University of Miami School of Architecture

Faculty Oral Histories

Interview with Sonia Chao

RESEARCH ASSOCIATE PROFESSOR

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Interviewed by Gilda Santana

Recorded by Gilda Santana

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Sonia Chao writes and teaches in the areas of sustainable architecture and urbanism, resilient design, and historic preservation in the subtropics. Her scholarship explores the intersection between historic preservation, historic places, and resilient design.

For a ten-year period, prior, Chao focused her research and capacity building efforts in the area of sub-tropical architecture, urbanism, and their intersection with sustainable and resilient design needs, leading to endeavors in Haiti, Mexico, Dominican Republic and Cuba. In Cuba, the focus was on urban codes; specifically, the relationship between the evolution of urban form and urban codes in historic centers, which resulted in inter-disciplinary investigations into this topic alongside scholars in Havana Cuba.

Before entering the academy, she practiced architecture in New York City with Robert A.M. Stern and Kohn Pederson Fox and in Venice, Italy with Studio Mar in collaboration with Architetti Vittorio Gregotti. She received a Master of Science in Architecture from Columbia University and Bachelor in Architecture from University of Miami.

Gilda Santana: Today is May 21, 2018 and I am speaking with Professor Sonia Chao of the School of Architecture faculty and we're going to ask her a few questions about her teaching and research. Sonia, could you introduce yourself with your full title?

Sonia Chao: My title is Research Associate Faculty and Director of Outreach at the School of Architecture's Center for Urban and Community Design (CUCD).

GS: You were an undergraduate here?

SC: I was a Public Affairs Manager, Politics and Public Affairs (PPA), with an English minor. I transferred over to architectural engineering in my sophomore year and I graduated in the class of 1983. We were the last class to graduate in the previous location for the School of Architecture, which was in the fourth and fifth floor of the engineering building.

GS: Was it then the School of Architecture or was it the Department of Architecture?

SC: No, we were a department and it was a really different reality. There were very few women faculty and very few women students, I think maybe a quarter of the students in the class were

women when I entered and probably fewer still in the years that were ahead of me. So, it was a different reality.

GS: How was that for you? Can you speak to the reality of being a woman in what was then still considered a male dominated discipline?

SC: I have to say I feel very fortunate to have had some wonderful mentors at the time, one of them being Tom Spain. There was also Tomas Lopez-Gottardi and others who were there to encourage the women in the program to see it through to build their own confidence and to see their own potentiality. It was a great cohort. There were no issues between the men and women in the program. As a group we were very cohesive and collaborative. It was a very positive experience.

GS: It seems from the other women that I've spoken to at least in the discipline of architecture, that seems to have been the case here going forward from that period. I was surprised, but glad to hear that. You went to Columbia after graduating from the architecture program here?

SC: I actually accelerated through the program in my senior year because I was permitted to do summer studios in both summers and at the time there wasn't a precedent for that. That allowed me to graduate within the five-year period. As I was contemplating applying for law school, I was encouraged to apply to school of architecture programs by Joanna Lombard and Elizabeth Plater-

Zyberk, who were faculty. They told me that I had the toolkit to be a good architect. I thought about it and I was very encouraged by their words. So, I proceeded to apply to a couple of different schools, got accepted at a couple of different schools and ultimately decided to do my graduate work at Columbia University.

GS: How do you feel about making that decision today? In retrospect, was it the right decision?

SC: I think it was the right decision. Absolutely. I have no regrets.

GS: Did you start working right away after graduating from Columbia?

SC: I did. At the time it was common for individuals to wait a couple of years before they went to a master's program, so it was also a little unusual in that I chose to go straight away. It was a very intense program. It was their Master of Science program in Building Design and Theory. Again we had a wonderful group of students. I was the youngest in the class and it was a great opportunity for me to learn from other students that were more experienced. We were sharing the room with those in the Urban Design Program and the Real Estate Program. There was a lot of kind of cross pollination and different ways of thinking about issues. So, thinking about the city as part of the design process was really something that became more and more a part of my thinking process.

GS: It makes me think of Aldo Rossi because the city featured so much into his politic for design.

SC: Rossi's work at the time was at the forefront of thinking, and I was also very fortunate to interact with what I deemed to be great leaders in the world of architecture at the time. Individuals such as Robert Stern, Bill Pederson from Kohn Pederson Fox, Barbara Littenberg, Ken Frampton and so many others. It was a wonderful opportunity to really learn about individuals that were at the forefront of changing the way in which we thought about that relationship between building and cities. In particular I became more familiar with plaster work, that relationship to historic structures, for example, and how to deal with our historic fabric, and so that became another kind of interesting focus area for me very early on.

GS: Were these folks that you came into contact with or just people that were at the forefront of the architectural discourse at the time?

SC: They were all my faculty.

GS: Those were all your faculty at Columbia?

SC: At Columbia.

GS: Wonderful. Wow. So that tells me a whole lot. So, you kind of answered this, but what interested you in architecture? Was there any one particular facet that made you decide, "Yeah, I

think that's what I want to do?" Because it seems like you had a lot of options and a lot of directions that you could have gone into, yet you chose architecture.

SC: I was always very interested in the dialogue between the macro issue of city and the micro issue of building. I'm very interested in everything from the detailing of buildings to the way that we think about the composition of our urban fabric. Interacting with these different scholars allowed me to embrace all of those topics and to not see them as separate silos, but potentially, as topics that in fact feed off of each other. That's how I thought about the way that I designed and the way that I teach ultimately as well. I was fortunate to end up working with both Bill Pederson after my time at Columbia as well as with a Bob Stern. I had an opportunity to continue to think about these issues very early on in my career.

GS: These were New York offices?

SC: These were very high-profile New York offices. I was very fortunate to work with them and in fact, early on I wrote my first book on the work of Kohn Pederson Fox. I did so with one of my classmates from Columbia by the name of Trevor Abramson.

GS: And we have that book here, right?

SC: Yes, you do.

GS: Okay. We need to get a signed copy.

SC: With Pleasure.

GS: After New York, what brought you back to Miami?

SC: That's a longer story because a while in New York, I get a call from the University of Miami School of Architecture and was asked at the time, by Joanna Lombard if I would be interested in applying for a tenure track position here at the School of Architecture. To be very frank, at the time, I couldn't see myself moving away from New York. It was a really exciting time to be in New York and I really enjoyed the things that I was doing in New York. So, I said, "thank you, but, no thank you", to the offer. I got another call a couple of weeks later and I was offered an opportunity to teach in the Venice program, a program that, by the way, a group of us established. We had participated in a Mexico program in San Miguel de Allende that the department had back then. We were so excited about that program and that experience that we requested to the then chairperson of the department, John Steffian, if he would consider an opportunity for us to do the summer semester in Venice, Italy. He approved that program, and we were the first group to participate in the Venice program back in 1982 if memory serves me correctly. It was interesting to be invited to teach the very same program that I had been in as a student. At that point I consulted with Bob Stern. The project we were working on was sort of in a transition as we were waiting for permitting, and he gave me his blessing. So, I took off and left for Venice and taught in the program. That's where I would meet my future husband. I decided that it was an interesting

opportunity to stay in Venice and look at preservation issues a little bit more closely. I did end up leaving New York to live in Venice, Italy, and did so for five years. During that time, I was very lucky to work with two firms. One was Studio Mar that was collaborating with Vittorio Gregotti and Associati. We won the competition proposal for the rehabilitation of St. Mark's square. That was a great project. I learned a lot about research. I had many opportunities to sit in the library there and much enjoyed that.

GS: Which library was that?

SC: Sansoviniana Library. Our firm was in association with Vittorio Gregotti an Associati, and that was a wonderful experience. I did that for a couple years and then I had an opportunity to collaborate with Alberto Chequeto who had been my faculty when I was a student in that Venice program. With him we did a competition project for Mattarello Campus in Trento [Trentino] and we won that competition as well. That was another really great experience dealing again with preservation issues and the rehabilitation of a historic building and the master planning for the whole campus. After that I worked on my own on a couple of small projects doing rehabilitation projects for historic buildings. I moved back to Miami on the eve of Hurricane Andrew, which was an interesting a moment. I arrived somewhere around 7:00 p.m. that night and the storm followed a few hours later. After the first initial weeks of working with my own family and trying to get us out of a lot of debris...

GS: Where were you living?

SC: Coral Gables. The canopy was completely destroyed, and a lot of the streets around our neighborhood. It was interesting just to try to get out of the neighborhood. I called the School of Architecture and I asked if the school was doing anything to help the communities down in South Dade. They responded that they were trying to figure it out, and asked me to join them for some meetings in the interim where folks were working with the AIA [American Institute of Architects] to do some of the assessments down in South Dade. I started by doing that, and then I started attending these meetings here at the school, trying to figure out how the school could work. Jorge Hernandez, another alum of the school who I knew of course because he was a few years ahead of me when I was a student, was then the Interim Dean at the School of Architecture. He invited me to join him and others on this initiative that he was a part of which was called *We Will Rebuild*. It was a group that President Bush and Alba Chapman of the Miami Herald led. He had organized committees that focused on different topics. There was one that was looking at the built environment. From that, the committee came up with this idea that we should look at South Dade in a kind of wholistic manner by pulling together ideas from different areas. Jorge invited me to become the project administrator for that, and I wound up creating 16 teams, many of which focused on macro issues of the city. Everything from infrastructure to natural systems, and transportation were areas that we looked at as case studies. We were thinking of these case studies as paradigms that could be emulated in other parts of the community by looking for characteristics within these different types of urbanism in the South Dade region. We wound up organizing the event in three weeks. Lizz Plater-Zyberk told me that it was the largest charrette she'd ever participated in.

GS: How many people were there?

SC: I think if I remember correctly, over 100 members on the teams, and then we had over 200 participants, everyone from then Senator Bob Graham down to residents from the different neighborhoods. Because communication was so difficult at the time, we actually drove into the different neighborhoods and handed out flyers so that they could join us so we could learn from what they were experiencing. But, also it was done with the intention of looking forward. We saw it as an opportunity to create more robust communities rather than replicating what was already there. We viewed them as opportunities for positive change. We made recommendations that were not embraced, such as suggesting that some of the neighborhoods hardest hit that were east or south, depending on where they in relation to Old Cutler [Road] should perhaps not be rebuilt and to buy back those areas. Those could be given back as natural landscapes, but that recommendation wasn't necessarily embraced. Folks wound up rebuilding in the same areas. I'm hoping that in the future, as our climate stressors increase, that they're thinking about how they can change their physical reality and adapt so that their asset is as best protected as possible. We thought at the time that it was important to address different issues, and it was a great opportunity for us to later on continue to work with different communities. One of the case study sites like, for example, this intergenerational center that could be created around a public school. We thought what if these public schools became somewhat more like civic centers for their neighborhoods, given that we know that suburbia has that kind of urbanism that creates public life. There was a particular condition in South Miami Heights that the team leader for that project, which was Suzanne Martinson, another alum from the School of Architecture, had led for us. She and I and others worked on this project, and we tried to give over tools to the community. Some of those things were actually built and so we were very pleased about that. A lot of the work centered on those issues of how you create doable projects that create more sustainable and resilient communities.

I was offered an opportunity to join Dade Heritage Trust,[1] which is a local nonprofit that focuses on preservation, to become their grant administrator. I did that for a couple of years under then Director, Louise Yarborough. I was in charge of overseeing the rehabilitation of 33 historic properties. That included monies that we had for the Florida Lighthouse on Key Biscayne this to properties concentrated primarily in the region south of Kendall drive. I worked with the architects and the preservation officers from Miami Dade County, Margot Ammidown, Bob Carr and Rick Ferrer, to oversee the rehabilitation of those buildings. I eventually made my way back to the School of Architecture though.

GS: What do you consider was particularly successful of your involvement in the, "We Will Rebuild" project?

SC: Well, I think that, part of it that was perhaps most immediately satisfying was this idea that we could work with this community, as I mentioned in South Miami Heights to introduce concepts that would engender civic uses that would be more helpful to their community and public spaces. So, as humble as an intervention as that was, I think it was the right way to proceed. The whole process was a public process with the community involved in that process. I think that we laid the seeds for future interventions so that was very satisfying. One of the things that I perhaps was more frustrated about was this idea that transportation that works in the city is really our Achilles heel. They are to this day moving forward. I see them as a real obstacle for the cities or the counties overall resilience if they aren't tackled in a more holistic and profound way. One of the concepts

1 dadeheritagetrust.org

that I have been talking about today is the child, if you will, of one of the concepts that we were talking about then. At the time we were talking about how these transit stations could become places where you can orient different types of uses, referring to them as TODs [Transit Oriented Developments]. Today though, I feel like those transit-oriented developments that could happen around those transit stations, in particular along the Metrorail line, which of course I felt, and I think we all felt at the time needs to be extended and connected not only down to South Dade but also towards the airport and other areas of the city so that it really becomes a real transit option. Most people today don't use transit public transit because it's a linear system with a very short line, so it doesn't make a lot of sense. Until they really complete that system and start using the half penny tax that was designated for public transit type issues on the metro rail instead of on paving more roads, we may not get there in time. These are some of the issues that today I think we're starting to tackle again. But this time, I've been working with students in studio and with different partners from the office of resilience from Miami Dade County and other divisions to think about how these transit stations could also have what I'm calling a “resiliency center”. That resiliency center offers not just day to day activities that could be part of any old TOD such as, you know, farmers markets or the pharmacy or other kinds of services or offices that might be there for nonprofits, for example, but also other amenities that during a time of need, would serve the community. There could be areas for refrigeration, for example, or for energy production and perhaps even provide shelter that could help communities. Furthermore, what we learned very interestingly from Hurricane Andrew was that at the time FEMA knew exactly how to deploy its goods to the communities of Homestead and Florida City because these were cities that had a town center. There was a main street in Homestead, and there was a main street in Florida City that were public spaces. So, they knew where to drop goods there and the residents in those communities

knew where to go for it. Whereas if you were somewhere else such as South Dade, South Kendall, you end up not knowing where to go. There aren't any public spaces anywhere near you. So where do you go? Furthermore, FEMA didn't know where to deposit any of the assistance. So that's why when the ULI (Urban Land Institute)2 were here a couple of years ago I asked them to think about the idea. They've embraced it as part of their recommendations to Miami Dade County for *adaption action areas*. Arch Creek3 is one of those adaptation action areas. That's not my term, but it's a very common term though when dealing with resilience in communities that FEMA has asked us to focus on in those more vulnerable communities.

GS: I didn't know you did all of this. I've heard alot about the Underline.4 How does that fit into the projects that you talk about?

SC: We have many alternatives for transportation be it by foot, bicycles, or mass transit. These are all wonderful overlapping alternatives the expansion of which we should encourage, right? They give individuals an opportunity to select alternative ways of getting around the city and that's important to us. Every time we get in a car—and we tend to do it as individual users, we are of course adding CO2 emissions into the atmosphere and those are creating the problems that we see today reflected in things such as sea level rise or extreme droughts, and extreme rainfall. There are repercussions to our continually adding these greenhouse gas emissions into the environment. What we're hoping is that individuals will have opportunities to reduce their own carbon footprint

2 https://uli.org

3 Arch Creek was an early settlement of the Tequesta Indians. Name derives from a long natural limestone bridge that spans the creek. It is at 1855 Northeast 135th Street, on Biscayne Boulevard.

4 The Underline is a 10-mile linear park, urban trail and living art destination planned for underneath the Miami Metrorail. https://theunderline.org

by having different options, but until those are offered in a complete manner, and that's not to say that there aren't a lot of really important initiatives out there such as the underline project, but they have to be interconnected to each other, seen as complimentary systems. They have to be funded, they have to be completed and executed. We can talk a lot about these different big ideas, but until our leaders who hold the purse strings actually put the money towards these projects, they remain as small pilot projects and/or nonexistent projects that never even come to fruition. These are some of the things that early on since then I've been working on these ideas of how our cities, how our urban fabric, both the historic as well as the new that's added to it, all play into these topics of sustainability and resiliency. We've been looking at it not just locally, I should add, but also in other locations. We've been doing work in places such as Mexico, working with the Instituto Tecnologico de Monterrey for many years on these same issues for different communities around the Queretaro area. We did the same with the Director for ICOMOS[5], and the planning division for the city of Santo Domingo. We've done similar work in Havana, Cuba working with the Office of the Historian, the Grupo para el Desarollo Integral de la Capital[6], and the Instituto de Planificacion Fisica, and we've done the same in Haiti. In 2010 the center [CUCD] was approached, and we wound up collaborating. We actually were also were reaching out. So, it was both of us reaching out towards each other to engage with the leaders in Haiti to be as helpful to them as possible in their process of rebuilding. We wound up having a direct dialogue with the Minister of Reconstruction, LeslieVoltaire. He wound up coming to Miami with other ministers en route to the United Nations, and he asked us if we would collaborate with them on creating an appendix to the *Haiti Demain* report (Haiti Tomorrow) because they hadn't looked at the what the physical aspects of rebuilding would look like. The report looked at economic issues, social issues,

5 International Council on Monuments and Sites. https://www.icomos.org

6 Group for the Integral Development of Havana is an urban planning effort in Havana, Cuba.

infrastructure issues, but they hadn't really focused on the rebuilding of the physical cities or buildings. On a pro bono basis we wound up working with these ministers. Dean Plater-Zyberk asked me to lead the Haiti charrette. I invited, as I had done back in ’92, friends and colleagues, alums of the University of Miami School of Architecture, but others as well across our community that were familiar with these issues. I had an interest in contributing towards this process on a pro basis. We came together and had a week-long charrette here that included scientists from RSMAS Rosensteil School for Marine and Atmospheric Sciences) and other divisions from the university, including. Professor Louis Herns Marcelin from the Department of Anthropology.

GS: Is he still there?

SC: Yes. He's wonderful, and he's got so many years of working in Haiti. He was a wonderful asset to have. Again, we broke it down into a macroscale and microscale issues. We got folks thinking about issues such as transportation and what are our risks? We were looking at the different layers, the multiple risks that impact Haiti, to again, working on case study sites. The Kellogg Foundation learned about this project maybe a couple of years later and they contacted us. I remember my very young student assistant at the time, saying, “the Kellogg Foundation is contacting you because they want to work with you on a project in Haiti”. It was summer and I wasn't in the office, and I said to her, “Nope, you probably got that message wrong. Nations don’t call you. Call them back and find out what they need.” So she calls me back a couple of hours later and with great pride, she says to me, “No, I got it right!” So, long story short, we were asked actually to do a similar process for the Akaye region, which is the breadbasket of the country. In

Haitian creole it's spelled a-k-a-y-e, and in English it's a-r-c-a-h-a-i-e. The Kellogg Foundation partnered with the Barr foundation to support our work. I wound up inviting colleagues that I thought had different strengths that could help us tackle the different issues, and we also had consultants Max Zabala and Michelle Sanchez Ovalde (sp) and two others that worked with us both of them Haitian who were very helpful to us throughout the process. One of them is an alum of the School of Architecture, her name is Jackie Génard, and we were able to work on 4 different initiatives essentially. There was the group of us that worked on the regional scale issues could be thought of as longer term projects with larger funding needs that entailed collaborations with the national government, such as roads. Other issues, for example, were how to protect the natural environment, how to protect the agricultural resources where cities and communities could be built, how to think about creating new regional centers that could promote economic activity, etc. We worked with a civil engineer from Denver, Colorado who had been doing a lot of work in Haiti to work with us on some of these issues. I asked other faculty here at the school to work on a kind of case study site that could again, service paradigms for other communities across the country. One was at the scale of a town, Akaye, which was the capital of the region. Another team worked on what we would consider a small hamlet, the fishing village of Luly. The third group looked at the crossroads in the middle of agricultural land and how that could be a place where one could in fact create seeds for public life, yet again with services that could help those communities that are underserved. My colleagues and I worked on this project for about a year and a half and we had to restructure the project because we quickly realized that there was a need for more trips than we're funded originally. I had to restructure the way that we use that money, so that we can in fact arrive at our goal. We wound up having, I think it was for mini charrettes, and there were countless number of sessions with community members, with focus groups and others to kind of tackle the

needs and to really listen to them. We had a technical charrette here in Miami. Before we submitted the report to the foundations, we had one last visit. I sent a couple of our representatives to meet with the community members, one from each team essentially to talk to them about what we were proposing and how we thought of it as a reflection of their ideas and their needs. I have to say that we were very proud when out of their own initiative, they started to get up–there was one of these large boards for us to take notes and write things on—and they just got up and put their signature on it. We asked, "What's going on"? The translator replied, "Oh, well this is their way of showing you that they own this report. This is theirs. That they are very proud of the work that's gone on here". At that point we figured we'd done our job right. Like that we've had other opportunities to engage with communities here locally, whether it was around the Coconut Grove Project that we did around the playhouse. There have been a variety of different directors between the time when I was the very first initial managing director for the Center for Urban and Community Design to today, when I'm it's director, once again. Folks such as Dan Williams did wonderful work with the South Florida Water Management District. Richard Sheppard who was another director worked with our Luce[7] Professor Samina Queresh. They did fabulous work in the West Grove over nearly a seven-year period, if I remember correctly. I think that the center has been able to engage these communities, and to really serve its purpose of fostering sensible, sustainable and robust kinds of initiatives that lead to social equity, economic kind of vitality, community empowerment. So, that's sort of the heart of the projects that I've been centered around this center.

7 Henry Luce Foundation supports projects at universities, policy institutes, media organizations, and musems, among many others. https://hluce.org

GS: How did you become involved in the center? We've had this conversation before, but not on the record.

SC: Okay, no problem. So, as I mentioned, at the time Jorge Hernandez was the interim dean, and right after we had the new South Dade planning charrette, a group of us looked at each other and he asked, “Now what, what do we do next?” And, from that small group, the idea of having a permanent center at the school came about. That’s when Jorge asked me if I would be the first managing director for the center.

GS: How did you come up with the name?

SC: I think it was part of reflecting our identity as a school, one that was really interested in building real communities and one that was interested in urban design.

GS: What year was that?

SC: That was in December of 92.

GS: You mentioned John Steffian. Everybody seems to have had said such wonderful things about him. Can you speak to your relationship with him, if there was any to this person, who seems to have been everybody's "golden leader" for lack of a better term?

SC: John was, I think, a great leader to use your word, because on the one hand he had this wonderful, very open personality. He was quite gregarious, and students did not feel intimidated by him. He was always looking to establish conversations with students, so we thought of him as someone who was very approachable. He was also someone who was constantly bringing new faces to the school. For a small or I keep saying school, sorry--for the department he was always bringing new faces to this department, and so we have opportunities to engage with great scholars such as Todd Williams and Billy Tsien, for example. There were so many others. There was this constant flow of individuals coming to South Florida that we were having an opportunity to learn from.

GS: Were they part of the distinguished visiting professors program?

SC: So as a student, I wouldn't be able to tell you whether it was or not, but I can tell you that we profited greatly by those interactions because these were individuals that later on in our career, we knew them and interact with them and reach out to them. So, these were wonderful opportunities. He also had a social, every Friday. There was a happy hour. I guess the drinking age at the time was different. So everyone knew that on 5:00 p.m. on Friday, on the fourth floor by the administration's main area, there was going to be some wine and cheese and lots of conversation,

and that was also a wonderful, wonderful opportunity for us to engage with each other. For example, that's where I had an opportunity to have a conversation with Lizz Plater-Zyberk, who later on mentored me through a competition for the Van Alen Institute where I placed. It was a project to look at Chicago's waterfront. Had we not had those informal opportunities to get to know faculty that we wouldn't have had yet as our own in studio or other courses, those moments of an informal interaction really gave us an opportunity to more directly engage with these faculties and learn from them and establish new relationships with them. They were very useful in trying to create a very cohesive environment that was very inclusive. I guess that goes back to your very first question about how I felt there. I always felt that I was a part of this larger kind of family, and I think that John was very focused on creating that kind of environment for everyone.

GS: I can't remember who it was that said that this school was very matriarchal and nurturing.

SC: It is a very nurturing school. I think it has always been a very nurturing school and we all thought of John as our patriarch. Had it not been for his vision, we wouldn't be a school today. I don't know when that vision would have come about, perhaps much later, had it not been for his kind of personality and the team that he had constructed around him, with individuals such as Tom Spain, Tomas Lopez-Gottardi, and Jan Hochstim, and others who really came together as a group to create this new reality called the School of Architecture with our own buildings. Albeit, on the other side of campus. Our own home was created from that moment.

GS: That is the seed period that I'm most focused on because it seems to have generated the school spirit and identity.

SC: Oh, absolutely. It was a great time to be in school. Today, I think technology is something that we must embrace and that we should embrace, that we should try to expand upon, but there's something to be said about the way in which our schools or departments at one time, we lived through this education of being an architectural student. I mean, we were always in studio, we were always sort of feeding off of each other and collaborating with each other. I mean, for all intents and purposes, we lived in studio. There was the sofa where people crashed on. There was, you know, the midnight band that was composed of different students. Everyone knew that at certain time in the middle of the night, they would just get up and get up and start dancing around and just exercising to get rid of some of that energy or to wake up, and then as soon as the music stopped, everyone went back to their seat and then continued working at their drafting tables. Because we were all in these two floors, we were in this concentrated area, you got to know everyone really well. It was a very healthy environment in which the senior students would stop by your desk and look at something and give you a quick critique. You could take advantage of that because it wasn't your teacher, but it was the senior fifth year student that was giving you a new way of thinking about your own project in the middle of the night. From my own experience, when I came back, for example, I think Jorge Hernandez was equally patriarchal and very much trying to create a place that could be united, and that faculty and students all felt like an important part of it. I thought that he embraced opportunities kind of in the same way that Steffian did, that allowed us to become a part of the “We Will Rebuild” initiative, for example. I'm creating the new center thanks to his blessing, and so I think it's important for us to kind of a give due credit to

all of the leaders at the school that created a wonderful environment for all of us to, to work in including Lizz Plater-Zyberk. And, now our new dean, Rodolphe El-Khoury, who I think has been fantastic for the school because he's been very respectful of the foundation of the school's thinking about the city in particular. He nurtures that while he also opens up new avenues for us to lead new investigations, for example, into the world of resiliency that I am interested in. I feel very fortunate to have collaborated with these different deans at the School of Architecture in different ways, whether it was as a student or as a faculty member.

GS: If you were going to recommend some reading on resiliency to get a broad overview, what would you recommend? What do you think is essential to know?

SC: Well, here's a couple of things. I think that when we started to look at resiliency here, we were looking at sustainability here at the School of Architecture. I guess it was for 2004 or 2005, during our faculty meetings, I would bring up this issue of resilience, that is, sustainability and I would say this is a topic that we should start embracing and start talking about. I remember a couple of my colleagues looking at me and asking, "What does that have to do with who we are in our identity?" My response to them at the time was, "Everything! If we're talking about mixed-use walkable communities, you're essentially talking about aspects of a community that make them sustainable. Those things are actually very complimentary. They're not different from each other and whereas you're right now perhaps thinking of it only as what can technology add to that conversation. I'm saying that we need to open up the discourse and see it from a larger perspective." There are all these other ways of thinking about sustainable design such as passive

building design. We can learn from those vernaculars. This is not to say that we have to emulate them and be them, but we can learn from their DNA and apply them today in like manner. We can look at cities and neighborhood designs and town designs and learn from their DNA and ask, "How do we apply those lessons to create greater communities that are economically, socially and physically sustainable?" At the time I got approval from Lizz Plater-Zyberk, who was the dean at the time, to chair a symposium that was titled, Under the Sun: Sustainable Innovations and Traditions[8]. We were looking in particular at the subtropics and tropics. I invited a cast of experts and practitioners, a real estate developer as well as folks that were working with the Department of Energy. The event took place over two-and-a-half-days. We looked at this issue again from the macro scale of cities down to the micro scale of buildings, but also across history. We were looking at a past precedents for passive design, historical as well as more recent history such as the mid-century modern architecture, and then we were blessed to have some of these mid-century architects with us. Alfred Browning Parker joined us, George Reed, [Peter] Jefferson...Quite a character. We actually had an event one night at a house designed by Alfred Browning Parker, where I then had an opportunity to talk to him a little bit about his influence, and the influence of Havana's architecture on him because that's of course another topic that I've been very involved with. He and I had a long conversation about how he used some of the tools, such as *persianas*, or louvers, that are very much a part of Cuban architecture, and how he learned to apply those in his building designs for South Florida so that they could better temper the sunlight and the weather that we have here. It was a wonderful opportunity for us to really embrace this topic of sustainability. That was the first time I offered a an upper level, elective course here at the School

8 Cháo, Plater-Zyberk, Correa, Grafton, Hernández, Hochstim, Matkov, Mitchell, Sánchez Hugalde, Cháo, Sonia R., Plater-Zyberk, Elizabeth, Correa, Jaime, Grafton, Thorn, Hernández, Jorge L., Hochstim, Jan, Matkov, Becky, and Mitchell, Carolyn. *Under the Sun : Traditions and Innovations in Sustainable Architecture and Urbanism in the Sub-Tropics*. Coral Gables, Florida: University of Miami, School of Architecture, 2012.

of Architecture that focused specifically on sustainable design. It was titled *Under the Sun*. Later on I got a grant from the National Endowment for the Arts, the first of its kind to be awarded at the University of Miami, so we were able to publish our findings and the publication is now available online. We have it here in the library.

GS: Yes, we do. We have signed copies.

SC: That was a really kind of wonderful opportunities for us to refocus ourselves and to see this conversation of the city in this larger conversation related to the environment, and how those related to each other very directly, and, how we as a school had a voice in that conversation that was very relative. That's kind of the way that I wound up thinking more and more about resiliency. As I was preparing for that event and preparing for my interventions during the event, because I had a couple of them, one that focused on historic preservation as a green alternative and, another one that looked at mid-century modern architecture across the Straits (Straits of Florida). I did a comparative analysis of some of the work of both Cuban architects and South Florida architects and how through these passive methods they were able to accomplish very sustainable designs. As I was doing all of that research, this word/concept “resiliency” kept popping up. I was thinking about it more and more and learning more about it and eventually my work started to embrace that chapter as well. Starting to think about how we as cities we start to adapt and make ourselves more resilient in the face of these climate stressors that will only increase over time. That has more recently allowed me to work on an investigation dealing with critical infrastructures. Thanks to funding that we received from the National Science Foundation (NSF), in the CRISP (Critical

Resilient Interdependent Infrastructures Systems and Processes)[9] category. It's a human-centered collaboration that tries to look at the city and urban design issues in relationship to our social issues. We're using something called the *People's Resilience Framework.*[10] We are looking at everything from populations, environmental issues, organizational issues in government, lifestyle issues, everything that has to do with how we create places in our society overall. There are five PIs [Primary Investigators]. I'm the PI for architecture, urban design and preservation. There are two engineers, one here at the College of Engineering who looks at structural design issues and one at the University of Colorado who was looking at Smart City designs and critical infrastructure. There's a sociologist from Virginia Tech, and a computational scientist who has actually worked with several different federal agencies who is also based out of Virginia Tech. Right now that's giving us an opportunity to engage with the City of Miami and the City of Miami Beach which we chose as our two case study sites because they represent two different types of geological conditions. Their morphology as well as their ways of making cities are very interesting to us. One's a riverfront site and the other one is a barrier island condition. We thought these could be used as paradigms as we make recommendations that eventually in theory, will help communities along the eastern seaboard that are coastal communities to think about creating anticipatory guidelines for their communities. We are trying to create the framework for those types of anticipatory guidelines. That has been a very rewarding experience because it has allowed us to

9 https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505277

10 Peoples provides basis for development of quantitative and qualitative models that measure the functionality and resilience of communities against extreme events or disasters. http://peoplesresilience.org/

work very closely with regional groups such as the Southeast Florida Regional Climate Change Compact[11] and the Institute for Sustainable Communities.[12]

GS: NSF funding is a grant.

SC: It's a grant that funds the research through CRISP the category that deals with critical infrastructure.

GS: When you say ‘our’ project, you're talking about the group of five. How did the group form?

SC: A few years ago as I was doing my research works for the Under the Sun Project, the same names kept coming up, like Ben Kirtman who's a faculty member over at RSMAS or Harold Wanless, who's a member of the faculty over in geology, and, I kept seeing their names and reading their papers, and thinking, I've never met these people. I had opportunities to engage with other faculty on a one to one basis and thought there are more people like me interested in resilient design across our campus. So, I approached our then Assistant Vice Provost for research. Her name is Karen Scarpinatto, I said, I have this idea, I'd like to create an ad-hoc committee of faculty that are focused on resiliency in Miami, and she said, “oh, that's a great idea. How can I help you?” I said “Here's a list of the faculty that I know about, but that might not be inclusive of all the faculty

11 http://southeastfloridaclimatecompact.org/

12 https://sustain.org/

that are out there, so maybe we can start by meeting with other faculty leaders within each one of the colleges to learn more." So, we did that and I wound up calling it the *Resilient Miami Initiative* and we wound up meeting for about a year and a half, two years. We would meet typically once a month to just exchange our research. Our sessions were primarily about presenting the work of two or three faculty. I wound up inviting faculty from FIU and FAU to join us. It was interesting because there was a little bit of turf issues initially, as one would expect. But, as we started to converse we began to feel comfortable with each other knowing that it was important that we break through those barriers of turf because the issues in front of us are that large and need that kind of collaboration amongst all of us. That is what allowed me to meet people like a Landolf (Rhode-Barbarigos) and [unclear] When they learned about this NSF grant opportunity, they approached me and asked, what do you think about this? And I said this is a great idea, but we really need to center it on urban design and how urban design is connected to social issues. That's when we started to talk amongst ourselves about how we create that team. The project is called, *A Human-centered Computational Framework for Urban and Community Design of Resilient Coastal Cities*. So there it is, and that's what we've been focusing on more recently. I am making a presentations to the City of Miami tonight at their request, at their sea level rise monthly meeting. I presented our interim findings to the City of Miami Beach Resiliency Officer and Preservation officers and others within their division to get their feedback and to also grow our collaboration so that the dialogue is always strengthened. We are also producing useful tools for those that need to be able to access them later. Those are important conversations for us to have been a wonderful opportunity for us to grow and learn more and to interact with each other on these topics.

GS: Wow. I have so many questions, but it's going to have to be another session. Well, one more question to you.

SC: Yeah. I would like to talk to you really briefly about you though. That's what I want to talk about.

GS: That was my question about Cuba. Besides be being of Cuban descent, Cuban and Chinese descent, right?

SC: No, no, Cuban and Portuguese. My family is originally Spanish and Portuguese.

GS: Chao, So that name...

SC: Portuguese.

GS: I didn't know that. Interesting.

SC: I did not either, but yeah. Family history and my brother who decided he wanted to learn more about our family tree looked into it.

SC: I did do one of those 23 and me DNA tests and it was like something like 93 percent Iberian. I was like, yeah, I got that. There are some weird and interesting things when you do those DNA tests.

GS: Cuba. How did you get interested in Cuba? I'm sure the historic preservation portion figures into it.

SC: It does, but you know, that's not how it started.

GS: So, looking at urban design?

SC: No, it started out of a very different vantage point. When I was at Columbia, I would frequently get asked by individuals, "where are you from?" And I would say to them, "Oh, I'm from Miami", and they would say to me, "But, where are you from?" At the time I thought, they know Miami, so let me tell them more specifically, and I would say "I'm from Coral Gables", thinking that that would, you know, clear it up for them. And their response was, "No, where are you from?" I got that enough times, that when I would say to them my parents were born in Cuba, I would always get the "ahh" moment thought interesting. I was never focused on that side of me. Even though my parents very much, exposed me as much as they could to these issues. I learned the language early on. It wasn't my first language, but I learned it very early on.

GS: English was your first language?

SC: Portuguese was my first language. My papa in New Jersey, which is where I was born, was a Portuguese, and so Portuguese was my first language. Not that I remember much of it now, but then English and then Spanish. When I was living in Europe, I would get that same question, and I thought, “What do they see that I don't see?” That led me to try to kind of learn more about my cultural heritage. So, when I first moved back to Miami, I got to personally become friends with Cundo Bermudez, who was of course one of the, wonderful, Avant Garde movement leaders of the modern era in Cuba.

SC: We met because I was friendly with his niece and she had heard that I had worked on a publication project in New York way back in the day and they were interested in doing a publication on his work. She asked me if I could join their group to try to help them in this process, and so, he would join us in those meetings and that's where I started meeting some of the collectors in Miami such as Maria Amiget and then others. We would have these sessions with will know, always present and we struck up a friendship and coincidentally he was looking for a place to live and I said there's a house for rent across from my mom, why don't you look at that? And he wound up living there. So of course, it was very convenient because I would in the afternoons come over and stroll over and have a cup of coffee with him and watch him paint, and you know, I interviewed him at one point and then we established a very nice relationship. In fact, the very first painting from our very humble, small art collection is by Cundo. He dedicated it to my husband and I when we got married. Essentially, my interest in all things Cuban emerged through this world of art. I

became a member of the Lowe Art Museum's Cuban and Cuban American Art collection advisory committee for several years, which is where I met other collectors from the city, people such as Carlos Saladriga, Jorge Perez, and others. Amiget was also on that with me. We were a group that were very interested in this topic of art, and Cuban art. There was an exhibit that was going to take place at the Lowe that highlighted the collection. We were given a preview of the material that was going to be exhibited by the curator of the exhibit, and I noticed that a lot of the topics were related to architecture or the city. I proposed to my colleagues on the committee and to the then director of the Lowe, that we could have a small symposium that focused on art and architecture of Cubans and Cuban Americans just in the way that the exhibit itself was looking at art by Cuban Americans. They thought that was a great idea. I wound up chairing that symposium and I reached out to different colleagues that was called Tracing Parallel Cultural...I'll look it up and send you the name.

GS: Does the Cuban Heritage Center have documentation of it? I'm sure they'd want to have it if they already don't.

SC: I don't know, the sole poster is lying on the back of my door and my faculty office,

GS: And it was held where?

SC: It was held at the Lowe Art. We had a small exhibition of works by contemporary Cuban American artists and architects. We had different sessions. Now the date of this event is an interesting one because it was September 21st of the year 2001. Does that sound familiar? It's 10 days after 9/11. I remember as we were getting ready for this event—whenever you're preparing for any of these events that are million things left to do in those days, right? I had been in conversations with Dean Plater-Zyberk who was very supportive of the idea of the event and I I asked her, “Lizz, do you think I should move forward with this? I think I should, but do you think it's appropriate?” I remember her looking at me and saying, “Absolutely. We're not going to let these terrorists change the way we live.” Well, everything that you can imagine as murphy's law would say that could go wrong, attempted to go wrong on me. There were no flights in and out of the country, for example, and because this was the beginning of the academic year, we had different faculty that were traveling with students in other locations. I had faculty that were stranded, I think it was in Boston and others that were stranded in Mexico, and then the Cubans couldn't get to us either. So that we had invited to the event and so it was---

GS: The Cubans from the island?

SC: Cubans from the island.

GS: Wow. That was so progressive of you.

SC: It was an interesting moment in the history of our university. I actually made every effort to not let it become about that because we were there to talk about research. We're there to talk about the city. We were there to talk about architecture. We were not there to talk about politics. So, when one individual who actually traveled quite a distance from Orlando to bring up polemics, I quickly replied that that was not the focus of the session. The focus of the session was really to talk about these issues of city placemaking and the role of architecture and what were the parallel kind of realities occurring across the Florida straits across history. It wasn't just about what was happening then. It was about what was happening across history. This is when I first became interested in the mid-century work by the Cuban architects that would later dovetail into that research of Cuban of American architects in Florida working during that same period and learning about sustainable design practices. So, that's how those two things start to really dovetail into each other. In any case, long story short, I was able to reach out again to colleagues here across the cities such as Nicholas Quintana and Raul Rodriguez who came in and lectured. We were able to have Jose Antonio Choi, one of the Cuban scholars with us because he happened to coincidentally have arrived beforehand to visit with family in the states. Individuals that we invited, but that we're not able to travel included a architectural scholar Eduardo Louis Rodriguez, who I was able to invite a few years later and he came and lectured here at our School of Architecture. After that event I was approached to consider working on issues related to human architecture and urbanism by the JM Kaplan Fund. Initially, I wasn't really interested in doing that because I was focused on preservation investigations locally. They invited me to go to the first be an audit of architecture in Havana, where Andres Duany was one of the speakers. They said, "Just come to the event and give us your thoughts later on." I remember being armed with as many video cassettes as possible

because I thought I really didn't think I was going to go back, I was just going for this conference. I was going to go see the city.

I would say that within a couple of hours of having landed, I was standing in my hotel doorway and saw these two little girls in their little uniforms. They couldn't have been more than seven or eight, going up to this little hole in the wall. It was literally one door that had a little refrigerator stuffed up into the doorway, and this guy was selling them ice cream. I thought, “There are just so many things in that picture that to a Cuban American, don't quite jive.” I thought how interesting. They're laughing, partaking in this very normal scene. I thought, “Wow, I should learn more about the reality of Cuban people here.” I took it upon myself to walk the city for hours. I left the hotel at daybreak the next morning, just walking the city, and being amazed by its architecture and by its urbanism. The variety of it and thinking to myself at the time, that maybe those relatives who always talked about, “La Gran Habana” weren't exaggerating. I thought maybe I need to learn more about this, and at that conference is when I met Eusebio Leal Spengler, who is the historian of the city of Havana and some of his staff. After that event, the Kaplan Foundation asked me what I thought. I had been conversing with Andres Duany also about this project and I thought I might do this. I put together a proposal. It was a very simple, small proposal at the time to purchase books on the topic of architecture, urban design and historic preservation and to donate them to the school of architecture in Havana. That was the sole purpose of that initial grant. Then I started having conversations with one of their faculty members that I had met at that event and we got the project done. Kaplan came back and asked me if there were other things that I would like to do there. I told them that I was really interested in the idea of documenting the evolution of urban form and the history of the island of Cuba as it related specifically to Havana and its relationship to urban codes—going back to those initial interests of mine in the world of law, I

guess. I got funding to do that and that allowed me to work with a group of scholars there. All of it was funded by the Kaplan Foundation. It was the only source of funding. I was able to collaborate with faculty from the School of Architecture in Havana, and we then received an invitation from the historian's office. They heard about the work that we were doing. We were already collaborating with the Office of the Historian and others on this topic of preservation. They invited us to show our project as part of the second Biennale that was coming up. We thought it was a great opportunity so we went ahead and prepared that exhibition material. Right now, after all these years, I finally have the time to focus on getting that actually published. I'm working on the that this coming fall. That was one of the initiatives that we've worked on. The other one had to do with engaging these students and faculty that were there and others that were working on these issues of preservation and the sea to get them to think about it from a larger perspective, and think about how more contemporary tools can facilitate the work. They started looking at this idea of form-based codes, and that's when Gustavo Sanchez-Hugalde and I started to really work very closely with some of our counterparts to think about how they could in fact take their original codes from the 1861 *Ordenanzas de Construccion*, which were essentially form based codes. So, this is not a novel idea. It's just a novel way of thinking about that process in so far as it becomes so much more graphic versus a chronological and word lengthy document. We had many interesting charrettes and just wonderful faculty interaction, because of course everyone who works with the Office of the Historian is a faculty member, and everyone who works in the planning division is a faculty member, and so, you're having individual conversations with these folks that are not just teaching the next generation about it, but when they go back to their other job and they put it on their other hat, they're actually making choices that can change the course of the city. What we learned was that there were so many really talented individuals there who had

for a very long time, and very quietly been amassing great research on the city. They knew their city inside out, and they were in the process at that very moment of reissuing their their urban codes for the city. So, it was a very fortuitous time for us to kind of interact with each other and to encourage them to go back to those original codes that had been somewhat diluted in 1961 when they started to use zoning kind of tools to segregate uses and to think of the city in contemporary terms.

GS: How does this, or, does this have any bearing to Sert? [1:32:19]

SC: Sert is a different issue altogether because it was actually happening before that in 1959. We are thankful that Sert's plan was a obstructed. It's a happy coincidence that occurs at that point in time, that project is frozen. There is no interest by the new government to focus on issues of architecture and urban design in the City of Havana. That's a good thing because had Sert's plan moved forward, we would not have Old Havana today, because his plan for Old Havana was to essentially keep a couple of the most important civic buildings. Literally a handful of them, and he was going to completely alter the urbanisms, the scale, the dimensions of the blocks, the actual character of the blocks—all of it was going to change because he wanted to make it a city that was friendly for the vehicle and friendly for what he thought were contemporary uses that needed these large footprints in order to be accomplished within that city scape. He was going to alter that urban fabric completely and in doing so, destroy it, which is really what we saw happen in many of the great capitals around the world. Many of the great capitals around the world were destroyed by that modern urbanism, and whereas I'm a great fan of modern architecture, not so much of modern

urbanisms. Because the idea was to change the way that we made cities to make it about the vehicle and how we quickly could get to places and how we could segregate uses that were thought of as not sympathetic to each other and to segregate these uses. What wound up happening of course is that the process made the cities much more car dependent because as we exploded the dimensions of the blocks, as we segregated the uses, everyone now needed the car to get around.

SC: Because land value now could be strategically placed, the banks knew where that was going to happen. If you knew that this neighborhood had a higher density assigned to it, it means that if bought a small two-story building on that area and land-banked it for a while, you had a great asset in 10 years that was worth much more. We saw this phenomenon across the United States and across all great capitals in the world. When you see a city like Havana which is of course a great capital is, is a large metropolitan region. It is not a small village, right?

GS: It was the center of commerce in the Caribbean.

SC: If you look at the writings of some scholars on Cuban history, they have identified Cuba as the seventh wealthiest nation per capita between the two world wars. That's a kind of striking fact. When you go there and you see the city, you know that that it was a reality. You can see it. The city is talking to you about that history. Whereas in Rome, it's city that you have to excavate to find its different layers because they're underneath each other. In the case of Havana, all of those layers of its 500 years of history are sitting adjacent to each other. You can go from the old historic colonial district out to El Vedado, for example, and see in between its different layers of history.

Then if you go beyond El Vedado, neighborhoods outside of it, you can go from seeing everything from the compact kind of city that the historic center represents, which is all about mixed uses, all about public spaces to the hinterlands where, you know, the country club region that is all about this broad acre Frank Lloyd Wright vision of the suburban neighborhood. That is a completely different scale and way of thinking about the city, and in fact, today, this is what's interesting about Havana. Havana was a wonderful opportunity for me to see what could happen to a great capital in the future when resources are limited. They of course have had shortages of all types. Anyone who's traveled to Havana has lived probably through one of the *apagones* [blackouts] as they're referred to, and other kind of things that are lacking there. You can see buildings for example, that are completely empty. I remember asking colleagues, "Why is that building empty while that one over there has all this informal intervention where people are inserting these little, mezzanines if you will, into these dwellings. How does that work? Why? And, logically they look at you and they say, "Well, because if you live up on the 10th floor if that building, how do you get up there every day?" There's usually, or often, no elevator. Many of those building windows have been sealed shut so you can't open them, so it's hot inside. No one wants to live in those buildings, and they haven't been intervened upon to make them habitable, or at least more habitable.

GS: What era are those buildings from?

SC: From the 1950s. The skyscrapers, if you can call them skyscrapers, the slab buildings that arise in Havana, are from after the Second World War 1947. There was a change in the way that land could be used. The idea of kind of condominiums appears, and so that's when you start getting

these taller buildings in the city. As those buildings over time became less like some of their taller, thin buildings—because there's some really interesting thin slab buildings in El Vedado. For example, they've got a very small footprint. All of the units have cross ventilation, they have natural daylighting, and, so with the exception of the elevator not being in place, those are actually towers that you can see people living in today because they're actually quite comfortable. It was just a wonderful opportunity to think about how the city had evolved over time, and where we could take some of the lessons learned from it, and how we could apply those to other places. That got me to thinking about our own resiliency here in South Florida and thinking about, "Well, what happens if water starts to sort of percolate up through the very poorest substrate? How does that impact our neighborhoods? What if we had less energy accessible to us? What happens when a lot of our suburban neighborhoods have residents who can't afford to put gasoline in their tank to drive across to downtown or one of the other neighborhoods that do have those types of uses."

GS: Aren't we sitting here in the middle of what could be a potential lagoon?

SC: We happened to be sitting on a ridge locally right now, and that's a good thing. I get asked a very interesting question frequently, which is, "So, so how long do I have? When should I sell my property?" We know that we've bought into a certain amount of sea level rise because of the amount of carbon emissions that we've already put into the atmosphere so, there's no way for us to vacuum clean those out of the atmosphere. Not yet. There are a lot of people thinking about different ways to do this, but they all seem to have more problems to them than are worth the risk of taking them at this time. We know we bought into a certain amount of climate change, which

means that we know we've built in a certain amount of a heat or extreme temperatures as well as sea level rise. These are just some just some of our realities moving forward. What we should be focused on is thinking about how we can make significant choices like learning about things such as, “What does FEMA say about this? What are adaptation action areas? What is a firm map? What is the national flood insurance program? Why should I care about that, and what should I be doing about that? What are some of the actions that I can be taking in the short term to dry proofed my house versus actions that I can be taking in the long-term to adapt my house or my property?”

In some cases where you're in very low-lying areas, should I be thinking about retreat? That’s just the reality of the place so, what we need to be thinking about are some of our larger hubs such as our tourism hub, Miami Beach, which is sitting out on this barrier island. It attracts a very large percent of the tourists that come to south Florida. They're coming here specifically for what they find in Miami beach. Those beaches, those offerings that the city has in terms of restaurants and nightlife and the kind of general urbanism that it offers. What happens if that engine turned off? What impact economically would that have on the rest of the city? It would be devastating. Brickell, for example, as we saw recently during Irma, had some water intrusion. What happens when that becomes more permanent over time? And, that's our financial district! What happens when your financial district is now not working? What happens when your transit hub, the airport is vulnerable? What happens when some of your roads are vulnerable? Flagler was a very intelligent man and he had his surveyors identify the highest ridge along the State of Florida, and that's exactly where he built his railroad. Those communities that are sitting along that railroad are like pearls on a necklace. Those pearls are the communities that are sitting high and dry, but to think only about whether my house is sitting in that pearl on that ridge is not to understand the larger picture. If these other engines turn off on you, it doesn't really matter where you are. Now,

folks asked me, “Will Miami be here in 100 years?” I don't know that any of us know the answer to that. Some of the ice sheets that are melting in some of the regions in the polar regions are of course going to play a real role in how soon some of that happens. But we do know that we have the capacity to adapt over time—cities have done that. Historically, cities can continue to do that. People have learned how to live in areas in different ways according to their desire to stay in those areas.

GS: Like Amsterdam.

SC: Exactly, Amsterdam is a great example, and although we cannot take some of those lessons directly from Amsterdam because they have a different sub soil, they are a great population for us to look at and learn from because these are people that have learned how to adapt to living in an area that otherwise doesn't really make a lot of sense. Will we be living in the same way as we do today? Probably not. Will the city have the same dimensions that it has today? Probably not. Are we going to look and live differently? Yes. My colleague, Hal Wanless[13] and I hosted an event with the US Department of HUD [Housing and Urban Development] and AARP [Association of American Retired Persons] that focused on resiliency for communities. He said, “Eventually we're really going to look quite different. We may become the new Florida Keys. and that is a way of thinking about the future of South Florida.

13 Dr. Harold R. Wanless I Professon and Chair of the Department of Geological Sciences at University of Miami. https://segd.org/harold-wanless

GS: Am I going to have waterfront property?

SC: I ask myself that question as well! Truthfully, it's not my job to think about what's happening 100 years out because between now and then science and technological innovations could yield creations or solutions that could help us mitigate some of the climate stressors, and therefore, change our destiny. But I can't see that. What I can see is what's happening within the next 30 years. I can see that because it's within the range of a mortgage cycle. I can tell a property owner, if you're buying a property today, think about where you want to be in 30 years when that mortgage is done and now you hold full title to a property. You don't want it to be underwater. Think about what you do today as it relates to your immediate future within the next 30 years or so. A lot of the work that we've done with the Southeast Florida Regional Climate Change Compact, has been focused on trying to create initiatives that build greater robustness for our communities within the next 30, 40 years. Knowing full well that according to the Intergovernmental Panel on Climate Change (IPCC),[14] the expectation is that we'll be somewhere within a four-foot range of sea level rise—Hal might say that that's very optimistic and that there's more water to be had—and he might be very right about that because he's been right about a lot of things on this topic. I think that in the meantime, what we can do is try to educate citizens and collaborate with our local leaders and regional leaders because right now our state leaders aren't really on the same page as the rest of us; that we put into place initiatives that can build greater robustness for our community both in the short term and in the long-term. That's why this work that we're doing with the NSF project is I think critical. It's an important project or a contribution towards those efforts. I'm very pleased

14 The Intergovernmental Panel on Climate Change is the United Nations body for assessing the science related to climate change. https://ipcc.ch

to also be recently named to the Executive Board of the Florida Climate Institute (FCI).[15] That's an incredible group of faculty and experts from across the State of Florida. I'm the only architect/urban designer on it right now. It's primarily scientists. There's an attorney, a couple of people that focus on social issues, and a couple people that focus on economic issues. As a collective, it is a wonderful opportunity for cross-pollination, to learn from each other and to collaborate directly with the Compact on these issues, providing them with data that can be useful to them as they start to make decisions as a region. It has been a wonderful process, and I have to thank this institution, the University of Miami, for providing me a platform in which to do all that work.

GS: Wow. I had no idea you'd done this much, and you had been involved at this level. I should talk to you more often. Well I'm sure I'm going to have a million more questions.

GS: This is part of a larger story, I mean, there are so many narratives in here that I'm thinking, okay, I did not plan on making this a PhD dissertation, (laughter) but I might have to think about it because something will come out and many things will come out of, but as long as you document and record the people who are here now...

15 The Florida Climate Institute is a multi-disciplinary network of national and international research and public organizations, scientists, and individuals concerned with achieving a better understanding of climate variability and change. https://floridaclimateinstitute.org

SC: You should have to reach out to Tom Spain. You know, that he's the reason that we have funding for the Rome Program because of his golf tournament. That's really his initiative, and he really should be interviewed not just for that, for so many other things. He was so critical.

END OF INTERVIEW

Transcribed by Gilda Santana

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