned the Institute into a recognized interdisciplinary institute in the midst of a system of discipline-based institutes in the Max Planck Society and outside.

SODIAN: To come back to your personal career. When did your interest in child development begin? When did you start your research program on child development?

EDELSTEIN: That was considerably later. During the first years of the Institute, say the early 3 or 4 years, I was much engaged in preparing a totally different research. I became a co-author of the first German quantitative study of school achievement, the *Schulleistungsstudie*, a representative longitudinal study of achievement of 7-graders.

Actually it was a direct antecedent of the PISA studies. The design was not the complex thing that PISA sports today, but it was a strong study of achievement increments over a whole school year, tested at

the start and at the end, a study that was representative for the whole country of (Western) Germany. It was quite an influential study that explained a lot of individual differences, and played a sizeable role in establishing the Max Planck Institute in school research. And here I was involved from the start. This school research phase lasted from 1967, when we started preparing the study, through the measurement phase in 1971, and the write-up phase between 1972 and 1974. I did not have the qualification to head this study, I may have had a part in bringing it about, but I certainly did not run it. It was run by Mario von Cranach as a visiting scholar at this Institute. You may also remember names like Hartmut Zeiher's or Diether Hopf's. This was the first really countrywide quantitative school study, that was longitudinal, critical and done across a set of subjects, English as a foreign language, German, Mathematics - and it established the Institute in this field.

But something happened that took me out of this study. A few years earlier (1966) I had received a request from the Icelandic Minister of Education to advise the Ministry on assessing the state of Icelandic education. He thought, Iceland being a small country, it would be a year's job, and asked me to come to Iceland to negotiate this plan. Actually, this happened during my first trip to an SRCD conference. I got his telegram during a trip to the USA, and on my way back from America I took a flight to Iceland. It was an interesting meeting, quite brief really, a conversation with the Minister Gylfi Gíslason, a rather progressive social democrat in a national coalition. Iceland was a member of OECD, and the minister, an economist by training, and a professor at the University of Iceland, had become aware of OECD analyses and policies relating to education, and came to the conclusion that Iceland needed reform and modernization of its educational system and of the system of educational governance and planning, and offered me the position of an adviser in this process. And that, of course, was difficult for me to turn down. I felt quite elated by this perspective, and accepted this advisory position in Iceland which involved staying in Iceland for extended periods of time. Therefore, with time, I left the study that I was talking about earlier to spend more time in Iceland. Instead of collecting data around the country I advised the Ministry to develop its own research and development unit. This led to the establishment of an R & D department, and my first job was to share the work of building it up, with part of my time there, and part of my time at the Institute in Berlin. This was the starting point of a long career in Iceland.

Before starting the study in Berlin, I had already renewed contact with Iceland. This was a somewhat different project from the one I have reported at this later opportunity. I was asked by the educational administration of the city of Reykjavik to make an analysis of the educational needs of a growing city. For a few years I was involved in a long-term prediction of demographic development and educational needs of a rapidly growing city. So, when the Minister called on me, I had this early history in Iceland already. I maintained the position of chief scientific adviser of the Ministry of Education until 1984. This provided the opportunity to live between two worlds, with one half of my consciousness and my experience in Iceland, which was if not my country of origin, the country where I grew up, and where I gained the historical knowledge which founded my own experience, a country proceeding through a deep process of change and modernization of the educational system. It follows that there was a variety of advisory jobs before our longitudinal study "Child Development and Social Structure" started in 1974. The first job dealt with defining the policy of the new R & D department; the second job was working with this new department planning for educational provision around the country. The third job was working on a reform bill for the Icelandic school system, a very progressive school law passed in 1974: It was a comprehensive school law providing for the education of all children in a common school up to about age 16. Finally, I was involved in the coordination of the curriculum reform extending to all subjects across the entire age range. This called for the cooperation with a group of inspectors, all located between policy and application. And then, in 1974, I came to head a group developing a social science curriculum for Icelandic schools which, at the time, even caught the attention of the United Nations. The project was actually funded with considerable support from the Ford Foundation. In a way, this project played a major role in the rise of a developmental conception of education in Iceland, including developmental psychology and a concomitant development of teacher education. A number of people, who worked on the program, went to the United States to study or to become experts in the field, and among these there were some who, studying with Robert Selman or Lawrence Kohlberg at Harvard or with Urie Bronfenbrenner in Ithaca, became developmental psychologists and

experts in social cognitive development and professors at the University of Iceland or the Icelandic University of Teacher Education. All this converged in the conception of education as a developmental enterprise. While this perspective is very much due to the opportunity structure that we faced in Iceland, I transported this view back to Germany, where it came to inform my position with regard to citizenship education and democratic culture in schools.

It was in 1974 that, under the influence of our experience in Iceland and my visits in the USA, where I had met Kohlberg and Selman, I became member of the Jean Piaget Society. I probably had joined SRCD even earlier. We started to plan for the so-called Iceland study "Child Development and Social Structure". This was a time when developmental psychology was involved in a lively political debate, the time of Klaus Riegel with "Psychology mon amour" and the Dialectical Psychology Conference on Cape Cod, the time of political discussions on the epistemologies of the left and the right, on Piaget and Vygotski. But it was a very formative experience, an engaging experience, very intensive. At the time, through my experience in Iceland, even more than through my experience at the Institute in Berlin, I had ample opportunities to travel and build up professional relationships in the US. The systemic input was very much derived from the appeal of an active role in the process of changing Icelandic education. I was led to think about the role of development in that process to an extent that I would never have been forced to do if I had merely been involved in research. Nor would I have entertained the idea of doing developmental research unless research and policy involvements had come together.

Looking at the modernization of the social system in conjunction with changes in individual development and with changing imperatives of the educational system, and looking at individual differences in dealing with those changes, with the changes occurring in families, we began to develop the idea of a study, to look at development longitudinally in a phase of historical turmoil, in a phase of deep historical changes; a study that would observe the interface, or rather: the interpenetration, of the social system and individual developmental dynamics.

The first measurement was in 1976.

SODIAN: It started with children at the age of 7 years?

EDELSTEIN: In the first grade of the Icelandic primary school. It is the birth cohort of 1969, in the year when they were six years old and turned seven. The last measurement so far was last year (2007/2008). So this is among the longest developmental studies. The subjects were 38 when we interviewed them a year ago. Of course, for a long time - since they were 20 - we had not seen them until now, at midlife.

SODIAN: What was the sample size?

EDELSTEIN: The sample size was 192.

SODIAN: What is it now?

EDELSTEIN: We got about 90 at age 38. It is a very complex and very intensive study, partly qualitative, partly quantitative. Moreover, it is a quasi experimental study, a semi-experimental study, quite a tough design, sample sizes would probably cause your eyebrows to rise, but we have a lot of information from the study. The basic design was choosing 1st graders on the basis of teacher's judgments, whether teachers took them to be high-level or low-level students on the first days of schooling. Pupils were sampled from all schools in Reykjavik, on the basis of teachers' nominations for these best, the least and the middle. Social class origin was then determined for all these children, and, for each of the six social classes, 12 high performing and 12 low performing subjects were sampled. We planned to look at their class-based developmental conditions, So, according to a sample chosen depending on the judgment of teachers, and distributed across the 6 social classes, we intended to look at the differential developmental trajectories of children, the high achieving and the low

achieving, from high or from low social class, across the developmental span of many years. That was the basic idea. We then adapted many other questions to this design. We had long conversations with parents, we had experimental games, we had Piagetian experiments and interviews, we measured social cognitive and moral development. We did not include theory of mind because that had not yet emerged.

SODIAN: Did you actually discuss or design your measures with colleagues like Kohlberg and Selman?

EDELSTEIN: Yes, we did. I met Kohlberg and Selman relatively early in the seventies, probably in 1974. We visited in Harvard and met a number of people, and started many discussions - also about the study. But I made the experience that advice generally remains external to what you try to do. People have a professional way of speaking about issues - of course we talked about the design, but basically people capitulate before the complexities of the questions. They are interested, they are constructive, but they cannot help you very much. Otherwise they would have to give up their separate stance, they would have to really enter the game. Selman actually came to Iceland and trained teachers there because he became so interested, but also because he got these promising students from my group who came to his seminars to study with him. We really entertained a good and productive relationship over many years. With Larry Kohlberg we developed a close friendship that lasted while he lived. He took his life in 1987. Larry was very interested in our study, and actually achieved real influence on the social studies group in Iceland. I think that a basic message from Kohlberg entered into the social science curriculum in Iceland: an understanding of morality as a developmental phenomenon, and the importance of the concept of justice in social learning - freeing the concepts of justice and morality from the prejudicial structures that remain common within traditional education. Kohlberg's theory indirectly was quite influential. It was influential, I think, as a vehicle of enlightenment. Kohlberg really does not enjoy the recognition that he did in the '70s or '80s. I still think highly of his contribution. Compared to its claims it may be too limited, but it is certainly more justified than the ignorance that the psychological community deploys against Kohlberg's contribution to the development of psychology. In my view this is ignored at the moment. The development of a science certainly is not a development of fairness to its past.

SODIAN: What political and social events have influenced your research writing, teaching, or other professional activities?

EDELSTEIN: Well, I guess I told of some of those in my childhood. I think the Nazis and the Icelandic experience, the liberating experience of recognition of children and of myself in that context. Actually, one of the greatest experiences was with my bosses on the farm where I worked, a conversation that was the most impressive moral teaching that I've been exposed to. When I was 16, I had turned into a politically somewhat radical minded person. This was a period of radicalism in Iceland and it was quite normal for an adolescent to become a radical thinker. I brought these radical ideas to my farm, which was run by two very conservative gentlemen, old farmers, old in my view of them. They must have been between 50 and 60, two brothers, who ran the farm. We got into a conversation about an Icelandic author who later received the Nobel Prize, Halldor Laxness. Laxness had a very rough theory about Icelandic farming, and he wrote critical novels concerned with farmers. I made myself the mouthpiece of this author, and one of the brothers was very upset about this, and walked away from the conversation. The other then said to me, "You hurt Johannes, you know that you hurt Johannes?" "Well, I didn't realize, I didn't want that," I said. And he said, "Never ever hurt a person." A Kantian perspective, so unforgettable. "Never ever hurt a person. There's nothing that's worth hurting a person for," he said, "You may be right or he may be right, but don't hurt the person." I have never forgotten this. It is consonant with some things that I feel that are amiss in the education of children. They're always being hurt, they're always being humiliated in their German schools. This was a memorable interpersonal experience that has had a very lasting influence on me.

Politically, of course, there were other events. I was very much involved in post-war political developments, and there was an event that played a certain role in 1949. This was the only situation in

which I have experienced something like a civil upheaval in Iceland, which is a very peaceful country, and the civil upheaval was, of course, only a symbolic one. There was the debate about joining NATO. I was on the left and against it, and the communists were against it, the socialists were against it, and the people who wanted Iceland to stay out of the contestation of powers were against it, and there was a march to protest against joining NATO. We marched onto the Parliament Square, the Square in Reykjavik that's in front of the parliament building, and protested. And then something very unexpected happened. The conservatives who were the ruling party in Iceland had assembled their young league in the parliament and armed them with clubs to beat us up. The police went at us with tear gas, and these "Whites" as they were called erupted from the parliament building with these clubs and started to beat us up. And somehow we, the leftists, were so innocent we didn't have an idea that anything like this could happen. It really traumatized us. Here was a renewal of a kind of aggression by a majority against a minority that may have aroused a memory of things past. It didn't hurt me a lot. I wasn't physically hurt, I ran away, and like most people only was lightly touched by these clubs, but it was an experience of a peaceful society suddenly turning into something very dangerous, very brutal, very aggressive, and it could happen at any time! I believe that in conjunction with my early experiences this experience has made me extremely sensitive to notions of human rights in schools. You know I am at present President of the Society for Democracy Education which is very much involved in creating a sensitivity for human rights and for the needs of other persons, and for participation and for collective and cooperative discourses. There must be a certain continuity among these involvements.

The next memorable political event, of course, is 1968. I'm a bit older than the '68 generation, but, like young Habermas, who is pretty exactly my age, I was very much involved. And it came quite close at the Free University of Berlin, when I had recently started my life in Berlin. The Free University was a hotbed of '68. It was a place where discussions about permissible or illicit violence played an enormous role. The Benno Ohnesorg murder occurred almost in front of one's eyes, a real wake-up experience, although I had, as one might say, the necessary distance. I was not part of the student movement, but I was quite close to it, observing it from both sides, both the excesses and the justifications. That, I think, really molded my generation. It affected me as a psychologist and social scientist, perhaps more than many of those who enter this field at the University and then leave it again. In a way I have stayed with it. It constituted relatively basic categories of my research life in a longitudinal perspective, calling attention to the historicity of development, the big effective events. It's difficult to say what has been really important, but I think the experience of the Nazi past, the liberation from it in Iceland, the equalitarian notions of Icelandic culture, the educational experience of the Odenwaldschule constructed as an egalitarian experience with children; the imperative of non-humiliation and participation as the principle of the development of the school from the very start of my activities there. There was a student parliament and class councils, things that are being discussed now. A number of things in this biography converged with my career as a researcher and with my career as a reformer and with my personal commitments. When I retired I became involved in a Federal program focused on education for democracy, the program "Learning and living democracy". And, although that went the way of all flesh with the constitutional changes of the so-called federal reform of 2007, since my retirement in 1997 I have continued devoting much of my work, much of my physical and cognitive abilities to the development of democratic schools.

SODIAN: Here is a last issue for today, concerning the way your ideas about child development have evolved. Would you think it has been more or less a straightforward linear evolution of ideas or would you see any major drastic changes that made you think about the field in entirely different ways?

EDELSTEIN: Well, I think it has been pretty continuous and pretty consistent. I did not originally come into developmental psychology or psychology at all, but developed my professional commitment to psychology as a response to the claims of education. So I think that the conditions for continuity and consistency have been pretty propitious for me, since I came into the system through a conviction that I had been building up from the experience of grappling with education, of grappling with children's thinking, of grappling with children's constructive mode of understanding; grappling with the question

how to look at differences between children of the same age, and understanding both the variability of developmental trajectories and their unity; both the common core and the variability of experience; the role of social background and the interface of micro and macro, etc. These are relatively late acquisitions for me, as I was trained as a linguist. And since these are relatively late acquisitions, some reflexiveness was needed for the constitution of the field for me. My biographical experiences, the macro/micro relations that in Iceland are so close to each other that they become visible in a quite different way than they do in a bigger society, almost a daily affair. This experience has led to an opportunity structure that has allowed me to maintain relatively unchanged my basic orientations in view of the interface between development as an endogenous dynamical structure in interaction with experience as an outflow of the social system, the macro- micro dimensions. It follows that I have not been under particular pressure to make these big leaps into neuropsychology. And I have always been independent as a scientist.

A position with Max Planck is a very privileged position, I have not had to look for funding, I have not had to accommodate different moods and fashions in the organized field of science. I have been able to choose coworkers according to my own views. I could hire people. I didn't have to find the funds. I had a very free position. And it has always been accepted that what I was doing was no nonsense. So, I have never been really contested, except as the holder of a minority view. And that's not a dire contestation, that's not so tough. In the world that I have had the luck of inhabiting it is not painful to be member of a minority. I was in a scientific minority because the world is divided between those who take Piaget seriously and those who don't believe in Piaget. Piaget for me was an eye-opener. I could see things that I experienced as real because he gave me a conceptual apparatus for understanding my own vision. I consider myself very lucky to having had this opportunity. The same happened relative to Selman or Kohlberg: Intuitions which I had were endowed with an apparatus for comprehending them.

I met Monika, my wife, when she was writing her doctoral dissertation on role-taking. I read her dissertation and it was an eye-opener for me; I could have continued writing this dissertation, it was so close to my understanding. And this opened the doors to the group in the United States where this movement originated. It so happened that this kind of theorizing matched the personal likings. Kohlberg and Selman may not have been easy persons to interact with, but for me they were. I was lucky. I have not had reason to endure major disruptions of my convictions. Of course, they have changed. I am much less of a dogmatic Piagetian than I used to be. I now see limitations in Kohlberg's system, the emotional side of morality only disclosed itself to me much later. But I have not had the need to reject the theory. I was always able to integrate. So with time I have become more of a relativist and less of an optimist. I do not believe that you can liberate children from the constraints of schooling by just being radically Piagetian, similar with the theory of mind and the structural theory of perspective-taking and so on. I did not feel the need to reject my previous theoretical commitments when new insights called for change. I still see continuities. But, of course, you become more relativist, you need a larger horizon than the horizon you started with. But I've been lucky, I did not have to reject it. I didn't experience breaks. There are enough breaks in a biography without that coming on top of everything.

End of Part 1. Part 2 of the SRCD Interview with Wolfgang Edelstein on March 2, 2009

SODIAN: This is the continuation of the interview with Professor Edelstein at the Max Planck Institute in Berlin. Today is March 2nd, 2009, and we are going to talk about his personal research contribution. What were your primary interests in child development at the beginning of your career?

EDELSTEIN: My primary interests at the beginning of my career were, on the one side, educationally oriented and, on the other side, relatively diffuse. I did not know too much about developmental science at that moment of my career. I came from ten years of teaching and of running a school. And, as I have mentioned, I had discovered Piaget, developmental research, and developmental theory as a

function of education, of educational intervention. I discovered it in function of my activity at the school. I found a kind of solution to educational problems through enlightening myself, so to say, by delving into developmental psychology. If I could define it clearly, the original interest would probably best be defined by the interaction of development and education. I think I have followed that interest ever since. It has been a guiding perspective for my view on developmental psychology and developmental science, it has been my perspective to adopt a developmental stance vis à vis education. I have always thought that education was intervention in development, and that development and education were not subject to a big divide, but had to cooperate, had to converge in the service of children's development, in the service of children's progress. So, I have always been interested in adapting my knowledge of developmental science to the question of how schools can serve children. That is rather the opposite of the general attitude towards education, where the question is always of how we can make children adapt to the school. Developmental enlightenment thus boils down to the question of how we can adapt the school and education, the organized educational establishment to the welfare of children, to the development of children, to the progress of children's development. I could say that this interaction, this interface, is what guided me, guided my interests at the beginning of my career.

SODIAN: Are there any major shifts that occurred during your career?

EDELSTEIN: You mean in my interests?

SODIAN: In your thinking about development and education?

EDELSTEIN: Major shifts? I actually doubt it. Of course, there is a continuous development of those insights with deeper understanding of developmental psychology, of developmental science, and with deeper experience and deeper understanding of educational processes. But I think that basically this interface has guided my work to a large extent, although it was not always implemented directly. I had great interest in the other side of what determines education, that is, socialization, the socialization heritage that education carries along, the historical cultural heritage that children bring with them. And that is bound to influence the understanding we have of the developmental process and the reach of the developmental process. I carried out this long longitudinal study in Iceland, which tried to assess peer socialization, class background, cultural background, and various facets of development. That has deepened my understanding of development, of course, but it has also enhanced my stance towards the reform of schooling, the reform of education. This kind of understanding led to my becoming very much involved in reforming the educational system in Iceland, where I became one of the actors in the school reform. What we tried to do was always done in the light of developmental necessities.

SODIAN: Can you summarize the main findings of the study and the main impact the study has had so far?

EDELSTEIN: Well, the study is not even finished. Therefore, the impact is still out there. Certain impacts I think I can enumerate. Basically it's a very complex study, a study that researched children's trajectories in various domains of development in a quasi-experimental fashion according to a quasi-experimental design. As we did this study, in a very intensive, partly qualitative, partly quantitative and formal way, we started out with the quasi-experimental design described earlier, with a cohort of children in the city of Reykjavik as well as the complete birth cohorts of three countryside communities. Let me repeat that the sample was designed as a quasi-experimental group drawn from two ability levels and each of the six social classes, which we also were the first to measure in Iceland. This traditionally egalitarian society, at that time, did not yet really acknowledge the existence of social classes. Actually, we validated empirically a social class scale with six social classes. We had high achievers from these six classes and low achievers from these six classes. Simplifying the design, we included high-achieving high-class children, low-achieving high-class children, high-achieving low-class children, and low-achieving low-class children. The basic contrasts that we have tried to follow up related to the developmental opportunities and educational stances of all these different groups, looking at these in a developmental perspective from the first year of schooling until adulthood. The

findings may probably not be considered news today, but we found that even in Iceland with its egalitarian tradition and with its unitary school system the chances of developmental enhancement were decidedly class-bound. So that doing something for children, and what you can do for children, calls for differential attention to children according to their cultural heritage and the social opportunity structure they're born into. We found in Iceland that even with the general attitude of Icelandic schools and of Icelandic teachers bent on helping children grow and develop, the ability of teacher professionals and of the professionalization system to support children that were developmentally less endowed or less positively grounded in their environments was clearly lacking in quality, in professionalism, in scientific enlightenment, to be able to do for these children what they clearly needed. The general interest, however, in this case, was perhaps less the improvement of education than an understanding of the vicissitudes of development based on the socialization practices and the social origin of the children. I have been observing, perhaps for reasons of my own biography the interface, not only of education and development, but the interface of macro- and microdimensions of the child's growth. How children are rooted in the social system of their origin and how development depends, on the one side, on the macrodimensions which determine their educational backgrounds, their parental homes, their fate as members of society. And, on the other hand: what independence has the microsystem of their development to free itself from the constraints of the macro-social conditions in which they grow? Maybe the basic and perhaps lasting advantage of this study, the lasting turnout, is a clearer view of the interface, of the interactions of the macro- and microdimensions of development and socialization: how socialization depends on the social origin of the parental group, on the form of interaction between parents and children, and how that determines the developmental trajectories of these children and how, on the other hand, these developmental trajectories can be enhanced by positive environmental factors.

SODIAN: One of the unique features of the study, as I recall, is that it was done during a time in which Icelandic society ...

EDELSTEIN: ... was in rapid change, yes.

SODIAN: ... a change from traditional forms to industrial modernism. What are the main findings with respect to the question of the impact of macrolevel societal change on individual development?

EDELSTEIN: I doubt whether we can pin down principal findings at this very moment. The study was sorrily understaffed, of course, and would have needed a more multidisciplinary approach in the group that dealt with the data. And for one thing, we need to, and we have not yet been able to, develop a really serious methodology for the interpretation of change. Edelstein: What kind of changes in the social structure can we measure over the course of this generation? It's very difficult to pin that down. Large-scale studies like PISA have difficulties doing this. And ours is a small-scale study. So, although it is representative of the social divisions and social patterns of the society and the system of social inequality at the beginning of the study, changes in the divisions of the society into social groups that have occurred over time have not yet been determined nor have the effects of these changes. We don't really know whether social changes can be measured on the individual level. What we find is a very general yet quite easily determined dependency of the developmental trajectories of the children on their social origin. Even in this egalitarian country, relatively few crossovers, between groups, say from the low-class low-achievement group to a higher developmental group, that is, to a group with higher educational privilege. Yet, during the time of our study, educational opportunities expanded greatly in Iceland. The balance of losses and gains has changed. There is more that's being done for the low-origin children in their later years of schooling and especially in their professional or occupational careers than used to be when we started. In order to understand the background, one should mention that Iceland has one of the highest or even the highest university student enrollment in the world: seventy percent of the cohort enters university now. So there's a lot of compensation for initial underprivilege going on in the schools, and a lot of enhancement of children's perspective to make it is implemented by the system. In that sense, it is a Scandinavian system with a lot of input for helping children's development come to fruition.

SODIAN: Some of your measures addressed foundational aspects of cognitive development. Did you find that social class and achievement plus schooling had effects on cognitive functioning on this level?

EDELSTEIN: Yes, it did have effects. The results again point to the question of how school selection is implemented at what ages. We saw that low-achieving lower class children, and that is probably nothing to write home about, are delayed in their development compared to high achievers from the upper classes. The latter are also developmentally advanced. So that if - as is the case in German schools - you implement school-based selection between tracks at age 10, you systematically throw out those who have social impediments developing at the same rate as the upper class.

SODIAN: There are some longitudinal findings from other studies indicating that individual differences on various dimensions of cognitive development may remain stable across the course of development, irrespective of schooling (i.e., educational track).

EDELSTEIN: This is a very important issue and one of the main strings of my motivation for the study. But how the school system deals with developmental input is very different in Germany and in Iceland. What we see is that children with delayed development at the age of 10 or at the age of even 12 can compensate by strategies of learning and support by teachers, and reach the same educational levels, even though their developmental balance remains at lower levels compared to those who do more. But it doesn't remain at levels too low for advancement. So, what is shown is that they may have a more restricted field of high performance, but it does not prevent all performance. We see that there is no systematic unity in the developmental trajectories in the various fields or the various areas of development, because cognitive development may proceed with socio-moral or social-cognitive development lagging behind, but it may also be the other way around. Advances in social-cognitive development, in perspective-taking, may have delayed effects on cognitive development, or it may have effects on the ability to learn, even without cognitive development reaching a fully equilibrated stage in the Piagetian sense. Children may at times maintain a relatively narrow path of progress in formal operatory reasoning, and still become advanced reasoners in certain fields provided by education. In sum, the results of this study have so far given us reason to be relatively optimistic about the potentials of development to advance educational progress of children in a very broad spectrum of early achievements. In my view this does not provide reasons for selection. On the contrary, there's a lot to be said for the argument that cultural enhancement of education is valuable and reasonable, even in the face of a certain delay in cognitive development in some children. So it is borne out to be a valuable social policy not to punish children for a delay in development, compared to their more fortunate peers, once you look at the whole thing from a later vantage point. There's a number of those who managed to pass the equivalent of the SAT. And there is very little dropout.

SODIAN: This way you have been able to make predictions from childhood to some of these outcome measures like SAT?

EDELSTEIN: Yes, to measures that may be taken to correspond to the SAT. You can make certain predictions. Usually those who are delayed have lower exit examinations from the high school or from the pre-academic tracks than have the quick and highly developed early developers, those who reach a high developmental level early. But they make it.

SODIAN: Were some of your measures especially good predictors and some especially bad predictors?

EDELSTEIN: We haven't really looked into the quality of the predictors. I bet that could be done, but I have not had the opportunity. It is just being analyzed now for the very reason that we now have adult data. And we wanted to wait until adulthood to look at certain predictors. What we want to look at is professional or occupational achievement. And now we have data. Last summer we collected the data about adult achievement in the work system and we are just beginning to analyze this data which

has been relatively difficult to get. But, in a next interview, I think I could perhaps tell you something more about this.

SODIAN: The theoretical background to the study was primarily stage theory, Piagetian theory?

EDELSTEIN: Not only. No, no. We had a broad approach.

SODIAN: Would you like to comment on stage theories in general or Piagetian theory in particular from the point of view of the findings of the study?

EDELSTEIN: Well, I could. Actually, we started out with a relatively firm belief in the stage theoretical models, also the Kohlbergian model. I encountered Kohlberg about the time when we just started this study and we based some of our measurement instruments on Piagetian stage theory, Selman type stage theory, and Kohlberg type stage theory. But we never did it in a radical fashion because we accompanied all these measurements with qualitative measures, interview measures, also with personality measures, so as to have a relatively well-founded and extensive basis for understanding developmental dynamics. Among other things, we had personality measurements, which also provide hints about the inner performance conditions for stage theoretical advantages or advances. We saw that, say, high-anxiety children may be highly proficient in Piagetian operations if given sufficient time and reinforcement while working on them, but when they are in the normal school situation they block. This is nothing, of course, that is new to any psychologist. But the relation between personality measures, attachment measures, the development of defenses, and other emotional psychology measures, and achievements on the stage theoretical cognitive and social-cognitive measures is mitigated or enhanced by personality characteristics that themselves are much more liable to depend on the socialization background of the children. What happens in development is a very complex interaction between personality, cognition, social experience, motivational enhancement. None of these single predictors are valid without a number of other indicators and other measures. In spite of the analytical stance we had towards measurement, we found it important to develop a holistic picture which reinstates both individuality and the macrosocial and microsocial origins of the child as mechanisms in which they grow or with which they deal with the challenges of the environment. The main value of the study thus is descriptive and explanatory, rather than predictive. We can learn a lot from it, it provides a fascinating landscape of development, but it's much harder to pick out a single indicator to predict achievement at later ages, because there are so many simultaneous compensatory programs at work in the individual that, if there is a general enhancement, an acceptance of the child, and he or she is given the niche and the needed support, there's an enormous amount of flexibility and adjustment capacity - quite contrary to what we experience in rigid school systems where children have little opportunity to grow their own compensation mechanisms for what is lacking in their endowment. And that is one reason, I think, for having something like a differentiated unitary school system for all children, over a relatively long time.

SODIAN: One of the problems of longitudinal studies is, of course, that the field changes, the theories change, the empirical findings change, the whole theoretical background of cognitive development has undergone a lot of change in the past 30 years. If you had to redesign your study today, what would be the major changes that you would make?

EDELSTEIN: That's a good question. I guess I'm not disillusioned about the study and its results because it had a very broad design and because much of what was measured in the study, and the interaction field between the variables and systems measured, have not become as outdated as an excessive theoretical reliance on only one of these systems would have made it. Actually, I come out of the study relatively comforted about the general validity of Piagetian psychology and also about the relative validity of Kohlbergian approaches, let alone Selman's approaches. We have to deal with these approaches in a much more liberal fashion. What I would do if I were to design the study anew would be to collect my information with a more or less neo-Piagetian and perhaps a neo-Kohlbergian attitude, but I would not reject the basis. I feel that the basis is still very informative. I would probably use

different measurement approaches. I would probably not measure the Kohlbergian stage system unchanged, but I would develop measures that get their inspiration and their enlightenment from something like a broadened Kohlbergian approach, looking much more intensively at the emotional component of morality instead of merely looking at moral judgment. And I would use much more pragmatic approaches, pragmatic dilemmas to measure a broader spectrum of moral performance than Kohlberg would have done. I would look at situations which are closer to life than many of his, and I would look at other kinds of moral performance than moral judgment, more experimental in one sense, more commonplace in another; similarly with Piaget. The scientific world is too quick to reject the kind of continuity that I think is needed to uphold the kinds of questions about development that we had 50 years ago. These questions have not lost their value to the extent that the progress of the theoretical minds in our sciences have held it to be the case. There is more continuity in reality than there is in the science that deals with that reality, and there are social processes at work in the scientific community that make us pay an exorbitant price for what is termed scientific innovation—to an extent that it tends to lose us the advantages of continuities within progress. As I look at our field today I see that universities are dropping psychology and the social sciences from their programs and eliminating the chairs for these fields in order to strengthen just one field, neuropsychology.

SODIAN: A common view of the way that cognitive development has changed is that the answers to the question of “what develops?” have changed. Some of this criticism addresses Piaget’s view of what a structure is, Piaget’s view of logical reasoning, and the empirical findings that show that logical reasoning abilities are in place much earlier than Piaget would have thought. Thus, some of the alternative answers that have been given are that it is domain-specific conceptual knowledge that drives cognitive development or that it is memory capacity that drives cognitive development. Would you like to comment on some of these alternatives?

EDELSTEIN: I do agree with those criticisms to a considerable extent. The difference between them and my relatively conservative maintenance of Piagetian reasoning is that I tend to look across the field with a more holistic perspective. Although I largely agree with the kind of criticisms that you formulated from a neo-Piagetian vantage point that does not, in my view, invalidate the measures that you take at a given time point in development. This is a kind of within-view of validity and if you look at it across the field, for example, from an applied position or from a meta-theoretical position, or from the view of what I call “basic applied science”, its validity tends to be upheld within the larger picture over time. What is basic applied science? Basic applied science means that you deal with what the theory yields in an applied setting, and try to understand and to explain that setting by using these theoretical approaches in a pragmatic fashion. You paint a developmental painting that is much broader than the argumentation about the contested issues which derives criticism from within the dynamics of a theory, not beyond those dynamics. We are looking at it from beyond the realm of the contested—with a validity that tends to be lost if you look at it from within, because the claims on the validity of a theory from within it are much stricter than if you use the theory pragmatically as a device for holistic information. And, in that sense, I tend to be less strict than a strict theoretician. My basic interest is this interaction, this interface of macro and micro, and, in that context the view that you take does not turn out to be as critical as if you look at a theory from within. And then, also look at the problem within psychology: The dimension which relativized for me cognitive development and perhaps also social-cognitive development, although the latter became a strong point of this study, is the personality-oriented performance conditions for cognition and social cognition, or morality. What is it that well-attached children do? How do they differ from those who, with regard to those developmental categories ...

SODIAN: ... are insecurely attached.

EDELSTEIN: Yes, who are insecurely attached. Or, what does self-efficacy mean? That has proven to be one of the important variables in the study. Children who have the experience of self-efficacy tend to do much better in all these fields. So that throws up the question how far are those developmental basics themselves dependent variables, subsystems of other systems that are much more prone to be affected by socialization processes. Self-efficacy quite obviously is. It can be repaired, but there can

be irreparable destructions in the children's psyche, in which even the strongest cognitive development turns out to be vulnerable. Attachment and self-efficacy have a lot to do with each other, and well-attached children have a much higher chance to be self-efficacious. We only discovered that in the 1980s, long after the study had begun. So, the study has also been accumulating a number of measures, such as defense processes. Defense processes were introduced into the study in the late 1980s. Thus, some of these measurements became a reason for looking at the study retrospectively, with later classifications, for reanalysis of original data.

SODIAN: When was the last measurement point of the study?

EDELSTEIN: Last year. At the age of nearly 40. But at that measurement time we did not look at morality or cognition, but at occupational achievement, choice of career, conjugal life, the having of children, the judgment that our subjects had of their own children, and their schooling experiences, and we also looked at the world views and political perspectives that they entertained. So, at some time, if I live to do it, it will be an interesting predictive study. For example, Edelstein: How does social mobility affect individuals? Social mobility is salient in Iceland, where school takes individuals into the university and beyond much more frequently than in most other countries. Many lower class children go to university that would not go to university here. It may be a curious thing to contend, but these processes make the study less interesting as a predictive study, because, in a way, the social system takes care of the prediction. But, as a retrospective and explanatory study, painting the dynamics of development and the relation between the macrodimension of origin and the microdimensional achievements in later age will probably prove rather unique. A little bit like the Hawaii study. Unfortunately we never wrote the book that we intended to write.

SODIAN: There's time to come.

EDELSTEIN: Well, it was a group achievement. And when I retired in 1997, the group split up and so this remarkable book that we had intended to produce was never written. There is a manuscript, but it was not completed. That's a pity. But, there are, of course, many Journal articles.

SODIAN: I guess the reader of this interview should have some key references.

EDELSTEIN: Yes, probably we should just include the bibliography. Yet, it's a pity. One should write a book like that book about the Hawaii sample. It was such an impressive reading. Actually we did write another Piagetian story. We wrote a Child Development monograph which was rejected by Bill Overton with the argument that the time of Piaget had passed.

SODIAN: When did you submit it?

EDELSTEIN: Well, that must have been in 1995.

SODIAN: And did you publish it somewhere else?

EDELSTEIN: No, I haven't published it yet, I had no time to rewrite it. I had stopped thinking of it, but perhaps we should. This is, of course, a monograph that is basically restricted to cognitive development and has a chapter by me on Piaget as a social-cognitive thinker, which is, I think, rather unique and relatively good, even though I should not judge my own work. But I was shocked by Overton's judgment, because it was so typical for that kind of stance.

SODIAN: Yes.

EDELSTEIN: Everything has its time and there's no survival, and you should have written a different monograph! I remember him saying: Piaget's time is up. It's such a limited view. Actually, I believe that the monograph was quite a good text and it was rejected, because nobody would want to read Piaget, so it may have been done with the best of intentions to save the society expenses for a non-saleable monograph.

SODIAN: They have a very high rejection rate. But the monograph could still be published as a book with another publisher?

EDELSTEIN: As a small book perhaps. But I doubt whether anybody's now interested in an empirical assessment of cognitive development in Piagetian terms. It's a pity, of course, there are very few works in the world which really trace the growth of cognitive development in a more or less strictly Piagetian sense in an empirically interesting environment with an experimentally designed sample across so many years, from 7 to 15.

SODIAN: Certainly.

EDELSTEIN: So it is a pity that this was lost on the world!

SODIAN: Would you like to comment on other scientific contributions and other studies of yours, or other theoretical works?

EDELSTEIN: This is, of course, the largest empirical contribution that I have made. Before this study I was involved in a study on achievement, something like a precursor of the PISA studies; a study of the development of school achievement across one school year. I think that it was a good and valid study which had many qualities that later studies had, and probably broke the ground for a pan-German school study across all states of the Federal Republic. I left that study when I went to Iceland and so I only wrote two monographs with Dieter Hopf and with Werner Stegelmann about what are now relatively pragmatic questions of achievement growth in schools, and I hardly even recall the content, I recall spending 2 or 3 very tough years in that study. However, the longitudinal Icelandic study has given rise to specialized studies in some of the fields covered which have become quite well known: a study on social-cognitive and moral development, a study on moral and friendship development, in a number of countries, across various cultures. Using cognitive development as an anchor variable to equalize samples across the world, we asked the question how social development, how children, acquire social values developmentally and how do they judge friendship problems, friendship dilemmas, and moral dilemmas across various cultures in the world. The principal researcher in these studies was my wife, Monika Keller, but I shared many of these studies with her, especially the Chinese study, the German study, and the Russian study. So we had a lot of comparative developmental data from a number of cultures, covering social cognitive development, sociomoral development, the development of friendship, of dealing with problems in friendship. It's interesting that there is, in these areas, a great deal of similarity across cultures, something like universality, and some important cultural variations. There are always these two aspects. This has strengthened my belief in the structure of developmental conceptions of the Piagetian or Kohlbergian type because there is so much structural comparability between China and Iceland, between Russia and Germany, between even Spanish gypsies and Icelandic farm children. It shows that there is something at work which nowadays would probably be considered an evolutionary feature, an evolutionary heritage, such as altruism, or strategic interactions based on interest, the impetus to act morally, or at least to make a moral appearance. It's very very general. And you can value this as a comforting issue. We have a lot in common with each other. The other interesting aspect is that certain dimensions of moral thinking are highly dependent on the culture. For example, what determines the actual judgment of Chinese children concerning the morality of children's interactions, specifically interactions of friends, is very much the judgment of the onlooker, whereas for Icelandic children, it is intrinsic. So, the structural similarities are strong, but the legitimizing reasoning, the argumentation in support of a solution will vary according to cultural values that are not intrinsic to the judgment itself. This appears very interesting to me as it shows that the basis for common value stances across the world is psychologically much more reliable than we used to think as long as culturalist judgments prevailed. We see that culture has a lot to say about how we arrive at these judgments, and how we interpret these judgments, and what reasons we give for these judgments. We learn from different cultures that the same judgment can be looked upon in different ways; but we also learn from the studies that there's much similarity in the kind of judgments that we give, that is, in the kind of values that we rely

on. It's a pity that we didn't have this study in the Congo or in other African countries. It would have been very interesting to know whether among warring factions in Burundi and elsewhere, where terrible civic wars and genocides took place—whether this study would have shown their judgments to be similar, while giving different reasons for either obeying these judgments, or for resisting these judgments, or to explain these judgments—how to ground the judgments in social life. How much information does such a study give you about alien cultures? Would it perhaps be a good thing if the United Nations supported this kind of research around the world? If we had this kind of data, the type of data that we have collected, we would be able to do peace work with a more solid foundation in the psychologies of these very different people. But we have never given such matters any attention. We are lucky if peace education and peace psychology has any resonance among people, if it has any bearing on people's choices. It has never been systematically attempted to enlighten us about conditions of psychological life in third world countries. If we knew more about their definitions of their needs, it might be easier to invest developmental work in these countries than we now are able to think of.

SODIAN: Let us move on to the next section of the interview. Please reflect on the strength and weaknesses of your research, on theoretical contributions, the impact of your work, and its current status.

EDELSTEIN: We might say a final word on it. I think that we have already dealt with the strengths and weaknesses. Don't you think so? It certainly has a lot of weaknesses like everything that's past; and I think that it has strengths even where this is not recognized. We discussed the developmental dynamic of scientific insights, so we have to abide by the judgment of history! I'm relatively optimistic that it will be considered a strong rather than a weak piece of research. A lot of thinking has gone into it, so I'm not displeased with it. But, of course, it has a definite bias in the sense that it is not a study that contributes to the progress of psychology as such, but rather to interdisciplinary progress. Basically perhaps it does more for the micro-enlightenment of social science than for the progress of developmental psychology as such. And I'm quite content with that. I don't regret that.

SODIAN: We have already talked about some published or unpublished manuscripts that represent your thinking about child development.

EDELSTEIN: If you want a paper that really represents my thinking, that is a paper from 1983, where I try to show this macro-micro relationship. It's a Houston symposium paper called "Cultural Constraints on Development and the Vicissitudes of Progress," published in a book edited by Kessel and Sigel in 1983 or 1984. I think that was a good paper, in a kind of Brunerian vein, but it goes a bit beyond Bruner at the time. It refers to this basic experience of Iceland as a macrocultural background for development and shows the vicissitudes of what we call progress. Not everything that we call progress at a given moment turns out to be progress. Some things turn out to be backlashes. I have another much later paper about the topic from another context when I was involved in school reform in Iceland, in an encompassing curriculum project which even got recognition by the United Nations. This was the social science studies in Iceland, from grade one to grade nine. The developmental impact of the enterprise appeared to be annihilated in 1984 by a political backlash that called for a return to academic history and rejected social science. I wrote a paper on this process called "The Rise and Fall of the Social Science Curriculum in Iceland 1974-1984" I still think that this is a good paper that provides a dialectical view of a historical progress of which I was both an engineer and a victim at that time, in that case. I was the Scientific Adviser to the Ministry of Education in Iceland, 1966 to 1984, during a very progressive time, which produced many lasting effects and a new school system. That was not due to my effort, of course, it was done by the pressures of history, by modernization pressures, but I had a role in it that was a satisfactory role to me. My information about developmental psychology and my social science enlightenment, my basis in developmental and social science contributed to the way that the school system developed and was designed to develop. So, I think I can look upon that part of my work without blushing. I don't see that I did anything deeply wrong-headed. Some grounding in social science gives you a certain support to not go too much astray by one sidedness and overinvestment in a single idea. It helps you to acquire a relatively broad perspective on

historical and social processes. That helps to make you politically more effective. You don't have to be partisan.

SODIAN: Do you think you have been politically effective, as a scientist?

EDELSTEIN: In Iceland, I rather think I have. I had a relatively noticeable role in establishing social science at the University of Iceland. I had a certain role in the academization of teacher education in Iceland, of bringing teacher education up to university level. Of course, this cannot be attributed to one person. These are historical processes, and they are collective efforts. But you play a certain role by calling on certain factors of enlightenment, of certain factors of knowledge, of information. I think I have been lucky enough to play a positive role in that process. I haven't been proven outright wrong in any of these interventions, and I haven't contracted a lot of hatred by people who have not been able to value them. So, over the long haul, I've been relatively lucky both in my political choices and influences, and in what I've been able to do. So I'm relatively satisfied with the way things turned out.

Of course, I am critical too, I know what I should have done better.

SODIAN: In Germany? Political impact in Germany?

EDELSTEIN: Well. You see, it's very difficult to separate the political impact of the Max Planck Institute from my own impact. For a time my impact was aligned with the impact on school reform that the head and founder of this Institute, Hellmut Becker, had, to whose inner circle I did belong as a young person. And I had a certain role in the earlier phase of school reform debate, in the Bildungsrat, the Educational Council. But, I don't think I played a major role in those processes. During the years around 1968, I was teaching about education and development at the Free University of Berlin, and believe I had a relatively left-wing position. But, in 1968, a left-wing position like mine appeared conservative, so I don't think it impressed a lot of students, there were perhaps 20 or 30 people in my seminar. I had been a teacher of one of the most revolutionary young people in Germany and France, Daniel Cohn-Bendit was my student. I may have influenced this person in school in my years at the Odenwaldschule. But these are historical coincidences. I don't think that the political influence of an Institute in a country like Germany works the way that think tanks exert political influence in America. We had a general influence for a time, during the first 10 or 15 years of this Institute on changes in German education, understanding the German educational system, but then after 15 years this Institute became relatively disentangled from educational policy, and much more "normal" in the sense that what it was interested in was effective theoretically grounded research and influence in the research community rather than in the applied communities. A name like Paul Baltes is, I think, a symbol of that restructuring of the Institute. The restructuring gave me personally the particular freedom to pursue the kind of research that I've been talking about. Before that, I probably could have had neither the idea nor the practice of that research. There is a price to be paid, and there is a gain to be won from it. In that sense it's very difficult to say whether you are a winner or a loser. We did lose perhaps, in the view of eternity, some perspective of changing more in society, which is in deep need of change. The German school system is terrible, it's repressive, it is unfair to an extent that is probably unimaginable for an American or a Scandinavian. But, the personal balance is positive. I've been able to spend my retired life on school reform with the credit that I have earned from my experience in developmental science and in social science. And I have been relatively effective, not in changing schools, but in placing their change on the agenda of need for a democratic school. It is now on this agenda. It has been adopted by the German Research and Development Commission of the "Länder," which accepted this program of "Living and Learning Democracy." In the wake of that Program which ended in 2007, a citizenship education movement has been started that works in a civic fashion on democratizing schools, and I've been quite active within that movement, and, to a certain extent, I can say that we have been quite effective in putting this on the national agenda. So, in spite of resistance from the Council of Ministers of Education, certain things are happening and even the Ministers of Education have planned a specialized meeting, in the summer of 2009 that targets democracy in schools. This is a special year, 2009! The conference will treat the question how to teach, how to work towards a democratic culture in schools, how to influence democracy learning. So,

I feel that certain steps on the way are being taken. Not very big ones, not seven miles at a stride, but there is a certain progress.

SODIAN: Some of the following questions do not apply, such as questions about the research funding apparatus. Almost all your research has been funded by the Max Planck Society.

EDELSTEIN: Anybody outside this country must understand that being a Member of the Max Planck Society is a great privilege with regard to organizing one's own research without the need of external funding. Moreover, I have had funding for projects that I have pursued outside the Max Planck Institute, and I have had no difficulties. These are small projects, and foundations like the Freudenberg Foundation have always given money for the kind of minor projects that I have been involved in with friends and colleagues. These, mostly, have been school reform projects, curricular projects, taking both developmental and social science information that we get from research and applying them in schools. As mentioned earlier, I once received a very good grant from the Ford Foundation to work with Icelandic teachers on school reform, a very enlightened grant from a very good Foundation. It was extremely helpful, and a good experience for someone who would have to grapple with research funding or Foundation funding in Germany, because it was much more generous, much more enlightened, much more thoughtful than anything you encounter here, besides the Freudenberg Foundation. But the Freudenberg Foundation is a small foundation with limited funds to give you. The Ford Foundation was very generous and could give a very substantial grant to this Icelandic endeavor of educating teachers within American settings to come back to do school reform in Iceland. The school reform in Iceland was government sponsored, but entirely teacher-based. And the teachers' education was enhanced and provided for within a project that the Ford Foundation funded to take teachers to America, again and again, and to do Summer Schools in Iceland with them. That was great.

SODIAN: The next section concerns your institutional contributions. It is easy to answer in which institutions you have worked.

EDELSTEIN: I've only been in one institution.

SODIAN: The dates. 1960s. You mentioned that last time.

EDELSTEIN: When I joined the Institute? In 1963, as a founding father, no, I should say, as a founding son.

SODIAN: When did you become a director?

EDELSTEIN: I became a Scientific Member of the Max Planck Society in 1973, 10 years later, and a director in the Institute in 1980, if I'm correct. And with the directorate, my chances of doing my own research were greatly enhanced, because I then headed a section of the Institute, a department which was called the Center for Development and Socialization. That is a programmatic name, and its topic is the micro-macro relation that we spoke about earlier.

SODIAN: That section started in 1980?

EDELSTEIN: That started in 1980.

SODIAN: And closed when you retired in 1997.

EDELSTEIN: It closed when I retired in 1997. So, my entire institutional life was spent within one institute.

SODIAN: How many students and postdocs worked in your Center?

EDELSTEIN: Well, this was small compared to what is usual at present, where excellent researchers are assembled by the dozens. We had perhaps seven or eight researchers, then perhaps four doctoral students; cumulatively, though it started with one or two, then you had to fight for these positions during the implementation phase of the new form of the institution after the creation of the four Centers that made up the Institute after the transition from a single director to a college of four. I didn't have a lot of inside power as a nondirectorial "oldtimer" within the Institute. The real power was, of course, with the new directors who had been recruited to reform the Institute, like Paul Baltes, who was very powerful and, at the same time, very helpful for a person like me who had grown up within the Institute and advanced to the position I now held, becoming a colleague of these newly recruited great men from outside and from abroad. So I had the smallest department. On the one side, I was granted equal rights, and we had a very egalitarian concept of leadership. We collegialized the leadership, and that was an internal invention and not something that was imposed on us from above. In sum, we had four departments, and were a college of directors, with one executive director, usually for a period of two years. We rotated the position of executive director from within a college of four directors.

SODIAN: Your group was the only one that specialized in child development.

EDELSTEIN: Paul Baltes was a developmental psychologist with a lifespan orientation and a special interest in aging. I was interested in child and adolescent development. I think that it's very unfortunate that the Institute's involvement in this area ended with my retirement, because the Max Planck system is not ready to endorse programs rather than individuals. They choose people. Thus, a person was chosen to succeed me, an excellent scientist brought in from abroad, Gerd Gigerenzer, but he has a totally different program—decision making under uncertainty—which is extremely interesting. Nevertheless, I think that my program is even more necessary than ever before, because we have a world-wide youth problem. On the basis of my research and school experience and developmental perspectives, I think I have a certain capacity for judgment in this field—we do have a huge problem of youth in a developing world, with terrorism but one aspect of the conflictual course of modernization. This goes far beyond the German problem, it's a European and a world-wide problem, and I think it's a great pity that there is no research on it. I see it neither in the current youth studies nor do I see it in the educational studies. PISA doesn't measure the dynamics of social and psychological adaptation to a modern world. The large-scale assessment studies do not even look at these questions. It has been rejected outright by the German Ministers of Education to even give development of social competencies in schools a thought, to even develop indicators and standards in this field, and I think that's very shortsighted.

SODIAN: One question about the role you believe was played by the unit, your group, or the Max Planck Institute, in the history of child development research.

EDELSTEIN: I think others are better fit to judge that than I can. Do we, did we play a certain role? Yes I think we played a certain role. Well, not so much in the field of child development proper, but rather with regard to the position which child development came to occupy in the psychology departments in the 1970s and thereafter. If we did have a major impact, that was not so much the impact of this Institution, although probably I would not have been called on to organize this important Summer School with Heinz Heckhausen in 1970 had I not been developing into a developmental scientist in this Institute, with Heinz Heckhausen on the Board of the Institute discovering that this person Edelstein harbored interesting ideas, and proposing to get together. But together we built the biggest one-shot input machinery into developmental psychology that ever came into place in Germany. That was a seminal Summer School in developmental psychology, the FOLEB school. I don't remember what these letters stand for. There was a series of Summer Schools financed by the Volkswagen Foundation. In 1971 we organized a Summer School with the advice of Franz Weinert, but operated by Heinz Heckhausen and organized by me. There were 50 or so students and doctoral candidates and young professors of developmental science and related sciences that spent 4 weeks on studying development in Starnberg near Munich. That proved an enormous input into developmental

science and developmental programs at the universities and into foundation funding of development projects that we thrived on for decades, at least two decades afterwards.

The first one, if I remember correctly, lasted 4 weeks. I may be mistaken, but this is my memory, perhaps because the impact was so great. It brought in a lot of people, such as John Carroll, Nate Gage, Richard de Charms, Jerome Kagan, Bernie Weiner and others. There is a report on the Summer School by Heckhausen and me and an edited volume on development and education by Diether Hopf and me. The Volkswagen Foundation ever since not only funded the Summer Schools, but adopted developmental intervention programs, paid for students, and supported dissertations, and really became a lasting support for developmental science, and it opened up the universities for developmental programs. We can date the sudden growth of developmental science, of developmental psychology in the 1970s back to this effort.

Many of the names that populated the departments of developmental psychology at the universities in the generation now leaving them for retirement were at this first Summer School of developmental psychology. And that, as such, had an enormous influence. The institution of developmental psychology developed from that moment onwards on various accounts, but certainly not due to my efforts. Ten years later, after Paul Baltes came here with his lifespan psychology, the Institute became a much greater influence on the growth of the science. Baltes was a much greater organizer than I ever became and much better connected throughout the world. So his impact in the Max Planck Society and beyond was immeasurably greater than mine.

And similarly, Weinert and Heckhausen had a much larger effect than I had, although together we had a sizeable effect on the welfare and growth of developmental science which operated through the Max Planck institutes in Berlin and in Munich.

SODIAN: Let's move on to your experiences as an academic teacher. You did not regularly teach child development, but you had students here at this Institute.

EDELSTEIN: I have had students, yes.

SODIAN: Doctoral students.

EDELSTEIN: These students are now professors. Not generally though. That is unfortunate. My best developmental science students are professors, both in Canada, Tobias Krettenauer and Thomas Theo. It's a pity that people of their quality should have to emigrate in order to find a position, but I don't think that has to do with their acceptance in development science. I think they are both well accepted. But, with university policies of restricting positions in development, there are fewer and fewer of these positions. Perhaps they have suffered from being outsiders because they were my students at Max Planck and not within the regular university-based developmental research and training.

SODIAN: No, I don't think so.

EDELSTEIN: But anyway, these are the two developmental scientists who obviously had enough stamina to become well-established professors in Canada. Another, a sociologist using the developmental experience acquired in the project, is Professor at the University of Münster, Matthias Grundmann. Monika Keller refused a career at the university. She would have become a professor, of course, but she chose to remain here, reluctantly and with a lot of heart-breaking. I think she would have loved to be a professor. Then there is Tina Malti in Switzerland, and there are a number of very good developmentalists whose lives have taken them into other careers. One is a High Court judge with developmental science as a background, Law with this background is very rare and very valuable. Others have gone to other universities. My identification with organizing research in other institutions and with developing other institutions has not been as strict as it should have been or could have been if I had been more enlightened and more involved. My involvement was always divided between Iceland and Germany. And I had these high stakes in Iceland and feelings of obligation, because of what Iceland

had done to save my family and myself. I have always felt something of an expatriate in Germany, whereas I felt at home in Iceland, and, therefore, somewhat torn between the two countries, with my allegiances and my loyalties divided between the countries. So, my institutional loyalties to Max Planck, not least for reasons of political criticism of elite politics, have perhaps not been as unshakeable as might have been expected of me. But I felt satisfied by doing what I did in Iceland, rather than in Germany. So, in a way, I have to be apologetic about not doing enough here.

SODIAN: Could you describe your experiences in applied child development research. We have already touched that issue. In applied work more generally, we've already commented on the political impact. Your role in putting theory into practice, I think we have already covered that.

EDELSTEIN: Yes.

SODIAN: So last but not least, your experiences with SRCD. When did you join SRCD? What were your earliest contacts with the Society and with whom? The first biennial meeting you attended?

EDELSTEIN: Wow! That's 30 years ago. Now I think, well, a general statement may be in order here. We are not Americans. I mean SRCD doesn't play this basically identifying role for us here. Of course, SRCD was an important issue for us, an important association, and SRCD meetings were an important and invigorating experience. And meeting people there and becoming acquainted with important American researchers and perhaps even forming friendships with important people at SRCD, while very important for one's professional life, wasn't decisive. Actually, my involvement in American science was much more intensive with the Jean Piaget Society than with SRCD. I remember going to SRCD conferences. I think for the first time in 1981, in Indianapolis, or one conference before that. I was in Kansas, I was in Boston, I was in Toronto. It was part of our game, part of our job, to go to these conferences and present at these conferences and meet people and take part in debates. I met Jerome Bruner at one of these conferences, I met Arnold Sameroff at these conferences, I met other interesting scholars, such as Bob Selman, but I had met Bob Selman in Harvard before. I met Larry Kohlberg, but I had also met him before—he had invited me to Harvard—and shared a conference with him in 1976. He had great influence on me. We were very close, and it was terrible when after 10 years of cooperation and close friendship, he committed suicide in 1987. It was a heavy blow. At times I have the feeling I'm one of the few Kohlbergians alive—but we have already talked about that. SRCD is important, but not overly important. I never participated in the sections, I never was on any board. I met a lot of very interesting people, Aletha Houston is one of them. Irving Sigel was an early acquaintance, I think he was the first one with whom I entered a really lasting friendship and advisory relationship. I think he introduced me to the American world with a solicitude that is specifically his: he was an extremely solicitous person. And then, very early, I came into contact with the Jean Piaget Society where I sat on the Board for a time, and where I remained involved for a long time. And that gave me a lot of feedback to my own work, because they were closer to understanding it than the average professional in the SRCD, which is a huge society with thousands of members. And the Jean Piaget Society had perhaps two hundred members!

SODIAN: These questions are tailored to people who have had some kind of official role in the SRCD.

EDELSTEIN: Right.

SODIAN: The field: Please comment on the history of the field. During the years you have participated, major continuities and discontinuities, and the events related to these. Have your views concerning the importance of various issues changed over the years, and if so, how?

EDELSTEIN: It's a complex question, isn't it? What I see is mainly the later history of the field. What I have seen since I started working in the field in the late 1960s, early 1970s, is the following: In the beginning, we had the dominance of Piagetian theory. And, for me, the linkage with Piaget had been

driven by the discovery of educational needs and accommodation. The pressure for children's accommodation to school instead of the school's ability to accommodate to the child, stimulated my interest in Piaget. The Piagetian dialectic really opened up a world, the world of psychology, for me, in a different way than the Saussurian linguistics that I studied during my time in Paris had done. I had training in structural linguistics in Paris, the Saussurian heritage. In a sense I was open to Piagetian argumentation from that structuralist basis. But Piaget himself had disappointed me in Paris. Being a linguist, a linguist would not really be tempted to adopt the pre- or nonlinguistic attitude of the Piagetians. I only discovered Piaget through application, through the need for an applied psychology for educational issues when I saw that the history of education in Germany did not offer any solution to educational problems. So I turned to psychology and found this great Piagetian heritage. And that kept me going for a long time. Then, after joining the Institute in 1963, beginning to work as a young person, I discovered and deepened my relationship to academic psychology. I was sent to sound out German universities in the service of the Institute and find out what university departments were doing in psychology, in developmental psychology, in social science. That really led to a kind of discovery. There were very few developmental psychology chairs at the time. And observing them was really interesting. The idea of the Summer School really was an outgrowth of sensing this lack of developmental psychology in the field in Germany, the underdeveloped and understaffed field, with the basic idea "We want to change this. We want a major input." And that input was perhaps unexpectedly, deeply responsive to Piagetian theory. Not everybody there was Piagetian, of course. There was a second strain. The second big issue in the Summer School was motivation theory, with MacClelland and Heckhausen contributing to our sophistication in the field. But Weinert and myself went on with the concern for Piagetian issues and, although Weinert was not really a Piagetian, we strengthened this preoccupation. Leo Montada was there, having just recently translated Piaget into German, and Irving Sigel was there too.

SODIAN: German cognitive development has been very much influenced by information processing theories. Probably the major development since the 1970s was that it became heavily oriented towards information processing. So, what's your perspective on that?

EDELSTEIN: What happened was a diminished impact of Piagetian psychology. But, then I did not follow that line, because I was not primarily a psychologist. I should say I had adopted the identity of a psychologist through the Piagetian vision and through developmental psychology. And then I took it with me into my cross-disciplinary work. Information processing never became an important area for me personally. It never was a field that I became involved in, since my research program did not touch on those issues. Information processing called for an experimental methodology and I was not experimentally trained as my background is rather a social science background than that of an experimental psychologist. So I took a different path. In America, I actually experienced this division of the field. When I visited the USA in 1976 and thereafter, there was this big divide between, say, a left-wing and a right-wing psychology that was superimposed on the division between Piagetians and non-Piagetians. So, within the so-called left-wing, among the liberals (or what to call them) an affinity emerged with the '68 movement and dialectic with Klaus Riegel in a central position. There was the Cape Cod conference and all that, and an uneasy truce with the Piagetian organization with the typical case of Michael Chandler who was among those whom I met early at SRCD and who, while taking a most differentiated stance, maintained his large and liberal Piagetian identity. What came up then and what I experienced as both a basic enrichment and a basic division was Theory of Mind, which you are, of course, most familiar with since you are one of the protagonists of that position. That, I think, was the basic change in the field that I have experienced. Do you maintain your stance as a dogmatic or traditional Piagetian or do you follow the development into a theory of mind? For a social cognitivist like me, that was the basic challenge. How do you reconcile loyalty to a Piagetian tradition with the fresh input, the new questions, the experimental enlightenment, the progress made by Theory of Mind? I think I basically remained on the Piagetian side of the divide, but I think that it became a real challenge, because it showed weaknesses in the Piagetian conceptions. It is quite clear that cognition is more than just operator cognition. Or you could perhaps also say ...

SODIAN: ... earlier competencies. This has not only been shown by Theory of Mind research, but Theory of Mind is one field that showed early competence in perspective taking, for example.

EDELSTEIN: And I follow that. Actually, I follow that. As you see, perspective taking became a very basic ingredient of the Iceland study, and even today I think that perspective taking is key. And I think it is indeed much broader and deeper than Piagetian theory has it. I think that Selman has done a lot to broaden the conception. And still there are other undisclosed domains. On the other hand, Piagetian theory, taken more liberally than he did, has also unleashed certain potentials for less warring factions on the Theory of Mind side of the great divide. I don't think that these are irreconcilable. I think that we have to develop the Piagetian perspective. The Piagetian perspective still gives you scope for further development, and I think that Theory of Mind is going to be here to stay. But I don't think that the theories have to remain definitively separate. I think they're going to be more of an alliance than they have been in the past. And as I see it, confronted by the extreme dominance of neuropsychology and experimental brain research, these cards are going to be stacked again.

SODIAN: This leads us to the next questions. What are your hopes and fears for the future of the field? You've already hinted at the neuroscientific turn being a potential danger to the field.

EDELSTEIN: No, I think, actually I am discovering certain advantages of it. I tend to be very critical of the university policy implications of the neuro-turn. It is a stupid idea that excellent research has to eliminate everything we know and start anew with a monopoly on personnel and resources at the detriment of 50 years of extremely fruitful research. We should not, of course, attribute this narrow-mindedness to neuro research, but to the stupidity of university administrations and the radicalization of market conceptions in university policies and scientific organizations, which I take to be disastrous for the development of science. We are beginning to see that brain research has promise, but I suspect that the promises have been overstated. But, at the moment, what this research does reveal is that it supports intuitions that have been around for more than 100 years. Nothing that I've seen in the so-called neuropedagogy—educationally relevant brain research—does more than identify brain areas that support the reform ideas of progressive education. Indeed, early experience, early motor experience, early motor exercise, musical exercise, thinking aloud, interaction strategies, heuristics, constructivism, all this can be read from the brain images as far as you can read that stuff. Ok. That is a certain promise. Perhaps it is going to deal with terrible things like Alzheimer's, I believe that it's worthwhile investing in this field. Scientific progress, when it turns to the body, is a promise to link up with evolution; it is a promise of decoding physical mechanisms of consciousness and, say, reflexiveness and moral judgment, and what not.

SODIAN: But in order to discover these, it has to be informed by cognitive theory, right?

EDELSTEIN: There's nothing that informs this at all. Doing all this millions or even billions of dollars worth of brain research with the result of being able to map the brain areas that are activated by perspective taking, and so on, doesn't appear as important as understanding what perspective taking is. The discovery of the mirror neurons may be more explanatory in the field of social cognitive development than most of the brain scanning that I have read about. So, I'm not hostile to it, but we shouldn't overinvest at the detriment of all other approaches.

One-sided investment in the progress of brain research seems, at least in this country, to go along with a serious diminution of interest in substantial fields that we lose at great cost. At the cost, for example, of understanding aggression, of understanding youth development, of understanding the developmental dynamics in education on which we depend much more than ever before—with globalization, with the political development of the world, with the breakdown of markets, for example. We don't even understand our environment psychologically, and we desist from even trying, because we have this wonderful brain research. As you see, I'm pretty critical.

SODIAN: Yes.

EDELSTEIN: I'm not against brain research, but critical of the lack of wisdom in the development of the sciences.

SODIAN: Shall we continue with the personal notes? Please tell us something about your personal interests, especially the ways in which they may have had a bearing on your scientific interests and contributions.

EDELSTEIN: I am interested in micro-macro relationships. I'm interested, in a rather sixty-eightish way, in the emancipation of the human race, in progress. I am not an overly optimistic person. I consider myself to be a rather pessimistic person. I have enough experience not to be optimistic. But I have never seen that play any role in my involvements or commitments. Who cares? As long as you benefit from self-efficacy, this will suffice to make you work; in spite of such divisions between pessimism and optimism. I still believe in the recognizability, in the ability to understand human psychological phenomena. I believe we are making progress. Also I think that evolutionary science is making progress that is really enlightening. That does interest me. Still, I maintain a basic interest—which I think is bound up with my biography—in understanding the relationship between sociocultural macrosystems and their change, and individual development, its possibilities, its chances. And I remain interested in what you might call the developmental potentials of social structures, directing change into a direction that is compatible with human progress. That's my basic commitment. It is essential to make that commitment compatible with the realities of science and the realities of the world. That is no easy game, and there is no easy winning, but there is enough motivation to work in that way and in that field. I think that those who can, should.

SODIAN: Thank you very much for devoting your time and interest to this interview.

End of Part 2.