

Interviews of the Margaret MacVicar Memorial AMITA Oral History Project, MC 356

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Maria Ofelia Moroni Yadlín – class of 1981

Interviewed by Madeleine Kline, class of 2020

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Maria Ofelia Moroni Yadlín (SM Civil Engineering '81) was interviewed on June 28th, 2017 by Madeleine Kline (SB Biology and Chemistry '20) at her office at the School of Engineering at the University of Chile in Santiago, Chile. Moroni is a structural engineer who has taught graduate and undergraduate classes at the University for 40 years. Kline interviewed her during a summer internship in Santiago.

KLING: Can you tell me where you were born?

MORONI: I was born here in Chile, in the North of Chile, in Antofagasta. But I have lived in Santiago since 1960, so almost all my life I have been in Santiago.

I studied in Santiago [Universidad de Chile], in this department [Department of Civil Engineering]. After that, my husband [Sergio Jara Diaz, SM and Ph.D., Civil Engineering, '80 and '81] – a civil engineer and full professor at Universidad de Chile – and I went to MIT in 1978.

KLING: Were your parents engineers?

MORONI: No, no. My father was a lawyer, and my mother was a teacher of high school. But I have some uncles – two uncles – who were civil engineers. Here, it is very common that if you have good marks in mathematics, the first thing that you think is to study engineering – that is, if you are not going to be a teacher. So that was the reason to be a civil engineer.

In this faculty [department] – in civil engineering – there are three main divisions: structural, hydraulics and transportation. So I followed the line of structural engineering.

KLING: Did you have siblings?

MORONI: I have two brothers. One is also a civil engineer and the youngest one is a physician, a neurologist.

KLING: Was your brother a role model?

MORONI: No, because I was the oldest.

KLING: Oh, okay. And was it unusual, as a woman, to be a civil engineer?

MORONI: Well, at that time, I was here in Chile. At this school [Universidad de Chile], there were about 600 students in the first year, and women were almost 30 students. About 5% – very few. But I had studied in high school, Liceo Manuel

de Salas, which, at the time, belonged to the University of Chile. That was a co-gender high school, so I was used to being with male classmates. I came here [to the university] with so few women, but I had a lot of classmates [from high school] who were also here. I didn't feel uncomfortable at that time. That's, I think, the big difference with today. It's more important now, even though there are more girls. They are about 20%, but I think they feel worse than we felt at that time.

KLINE: Why do you think that is?

MORONI: Well, I think probably many reasons. I think [that] at that time, we had more problems in this country. Other things had more priority than today. I think that that was the most important; that's my idea. We're an underdeveloped country; there was a lot of poverty. And you have a lot of things to do in the future, with your profession. You thought you could change the world – things like that. All those fantasies disappeared.

Probably today, the problem might seem like something clear, right in front of them, and they can focus on that instead of some other problem. Or, the other problems don't have solutions. Maybe we realized that. And [there was nothing we could] do.

At that time, there was war, the Vietnam War. There were a lot of other things to think about. And then also, in Chile – well, I was at the university from '68 until '73, so I was here during the government of the Unidad Popular. When I finished, well, the thing is that here, we have six years to study engineering. So our degree is, I will say, something like a master's in the United States. We have a specialization. We are civil engineers with a specialization in structures, so we are ready to do many changes in this country. But because the [1973] coup came [overthrowing the government of Chilean president Salvador Allende], we were not able to do anything. We had to change completely what we wanted to do.

KLINE: Before the coup, were you still planning to go to the United States to study?

MORONI: Never, never. No. My plan was to go to [work for] the mining company, because during the Allende government, all mining was nationalized. The mining companies belonged to foreign companies. Most of them were American. And there was a law, and so all the mining was Chilean at that moment and they needed a lot of professionals. So my first plan was to go to work to Chuquicamata [an open-air copper and gold mine in northern Chile].

But because of the coup, first I worked in a consulting engineering firm (Ingeniería Estructuras Consultoría, IEC) that specialized in structural analysis

using newly developed software, until my first son was born. Then I moved to the University of Chile, and I've worked 40 years here. Never changed. That's also something that's very different from what's going on today: our students, in five years they move maybe three or four times their job. So this is completely different.

KLINE: Can you tell me about when you moved to the United States?

MORONI: I moved in '78. At that time, I finished school and I started to work in a private company. And then I got married. I had my first son, and my husband (who happens to work just upstairs) – he was very enthusiastic to do a Ph.D.

KLINE: Also in structural engineering?

MORONI: No, in transportation. Also in civil engineering, but in transportation.

So, we applied to MIT and to Berkeley, because Berkeley was more related with earthquakes, earthquake engineering. We were both admitted at MIT, so we went to MIT. It was something that depended on where we were received. So we went there in '78. We had one kid already at the time. I did my master's there and he finished his Ph.D. in the transportation division at MIT.

I think, well, he was already in the academic career, so it was important to have a Ph.D. for him. And I moved to the university when my first son was born. So I had also started, but he was ahead than me. That was like a family project. In fact, we had a very short time there [at MIT]. He finished in two years and eight months, or something like that, and I finished my master's in two years. In October I finished, and my second son was born in November 1980. So it was really big, big project.

That's also something that's very different going on. In American universities, all the colleagues that went after to study there, none of them came back before five years, six years. They complain that the American universities ask them to be there for a longer time. And right now, in fact, I am living that, because my youngest son is studying at Northwestern University. My two sons studied here also. All the family studied in this faculty [University of Chile], so we belong to this place. He went for the four-year plan, and now he said it's a five-year plan. So he will stay at least five years there.

KLINE: Studying engineering also?

MORONI: Industrial engineering. Both are mathematicians – civil engineering, in mathematics. But the Ph.D. is in the industrial department there.

KLINE: So when you were at MIT, did you live in Cambridge, or did you live in Boston?

MORONI: In Cambridge. We lived in Eastgate. It's the building for married students. It's a tower, 25 floors. When we first arrived there, we lived in Arlington. For us, it was really far, and the change incredible, because we had to take the bus and then the metro. [In Chile] we have snow – but in the mountains, not in the city! The first chance that we had to move to Eastgate, we moved there. And we stayed there – two years or more.

KLINE: Did you know other women who were studying there?

MORONI: I don't have memories about that. In the graduate [school], I worked with some guy, I remember, from Egypt, and there was another classmate from Greece. But most of them were younger than me, because we had studied here [in Chile], and we had the family. I was in my thirties when I went to do the master's. So probably I didn't have too much relation with my classmates.

Women – I don't remember any of them. My husband, in the Ph.D. program, he had only one. She was a lady from China, I guess from Taiwan.

KLINE: In the whole program there was only one woman?

MORONI: In the Ph.D. program. But she was living in the United States before. Even she had changed her name, all those things that Chinese people do in the United States. But I don't remember women. I don't think I had any women professors at that time. Only some people from the staff.

KLINE: Was MIT welcoming?

MORONI: I think that it was welcoming. We had a beautiful host family (Peter and Brenda Roberts) who we visited again when we came back to Boston, and many Chilean friends.

KLINE: You and your husband were both at MIT. How did your experiences differ?

MORONI: Because we had a one-year-and-a-half son when we came to MIT, my dedication to study was about three days a week; my husband was dedicated full-time to his Ph.D. work. I think the main difference is that I didn't have time to socialize with my classmates, so now hardly remember some names, while my husband has, till today, very close friends from that time. We stayed less than three years. At the end of the second year, our second son was born, so my husband worked very hard to finished in a short time.

KLINE: What was it like to be a native Spanish speaker at MIT?

MORONI: At the beginning, it was really hard. All my notes were half in Spanish, and half in English. But when we finished, I could understand almost everything. Although till today, listening to the radio is very complicated to me.

KLINE: Was it helpful to your career to have gone to MIT?

MORONI: It helped me when I came back to Chile in 1981, but I did research in a different topic afterwards. Till today, attending MIT is considered prestigious in Chile.

KLINE: Do you remember any specific classes or professors from your time at MIT?

MORONI: I attended lectures by very famous professors at that time, [including] Professors Whitman [late Professor Emeritus, Department of Civil and Environmental Engineering; renowned geotechnical engineer and earthquake expert], John Biggs [late CEE Professor Emeritus; author of a textbook on structural dynamics; a designer of Boston's Central Artery, demolished by the city's 'Big Dig'], and Jerome Connor [CEE Professor Emeritus; bridge engineering expert] – who have published classic books on their specialties. I knew them in person, and [it] was an extraordinary experience.

Professor Eduardo Kausel [CEE; structural engineer; work includes analyses of the collapse of the World Trade Center towers on 9/11 and earthquakes in Chile] was my supervisor. Because he came from Chile, we became friends. We are friends since that time.

KLINE: Do you remember cultural differences – being a graduate student from Chile at MIT?

MORONI: Lectures were about the same than those we have in Chile, using blackboard and chalk. But [one difference was that] students came from different countries. Again, there were several from Greece and Egypt. Living in Eastgate, we met people from Spain, Israel and some other countries.

KLINE: And so you were there around two years, and then you came back?

MORONI: We came back to Chile, to [the University of Chile]. We were back here, and then we went back [to the United States] twice, because my husband was a visiting professor to MIT. The first was in 1988-1989 – about six months – and then we went in '96 – both times to be there. But I would just stay at home.

I enjoyed it a lot more than when I was a student [at MIT], because the kids went to school, and we could travel a lot more. When we were studying, you know, we didn't move from the apartment. We went from the apartment to school, you know, and no more than that. But after, we had a very good time!

KLINE: Where did you travel?

MORONI: Well, just Boston. Doing a lot of things there we didn't know when we went the first time. Emerald [Necklace], trekking – you can walk through all the parks in Boston. It's beautiful there.

KLINE: And your kids went to school?

MORONI: Yeah, the second time, we lived in Brookline. They went to Driscoll School [a public school] on Washington Street. Excellent school. They have a special plan in Spanish, so it was very good. And it was so long ago that two years ago, we celebrated our 40th anniversary of our marriage. So we went with all the family, with my two sons, my daughters-in-law, all the grandchildren. We visited all the places that we had visited at that time. We went to Driscoll School, to MIT, to Haymarket – all the places we had been talking about for many, many years. We have good memories of Boston. I think it is a beautiful city. The only thing I didn't like about Boston is the summer there – too hot and too humid!

KLINE: Yeah, the summers are too hot and the winters are too cold, so it's difficult! When you came back, did you work as a professor?

MORONI: Yes, I worked as a professor here. Well, what I felt at that time was that because I had studied six years here, and also we do a thesis, when I came back, I thought I'd studied everything about the same, but in English. It was not so different. Maybe the codes, they have been updated every five years since I finished civil engineering. The concrete codes, the American – what's it called— ACI, the American Concrete Institute. In Chile, we used European codes at that time. But, I didn't learn too much, I felt, because here I had studied a lot before.

But the type of teaching – well, that's a big difference here, even today. Our students here are very passive. You ask them to read something and they don't. That was very, very different. You have homework there [at MIT], and tests and all the people wanted to do it. But here, you give the same homework, and nobody does anything! You have to punish them, or give a mark. So I think that was the main difference. Not in the topics, but in the type of student.

I think that has not changed here. Even 40 years after, we are about the same. Probably because in high school, or in basic, primary school-- I saw how my kids went to primary school. That also was different from school here.

KLINE: They went to school in the United States?

MORONI: They went to school in Brookline, yeah.

KLINE: How was that different, do you think?

MORONI: I think the difference is that they tried to involve more. What I remember, for example, one was studying Greek culture. One day, they prepared Greek food and they had to dress like Greeks, things like that. So, for a little kid – seven, eight years old – I think that's a lot more memorable than just the dates of when the battle happened. You know, things like that. That was something that impressed me.

Right now, one of my granddaughters, she just finished the first year. She learned to read, in Spanish and in English. And they wrote a book, all the class, they had to write a small story, yeah. And they print the book, well, probably they have more money. But that is a public school.

KLINE: Here?

MORONI: No, in Evanston [Illinois]. And that doesn't happen here in Chile. Even in a private school, you are not going to see something like that.

KLINE: So, one of your sons lives in the U.S.?

MORONI: Evanston, yeah. He studies at Northwestern University, north of Chicago.

KLINE: Oh, right. Nice! So what has your experience been like? You must like it here if you've been here so long!

MORONI: At this university? Yeah. I think that the first thing, because I studied here, and we came back here in '81 – we had a dictatorship at that time (until '90) – I thought this was a very safe place. I knew every person, from before the coup. So I knew what they thought. [LAUGHS] So it was very, very safe. That was one of the reasons.

The other reason was that my professors now were my colleagues. Because we have the earthquake engineering, we have earthquakes every 5-10 years, so always you have something to do. So because of that, I think it was a good place to work. Finally, I have my reason to retire – it was about my students. I didn't like to have more lectures, because I think that that's [gotten] worse. The students don't study, they don't go to classes. That's another difference. In the United States today, students attend classes.

KLINE: Well--

MORONI: Well, most of them. I just know the graduate students, not the undergraduates. But here, no. You go to prepare a class and you show up at the class, and maybe one, two students from 20 or 10.

KLINE: You think it's because they don't care?

MORONI: Yeah, because they can see on the computer. They don't care. I think they are not interested in learning. They are just interested, I think, in passing the class, and with the minimal mark. It doesn't matter. And that was something that I didn't like. When I just came here, it was reasonable. And the first thing, it was a safe place. And I didn't like to work in the private sector.

KLINE: Why?

MORONI: Because I experienced that they were always complaining that they are not doing good business, and you feel that you have to take money from your pocket to give it to them – like that. The gain [pay] was not too much. So I prefer to work in the public sector. And because of political reasons, I didn't have a chance to work in the public institution, at that time. When democracy came back, in '90, I had been here about 20 years, so there was no time just to move. I stayed here.

KLINE: And you teach undergraduate classes?

MORONI: Undergraduate, yes. Undergraduate and grad both. Because here we have two years. The first two years are called el Plan Común. They have the mathematics – things like that. And then the third and fourth years, they have, how do you call it, civil engineering courses, but basic, like solid mechanics, fluid mechanics, things like that. And then, in the fifth and sixth years, they have the specialization. I cover both groups.

KLINE: Is there anything else you want to say? Is there anything specifically about being a professor who's a woman? Have you had any experiences with male students?

MORONI: Well, that's what I was talking about at the beginning, because at that time, we came here, we [women] were very few. But we didn't care, because I didn't feel there was any problem to me. But since I've been a professor here [in Chile], and maybe 10 years ago – well, not only the women that are colleagues and professors, but also a lot of young men that are doing their academic career – I think, right now, they have a lot more pressure on them. They have to change to be professor's assistant and then the full professor, all that, and to write a lot of papers and things like that. And in this moment, the young males also have a lot of work at home. At least I see that in my own boys. So, it's not so easy to work.

For instance, when I came here in '81, we had a daycare in the faculty [department]. It was free until the kids were two years old, and the people who worked in the daycare, they were staff of the university. So, in a way, they were your colleagues. And that disappeared in '95, after the democracy. they closed the nursery, because they said that it was too expensive, and it was cheaper to have a constituency with a private one. Since then, they don't have it. And that

was a real help for us, because we came in the morning, and we had the kids here, where we could go there to see them.

Now, the young people who work here, they have to have a private nursery in another place, so I think it's harder for them. That was one of the topics that started being very important. Now, there are about 30 women professors, so they have a mailing list only for them, and they have started talking about that problem.

Also, it is hard for women today in the house, with the family. They need to have projects and write papers, things like that. For instance, when they have kids, you may have at least, in all the work, you have a [maternity] leave. It's six months post-natal. At that time in the U.S. they didn't have that, at least in Massachusetts. Because you have the six months, you're not working. And when you come to be evaluated, you have, like, a gap. You were doing nothing. They got bad evaluations because of that, so they started complaining about that also.

Today, it's a big issue for male, female – much different than it was 40 years ago. Today it's an issue, I think, but 40 years ago, I don't think it was.

In MIT at that time, I didn't have too much contact with undergraduates. We lived in a graduate building, and so all the people were married. Well, most of the men were studying and the women stayed at home. The first time we had a daycare, it was a Chinese lady that lived in the same building. And then in the Eastgate, on the second floor, they had a nursery, so my oldest son went to that nursery.

KLINER: Thank you so much for participating in this oral history project. I'm glad I got to meet you, being in Chile this summer!

MORONI: Thank you for asking me.