

INTERVIEWER: Today is May 29th, 2009. I am Karen Arenson, we're interviewing Noam Chomsky, Institute Professor and professor of linguistics emeritus at MIT, father of modern linguistics, philosopher, prolific author and political activist. He's one of the most widely-quoted intellectuals living today and probably one of the most interviewed. He has received numerous honorary degrees in the US and abroad, and even had a research chimpanzee, Nim Chimpsky named for him, a not altogether friendly act, I think. Professor Chomsky, thank you for talking with us for this series of interviews being recorded for MIT's sesquicentennial. You've been at MIT since 1955, for virtually your whole career and for more than a third of MIT's existence. What's kept you here all this time?

CHOMSKY: I like the atmosphere. I've had very attractive offers from other places but never considered them. It's a great place to work. A lot of bright, exciting students. A good interdisciplinary environment. Just a proactive place to be. So, never saw any reason to leave.

INTERVIEWER: What do you think is and should be MIT's role in the world?

CHOMSKY: The core of its role has been pretty much to create the advanced economy of the future. So if you use computers and the internet and information technology, pharmaceuticals, whatever it may be, a good part of it is created here and in some similar places. Primarily through government funding. On the side increasingly over the years it's shifted from being-- the years I've been here-- an engineering school, which is what it was when I got here, to just a science based university, which had a lot of side-effects. For example, one side-effect was enrichment of the humanities, social sciences department. Because as the student body shifted from engineering oriented to science oriented they just had different interests, concerns and needs. The university adapted to them. But the role in the world should be to, like any other university, a place of free inquiry, interchange and thought. This one particular university happens to be focused primarily but not solely on science. Secondly, technology because that's become more and more of an offshoot of science. A place where students at the most free period of their lives, out of parental control not yet into the stage of having to put food on the table, can inquire and create, find themselves. For the faculty, same thing. Constant innovation, excitement. Both from students, from other faculty, from the outside world, and should be an environment which they can pursue those interests and concerns in a constructive way. To an unusual extent it's been that, I think, during the period I've been here. It changed a lot, so it was quite different in the 50s.

INTERVIEWER: Is it still as hospitable a place for you as it was then?

CHOMSKY: Well, it's grown a lot. In the mid-50s fifties you kind of knew everybody. If you had a question and you wanted to talk to the provost, he's a personal friend and so on. But now it's far-- for each individual it's kind of

more impersonal because it's so much larger and more complex. But it remains, in my experience, pretty much the same kind of place.

INTERVIEWER: How good a fit has linguistics been for MIT and has MIT been for linguistics. It's always been in the School of Humanities and Social Science, it's not in the science school.

CHOMSKY: Technically. But that was administratively, but not actually. So the field developed, the modern field of linguistics to a large extent developed at MIT. But it was in the Electronics Lab. Yes, the administrative offices were in the modern language department, but the contacts there were pretty restricted. The main contact, connections were in RLE, the Electronics Lab, which was a highly interdisciplinary lab in those days, in the 50s. In fact, a lot of the particular specific departments that now have existed spread around, were sort of sitting there in Building 20 with a lot of interaction between them. Linguistics fit there perfectly. It was right at the core of the emerging cognitive sciences, that didn't really exist at the time. They were just coming into existence and language is at the core of it, and has in many ways remained so. It was an interconnection of mathematical interests, computational interests, study of increasingly interdisciplinary sort of mind in a broad sense. Its implications for other aspects of human behavior and interaction. So it has a sort of a natural spot, the study of language always has at the intersection of the sciences and the humanities and social sciences.

Here it developed very, in a very natural way. In the pretty unstructured and open environment of the old Building 20, research lab of electronics. Course connections elsewhere, so I worked a lot with George Miller, he's a professor of psychology at Harvard. We had close ties to Bell Labs, back, Lincoln Labs, to an extent. But the various expanding departments here. So psychology and the cognitive sciences weren't a separate program. They grew out of the RLE environment. Luke Teuber was one of those who --

INTERVIEWER: And now that RLE and Building 20 are long-gone, or not so long-gone?

CHOMSKY: Yeah, that's unfortunate. We --

INTERVIEWER: Are those connections still there, or is there any --

CHOMSKY: The connections are there, but it's less intimate than when you're in the next room. So the disappearance of Building 20 was kind of a sad moment. In fact, there was an effort from some of us to try to preserve it as a historical monument. But Jerry Letvin, who was almost at the point of that, you know old lady who won't give up her home. Buildings are being constructed all over the place. But not quite. But it was a pretty, it was a really wonderful place to work. First, it was totally -- there was no security. So you could be in there at night. Students, some students were practically living there. No guards at the doors. It's kind of astonishing to me that nothing was ever stolen. Had a lot of equipment in it, and so on, and of course this was, at the time this was kind

of like an urban neighborhood. You know, factories, working-class housing and so on. But this --

INTERVIEWER: It was kind of on the edge of the MIT campus at that point, too?

CHOMSKY: It was on the edge of the campus, but it was just a very, kind of a perfect research environment if you didn't mind the windows falling out every once in a while, or squirrels in the walls.

INTERVIEWER: But you could open the windows. And now?

CHOMSKY: We once had a, my colleague Morris Halley and I, we're still in next-door offices but we started in '55. We were off in one corner of RLE, which was a Second World War temporary building. You know. But it was incredibly hot over the summer. So we tried to put in an air conditioner. But you had to have permission. So we asked permission from the, whatever chain of bureaucracy it was. We finally got a note back saying couldn't do it because it would be inconsistent with the decor of Building 20. I kind of liked that. So we brought one --

INTERVIEWER: You framed the note?

CHOMSKY: Asked the janitor to put it in for us. They didn't seem to care. But the other thing in Building 20 was, that it was a temporary building. You could move the walls around. So it was kind of randomized inside. Which had very nice properties. So like, for example I happened to find a little corner of it that didn't have, a room, but it had no windows. So I figured they're not going to use it for anything. So I asked if I could use it just for books. They said sure, fine. So I had a big storage space for books. That was nice.

INTERVIEWER: Your current quarters, what are they like?

CHOMSKY: Well it's a very interesting building --

INTERVIEWER: You mean the new Stata building.

CHOMSKY: Yeah, it's right on top of where Building 20 used to be. But it's not really a place to work. For example, I do my work at home now. Like, I don't even have a computer in the office. It's for appointments, interviews, things like that. So for example it has a, has a slanted wall, which doesn't make a lot of sense for a faculty office, I mean. What you need is a place to put books and a blackboard and things like that. But it's an interesting, attractive building. It's fine. Actually, I think it's less, it was built to be interactive. My impression is it's probably less interactive than the old Building 20 used to be. Which wasn't built for anything. It was just put up.

INTERVIEWER: Do you think that being at MIT has provided you with a kind of legitimacy as your professional career was beginning to develop and in your any role as a political activist, or in other ways?

CHOMSKY: I don't think so. As far as the profession was concerned. In fact, it's kind of an interesting fact that what happened in the United States has replicated throughout much of the world. Modern linguistics developed on the periphery of the academic system. So here at MIT, not at Harvard. That's been true as it's later expanded throughout the world. It was very different from-- the modern field developed in a manner which was a quite different, in fact, antithetical in many ways, to the existing disciplines. And it was not welcomed. So, for example, for years I didn't publish in linguistics journals. I published in engineering journals, or something like that. In fact, I remember my first monograph, which came out in 1957, it was published in Holland. But shortly after, there was a review of American linguistics by somebody. He had a footnote that said we'll mention this because this is Dutch linguistics. That kind of thing. So it wasn't-- we actually founded a new journal, *Linguistic Inquiry*, published by MIT Press. In large measure because the work that was coming out here, students and us couldn't really, it was no natural place to put it within the linguistics profession. In fact, it has interesting roots back in the tradition of linguistics. Actually, back to the millenia, back to the early Indian grammarians. But that had been almost entirely forgotten by the profession. I started working at it myself, but by now there's a field of, a much richer field than there was of history of linguistics. But that came out of here to a significant extent, off on the periphery of the field. As I say, that's replicated elsewhere.

INTERVIEWER: I know it was a while before people began to accept some of your ideas and to go out for your first book to come together. But I just wondered whether the MIT luster even then may have helped convince some people, well, maybe we should be looking at it, you know, MIT thinks he's good.

CHOMSKY: I doubt it. Because remember, MIT was an engineering school. It was not then regarded as a major university. It was a place where you went if you wanted to build things. In fact, they had a very good math and physics department. But to a large extent they were service departments. Teaching the engineers tricks so they could do things.

INTERVIEWER: What has being at MIT meant for your role as a political activist? I think it's maybe sometimes closed arched eyebrows and so forth.

CHOMSKY: Well, it's kind of ironic the role that it played. Actually the-- not just me incidentally. There were faculty peace groups in the 50s, and the early 60s. They were largely MIT based. Not Harvard based. My own role was RLE, where I was 100 percent supported by the three armed services. In fact MIT altogether was, I think, about 90 percent Pentagon funded at the time. But it was also the center of anti-Vietnam War academic nerve. Anti-Vietnam War activism. Resistance. Teaching and so on. There was no interference. I mean, the record for academic freedom is very good. There are a few exceptions, but by and large quite good.

INTERVIEWER: What do you think your being at MIT has meant for MIT?

CHOMSKY: That's for others to decide. But it was the source of a lot of things that have happened since. So I personally-- it was at the time-- there was virtually nothing. Maybe one course in philosophy. Almost, you know, psychology was practically nothing. I did introduce the first modern philosophy courses. It helped establish what's now a flourishing department. The random behavioral sciences sort of grew out of the interactions mostly at RLE in the late 50s, early 60s. I was part of it, along with others like Luke Teuber, I mentioned.

INTERVIEWER: I was thinking along the lines of people perceive MIT to be very much an engineering and science --

CHOMSKY: They did.

INTERVIEWER: --university. Then they say it has the top economics department and the top linguistics department and in some ways maybe it's helped convince people that there's a breadth and an excellence to MIT outside of the things they think of --

CHOMSKY: It probably has. But on the other hand, I think that's part of a broader development that took place since the 50s. As I said, at the time it mainly was an engineering school. So students were making things. Building circuits and bridges and students took, if you were studying mechanical engineering and civil engineering, electrical engineering, you take quite a different curriculum. Because you were-- it was oriented towards the technology of the time. Well, after the Second World War, there was a substantial change in the relationship between science and technology. There had always been a relationship. So Archimedes was a scientist but contributing to armaments. But there was a qualitative change during and after the Second World War. The sciences became really essential to technology in a way that they hadn't been. They had been an aid. It's kind of like biology and medicine, you know. Medicine, of course, is paying attention to biology. But it couldn't contribute much. But this transition took place, primarily at that time. As it took place, it was reflected at MIT and to a certain extent stimulated by MIT, so it was an interaction. It shifted the character of the Institute altogether. So now it shouldn't really be called Massachusetts Institute of Technology, it's a science-based university. Students in the various fields take pretty much the same courses. Maybe slightly adapted to their own interests. They also have a range of other interests. You know, music, philosophy, humanities and so on. So it's kind of a university based around science. I don't how much it's understood in the outside world, but that's the way it should be perceived. And the role of linguistics and economics and so on just sort of fits pretty naturally into that.

INTERVIEWER: Let's do a brief pass through some of the biographical information. Can you talk briefly about where you were born, growing up, your family, your schooling?

CHOMSKY: I was born in Philadelphia. 1928. My parents were immigrants. They themselves were pretty much in a Jewish ghetto immigrant community. Ghetto not physically, like scattered all over the city, but their contacts were

with social other contacts were with other people very much like them. You know, the Jewish immigrant community was split into various different directions. My parents happened to be involved in, well, for them the primary interest was revival of Hebrew. So my father was a Hebrew scholar, my mother was a Hebrew teacher. The language was being revived. The culture was being revived. That's what they did. My father ran the Hebrew school system in Philadelphia. My mother was active in it. All of my friends and my wife, everyone else, we all came out of that milieu, and there was, it wasn't, it was observant but not religious. It was kind of oriented towards Palestine. The people would have called themselves Zionists. I did too, but in a sense quite different from post-1948. So my father, for example, was what was called in those days a cultural Zionist. A follower of Ahad Ha'am, a leading writer in the early part of the revival of Hebrew a century ago, whose vision was that there should be a cultural center for Jewish life in Palestine. That was pretty much the life.

INTERVIEWER: They were immigrants from?

CHOMSKY: My father came at the age of 17 from the Ukraine, just in time to escape being drafted into the Tsar's Army, which was a death sentence for Jewish boys. My mother's family came, she came when she was about one, from what's now Belarus.

INTERVIEWER: And the language they spoke at home, and that--

CHOMSKY: Their own native language was Yiddish. But there was kulturkampf going on in the Jewish community between the Hebrew-oriented and the Yiddish-oriented. They were on the Hebrew side. So I was-- I never heard a word of Yiddish. That was my parents', it was like their secret language. It's their native language. Same with my wife.

INTERVIEWER: But not Russian, or --

CHOMSKY: My father had learned, Russian. Which was considered heresy where he, he grew up in a little village near Kiev. You weren't even supposed to know Hebrew. I mean, you use Hebrew for prayer, or like, reading the Bible. But you're not supposed to speak it. So even looking at modern Hebrew literature, which was developing at the time, was considered heresy. But he went on and learned some Russian, which I doubt if his father even knew about. But that was not part of our background. It was, you know, to the extent that it was not an English speaking thing. It was Hebrew oriented.

INTERVIEWER: And your schooling, you?

CHOMSKY: My parents were working, they were teaching all the time. So they sent me from, at age one and a half, I guess, to a private school which, and my father was interested. He was kind of a, very much influenced by

John Dewey's educational and other ideas. This was a Deweyite progressive school run by Temple University, which had a Deweyite educational program department. I was there from before two until school ended at 12. That was a fantastic environment. In fact, I remember elementary school much better than high school. I remember everything that's happened. It was on Deweyite lines. There was encouragement of students to think independently, work creatively, work with others. A lot of interaction and projects. There was virtually, I didn't even know I was a good student until I got to high school. Because there was no ranking. I knew I'd skipped a year, everybody else knew I'd skipped a year. But all that meant was I was the smallest kid in the class, you know. But didn't have any other connotations.

INTERVIEWER: I think you, you've commented that pretty much everybody throughout seemed to thrive in that environment?

CHOMSKY: Well, you know, like a lot of private schools it was a mixed story. There were kids whose parents were, kind of achievement oriented. There were kids who just couldn't make it in a public schools, so problem children. So you'd get the usual mixture. But there was a sense that people weren't ranked. Kids weren't ranked. So everyone's supposed to be doing their best, you know. They're praised if they do their best. It was pretty much accepted by the children in the school, I remember.

INTERVIEWER: Right. Then you went to a more traditional high school, which you --

CHOMSKY: I went to a traditional, in the city there were two academically oriented high schools. One for boys and one for girls. My wife went to the girls' one, I went to the boys' one. For me, at least, that's kind of like a black hole. I barely remember it. I hated it, couldn't stand it. As I say, I quickly learned I'm supposed to be a good student, all that sort of thing. But it was --

INTERVIEWER: There was nothing there that really grabbed you.

CHOMSKY: No, everything I did was on the outside. It was just a place where you went --

INTERVIEWER: But you did well enough to, to go off to Penn?

CHOMSKY: Yeah, I was -- well, you had to -- we were working students. You went to the local school, there was no other choice. Although it was pretty inexpensive at that time. I think was a hundred dollars a year or something. Couldn't make it without a scholarship, so I got a scholarship. Went to Penn which was, in those days, not all that different. In fact, Penn was, I was, I got out of high school at 16. I was pretty excited about going to college. I thought it would be interesting. Now that I'm done with this boring stuff, and the catalog looked great, and so on, so I took what I thought would be interesting courses. But I found it was overgrown high school. In fact, after about a year I was thinking of dropping out. It's changed a lot. Penn is now a major university. But at that time it was

substantially a football, fraternity school with a scattering of extremely good faculty. So the more academically oriented students who sort of found each other were, many of them like me, had a variety of interests that weren't connected. Because you were attracted by terrific mathematician in my case. An outstanding, country's outstanding linguist. A few great philosophers and these things. In fact, by the time I was a junior, I was mostly taking graduate courses and really didn't have an undergraduate education.

INTERVIEWER: But you contemplated dropping out, I think --

CHOMSKY: I did.

INTERVIEWER: And just going off and, had you not, I guess --

CHOMSKY:--a seventeen year old kid, I didn't know exactly what I'd do but I didn't see much point staying around.

INTERVIEWER: Did your parents care whether you got your degree or not?

CHOMSKY: I don't think they even knew. In that generation, you just didn't talk much to your parents. There were a lot of things they didn't know about our lives. So for example, we happened to be the only Jewish family in a mostly Irish and German Catholic neighborhood. Which was rabidly anti-Semitic. In fact, pretty pro-Nazi during the 30s. There were boys in the street, you know, you sort of figure out what's happening. But my parents never knew. I never talked to them, they didn't ask.

INTERVIEWER: Interesting. Along the way, I guess, as a child, you spent a lot of time in New York City, too, with relatives of your mother's and --

CHOMSKY: My mother's relatives were --

INTERVIEWER: And their friends in intellectual circles, political circles--

CHOMSKY: That was a different crowd. Her family, at least the part I got involved in, was mostly unemployed working class. Pretty radical. Some of them had essentially no formal education; in fact, the uncle who was most influential in my life had never gotten past fourth grade. But he was one of most educated people I've ever met. He was physically disabled, so he was able to run a newsstand under some New Deal program. That was the one place where there was any employment in the family. So everybody worked there. I did, too. He had collected a circle of European emmigrés around him, who used to hang around the newsstand and have discussions and political talks, and German psychiatrists and so on and so forth. It was pretty lively. In fact, for years I thought there was a newspaper in New York called the *Noosenmeera*. Because as people racing out of the, it was at a subway stop, people would run out and ask for the *Noosenmeera*, and I'd hand them two tabloids, the *News* and



Mirror as I later found out. But it was a, it was a very lively environment. And ever had a -- by the time I was old enough to go to New York by myself, like about 12, I'd immediately gravitate there on weekends and so on.

INTERVIEWER: It became an education of a different sort?

CHOMSKY: It became an education, and I had another related education there. This is, this was around 1940, approximately. They were, there was big refugee population in New York. A lot of people fleeing from fascism. In New York at that time, I guess, Fourth Avenue from Union Square down south was full of little bookstores. That are run by some guy, a Spanish anarchist or something like that. They had real intriguing material, and I spent a lot of time hanging around those. The anarchist offices of the Freie Arbeiter Stimme were in Union Square. And spent time there. A couple of my relatives, and particularly my uncle, were also very much involved in such things. I just got a totally separate political education. In fact, the first article I wrote was in fourth grade. So it would have been, I was 10, I guess 1939. Yeah, I know exactly when it was. Because it was right after the fall of Barcelona, so it was February 1939. It was about the fall of Barcelona, the spread of fascism in Europe. It was just a large part of --

INTERVIEWER: So you made it out of Penn, and then--

CHOMSKY: This was long before I got to Penn. This was long before I got to Penn. In fact, what drew me back to college at Penn was meeting Zellig Harris in a political context. Shared political interests. He was a professor at Penn. I didn't know it at the time. But he was the leading linguist in maybe the world, or the country. But, and he kind of, in retrospect I think he was trying to talk me into coming back to college or something. But at the time he just suggested-- he knew I was planning to drop out-- thinking about it. He just suggested I take some of his graduate courses. Then he suggested a couple of other faculty members. In particular in philosophy and math. He suggested I take their graduates courses. It just kind of went on from there.

INTERVIEWER: So you did get through college, and then got recommended for the --

CHOMSKY: I got through college [INTERPOSING VOICES]

INTERVIEWER:--junior fellows at Harvard, and that's where you did a lot of the thinking about your linguistic theories.

CHOMSKY: That was, I was there for four years. It was a research fellowship with no particular constraints. So you could sit at a desk in Widener Library in those days, and have the whole resources of the library, the university, a lot of bright young colleagues. So a very intellectually stimulating environment. Again, free to explore. In a way, it was back to elementary school. An environment where you're free to explore.

INTERVIEWER: Or the streets of New York and the bookstores along Fourth Avenue.

CHOMSKY: Or the streets of New York. So I just skipped that academic high school. Just kind of like a continuity.

INTERVIEWER: How did you develop your theories that define modern linguistics? Where did your ideas come from?

CHOMSKY: Well, partly it was just having acquaintance with other fields. Like logic and foundations of mathematics and other things. There are concepts that were developed there which did seem to me to be applicable to the study of language. Now, at the time, well I just give you an example, but at the time the way you, when we were, when I was in an undergraduate student, formally in linguistics, a standard, say, term paper would be to go to the *International Journal of American Linguistics*, where people did descriptive studies of American Indian languages. Take one of the articles, you know, *Phenology of Cherokee* or something, and do what was called a structural restatement. You know, it was restated in a more elegant form, using procedures of analysis. It was sort of like inductive procedures of analysis, which were most extensively developed in Zelig Harris's book which, the first edition of his book was called *Methods in Structural Linguistics*. That's what it was. It was methods. In fact, I learned the field from proofreading the book for him. When I was, when we met. He's sort of, I presume enticing me back to college or whatever it was. He asked if I'd proofread the galleys, so I did. You know, kind of learned the field that way.

But that's what you did. You learned methods. You applied them. You got a restatement of the descriptive data. It's what we did. When it came time to do an undergraduate thesis, Harris suggested to me that I do that with modern Hebrew. Which I knew fairly well. Not perfectly but well enough. So I started to do it the way we were taught. You know, you'd get an informant. Israeli informant. It was pretty, just about, from the Jewish community in Palestine. Hebrew speaker, native Hebrew speaker. There are field methods. You're taught how to elicit data from an informant. So I used the field methods, get the data. Then started organizing and inquiring with methods. After a while, I was working entirely by myself. It just seemed to me that this is senseless. For one thing I know the answers to everything I'm asking. Except for the parts I don't care about, like the pronunciation. Because I didn't care about pronunciation. So what's the point? So I just sort of put it aside and did what seemed kind of obvious. Intuitively it is obvious. We write what's now called a generative grammar. That is, try to find a set of rules and principles from which you can mechanically derive the structures of the infinite number of expressions of the language. The structures have to feed into, basically, two other systems of the mind. Or the body, the sensory motor system. You've got to pronounce it, and the thought systems because it has to be interpreted.

So that's what's now called generative grammar. But in those days, I didn't know at the time that there was a tradition of doing something kind of similar to that. Which in fact goes back to the Indian grammarians of 2,500

years ago. It sort of persisted in kind of a back strain of the field. But it was not what anybody knew about. It was off there in some exotic place. By the mid-1950s, unlike the nineteenth, early twentieth century, you could actually do things like this in a fairly precise way. In the 30s, 1930s and the 1940s, it was the beginning of a really extensive and careful development of what's now known as the theory of computability. There were major results in the field. The theory of computability, recursive function theory. I was studying these things on the side and it did give a comprehension-- the ideas were kind of in the air, but this made them readily available in a precise enough form so that you could actually formulate what later came to be called generative grammar in these terms. Pretty much the way you could, on the model of the way you can do what's called meta-mathematics. You know, the study of formal mathematics, a theory in terms of a theory of computability. Which had really profound results. Many of them. So it's kind of melding these things together, as an undergraduate, it just gave a-- I did this thesis and I don't think anybody ever looked at it, frankly.

But anyway it was done, and when I got to Harvard I was kind of schizophrenic for a while. For a while I was, in many ways, for one thing I was committed, intellectually to the belief that the procedural approach of the more or less inductive analysis of data must be the right one because that's what all the smart people were doing. But on the other half of my brain, generative grammar seemed to make a lot more sense. I sort of tried to work on both for a while. At some point, in fact I remember the exact point, in 1953 my wife and I were taking the graduate student backpacking trip to Europe. So we were on some old half-sinking boat and going over to Europe. I was completely seasick, anyhow, it just occurred to me that it was actually getting results from the generative grammar approach. While the other approach was just kind of technical formalization Which wasn't going anywhere. So I kind of decided okay, I'll drop that and continue with the generative grammar.

Meanwhile, there was a side issue. In, this was the period of behavioral science. So the social sciences, psychology, they were studies of behavior. That had a, kind of a similarity to the structural linguistics of the period. The topic was data. The problem is how to control, organize, describe, to organize and describe data and to control performance. That's what behavioral psychology was. It was just everywhere. You know. Cambridge, for example, and where I was, these were the dominant thinking in philosophy, psychology, linguistics, social sciences. It just never made any sense to me. I wasn't alone. There were a few of us.

INTERVIEWER: But did you sit around and kick around ideas with friends? Or did you mostly sort of noodle about this in your own mind, or? How did you work?

CHOMSKY: There was a small group of graduate students who were kind of resistant to the prevailing sentiments. One of them is Morris Halley --

INTERVIEWER: Who was at Harvard with you?

CHOMSKY: He was at Harvard with me. Though he was actually, he was a student at Harvard with me. But he was actually starting to teach at MIT. He was working in phonetics labs. So he was working here, I don't think he was teaching. But he was in the labs at MIT. In fact, my wife was working in the same lab in the early 50s. I met Morris through my wife. Another was Eric Lenebergh, who went on later to become the founder of what's now called biology of language. Went on to medical school and did fundamental work. There were a few others. One of them was a fellow, a junior fellow, same place I was, Peter Elias, who was a mathematician, whose specialty was information theory. We did a lot of discussion and work together. He ended up being chair of the electrical engineering department at MIT. But there was a very small number, just a few of us, just didn't fit with prevailing attitudes.

INTERVIEWER: Were you aware at the time of how transformational your ideas would become? Did you step back and kind of look at --

CHOMSKY: Well, there was very little. We were talking to each other. In fact, the first person from outside this small group of students who became at all interested was George Miller, who was a professor psychology at Harvard. The psychology department at Harvard was, it was kind of characteristic of the times. There were three major professors. B.F. Skinner, Smitty Stevens, George Miller. Skinner and Stevens both knew the total truth. But it was different truths. So if you were a student of Skinner you weren't allowed to take courses with Stevens, and conversely. Eric Leneberg, who was in psychology, had a lot of problems with that. Then there was George Miller, who was kind of eclectic, open-minded, thinking about other things. So students who didn't fit into the straitjackets drifted towards Miller. So I met him. He was kind of interested in what I was doing. We actually spent a summer together at Stanford working on this stuff, and teaching it. But even with that there was essentially no resonance. The book that I was writing, I wrote, I was writing a book on my own at the Society of Fellows. It was finished in 1955 and my wife and I ran off about eight hundred pages on hectographs. I don't know if you ever saw them, but everything in the world turns purple when you print them. We ran off a couple of copies, maybe twenty copies for friends. Somebody suggested that I submit it to MIT Press. Which I did, but it came back pretty soon with pretty sensible comments. They rejected it. But the comments from the reviewers were that they hadn't a clue what it was. There's no such field. Where does it belong. So this just didn't make any sense.

INTERVIEWER: What was your reaction?

CHOMSKY: Their reaction? My reaction? Well, I didn't care much. There was a, I was at the age where --

INTERVIEWER: Here we are, we're supposed to be at the frontiers of knowledge and that's what this is?

CHOMSKY: Well, there was no interest in it outside. So, but it didn't matter, you know. In your early twenties, you're thinking about what you're doing. You don't really care what the world thinks.

INTERVIEWER: Did you have a eureka feeling as you were doing it, though?

CHOMSKY: Oh yeah. There were a lot of things that just seemed to be discoveries. I was excited about them and the couple of people I could talk to were. But then I got involved to some extent in a formal theory of automata. That I could publish. You know, I could publish in engineering journals. Journals like *Information and Control*. -

INTERVIEWER: That's about the time you were here at MIT?

CHOMSKY: Yeah, that was right about the time of 1956. So I was at MIT and there was a lot of outside interest. It's kind of loosely related to linguistics. The formal systems are similar in some respects to the systems of natural language. Not terribly close, but similar. This could go on in parallel. It's since become a, kind of sub-branch of the theory of computation. It's sort of, and other mathematicians got interested, and so on. But, the actual linguistic work was very restricted.

INTERVIEWER: When you came to RLE, Jerry Wiesner was head of it?

CHOMSKY: Jerry was head.

INTERVIEWER: Did you talk to him at all about your ideas?

CHOMSKY: Yeah, I had a very --

INTERVIEWER: Did he get them?

CHOMSKY: interesting interview with him. Roman Jacobsen, who was a great, who was a personal friend, and he was --

INTERVIEWER: He was up at Harvard.

CHOMSKY: He was at Harvard at the time. But he was a leading figure in the whole intellectual community. He knew Jerry Wiesner. He suggested I-- I didn't have any possible academic appointment. I had no field. When I got my, when I got out of the Society of Fellows, PhD and everything, I had no thought of going into the academic world because there was nowhere to go. But Jacobsen suggested I talk to Jerry Wiesner and so I did. An appointment with him. He asked what I was doing. I kind of described what I was doing. Then he suggested that I come to RLE and work on a machine translation project. They had a project of trying to, you know, develop computer programs that could translate language. I told him, I don't think the project makes any sense. The only way to solve this problem is brute force. What's going to be understood about language is not really going to help and I'm just not interested, so I'm not going to do it. He thought that was a pretty good answer. So he hired me on

the machine translation project. But mainly to do what I felt like.

INTERVIEWER: But you didn't do then?

CHOMSKY: No. Because the project made no sense. Over the years it's, I think, become clear why it made no sense.

INTERVIEWER: But it didn't bother him. He hired you anyway.

CHOMSKY: But that's what RLE was like. He was just encouraging. There was just encouraging, a lot of innovative, strange people. With odd ideas. Some of the, worked out, some didn't. But.

INTERVIEWER: How well did you come to know Jerry?

CHOMSKY: Jerry?

INTERVIEWER: Wiesner.

CHOMSKY: You know. People knew each other in those days. It was a fairly small community. So, you know, we were friendly but not close personal friends. Soon he went off to the Kennedy Administration, he went to Washington. Came back and became provost, and so on. But, president later. But the same with the others. Like Walter Rosenblith, who was there later became provost.

INTERVIEWER: Who was provost under Jerry, I guess.

CHOMSKY: Yeah. And later. But at the time he was in RLE. Like, everybody was. Jerry Letvin, Teuber. Almost everyone was there at the time, they later branched out to different fields. Different departments. But the internal to the RLE community it was an interesting place. There was George Miller at Harvard. By the mid-50s, the kind of Bible in the sort of intellectual community concerned with these topics was Skinner's book, *Verbal Behavior*. Which was circulating in manuscript when I got to Harvard. That's what, you know, Van Quine, the main philosopher, based his work in these areas. I studied with him. Kind of like the Bible. I read it of course. It didn't seem to make any sense whatsoever. I finally wrote a critical review of it.

INTERVIEWER: Which got a lot of attention.

CHOMSKY: That turned out to get a lot of attention. It came out in 1959. I wrote it in '57. It got a lot of attention. It was part of the-- there was at that point --

INTERVIEWER: It was that long lead time in getting that --

CHOMSKY: Yeah, just getting things published. But it was part of a sort of a growing, it was part of the growth of cognitive science and neuroscience. Neuroscience related to cognitive science, and so on. There was an undercurrent there of discomfort with the behaviorist sort of ideology. It was kind of like a religion, almost. So this fit into that and contributed to it. In fact, there was work by, it was so, considered so out of tune with the mainstream that, there's a famous brain scientist or neuroscientist, Karl Lashley, who was at Harvard, in fact, who, back in 1950 or so published a really important article on the structure of behavior. In which he showed very convincingly that the behaviorist approaches couldn't possibly work. But nobody paid any attention to it. In fact, I was right in the middle of all of this and I never heard of it. I found out about it from an art critic, Meyer Schapiro. I read it, and I saw that this is really important. So I wrote about it in my review of Skinner, which may be the first article that even referred to it. In those days you couldn't do a database search easily. But I couldn't find any reference, nor could anyone else. It was apparently novel to the people I showed it to. But then there were a couple of other things like that within comparative psychology. Which was in those days pretty different from experimental psychology. There was work coming out, but it was just inconsistent with the behaviorist approach. Another important development was ethology. It's now comparative zoology, with figures like Konrad Lorenz and Tinbergen, and others. Our small group of graduate students, we were reading that material and you could see that it just didn't fit at all with the behaviorist ideology.

INTERVIEWER: So how did you go from all this research and thinking and there wasn't a linguistics department, there were some language courses in-- how did you become a department? The formal bureaucratic whatever?

CHOMSKY: Well, we were in the modern language department. We had to pay our dues by teaching. Morris, who was there, I forget, he was probably teaching German or French or something. Whatever he was doing. But I really didn't know any languages. I mean, I'm not that kind of a linguist. About the only courses I could teach were, in those days they had cram courses for PhD students to help them fake their way through reading exams in French and German. Fake is the right word. These were a residue of the pre-war period. I mean, pre-Second World War if you wanted to be a civil engineer, so you had to know French and German, because the United States was kind of like an intellectual backwater. The main work was being done in Europe. But all of that changed totally during the Second World War, for obvious reasons. None of the graduate students were ever going to read an article in French or German. Almost unbelievable. But they still had the residue of the exams. So the only way to deal with it was for the modern language department to run courses in which you taught graduate students enough tricks so that they could fake their way through the exam, and then forget about it. The exam would be-- had to read and translate a paper in their own fields. Well, you take a look at a paper in your own field and you understand the formulas. You know, you understand the international words, and you learn that the verb is over here instead of over there, and so on. You can kind of fake your way through it. Those are the courses I was teaching. Sometimes they were quite funny.

INTERVIEWER: But to jump from there to a department, a real department--

CHOMSKY: Well, I was allowed to teach an undergraduate course in linguistics and philosophy, modern linguistics and my own kind of work. Our kind of work in modern philosophy. There was nothing like that at the time. After a while there were students who were interested. So in fact a number of the students went on and became professionals. Actually one of them is chair of a linguistics department. Somewhere there were mathematicians that became interested, and so on. There was a certain increase in interest among undergraduates. By that time we were getting visitors from outside, who'd just heard about it and wanted to know something about it. By about 1960 we had one visitor who was at a point where he could get a PhD but there was no PhD department so the electrical engineering department agreed to let him get his PhD in Turkish nominalization in the electrical engineering department. But it was sort of reaching the point where you could think about a graduate department. MIT was pretty free and open, so they agreed that we could establish a graduate department. Shortly after that, also in philosophy, because that was building up, similar way and I was again very much involved in the appointments, teaching and so on. So the department just sort of formed around -

INTERVIEWER: This was under Stratton, or Howard Johnson, or?

CHOMSKY: This was still under, 1960, I think it was --

INTERVIEWER: Early 60s?

CHOMSKY: Yeah, then Jay Stratton, I guess. Maybe Howard, I forget the exact order. But I think it was --

INTERVIEWER: Did you care very strongly one way or the other whether it became the department?

CHOMSKY: Yeah. Once it became a department, we could have students. We could have courses. Students contribute a lot to the development of a field, so it became richer and much more exciting. The early graduate students went off and started their own departments. Which is hard, they had to try to work their way into the field. Ours was at first the only department actually in the world that was dealing with this kind of thing. But there were foreign students, they went back to their own countries. Gradually by the 70s there were at least bits and pieces all over the place.

INTERVIEWER: Did you do much pushing to make it a department, or did Morris do that? so who did the organizational work?

CHOMSKY: Morris did, he did most of the dirty work. He did most of that. Luckily for me. But it wasn't that we were pushing against-- there was no resistance to it. It was kind of like, sounds like an interesting idea, fine, let's go ahead with it, and so on. Somebody had to initiate it.



INTERVIEWER: [INTERPOSING VOICES] some kind of critical mass and makes sense to anoint it.

[INTERPOSING VOICES]

CHOMSKY:--and work through. It was a pretty limited bureaucracy in those days. The move from working in an office at RLE to talking to the president was a very brief move. You know, not a lot of stages in between. As I say, most people sort of knew each other.

INTERVIEWER: I'd love to talk a little about that same period but the other side. What it was like to be an anti-war activist at MIT in the 60s and 70s.

CHOMSKY: Well, you have to remember the environment. The war in Vietnam actually started in 1962. That's when Kennedy started the bombing of South Vietnam. Chemical warfare destroying crops and livestock, rounding people up into camps and so on. But there was no protest. I mean, just nonexistent. It was a very quiescent period all over the country, apart from the very exciting civil rights movement in the South. The first talks I was giving were in somebody's living room, or a church with four people or something like that. By the mid-60s some activism was developing. Actually in 1965. This was all my own time, it had nothing to do with MIT. I started organizing national tax resistance, or trying to. Within a year or two it was broader resistance. In fact, by 1968 I was coming up for federal trial. I was giving lots of talks and so on. Meanwhile, I introduced, with a friend who was also on the faculty-- we introduced undergraduate courses in social and political issues.

INTERVIEWER: So this was Louis Kampf?

CHOMSKY: Louis Kampf. But it was, I did it on my own time. He did it as part of his, it sort of fit into his department. But for me it was just my own time. By the late 60s you had hundreds of students. Meanwhile the mood in the university was changing. Student activism was kind of taking off. Here was late. But by 1968 it was substantial. There were major events that took place. Which had a big effect on the Institute. So in, there were just a small number of students who were active, but they kind of galvanized the place. It must have been late 1968 or so on, there was a, late 1968 there was a, the students decided, I didn't think it was a good idea, but they went ahead, to set up what was called a *sanctuary* for a deserter. There was a Marine deserter, talked to him, made sure he understood what he was doing. Understood the consequences and so on. They just set up a room in the student center and had a press conference that nobody came to. They said, well, okay, we're going to stay with this Marine deserter until the FBI comes and picks him up. Within about, within about a week the Institute was half shut down. Half the student body was over there all the time. It was 24 hours, seminars, there was rock music, everything of the sort that was going on in those days.

It had a tremendous effect on student body. It had an effect on the Institute. One of the effects was that it just

raised in the student body and some of the faculty, an awareness that we should be thinking about what we're doing. Then came March 4th, March 4th 1969, when the Institute was closed for a day just for seminars and discussions and meetings about, you know, uses of technology. How do we think about the consequences of what we're doing instead of just making stuff? We asked what it's for, or what we should be doing. Should we be doing something else? That was really the first, you know, individuals had thought about things like this but this was really the first time that there was an organized concern about it. Out of that grew a lot of things. In fact, the Institute just changed radically. These became central topics. The Union of Concerned Scientists came out of that. Henry Kendall, who was a Nobel Prize physicist and had been a Pentagon planner, he was working on planning bombing Indochina but he kind of, I remember he came, we talked about it. Went through a personal conversion and thought, I've got to change this. He became a leading figure in what became the Union of Concerned Scientists and a lot of other things developed out of it. And it did change the atmosphere of the Institute a lot. So these are now kind live issues in a sense.

INTERVIEWER: Did you and Jerry Wiesner ever sit down and talk about what was being done and how it was being done? Did he reach out to you because as the students got more--

CHOMSKY: Well, he wasn't very happy about it --

INTERVIEWER: -- aggressive.

CHOMSKY: He was, you know, on the extreme dovish side of the, sort of, Kennedy Administration. But he never really accepted the fact that the students and the activists considered him a kind of a collaborator. Because he thought he was taking a strong stand against, you know, war and nuclear weapons and so on. But from the students' point of view, from the activists' point of view that wasn't the case. There was never really a reconciliation.

INTERVIEWER: No. But you weren't altogether comfortable, I think, with some of the aggressive tactics that the students used in the end?

CHOMSKY: Now, it was, by the late 60s, I mean, the student movement really had a very brief existence. You know, a big effect but a brief existence, a couple of years. So, it started in the early 60s, after the Civil Rights movement and so on. But gradually grew. By the late 60s it was a huge phenomenon. By 1969 it was falling apart. It literally --

INTERVIEWER: There were the November actions, I guess, in '69, the--

CHOMSKY: Not just that-- it was that, but a lot more. The main group --

INTERVIEWER:--sit-in in the president's office--

CHOMSKY: Yes, that was happening here and Columbia and other places. I wasn't in favor of it myself, and didn't like those tactics. But the Students for a Democratic Society, SDS, which was the nationwide student organization, had a rapid expansion in the late 60s, but by 1969 it was collapsing. It broke up into two wings. One of them sort of Maoist, and the other the Weathermen. We had a lot of work, trying to talk students out of going in those directions. I mean, you can understand the attraction. You know people, desperate, upset over a lot of things.

INTERVIEWER: Did they get angry with you for trying to talk them?

CHOMSKY: Oh yeah, we had a lot of confrontations and conflicts. Your friend was involved in this. But, and a lot of them --

INTERVIEWER: But in the face of the criticism, MIT ended up setting up what was called the Pounds Commission.

CHOMSKY: The Pounds Commission was set up for a very--

INTERVIEWER: To advise it on what it should do with the two research labs --

CHOMSKY: Well, the --

INTERVIEWER: Two research labs that were seen as being instrumental to varying degrees in the of war effort --

CHOMSKY: Well, it was -- INTERVIEWER: You were named to that -

CHOMSKY: It was more than that, it -- [INTERPOSING VOICES]

INTERVIEWER: Were you we surprised that you were --

CHOMSKY: No, it was --

INTERVIEWER: Did you have any --

CHOMSKY: It was a little difficult.

INTERVIEWER: Did you have any hesitation about serving, or --

CHOMSKY: Well, I had --

INTERVIEWER: Did you consider saying no?

CHOMSKY: Personal hesitations, because I had arranged to teach in Oxford for a semester. I was the John Locke

lecturer at Oxford. That was the semester in which they wanted the Pound Commission to meet. So actually the dean --

INTERVIEWER: You were flying back and forth?

CHOMSKY: Well, the dean really pleaded with me to be on it. So I had four trans-Atlantic trips a week. I'd teach at Oxford, come here, go to a committee meeting. Go back the next day and teach at Oxford again. This went on for about six weeks.

INTERVIEWER: So your hesitation was just that you weren't here and it was --

CHOMSKY: I wasn't here, and I --

INTERVIEWER: --very inconvenient.

CHOMSKY: Didn't want to give up, I had promised the semester at Oxford. I didn't want to give that up. You know, the John Locke lectureship I wanted to give -- and I was giving talks all over England at the same time, I wasn't just teaching. The Pounds Commission was set up to try to head off a confrontation that nobody wanted. I mean, the protests against the labs were building up to the point where they were going to lead to a confrontation. The administration didn't want it, the students didn't want it. So what you do is, you set up a committee; and the committee was going to review the state of Pentagon-related activity at the Institute.

INTERVIEWER: I think we have just a minute or two to sum this up, and --

CHOMSKY: Well, you know, briefly, it turned out roughly -- actually nobody even knew what the finances were. The finances of the Institute were not even in anybody's head. They were just kind of like chaos. A ton of money was pouring in. It turned out roughly that the two military laboratories were approximately half of Institute expenditures. But nobody really knew if they were contributing to the Institute or taking from it. Like, how much did the library contributions matter? So that had to be sorted out. Of the academic side, I think about 90 percent was Pentagon-based. But there was no classified work going on on campus. Indirectly everything can be war-related, except in the political science department. They were working on counterinsurgency under what was called a peace research institute, with closed seminars and things like that. But elsewhere, it was, in the outside labs. On the other hand, the labs were very closely integrated with the Institute. So for example, my wife was a programmer at Lincoln Labs. I was in RLE, but there was no particular barrier. In fact, people people would go up and back freely. But the real issue in the Pounds Commission was whether to separate the laboratories from the Institute. There were sort of three views that came out. There was what was called the liberals, who said yeah, we've got to separate them from the campus. There were the conservatives who said we've got to keep them on

campus. There were two or three of us, one student, one me, who were called the radicals. Who agreed with the conservatives. We've got to keep them on campus, so that people know what's going on. It's a focus of attention and concern, and you think about it, let's not hide it somewhere-- where the same relationships are going to continue, but under an apparent administrative break. Well, we lost, the liberals won. They were formally separated. But it was an interesting time. However, it's about the time of the May 4th and these other developments-- and did make a change.