INTERVIEWER: So this is the 150th anniversary celebration with professor Rosalind Williams. And I'm going to start back, can you tell me where you were born.

WILLIAMS: Schenectady, New York. I was born in Schenectady. Which I was very proud when I learned to spell. My father worked for GE there. That's why we were there.

INTERVIEWER: And what was it like growing up in Schenectady?

WILLIAMS: Cold. It's interesting that you ask me about growing up in Schenectady. Because I just went to my brother's 67th birthday party two days ago, three days ago. And I was going through a lot of slides from the family, to take to him for that occasion. And so I now have especially revived, vivid memories of snow banks, and a lot of sledding, and small houses in a suburb of Schenectady, called Scotia. That was home to mainly GE engineers. And that's who my father was. And so it was, you know, it was a happy and an extremely normal childhood in the sense of the two-parent family, this older brother, and a small suburb, walking to school, walking to the park, skating in the winter. We had a camp on Sacandaga Reservoir where we would go. We'd spend vacation in New Hampshire. So it was it was a very kind of predictably pleasant childhood-- good schools.

INTERVIEWER: Was there anything about your childhood, or any particular significant event, that happened that you think influenced your professional life later?

WILLIAMS: The significant events of my childhood weren't events, so much as the overall context. And that context is a life in the family of engineers. So my father was an engineer at GE at the time. Late 40s, early 50s was kind of neat: the almost classic period of large industry in the US. But my uncles were also engineers. My grandfather, my mother's father, was an engineer. My father's father worked at MIT, as a janitor, actually. But still, it was at MIT. So that is the context in which I grew up. And that certainly had an influence-- an overwhelming influence-- in the sense of giving me an interest in, and respect for engineering. I myself wasn't gaited that way. I was interested in reading and writing. But it therefore gave me a sort of topic to think about that might not have occurred to me otherwise.

The other event that is meaningful, is that at the age of 12, we all moved to southwest Virginia. Because GE at that point, and that point being 1956-- so you can do a little arithmetic and figure out I was born in 1944 towards the end of the war. But 1956, GE was sending units of the Schenectady plant to the South and Midwest. It was the first wave of what would later be overseas geographical diversification. The South had cheaper labor and non-unionized labor. And GE had gone through some very serious labor problems in that post-war period. And for that reason was happy to get decentralized to get people out of Schenectady. So at the age of 12, I found myself in rural, southern Virginia. That's a big event too because it was just a very different place being a Yankee in the South, and not what you'd call the progressive South at that time.

INTERVIEWER: How long did it take you to sort of adjust to that, or to feel like you were fitting in?

WILLIAMS: Oh I never fit in. But that was okay. When we moved to Virginia, and again, the place is Salem, Virginia. It's outside of Roanoke. We were the Yankees in the South. And that never went away. We were always different. But that didn't keep me from making friends, from having a good time, from adapting to that milieu. The downside is that the school system wasn't very good. I always felt my education was not what it should have been. But my parents did everything they could to make up for that fact. Which they certainly recognized. And, you know years later I went back to Roanoke in 2002 for my father's funeral. Afterwards we were sitting around talking with friends from their church-- they had become Unitarians, migrating from the Methodist to the Unitarian Church. And the friends started telling us, my brother and me, about the influence of the GE people moving there in the 50s. But they said, you know, these people were a lot richer then we were. They made better incomes. The had better education. But you know, they didn't join the country club. They joined the Kiwanis Club, or the local clubs. They got involved. They got involved with the Boy Scouts, and the schools, and the churches. And really got engaged in the community. And really kind of helped us see some possibilities that we hadn't seen before. And they really got engaged with ordinary people. And I never thought of it that way. And I must say I felt very proud of my parents. Because that's exactly the description of how they treated that move. And so they encouraged us to do likewise. My brother and I are still very, you know, we were on the high school honor hall of fame. We kept in touch. And I will say that my brother, who completed the Appalachian Trail this past year, had the great pleasure of hiking on the trail overlooking the valley where we had gone to junior high and high school. And kind of seeing it from a new angle made him very happy. So we've kept connected. But it was an enormous change in our lives.

INTERVIEWER: So out of your family of engineers, you became interested in history.

WILLIAMS: No I was interested in history. And because of my family of engineers, I became interested in history of technology. And science, I should say, because the two are very hard to separate at points.

INTERVIEWER: And how did you decide to go first to Wellesley and then to Harvard for undergrad?

WILLIAMS: I decided to go to Wellesley mainly because I wanted to get back to New England. Here I was in southwest Virginia. And I still had all the rest of my family at that point, grandparents were in New England, and specifically in the Boston area. So I'd always thought of the Boston area as the place to be, and the place to enjoy. So it was going to be somewhere in New England. Because I did want to get back in the Northeast. So Wellesley I think, seduced me with architecture. I can remember visiting there on a very wintry day with my uncle-- one of these engineer uncles who gave me a ride. And Wellesley has a wonderful Gothic architecture. And for anyone interested in history and literature, this was obviously a good place to go. And it was quite romantic. Yes, so I applied there early admission, got in, and never looked back. I never thought about it. I think after two years I was feeling somewhat stuck out in the burbs. And I wanted to be closer to where the action seemed to be, which was Boston itself.

So there was another issue that I had. I couldn't decide whether to major in history or in English at Wellesley. Because I wanted both literature and history. And Harvard had, and still has, a very good joint program, or interdisciplinary program with history and literature. So those were the two attractions of Harvard: social and intellectual. But I will say, I got my best teaching at Wellesley as a small, focused, liberal arts college. I really enjoyed it there. I still have friends from Wellesley. Including my freshman year roommate who's still one of, if not my best friend. So I had very good feelings about Wellesley. Harvard was very different but also a good education in a very different way.

INTERVIEWER: I was particularly interested in your answer because my daughter went to Wellesley. So I was wondering now, why would you go for two years and then not stay? Because I do think the education is very fine.

WILLIAMS: Oh it's superb. Yeah.

INTERVIEWER: And then how did you choose to go to Berkeley first, and then UMass for graduate study.

WILLIAMS: Well you're asking me why I went where I did to graduate school. Graduating in 1966, it was the '60s. That's the short answer. And somewhat as in the same way that I wanted to move from Wellesley, in part, because there seemed to be more action in Cambridge. The action then seemed to be in Berkeley, or on the West Coast. And I wasn't sure what that meant exactly. But it seemed a really interesting place to be. And by that time, I think I wanted to get out of the Northeast and try a different place. So I didn't quite know what I wanted to do. And I was not sure about an academic track at that point. But it seemed like not a waste of time to go to graduate school. So it was more a place holder decision. And as I said, Berkeley seemed an exciting place to be. So I headed out there intending to get a doctorate, or at least in a doctoral program. But it was not a very happy year in many ways. And so after that, or towards the end of the year, I made a decision to just get out of graduate school and do something else, come back to Boston. By that time, the man I was eventually going to marry, you know, he was here. I wanted to be with him. That was part of the decision. So at that point, I came back to Boston. And then there's an interval of what, four years, five years between that time and when I went back to graduate school at UMass.

The reason I ended up at UMass Amherst is because my then husband was going to Amherst College on a postdoc. So that was entirely the fact that he was there. I was following him. It was the one place that offered a PhD program in history at that point. So that's the reason I ended up at UMass Amherst.

Two comments about all of this. First of all, those four or five years in a sense, like anybody later on in life, I look back and say boy if I had only known then what I know now. I could have used them in a more valuable way. On the other hand, I'm not sure that I didn't use them valuably. I worked with migrant workers in southern Florida. I did other kinds of social science work. I worked for ABT Associates. I mean it's still a company here in Cambridge. Which turns out to have been a real cutting edge social science research firm. I did a lot of writing on my own. So in some ways, those were very valuable years. But they were not on the tenure track. And I feel extremely lucky that I was able to end up in the academy. When I got off the track for that long, I'm not sure it would still be possible. But in my generation you could wander, and not have to pay a penalty. At least for what you might have to pay now for doing that.

INTERVIEWER: Yeah a lot of people were wandering in the '60s.

WILLIAMS: When I go to my Wellesley reunions, class of '66. I've over and over again heard my classmates say, you know, I expected to marry the doctor. I never expected to be the doctor. And yet look at me. So there's a surprise of women in my generation. We weren't quite 50s. We're a little earlier than just, of course I'm going to have a career. And so we're in the middle. And most of us ended up having some sort of a career, but not expecting to from childhood. And so the sense of surprise and delight is palpable.

INTERVIEWER: In your studies, in that period of your life, were there any particularly influential mentors that you had?

WILLIAMS: I would say, I was very lucky in my graduate studies eventually. But it's an unusual track because what we now call history of technology, was only in its very formative stages. So for example, when I went to Berkeley, I went there in part because of a scholar named Hunter Dupree, who's still alive and still actually living in Harvard Square. I saw him not that many years ago. He was a historian of science. And for no particular reason I thought, well there weren't many people like him around. But he was close enough to what I wanted. And so, for example, he helped me write a Master's thesis about responses to chemical warfare in the interwar period, particularly in England, and the fears of the combination of chemical warfare, gas warfare, an aerial warfare that were just very powerful between the First and Second World War. I mean, that was not his field. But he recognized my interest in it. He recognized that part of the interest is that I'm from a family of mainly chemical engineers. So he understood me as a person, encouraged me. And I owe a lot to him.

Also in my graduate studies at UMass Amherst, there's no history of technology there. There's some history science now, but not when I was there. So I ended up working with an advisor named Will Johnston. He has just retired and is now living in Australia. And he did intellectual history-- European intellectual history. So this was not exactly his thing. But again, like Hunter Dupree, he trusted me. He encouraged me. He basically let me go. And he said, you figure out what you want to do and I'm here to help. That's a wonderful gift. And that's a gift I had both for the Master's and the doctorate.

INTERVIEWER: So you have training in history, and particularly history of technology. And then how did you come to wind up as a writing teacher?

WILLIAMS: You just asked me, or commented on my training in history and history of technology. I've never had training in history of technology. I mean, that's a label that I use for myself because it's convenient. But again, in my graduate studies, I never worked with anybody who was a card carrying member, for example, of the Society for the History of Technology. However, what I did, I informally worked my senior year at Radcliffe-- I mean, I thought of it as Radcliffe, so I'm going to use that term-- for Thomas Hughes. He was a friend of my grandfather, who was then at MIT. And he was a card carrying historian of technology. So this was not my own education. But it was a research job that I had with Tom Hughes. That, again, was absolutely formative in connecting with somebody who knew what that field meant. And to say that he encouraged me is an understatement. He's still a big part of my life. And he has been for all these years. So I owe him a lot.

And the other person who helped me figure out how to combine my humanistic interests, with the history of technology, is Leo Marx. Now he's, you know, an MIT professor-- emeritus. And we are going to be teaching together this coming semester. I mentioned my husband had a postdoc at Amherst College. Amherst College is where Marx was teaching in the early 70s. Well that's when I encountered him. He does history and literature. And he's the great example of a literary scholar who uses literature to understand not just history, but history of technology. So you see there are many parts of my brain I had to knit together. And Leo and Tom, who were never formal teachers, helped me do that. Along with my formal teachers who basically had the great wisdom, I feel, to say just whatever. You do it. So I just want to comment on that way that life happens to you even though you aren't planning it. Or you aren't actually enrolled in programs. The intellectual influences come from the angles... anyway.

INTERVIEWER: You had a lot of mentors.

WILLIAMS: Yes, yes.

INTERVIEWER: And that's often unusual for women.

WILLIAMS: Well I was just going to say. And they're all male. The ones I named are all male. My mother's an extremely strong influence. But in terms of mentoring in my academic interests, yeah. I've been so fortunate.

You asked me about my mother and her influence on me. And the first influences: she's a woman who studied math and majored in math at Radcliffe, and taught math at community colleges in southwest Virginia. And there are two things that are important. First that she was good at math. Well she had started majoring in chemistry, though she didn't stick with it. But her respect for science, engineering, and math, they were all part of a bundle. And the other thing is being a teacher in a community college. Where she said over and over again, that this for her, was just the right place to teach. I'm sure she was a terrific teacher. And she felt those were the students who were the first generation to go to college. That those community colleges are the great root of upward mobility for so many students, especially in southwest Virginia. So her democratic sentiments together with her abilities in math-- those two things together-- made a deep impression on me.

INTERVIEWER: You were one of the early ones to take a kind of interdisciplinary approach to your particular study of history. You've got some history and some literature, and then the technology piece. Was that unusual at the time?

WILLIAMS: An interdisciplinary approach is something where, in retrospect, I realize I'm part of a generation. I'm always amazed how you can do something seemingly on your own. You think this is your great discovery. And then you discover a lot of other people are going the same way. So you have to believe in zeitgeist and cultural background. I mean, I'll give you an example. When I came to work on my doctoral dissertation, I was then living in South Carolina with my husband. I wasn't anywhere near UMass at that point. And I was just corresponding with my advisor. This is pre-email. So we were writing letters to each other. And I was looking through my notes that I had accumulated. And thought well, a lot of people have looked at technology from the producers point of view, the manufacturing point of view. What if we look at it from the consumers' point of view, the users, the buyer. And thought, aha, you know. I'm going to write my dissertation somewhat on I don't quite know what. But it'll be from this angle. And so low and behold, ten years later, it was clear that history of consumption was something that a lot of other people had that moment about that same time. Because books came out. I mean, mine was on the early edge. But it was certainly part of sort of ten year publication history of a lot of works on history of consumption and consumer history. So here I thought I was being an interdisciplinary pioneer, but not so. There were others. And I would say, in general, the interdisciplinary approach to history of technology that looks at machines, and systems, and social context. That is a large part of the history of technology. And so I'm by no means alone. It's still not so common to use literature, imaginative literature, as both a source of insight into history of technology and a source of commentary and evidence. That's less common. And I think unless I hadn't had the privilege of working with Leo Marx for so many years, on and off-- we weren't always in the same institution. But, he's been essential to me, in kind of reminding me, that you can do that kind of interdisciplinary work. That's a little more unusual.

INTERVIEWER: Was there anything besides your sort of background from your family of engineers and your own interest in history and writing? Was there anything else that sort of drew you to that intersection of society and technology?

WILLIAMS: Well, yes. I mean this is where my mother's father, Doc Lewis of MIT, is essential. Because while he was a member of the academy of engineering and the academy of sciences, and in some peoples' view, the founder of chemical engineering in the US, all these high, you know terms of praise for him as a science-based engineer. He loved literature, took it seriously. Those are two different things. And he both loved literature, took it seriously, knew literature very well, knew history deeply. And was always telling stories about the connections between science and engineering, and history and literature. So, for me this just wasn't an intellectual connection. I had a life experience. Somebody whose life was shaped by bringing those things together. And in some ways, shaping MIT, in the sense of the Lewis Report. The report of the committee that he chaired in the late 1940s established the School of Humanties, Arts, and Social Sciences as is now known at MIT. So that serious appraisal of the significance of the humanities, arts, and social sciences is built into MIT. And Doc Lewis has a truly major leadership role in having that come about. So it's not just MIT, though. It's me personally. It's like we were sort of a fractal image, you know. And me as an individual, and MIT as an institution, the connections are the same ones that he really believed in.

INTERVIEWER: Is there anything more you want to say about his role in MIT?

WILLIAMS: Well I could tell stories forever as he did. Since I wrote the book *Retooling,* starting with him-- it's not about him but I started with him-- as a way of getting into the history of MIT through this personal view. And my grandfather, himself, would say over and over that whatever the great ideas, great thoughts you have, individuals are what make them happen and what make them come alive. So, in a sense, I was using his own advice and framing the book that way. I think maybe other people are better suited though, than I am, to write the history of his influence on MIT. Because I saw it as a little girl. You know, he was my grandfather. And for a long time, I couldn't understand why he didn't seem to be that important because he wasn't head of the department, or he wasn't provost. People seemed to think of him as important. But I couldn't quite understand why. They would say he's a great teacher-- just an off the charts teacher. Well you know, okay. But in other words, in worldly terms, it didn't quite seem to compute. And so it's taken me awhile, as growing up myself and being in the academy myself, to understand what makes a professor great as a professor, not as an administrator. So somebody else can write that story.

My story is basically one of affection, and love, and respect, and personal interactions. I'll give you one example. In the fall of 1959-- so I'm 15 at that time-- my grandfather had a conference in Europe that he had to attend. But he wanted to go with my grandmother. And so he invited me along to take care of my grandmother, to be a companion for my grandmother on this trip. So I set sail on, you know, Cunard Line, if you can imagine. This is 1959, first class. A cousin went along too. That's another story. But anyway, so the four of us went to Europe together. And I spent a couple of weeks in England with my grandmother. But en route, I was missing class. Because this was in September. And I was missing 9th grade geometry, 10th grade geometry. And so my grandfather tutored me. And I had never thought of myself as being competent in math at all. I mean for whatever reasons, it was not something I was very sure of myself about. So he sat down to open up the geometry book in the middle. And I said Grandpa, you know, I don't know geometry. We've got to start in chapter one. He said, oh no, no, not chapter one. And the tutoring sessions were just a revelation to me. First of all, I didn't feel stupid anymore. Because he was such a brilliant teacher. He got me to understand how to ask questions, how to know what I did know, and to work from there. And that really changed my math life, at that point. Not that I ever went on in math to any extent. But it just gave me a sense of the beauty of it.

And then when we were in England, he spent a few days there with my grandmother and myself, before he went to his meeting. We rented a car and we went to Windsor Castle. And he knew more English history than I did. And we went up to Warwick Castle. And why do I do European history and literature? You know, it's that visit. And I must say another visit that my wonderful engineer father arranged-- to go to Europe in the same year. As I say, my formal education was sorely lacking. But for a 15- year- old, in 1959, to go to Europe twice in a year-- with my parents and then my grandparents-- that was a life-changing experience. I felt the world had opened up. And even now when I go to Europe as a grownup, I still have this moment of excitement when I'm landing. Especially if we land in Zurich, which is where that first plane trip, you know, that's where we ended up. I relive that moment and just think how lucky I was to have that other world opened up to me.

INTERVIEWER: That's very unusual at that time.

WILLIAMS: Yes, yeah, Very much. Nobody else in southwest Virginia had close to that opportunity, or very few people, I should say. Yeah. But yeah, so as I say, it opened a door. And again, I'm quoting my grandfather here who always said, when you do good research it's not like you answer all the questions. But you open the door for other people.

INTERVIEWER: So how did you wind up coming to MIT?

WILLIAMS: I came to MIT, because one night in 1980, when I had been two years rewriting my dissertation for publication on my own with a little kid. Another one, I guess, had just been born at that point. I felt I was living in my garret, writing away. Nobody knew I was there. Which is fine in many ways. It's liberating. So my husband and I were sitting in bed reading, just before we went to bed. And he was reading *Science Magazine.* He said, oh here's an ad for a postdoc at MIT you might be interested in. So it turned out to be a research fellowship, that was supported by Exxon, in the program in science, technology and society at MIT. And I thought well, okay. That's great. I love MIT. I remember it from childhood. Leo Marx was part of the department then. I knew this person a little bit from Amherst College. And so I applied. And got an interview. I had a very nice lunch at the faculty club. And then got the fellowship. But as I said, I had an infant and a four year old at that time. So I asked if I could make it half time fellowship and spread it out over two years, rather than full-time in one year. And they let me do that. And I have been grateful ever since to MIT and STS for that flexibility. Because I couldn't have done it otherwise.

So that's how I came to MIT. Towards the end of the two years, there weren't any jobs in the STS program. But it would be nice to stay at MIT somehow. So a colleague mentioned to me, he said, well, you know the writing program is always looking for people to teach courses. So you might send in your resume there. Which I did. And after one semester of unemployment-- again I can remember it was a very cold January day, like today. I got a call from Jim Purdy, head of the writing program, who is still head of the writing program. And he said he had a course that needed teaching that spring. And could I do it? And for me, with these two little kids, it was perfect to teach only one class. I had no interest in a full-time job. Who knows what I could've handled. But I didn't want to handle it at that point. So I taught the class. And then the next term I taught two classes. And then I taught three classes. And then the new head of the writing program, at that point Ken Manning said one day, Rosalind, there is a tenure track position we're advertising. And why don't you apply for it? Or think about applying for it. And I honestly hadn't known that it was being advertised. I was so out of it. I just taught my classes. So Ken mentioned this to me. And I thought, well I better apply for it, at this point. And so at that point, you know, the kids were little older. It seems maybe manageable to consider this. So I applied and got the job.

The job however, was not in my research area whatsoever. It wasn't technical writing. Now writing is writing. And I certainly learned quickly what I needed for the basics of technical writing, or technical communication. But it, you know, was hardly a job in my field, quote unquote, but a very good one. And I kept that same basic position for about ten years, until I became dean. So most of my teaching at MIT has been technical or essay writing.

INTERVIEWER: That whole period of time, were you sort of looking, you know, keeping your eye on STS and waiting for an opportunity? Or did you sort of commit yourself to writing?

WILLIAMS: I think it's fair to say that when I was teaching writing at MIT, I also kept in contact with STS. Because if there is any department that does fit my own research profile, it's always been STS. But the beauty of MIT is precisely that the boundaries among units are fairly low. In other words, your unit commands your teaching responsibilities. But your research can take you anywhere. And nobody worries about it. And that's a great strength of MIT. So, actually, I taught maybe one semester when my old mentor Tom Hughes was in town. I taught with him and with Bruce Mazlish, who was in history. But we taught a cultural history of technology type of class together. That I enjoy tremendously. And I'd go to STS events. And, you know, I had colleagues there. I had friends there. So yes, I did keep in touch over all those years. But I never had an appointment until I stepped down as dean.

INTERVIEWER: Let me ask about if you can tell me about the role of Scott Krueger, and what that did while you were dean.

WILLIAMS: I said before that life is what happens to you when you're making other plans. When I became dean for undergraduate education, there were two things that changed that position radically from what it was when I took it in 1995. And the death of Scott Krueger is one of them. But I should also mention as context for all of this. the other was a re-engineering. Which was the reorganization of MIT in the mid- to- late 1990s. Combined with the deaths of two people at MIT-- Jim Colliton and Bill Dickson's retirement, followed much too soon by his death. Those people had had units of what are normally, in most universities, thought of as the dean's office reporting to them for example: Admissions, for example: Housing. So when I became dean, it was a tiny office with a lot of units that had responsibilities that deeply affected student life outside of it. But within a year, due to illness, death, and re-engineering, the dean's office had gone from something like 40 odd people to over 500. I wish I knew these numbers better. But it was an order of magnitude, change. All of a sudden, the dean's office was this enormous expanse. And so there were a lot of things going on already at MIT in terms of the role of student life here, the management of student life here. So it was not a stable situation. So while all these events were still playing out, the death of Scott Krueger came about in the fall of '97 in the context of a fraternity event. And that was also a time when MIT was already having a task force to look at the connection between student life and student learning. You know, I'm a little uncomfortable kind of thinking about Scott's death as sort of a catalyst for institutional changes. It was absolutely that. But it was a kid whose life was cut short. And I was thinking ten years later. It's still to me, primarily just a tragedy. It's just awful, and should never have happened. So as I said, it's hard for me to talk about it as sort of an institutional event. But it was that also.

INTERVIEWER: It made major changes in student life.

WILLIAMS: Yeah, and again, what I would like to emphasize though, is those changes were already going on. First through the reorganization of the dean's office. Which, for the first time, made that whole area of student life manageable as a coherent whole. And second of all, because the task force was meeting and trying to define the role of student life at MIT in this day and age. So the questions were already out there. And so part of the reason that the changes happened as they did, is because Scott's death came at a time of a lot of questioning, and to some extent, upheaval anyway.

INTERVIEWER: Can you talk about the changes that happened in that period of time? And how from the report and from his death what did the administration decide to do to improve student life at MIT?

WILLIAMS: Well the effects of Scott's death can be described narrowly, or more broadly. So to start narrowly, anybody would sort of encapsulate it by saying, freshman now live on campus. And that's kind of the narrow policy change that was made in response to the pressures on MIT after Scott Krueger's death. I mean, I feel that MIT had this choice at that point: either no independent living groups, no fraternities, or freshman on campus. There was not a choice to continue to house freshmen off campus. There was a grand jury meeting sitting that whole year after Scott's death. I testified. A lot of people from MIT testified. And there was real concern that MIT and individuals, like myself, might be indicted for manslaughter. I mean this focuses your attention on the trade-offs. So I think it was clear that MIT had to take at least the step of housing freshman in dormitories, or we would say residences, directly run by MIT. And there was just no way around that change. Whether or not that would've happened anyway, it's hard to say. There's great inertia in the housing system here. And I think we're still working out the consequences of this more narrowly defined change in housing policy. I mean, it always amazes me that MIT, that prides itself on being able to count and quantify, would beginning in the 70s, raise the percentage of women among the undergraduate student body dramatically from single digits. Actually I had a roommate at Radcliffe who fled MIT, because she was one of these single digit women undergraduates. And it was a very tough environment. So single digits up to 40 percent very quickly. And now well over 40 percent. If you count the numbers, that simply means you have to change your housing stock. And all these fraternities are not likely to survive when you're competing for a much smaller pool. I mean, that to me, is just common sense. But MIT never really has come to terms with that arithmetic. And is still working on it.

Okay, so that's the narrow answer. The bigger answer has to do with student life, both for graduates and undergraduates at MIT. And I stress the graduates because the office of the dean of students takes responsibility for both dimensions. Not completely for graduates, but a large measure of that. And there, I think, it's a simple human truth that you're living conditions, your social conditions influenced how you learn. And if those conditions are favorable, your learning is improved. So that seems a pretty simple statement to make. But to implement it, and to ask yourself what do we mean by good conditions at MIT? What's favorable for learning? Again, I think we're still working on that. But what happened during the 1990s, was really putting that question on the agenda as a learning question, not just a care and feeding question. Looking at residence life more carefully, for its social networks in ways that MIT might influence for the better. Because residential life here has always been deeply connected to academic life. But in ways often defined by the students and sometimes in adversarial ways, adversarial to the goals of the institution. So I don't mean to present this as a story of neglect of student life versus, oh now we've discovered it. It's more that the discovery of the importance of student life or student learning made MIT want to have more influence. And the students' resistance is predictable. Because they're correctly seeing that the institution wanted to have more control over what was happening in residential life, feeling that it wasn't always healthy for students. Having freshman living in fraternities, for example, is arguably something that the students would fight to protect-- and alums would fight to protect. It's also something where the institution, understandably, has reservations about that arrangement. So, you know, there are just different ways of interpreting what's good for the students here. And there are tensions, because there are different points of view on this.

INTERVIEWER: After MIT made the decision that freshman needed to live in university housing, how did you respond to, or handle, the reaction from other students that didn't like this, and alums?

WILLIAMS: Yeah. When the decision was made that freshman had to live on campus, you know, most alums, students, even faculty had no clue, or very little clue, that it was in the sense an absolutely necessary decision. That it was being forced through the potential legal consequences of the alternative. So they thought it was an option, that this is MIT's decision. I see it much more as MIT's bowing to the force of necessity, the force of things. But that means there's a great deal of anger. Because there are enormous financial consequences to this decision. At a time when fraternities were already under financial pressures for a lot of reasons including the value of Back Bay property, MIT's policy of keeping housing expenses low for the residences. Anyway for a lot of reasons, fraternities were right to react in saying this really, you know financially, makes it hard if not impossible for a lot of us. And then there were a lot of alums who felt that these were the best years of their lives. Not all, by any means. There are many other alums who had a different view.

So there was a lot of push back. And I just spent a lot of time going to fraternities, to alumni meetings, to travelling around to alumni groups elsewhere trying to explain the decision. But it was hard to explain. Because I never felt I could say, you know, with the grand jury meeting, we had no choice. I mean, that was a legal background that really couldn't really be discussed. And so it was not easy. And this is where being a woman really was a detriment at MIT. And, I must say you know, in most of my life here, I have not felt that way. But at this point, certainly for a woman to be speaking for a fraternity system, just didn't work.

It helps enormously when Larry Bacow became chancellor. Because he was a product. He was male, a product of the fraternity system, and a product of MIT. And again, not being an MIT alum-- I am an honorary alum now-- but at that time, it wasn't the real thing. So I didn't have standing. I didn't have, sort of, moral authority. Larry had a lot more. But even he faced a lot of push back. So my situation was particularly vulnerable. But there was simply a lot of unhappiness. And again, for reasons that I understand looking at the world from the fraternities' point of view.

INTERVIEWER: So, it's been more than ten-- a little more than ten years-- since that decision. How do you think the decision has sort of shaken out?

WILLIAMS: I'm not sure how the decision has shaken out. I believe that MIT still really hasn't come to terms with the disproportion between the composition of the undergraduate student body and the housing system. I think the numbers still don't work that well. It's disappointing that the project to convert Ashdown to undergraduate housing was put on hold. Because that would have been an enormous help in giving MIT more flexibility in its decisions. I mean, that is what it is. But anybody who cares about the housing system can't be happy about that. This is not news. And within the fraternities, I'm not sure. I have had interactions with three-- this is not a big sample-- but three alumni members of house corporations, who feel that the students are not really in any brave new world of fraternity living. That they have not really responded to the challenge as they might have. And that the quality a fraternity life is slowly diminishing. I think, in large part, because of the financial pressures. And that the house corporations are not always in line with the students. That the nationals are not always in line with the house corporations. So I have a few, kind of, data points that make me worry. But I really don't know. I'm really not sure. All I know is that I think it's something that MIT is continuing to work on. And we'll have to. Because we are not there yet in terms of a housing stock that supports the student body, and that keeps the choice of residence that means so much to MIT students. And yet mixes in, you know, enough of the institutional goals with that choice. So I think it's a work in progress.

INTERVIEWER: Going back as dean of students and undergraduate education, are there other areas where you feel you made a big contribution, or where there were significant changes?

WILLIAMS: The biggest contribution I made as dean from 1995 to 2000, was very simply, being there at a time when the office of the dean became organized in the way that it currently is. That is, taking in the wide range of student life, and learning management, activities, and units. Bringing them together, sorting out the office so that by the time I stepped down there was a fairly coherent definition of what the dean's office is, what it includes, what its responsibilities are, and how it's managed. So that's the major accomplishment. Is simply leaving a framework that has lasted until almost ten years later. And the framework looks robust. What goes on within it keeps changing. But we're not trying to reorganize all the time. That I think, is great. Because then you can spend your energies on the work and not the reorganization. I'm also really flattered that the quality of the deans who succeeded me is so high. These are first class people. And it's an indication that MIT now has a dean's office that can attract absolutely first-rate people, like Bob Redwine and Dan Hastings. So just having an office that set up, organized, and is taken seriously in the discussions. None of that really was true when I came on board. So it's not very glamorous. It's not an event. But it's getting a structure there that, I think, is serving us well.

INTERVIEWER: You also, at that time, served on the Academic Council. Do you have any thoughts to share about what that was like, about changes that came out of that counsel at the time you were on it?

WILLIAMS: The service on Academic Council in those five years-- 1995 to 2000-- just came with the job. But again, was a huge privilege to see more of MIT than the ordinary person gets to see. These were the Chuck Vest years. And those council meetings were fascinating for the range of issues that was brought there. But mostly, I think, for the discussions of tenure and promotion cases-- because that's where it's really like lifting a lid off of MIT-- and seeing fine scale, what is going on. It's not just institutional offices. It's individuals, and how individuals thrive in this place. Or occasionally don't thrive, but much more often do. And to think of MIT as a place that maximizes the ability of individuals like that to find their way within the institution. Not to become what the institution wants them to become, but to enable and facilitate these people. That was the real thrill of being on Academic Council. It was also the time that women in science became an institutional issue. And while an issue like-- these were not things that were voted upon. That wasn't Vest's style. It was more a place where these kinds of changes could be discussed and seen. So it was a mix of the ordinary routine tenure and promotion cases, and these extraordinary changes that were happening at the same time. They were all there. When I wrote my book *Retooling,* I just use my notes from Academic Council. It's basic information about, for example, my chapter on engineering. What is engineering now? That's out of those discussions in Academic Council largely.

By the way, when I was finished with that book manuscript, I sent it to Chuck Vest and to Bob Brown and the dean of science, the dean of engineering, other people on Academic Council. Because I wanted to make sure I was not intrudeing on anyone's privacy. And I also just wanted them to know, generally, what I was going to be saying. Because there aren't any rules really, in writing, for how you deal with using information from that kind of a meeting in the open press. So I really appreciate their reading over the manuscript. Some people had suggestions, but nobody felt that there was anything that had to be censored for the good of MIT. That also, is a very MIT-like attitude, isn't it?

INTERVIEWER: Yes. What made you decide to leave the dean of students position and become part of STS?

WILLIAMS: Well you asked me why I left the dean's position, and then why I became part of STS. And those are really two different things. I'm not sure exactly why in the winter of '99, 2000, I decided to step down. I think the main trigger was the fact that my partner, Margaret Bates, who really had oversight over student life. I was always trying to concentrate on student learning, on the academic part. I always felt like that's what I really wanted to do. I never got to that. But she had decided to step down. And so at that point, I thought well we have a chancellor now, who is Larry Bacow. He's going to replace Margaret. It probably would make more sense to replace two people and to get a new partnership in place. I'm sure I was also worn out at that point. But for me it wasn't an easy decision. Because I kept feeling if I just stayed another year or two, finally I would get to the academic decisions. Finally the desk would be cleared and that would happen. And maybe I just realized that it wasn't going to happen in that time frame. I will say, I think it has happened since. But it wouldn't have happened in 2000, 2001. So I figured, okay, here's an opportunity to replace a team. And I think that was a wise decision.

In terms of STS, I felt frankly, it was my opportunity to request that move. Though it's not a move, it's still a joint appointment. I still have an appointment in writing, and still discuss as needed, what is going on in that program. And I am very attached to the mission of that program. And I have great respect for it, and pride in it. But I was also very happy to be able to teach, more in my area, though not entirely. You know, it's always a fit. And also to have an opportunity to work with graduate students. If I learned anything over my years as a teacher in the writing program, it's that graduate students are so much the core of life for many MIT faculty, that if you're not working with graduate students, you never quite feel you're in the same discussion with some of your other colleagues here.

INTERVIEWER: Can you describe to me, how you see the mission of STS at MIT-- its role at the university, what it brings to the university?

WILLIAMS: STS has a unique role at MIT. Because it was intended by the founding fathers, Jerry Wiesner and Walter Rosenblith, to be above and beyond all the schools. It was intended to be an integrated unit that would work across science, engineering, SHASS, and architecture and planning, and Sloan. And that is still the mission of STS. And there really is no other unit that is charged, not just with interdisciplinary studies. I won't say we all do that. Many, many people at MIT do that. But it tends to be within engineering or engineering and science, for maybe history and literature. But literature and in engineering? Science and history? So I describe STS's mission as deeply interdisciplinary, as opposed to within fields that are neighbors already. And that mission, I think, is essential to MIT's future. It's a mission that, in my own thinking, goes back to the message of the Lewis Report of 1949, which was to set up a School of Humanities and Social Sciences. There was not arts included in the title at that point. But that school was supposed to be doing humanities and social sciences in a different way-- a way that was appropriate for an institution that was, and is, still focused on engineering and science. Now the school has, in fact, evolved to have a mix of that kind of work, and more classic disciplines in the humanities and social sciences. Classic in the sense of not necessarily being related or focused on science and engineering. But the mission of STS, is quite explicitly, to work across all the units here. So that's very special. It's very daunting. It's very exciting.

INTERVIEWER: Why do you think it's so essential?

WILLIAMS: When I teach undergraduates at MIT in a sort of capstone class in STS if they're majors, minors, concentrators. I teach the class by saying, we're going to look at what's going on in the world today-- at MIT, in the US, in the world at large. We're going to focus on events. And my challenge for you is to find any major problem that we're trying to deal with as civilization, as humanity, that is not an STS problem. okay, every problem that we're grappling with has dimensions of science, technology, and society altogether. So that's why it's so important. Because I would say MIT, as an institution over 150 years, has been as successful as it has because from early on. It realized that there aren't problems in science and technology that can be dealt with outside of the social context. You know, what is special about MIT? That's a really good question. Because they're a lot of engineering institutions, and technology focused institutions in the world. And few have had the leadership role of MIT over the last 150 years. But MIT's kept reminding itself that if you just do engineering, you're not going to do it well. And, of course, a major step was bringing in science-- at the highest level of excellence-- to MIT many years ago. But that's been essential. And I would say, just as essential, is to have humanities, arts, and social sciences at a level of excellence, so that engineering can fit its work with that of the larger world. And without that, it's just not going to really engage. It's like the motor will be running but you won't have the car in gear.

INTERVIEWER: How do you think it plays out in terms of how MIT students are different when they graduate, than if they went to some other science or engineering-oriented school?

WILLIAMS: Now you're you've asked me an interesting question. The question was, MIT students, how are they different when they graduate here, from another science or engineering-oriented school? I would ask how are they different from Princeton, Yale, Harvard, Stanford, Berkeley graduates? Because in fact, that's what we think of as our peer group-- not engineering schools anymore. I mean, or only a select subset, or only a few. So that is very interesting in and of itself. The question is more, why does MIT think of its peer institutions, or its graduates, as comparable to these other institutions that I all named, that are not engineering focused. The science is a little different. Because so many institutions now, for example, like Harvard. If you look at its graduates, more than a majority we're being graduated in some form of the sciences not that long ago. I don't have the latest statistics. But MIT is special in its focus on engineering. Though I'll point out that Harvard is quickly trying to develop a real capacity in its undergraduate education on that realm too.

So our students, I think, have a sense of their own competence in quantitative analysis, which is absolutely hard-earned and well-earned. They also have an ethic that even if you don't know something, if you work hard at it, and put in the time-- it's a work ethic to the max. I would say that that's something that any student learns to an extent. But I think our students really learn it. And I think it's an excellent lesson. But I think our students are uniquely well-prepared exactly for a, sort of, STS view of the world and of their own work. And our students don't graduate wanting to be an engineer. They graduate wanting to save the world. Through engineering, maybe, but that's a different goal. And this may not have been true ten years ago, or twenty years ago. But I would say our students now, have extremely high ambitions to make a difference to the world, to society. So just in terms of meeting student needs here, again, I would argue STS is essential. Even if it's not taught in STS. STS is done many places here beyond the boundaries of the program with that name. And I again think that's one of the strengths of MIT.

INTERVIEWER: So you've got a nearly 30- year perspective?

WILLIAMS: Well I just got my 25 year-- well they don't give you a chair anymore, they give you a pin-- but whatever. I'm getting up there anyway.

INTERVIEWER: How have you seen the institution changed?

WILLIAMS: My perspective on MIT is actually longer than 30 years. Because I was running down the Infinite Corridor when I was six or seven. So I think it's changed enormously since I was running down the corridors-- or visiting my grandfathers: the upstairs one, and the downstairs one, the professor and the janitor. Because the obvious difference is, it was male. And it was much more predominantly engineering in a classic industry-related sense. What is engineering now? It's a field that has greatly expanded in that the variety of meanings of that term, and what it means to be an engineer. Bioengineering-- that's a concept that would have been hard to wrap one's mind around in the 1950s. Of course the framework for it was being laid in that period. But so MIT was much more stereotype of itself, when I was a little girl, or dating the man from MIT that I eventually married. So, you know, the predominance of women, that diffusion, or the great expansion of meanings, of engineering and science. And, I think, the openness to the engagement with the practical world-- in not just an industrial sense, but a larger sense-- these are all good things that make me feel like I belong here too.

INTERVIEWER: Let me start by asking from *Retooling,* what is it you wanted? What compelled you to write that book? What did you want readers to get from it?

WILLIAMS: I wrote *Retooling,* because I wanted to write for some time, a book that would be for a more general audience, not just an academic one, about the insights that the history of technology has to offer, to thinking about engineering in general. So I thought of it as topical. Like there were different themes I wanted to explore. For example, just engineering systems, as opposed to thinking of engineering as devices. So I had a, sort of, set of notes of topics I wanted to write about. And when I was asked to become undergraduate dean-- and later became undergraduate and graduate dean-- one of the reasons I took the job, was I thought, oh I can get a good book out of this. And I'm first and foremost a writer. That's kind of who I am. And I didn't know what the book was going to be about. I just knew if I kept my eyes and ears open, that I would learn things that would help me understand the world of engineering better. So I was taking notes all through my 10 years as dean, knowing I wanted to write some kind of a book, but not quite sure what. So towards the end of that time when I realized I'd be stepping down-- well even before then, because I'd been encouraged to keep my scholarly life alive. I wrote an article that sort of summarized some of the things I felt I was learning. And that article, then, provided the basis for the book eventually. So *Retooling* is not just for MIT people. I use MIT as a sort of site, a research site. But it's about engineering in the modern world. And to some extent, higher education, but really about what is engineering. I raise questions like, is the information age a new age, really? Is it a revolution the way the Industrial Revolution was? So these are classic historical questions. And I just use MIT to raise them.

INTERVIEWER: To someone who's not coming from your field, your books seem like three, not unrelated, but sort of disparate interests.

WILLIAMS: No, you're putting it very politely to saying my books are disparate. And, believe me, I've often wondered myself, am I just completely all over the map. So here's how I would explain the thread. You know, there's a saying among historians that the owl of Minerva takes wing at the dusk. Now the owl of Minerva-- that's wisdom, okay? And it takes flight at the dusk. In other words, when things are getting over, then you look back and say, oh now I see it. So after my third book, I figured out the connection. My first book is about, not consumer society, but a consumer world. It's called *Dream Worlds.* And my argument is that one of the aspects of modern technology that we under-appreciate, is how much technologies are designed and used, not for utilitarian purposes, but for imaginative ones. And so I look at consumer societies fulfilling dreams. And I don't mean that in a literal sense. I mean it more in general imaginative sense. So I'm interested in the imaginative life and the full spectrum of consciousness, not all of which is that rational. And how the world-- the built world-- interacts, stimulates, satisfies, or doesn't satisfy that imaginative life. That's my story. That's my theme, not just in *Dream Worlds.*

The second book, *Notes on the Underground,* uses underground environments, again, as a world to think with. This is an imaginative environment. Underground environments, why they're special, is that they're all built. There's no nature when you go underground and try to live there. The only way that human beings can dwell under the earth is by using technology, creating a technological environment where all food has to be brought in. Ventilation is a problem, heating, light. All these things are issues that can only be solved through human built means. So the world of the underground interests me as an artificial environment. And it interests me because the world on the surface, of course, it's becoming more and more predominantly human-built, as opposed to given. Never entirely, of course, but if you fly over any major city, you really get a sense of the dominance of the built environment. But again, it's the imagination that interests me, in connection with this world. So what does it do to human beings who live under the world either in reality-- because I use some real examples, you know, air-raid shelters, and the like-- or in imagination. And there's a lot of books about imaginary underworlds. And *Retooling* is also, you know, about imagination and engineering. I mean I wouldn't have written that if I hadn't been in administration at MIT. But the work I'm doing now goes back to, again, this mystery to me. The big question, if you will, what does it do to human beings to live in an environment where, we ourselves, have had the major role in building it? That's very different from the environment that humans have dwelled in for most of history. The predominance of the built world-- it's here and there. But there's a lot of the given world that we interact with. And as this becomes less and less true, what does it due to our society? And what does it do to our souls?

INTERVIEWER: And is there another book in the works?

WILLIAMS: Well this is the one I'm working on now. I haven't quite got the title. I think of it as a story-- I might name it something like *The Human Empire.* Because that's a way that I have of defining, for myself, what I mean by this event in history that doesn't have a name. But the event is the realization of human beings. That we live in the world now that we dominate. We don't control it, by any means, completely. But we dominate it. And again, human beings have been changing the world for as long as we've been hominids. But the realization that we have mapped the whole world, that we have filled the ecological niches, that we could fill more. And that they dominate, really, the fate of the earth. That's a new realization. That's only 100- years- old. And so the book I'm writing now, looks at the point in the late 19th century, where people had this realization. I mean in an American context, you can think of it as the end of the frontier. But I'm saying no, it was a global frontier that was reached, you know, when the polls were mapped. Or you knew that the polls would be mapped soon. I mean, that's a moment in human history that's unprecedented. And two things go together. It's both the realization of having explored the world-- the realization of it. And the realization that human beings would dominate the world henceforth. Those two things are hard to separate. So I'm looking at imaginative writers who are writing about this event. I mean, they don't start off by saying, this is what I'm writing about. But that's what they're writing about. And so I'm using literature to help us think through the implications.

INTERVIEWER: It's very interesting to me that these topics seem related, but they don't have a similarity of content that one usually sees in a body of work.

WILLIAMS: Right. Well I'd say the similarity content is, I write about Europe and England-- not about the US primarily. And that limits my readership being a US citizen. However, as I've explained to you, for me, Europe was an open door. It's very similar in so many ways. But it's just different ways of looking at the world. And primarily, to be the attraction of Europe as I've gone on in my work is, the old continent is really the newer continent in terms of understanding the problems of living in a human-dominated environment. We've had the illusion of a frontier in the United States-- the illusion of open space, only an illusion but a very compelling one. In Europe, you know, the idea that there's wilderness and openness, these are just not issues for centuries. So they're much out in front, I think, of many Americans-- or American society generally-- in coming to terms with living in a very crowded, very finite, human-dominated environment. And they have a lot to tell us. I don't want to say to teach. Because we have to teach ourselves. But they have a lot of experience that is relevant.

INTERVIEWER: And I agree with you completely. I think it's going to be a long time before this country sees that.

WILLIAMS: Experiences it, yeah. You see through experience that the country-- the United States-- is going through a very interesting event of consciousness right now. And that's what I call the advent of the human empire. A century ago in Europe, it was more an event of consciousness. You can never just point to some statistic and say oh, this proves that human beings realize they dominate the planet. I mean there are many, many statistics to use. And I welcome them. I use them. But you really only tell the story if you look at the consciousness, the awareness of what this means. And Americans are going through this event of consciousness right now. INTERVIEWER: I'd like to talk a little bit more about, kind of, general reflections about MIT. How do you think your professional life would be different had you not been at MIT? What did MIT add to, or take away from?

WILLIAMS: Yeah, MIT is a very special place for a humanist, right? And I think there are humanists who shouldn't be here, who would be very unhappy here. Because I'm interested in technology and engineering, for me it's been a research site, as well as a place to do my work. And there are certainly moments when I've daydreamed of being in an institution where there are more students who don't have to be talked into respecting what you do. And a lack of respect can hurt, at times, of both among faculty and students. So these daydream moments come along. But they only last, MIT would say, a nanosecond. Because what I've gained from being in an environment the teaches me, and that forces me to defend what I do, that doesn't take it for granted. That really has been wonderful. Because it has prevented me from retreating in an enclave of people who talk my talk and think like me. And I think that's healthy for all disciplines to be nudged regularly. So MIT has allowed that. Otherwise, it's really hard to say. Would I have taught writing elsewhere? I don't know. There are many variables. But I've enjoyed teaching writing. Because again, you get to know a student in the way you never get to know them, in a more abstract discussion. Essay-writing, you find out things that sometimes send you to the counseling office. Because you don't know what to do with them as a teacher. So there's an engagement with students here that is quite special. And again, I feel privileged to have had that.

INTERVIEWER: Do you have any examples of what you're talking about of a particular story about a student?

WILLIAMS: I am trying to think of specific essays where the topic of the essay got me worried about the student. I will say that this is not uncommon. With my colleagues who teach writing, it happens regularly. That they get drawn into student life through teaching writing here. But it is something that I think is wise to resist. I'm not a trained counselor. And I think it is very helpful, to the student and to yourself, to say, you've got some heavy material here, but let's look at it as a writing issue and writing problem. I'm thinking of one student, in particular, who turned in some essays that I just had a hard time-- I couldn't follow them very well. And I couldn't understand what was going on. And he told me later that he had Asperger's Syndrome. And he was using this not as an excuse, but just an explanation for some of the traits both in class, and in his writing. And that's the kind of thing I'm not sure, in other classes, would have been picked up or so obvious. But I will say, in teaching STS topics, I have a lot of carry over from my teaching of writing. I really work on the writing. We read out loud in class. We go over, sometimes sentence by sentence. Because that, I think, is a kind of fine-grained, rigorous analysis that you need as a student, and is all too rare. It's just a privilege that MIT allows me to do that though-- not worrying too much about class sizes, having writing teachers as assistants as needed. MIT is just such a privilege all around.

INTERVIEWER: I imagine that there's been some resistance over the years, to recognition of the importance of writing. That seems to be an old theme from science that it's not that important how you write.

WILLIAMS: I have found at MIT over the years-- and now I'm going back to the 1980s-- it's surprising. A basic acceptance of the importance of writing in a narrow sense, and an ever-widening sense, of its importance. When I was here in the early 1980s, the writing requirement was first instituted, thanks to colleagues like Ken Manning and others from the writing program, but not only from the writing program. My first job was going into classes like chemistry, and mechanical engineering, and you name it. I was the person who was going to tutor in writing. And so I sat in on these classes, worked with the professors. I never had a professor question my importance. They wanted their students to write well. But it was on the very limited basis. You're going to write a report, a proposal, you better learn how to write well. First of all, it opened up to: you better learn how to speak well too. And this, again, goes back quite a few years and some departments. Over the years MIT had expanded that writing requirement, has made it more rigorous, and turned it into a communications requirement. And the real change is that now, it's not regarded just as the business of the writing teacher to come and do it for you. It's understood, not universally but much more widely, that the engineering and science teachers bear part of the responsibility, at least in moral support, and often in the actual content. Because somebody like myself, who isn't familiar with the field, can only go so far. So there was a review last year-- last two years-- of the communications requirement. And actually, you asked me earlier of things I'm proud of. I should have said, you know, over 20 years, getting a really robust communications requirement in place, along with many other people. But this is something I've worked on, on and off, all those years.

Anyway a report was done, reporting on faculty attitudes. And the astonishing thing to me was how much, not just the communications requirement was praised, but how much it was accepted. I forget the exact percentage. It was a very high percentage of the faculty responded and said, it's a jointly shared responsibility of all the faculty. That's new. And that's very important. So, no. I haven't found resistance. I found a degree of education. But I always felt, as a faculty member, as a writer, I could go anywhere and people would take me seriously. And I've never felt otherwise. And indeed, the first committee that I joined at MIT, which had to deal with some demonstrations that were going on here in 1990. I was very junior. I wasn't tenured then. But they knew I was from the writing program. So the chair of the committee turned to me and said, well, will you draft the report? And once I got over my surprise, I thought, this is great. I have some real influence here. I get to draft the report. And that also has been true. Not maybe so blatantly, but over the years, if you write the report or are known as being able to write halfway well, it's very useful in the institution.

INTERVIEWER: I think that's because a lot of people don't realize how much influence a writer actually has on reporting out.

WILLIAMS: But a writer understands.

INTERVIEWER: Yes, a writer understands. When you think about MIT going forward, are there goals or aspirations that you have for the institution?

WILLIAMS: The aspirations I have for MIT may sound parochial, since I'm a member of the program science, technology, and society. I've seen this institution for a long time, so I hope it doesn't sound self-serving to say. I think STS, not the program, but that approach to the world-- that's where MIT really needs to head. Again, just because of the major problems that we are trying to deal with. Biology, and bioengineering, and neuroscience: all those issues are related to medicine, and to legal issues, and to public health. Those issues-- environment, engineering-- there are no technical answers in the sense of no purely technically answers. So unless MIT has the capacity to look at these problems, you know in a large way, and to connect the aspects of science, technology, and society, our influence will be limited. It won't be nil, by any means. But MIT's future, like its past, is going to depend upon a realization that what engineering is, is evolutionary. It's not a static thing. And engineering is evolving into a suite of disciplines, and sub-disciplines and inter-disciplines, that deal with situations, that deal with problems. And it's not that every faculty member has to cover the range. But MIT has to cover the range. And our students have to be made aware of the range-- of ways of approaching these problems.

INTERVIEWER: Do you think that recognition is widespread, the recognition that this is the way that MIT has to go?

WILLIAMS: I can't answer that question. It's a big place here. And all I will say is there's certainly a lot a faculty who would agree. I always, of course, prefer to look at the junior faculty because they're our future. And I would say, probably the agreement level is higher there. There's probably demographics related to age. But I don't know. It would be very interesting, and good MIT fashion, to find out. This is a researchable, empirical question.

INTERVIEWER: Would you have any advice to those more junior faculty members who are the future if the institution?

WILLIAMS: Oh I think our junior faculty is fabulous. I think they should give me advice, not the other way around. I do try to do informal mentoring, listening, sounding board, some street smarts. But in terms of advice, I think they're gaited to a very broad approach to problems. And to some extent, they have to be reigned in. Because if you become too diffused, then that's a problem too. No, I think any advice I would have to offer would be more institutional history and ways of the world in terms of intellectual breadth. I learn more than I offer.

INTERVIEWER: You were in the dean of students position when it went from something very small to something very big.

WILLIAMS: And I would add, I was in this dean's position, not only when it went from small too large quantitatively, but qualitatively became a unit that was recognized as a locust for discussion in administration of a whole area. And it has been very scattered before. And I almost call it an ideology. That's a little strong. But the ethos was, let the students alone. They know best. They run the place. And we're here to stay out of their way. Now that's not an entirely bad approach. But as we discovered to our sorrow, and the sorrow of others, that's not entirely feasible, appropriate. And partly it's because MIT's student body used to be much older. Back in the 20s, most students who came to MIT-- or went into technical universities and colleges at all-- worked two or three years, at least, before they entered. It was just a different group. And so the ethos was shaped in a different period. And we really had to catch up with the fact that we had a very different student body. So I would say, back to your comment about the dean's office, yeah. It was a really pivotal period. Not just in organization, but in understanding MIT's mission.

INTERVIEWER: Do you think that the change from, let's leave students alone and stay out of their way, to we really need to give a thoughtful approach to student life and how it dovetails best with learning, or in a learning environment. Has that now become a widespread attitude, do you think, on campus?

WILLIAMS: Yes I think you phrased it very well as a thoughtful approach to seeing how student life can dovetail with learning. As I've said, it's always dovetailed. There's always been a symbiosis of life and learning. But you can certainly find examples where it was an adversarial relationship. Where the life, for example, the strong control that students exerted over their living conditions related to a lack of choice in the curriculum. You're told what to do in the curriculum. It used to be you were told what to do for two years running. This is the core. This is it. So you can understand in that situation, why control over where you live and how you live, seems extremely important. So I think what MIT is trying to do, is to evolve both its student life and learning towards more moderate. Where you have more choice in each area of life, rather than huge choices here and very little there.

INTERVIEWER: Are there specific ways you could talk about how you think student life has improveed to allow for better learning in the last ten years?

WILLIAMS: You asked how student life may have improved in the last ten years. I'm trying to think back specifically to that time frame. I do believe that one thing that happened in the late 1990s, simply putting a lot more resources into student life generally, so that the system, for example, of housemasters and graduate resident tutors, and that support system, which has always been there but used to be very thin, is now definitely more robust. That's the kind of thing that I think has been helpful. And times are tough now. I hope that we can keep moving in that direction without too much stasis at this point.

Again, this is where, I think it's difficult to measure. Because students, God bless them, keep coming and going. So you don't have a standard pool. The pool has changed a lot. I think there are enormous opportunities for students in student living. But they wouldn't see it, because they weren't there when it was different. It's hard to say, when I haven't been engaged directly, for going on nine years now. But I will say, the undergraduates I do interact with, they're such a fabulous group of students. And they seem to find their way here. And they seem to have opportunities that they make for themselves. So I think we're doing very well. I just can't give you a compare and contrast very easily.

INTERVIEWER: Anything else?

WILLIAMS: I don't think so. Thank You.