Artists Documentation Program

Video Interview Transcript

ÁNGEL SANTIAGO ON DANIEL LIND-RAMOS

NOVEMBER 25, 2020

Interviewed by:

Irene Esteves-Amador, Ph.D, Artists Documentation Program Fellow, The Menil Collection

Video: Pablo Impelluso | Total Run Time: 01:22:22

Location: Museo de Arte de Puerto Rico

This interview is part of the Artists Documentation Program, a collaboration of the Menil Collection and the Whitney Museum of American Art.

The Artists Documentation Program has been generously supported by The Andrew W. Mellon Foundation.

About the Artists Documentation Program

Throughout the twentieth and twenty-first centuries, artists have experimented with an unprecedented range of new materials and technologies. The conceptual concerns underlying much of contemporary art render its conservation more complex than simply arresting physical change. As such, the artist's voice is essential to future conservation and presentation of his or her work.

In 1990, The Andrew W. Mellon Foundation awarded a grant to the Menil Collection for Carol Mancusi-Ungaro, then Chief Conservator, to establish the Artists Documentation Program (ADP). Since that time, the ADP has recorded artists speaking candidly with conservators in front of their works. These engaging and informative interviews capture artists' attitudes toward the aging of their art and those aspects of its preservation that are of paramount importance to them.

The ADP has recorded interviews with such important artists as Frank Stella, Jasper Johns, and Cy Twombly. Originally designed for use by conservators and scholars at the Menil, the ADP has begun to appeal to a broader audience outside the Menil, and the collection has grown to include interviews from two partner institutions: the Whitney Museum of American Art and the Center for the Technical Study of Modern Art, Harvard Art Museums. In 2009, The Andrew W. Mellon Foundation awarded a grant to the Menil Collection to establish the ADP Archive, formalizing the multi-institutional partnership and making ADP interviews more widely available to researchers.

Acceptable Use

All uses of this transcript are covered by a legal agreement between the Menil Collection and John Chamberlain.

This interview is made available for non-commercial research purposes only and may not be duplicated or distributed without express written permission from:

ADP Archive
Menil Archives, The Menil Collection
1511 Branard Street
Houston, TX 77006
adparchive@menil.org

[Speakers (in order of appearance): Irene Esteves-Amador, Ph.D, Artists Documentation Program Fellow, The Menil Collection; Ángel Santiago, Conservator of Sculpture and Three-Dimensional Objects]

[BEGIN RECORDING]

[00:01:10]

IE-A: Good morning

Ángel Santiago: Good morning

IE-A: Good morning, Mr. Ángel Santiago. Thank you for being with us today. We are here at the Puerto Rico Art Museum in San Juan on the occasion of a series of interviews that we are conducting as part of the Artist Documentation Program of the Menil Collection in Houston and the Whitney Museum in New York. Specifically, we will document the work of Puerto Rican artist Daniel Lind-Ramos. In fact, we are here today with one of his pieces, an assemblage titled 1797. We decided to begin this documentation process by talking to an authority on the subject in this country and I dare say not only in Puerto Rico, but in the entire Caribbean region.

[00:02:10]

IE-A: Ángel Santiago is a restorer of three-dimensional objects. He is just retiring from the Ponce Art Museum, which is too important a place regarding conservation and restoration in Puerto Rico and the Caribbean since it was there that this practice formally originated in the Conservation Laboratory named after the great pioneer,

Ángel Santiago: Anton J. Konrad.

IE-A: Anton Konrad from Germany

Ángel Santiago: Anton J. Konrad.

IE-A: Who arrived in Puerto Rico to take on that enterprise in 1979.

Ángel Santiago: That's correct.

IE-A: We are going to be talking about details, of a conservationist nature, when we refer to this piece. It is important to be in the presence of the objects to be able to make comments, and, also, that they stimulate our thinking. I am very

grateful to Mr. Santiago for coming, for giving us his valuable time. He comes from Ponce, which is not close and thanks to the institution, the Puerto Rico Art Museum, for receiving us today. Archie, may I call you Archie? Because...

Ángel Santiago: Yes, yes.

IE-A: We colloquially call him that.

Ángel Santiago: I'd be offended if you didn't.

IE-A: Very few know that his name is Angel. Alluding, precisely, to the figure of Anton Konrad whom you knew and with whom you had the good fortune to enter this field to which you have dedicated a large part of your life. Because you just told me that you worked at the Ponce Art Museum as a restorer of three-dimensional objects for more than 30 years.

Ángel Santiago: That's correct.

IE-A: You were definitely privileged to have been apprenticed to Anton Konrad. I even dare to say that you are possibly the only restorer of three-dimensional objects that this island has ever had.

Ángel Santiago: At least here in Puerto Rico, at the moment. There are other objects' conservators but they are based in New York or Canada. They are not located in Puerto Rico though they visit occasionally and help us in some projects, but the one here is almost always me.

IE-A: Well, I think it goes without saying that we have a great need in Puerto Rico for more conservation specialists, in the different areas of conservation. But I wanted to appeal a little bit to your memory since you are at this juncture of life, at this transitional process, right, where you are moving on to other projects, which I am very excited about, right. In fact, is thanks to this new stage I have you here with me so relaxed, right.

Ángel Santiago: That's right.

IE-A: And so, I wanted you to rescue that experience of your beginnings at the Museo de Arte de Ponce, of who Anton Konrad was, of the conservationist philosophy that he advocated.

Ángel Santiago: It is curious because Konrad, as you mentioned earlier, arrives in Puerto Rico in 1979, with a European-North American vision of conservation. And he tries to instill in Don Luis A. Ferré that whole mentality of conservation, not

restoration. Because unfortunately when we talk about restoration we are talking about adding, about replacing something that is missing. Whereas conservation is broader, you have to foresee any damage to the work before it can happen. And this includes weather conditions, insects, variations in temperature, variations in humidity, and lighting variations. All these factors have to be foreseen when one is working with a work of art before physically intervening with it. And Anton Konrad teaches us this very well. I did it for three and a half years under the supervision of Edeltraud Bronold because Konrad had already dedicated himself to private practice. But, in the last year that we were taking the internship courses, he allowed us to go to his private workshop to help him with artworks he had by Campeche, Oller, and other Puerto Rican artists. There we had a more direct intervention with the works. We were allowed to do things that we were not allowed to do in the museum as students. There we were able to. After that we went on to do an internship abroad.

Ángel Santiago: Rocky Mountain Regional Conservation accepted us for three and a half months to consolidate the knowledge we had acquired with both Konrad and Edeltraud Bronold. It is interesting because they were a little reluctant to receive Puerto Rican students in Denver, Colorado, because they did not know what we knew or did not know. And the portfolios we sent were quite impressive and that helped us a lot in the relationship and also in getting people to help us.

When we had problems in Puerto Rico, we communicated with them and they -because we were neophytes at that time, we were recent graduates from a conservation course- gave us the responsibility of the Oller and Campeche works.

IE-A: But I imagine that in the process they also learned a great deal.

Ángel Santiago: Oh, yes.

IE-A: I am referring to colleagues from the United States. Because the great unknown was how to adapt the knowledge acquired both in the United States and in Europe to the conditions of the tropics. And, in fact, that is what we are going to talk a lot about today because Daniel Lind's pieces include many of these tropical materials

Ángel Santiago: That was an interesting detail, because during those studies, I got to work at the Museum of Natural History with Carl Paterson, who was my director at that time there at Rocky Mountain. And I got to work with three sarcophagi and two mummies. And then, what happens, the materials they were using were more European-type materials - a lot of rabbit glue, a lot of gelatin – organic materials

that, for Denver's climate, which is basically dry compared to Puerto Rico, were suitable.

But I always had to consult him, I'd say, "I'm going to Puerto Rico, where humidity is high, and I'll have problems with the gel and the rabbit skin glue, because over there the humidity will deteriorate them faster. Fungus will grow." So we started to look for alternatives. I learned to use those materials, but when I come to Puerto Rico, I have to modify all that and use materials that are less... That do not sustain those physicochemical, biological damages in the glues, or binders. It's interesting because that's what leads us, and Konrad always kept in touch with us. He'd visit us every time he came to Puerto Rico and he'd always say, "Use your noodle between the ears." That we should use our brains, and not take things for granted, that we should always analyze things well before proceeding with the work, because the artist's intention was the most important thing. It wasn't how the work looked at the end, but what that intention was. It wasn't fixing a crooked eye, it wasn't fixing a twisted mouth. It was simply to maintain the artist's intention. And I think that helped us, both Lidia and me, to be able to do the work we have been doing.

IE-A: Well, it's good to hear it because it's the goal of this program to rescue the artist's voice, to respect that intention, and to understand it too.

Ángel Santiago: Definitely.

IE-A: And in this process, as you said, prevent damages that we ourselves, in practice... can provoke

Ángel Santiago: that we cause.

IE-A: And I imagine that Konrad suffered his shock, right, when he arrived in Puerto Rico and had to adapt his practice, not only his theoretical knowledge, but a yearslong practice to different and challenging climate conditions. Because I went through that.

Ángel Santiago: Yes.

IE-A: And many colleagues who have studied in Europe or the United States face this difficulty when we return because we expect to use our books and practice, using what we learned and there is a dislocation between what we learned and what we can do. So I also believe that Konrad's practice, the fact that he left the museum and started a private practice, must have helped him a lot in the process of learning to be a conservator in this tropical context.

Ángel Santiago: He definitely came with a mindset. He had visited the museum before and came mentally prepared for the challenge. What he first noticed was that the museum kept the second floor doors open without air conditioning, The air conditioning was for visitors and was turned off at six o'clock in the afternoon and turned on in the morning. Then he realized there were many climate problems inside the museum that were affecting the artworks. His challenge was to prove to Don Luis that this was happening.

IE-A: Without a doubt, Konrad, his teachings, far exceeded his immediate circle, indeed, of the workshop and his students. He even had to teach the institution's founder director a few things. And, speaking of this, we realize that, as in everything, really, institutions, individuals, disciplines, go through changes over time. And you were in that museum as a conservator of three-dimensional objects for many years. And I also wanted to ask you to try to describe a bit, because I know that the Ponce Museum of Art, which originally started with a fairly traditional collection of works -especially that collection of the Pre-Raphaelites; and there are many baroque pieces. In terms of Puerto Rican works, from the 19th century, from the masters of the beginning of the 20th, but, as an institution that adapts as time goes by, they start, at a given time, to acquire a more contemporary artistic production, which means that objects come in that present new challenges, because they are made with atypical materials, if we contrast these with those that made up the museum's collection. And this meant that you, conservators in charge of the preservation of this heritage, had to adapt, not only to the museum's new practices when it came to acquiring this more experimental contemporary artistic heritage, but to adapt to the practices of the artists. And so I wanted to ask you to tell us briefly about how that evolution has taken place.

Ángel Santiago: It was gradual but firm in the sense that we kept in touch through the AIC - the American Institute of Conservation - with everything that was happening at the time, we went to the conventions, and there we shared with other conservators from other parts of the world, where they showed us and explained the problems they had that were or weren't applicable to Puerto Rico because of the climate, basically. Then, since it was not a large acquisition of contemporary work, we could gradually adapt to it and talk to the artists themselves. They were alive, we could talk to them about their intention, the best way to preserve their piece. If intervention was needed, what could or couldn't be done. And that was a great help, the direct communication with the artist.

IE-A: Definitely the artists' experimentation challenges the conservators-restorers to go beyond frontiers. And I know about a practice at the Ponce Museum of Art led by your colleague ,Lidia Aravena, who is the chief conservator there. Her specialty is...

Ángel Santiago: Painting.

IE-A: the area of painting. And I had the opportunity to talk to Lidia and she told me that in the face of these experimental pieces that were becoming part of the collection, and her having a conservative training as a conservator, her training...

Ángel Santiago: of European tradition

IE-A: Exactly, traditional in the European way and also coming from those practices in the United States that you mentioned. It occurred to her to ask the artists when they brought a new piece to the museum, whose morphology or materials, techniques she saw would be a challenge, she took the initiative to ask the artists to give her a kind of sampler, a small box, the one they wanted -because this process was not standardized at all- and to put in it any additional pieces they had left over. Any material information that would help her either to replace some parts of these objects or to use them to better understand the work and know how to intervene, if necessary. And, in fact, I find it interesting because she baptized this practice of hers with the name of "artists' kits." And I saw the piece of furniture where she puts these little boxes. I wanted to ask you about this because your practice in the museum seems very forward thinking. I also wanted to know if you, as a restorer of three-dimensional objects, have ever benefited from your colleague's initiative, these "artists' kits"? Did you use them in any way?

Ángel Santiago: Yes, definitely. It's interesting because we don't have a lot of those kits, because not all artists are that disciplined. But we did have the case of a painting by -oh, my God, now the name escapes me. He is an artist from the Santurce area who uses complex techniques because he complicates his life a little bit as an artist and he likes to do historical mixtures and such. And he did a painting where he included half spheres.

IE-A: That is José Jorge Román.

Ángel Santiago: That is correct. I did not want to go into that...

IE-A: I thought so.

Ángel Santiago: ... I was going to leave it to you.

IE-A: I thought so. I know him.

Ángel Santiago: What's interesting is that we had a mishap with one of the pieces and José Jorge was called. And Lidia says, "look, we need you to come and see your piece because this and that happened to it, and we need to know why, what did you use." Unfortunately, the piece -I am talking about many years ago - the museum did not have a complete condition control and we had a mishap that a mouse came in. A plague, as they say in museums. And this mouse gave himself to the task of eating away one of the little spheres, or several, of which the piece was composed.

IE-A: They are synthetic, what is the material?

Ángel Santiago: No, that's what...

IE-A: That's what they look like.

Ángel Santiago: ... what we thought. That is where the kit comes from. Because we thought they were rubber balls or modified golf balls or whatever. But when we called him, we said, "Look, Jorge, we need to know what you used." He used honey, he used a lot of materials that were attractive.

IE-A: A dessert.

Ángel Santiago: A dessert for mice. So he makes that kit for us and brings us several little balls. Small ones, big ones, all that he used. He brings us the colors and tells us which ones he had. It was my turn to replace them -because Lidia said that it was not a painting, that it was an object- it had the spheres.

IE-A: Of course, she was avoiding it.

Ángel Santiago: And then we worked on it, the pieces are replaced and it seems that nothing ever happened. We keep the ones the little mice worked on, and a couple of additional pieces. For the Lichtenstein sculpture, we also asked for a kit and we have a complete kit of the colors and materials used in the "Brushstrokes in Flight" piece.

IE-A: How wonderful, I would like that project to, precisely, become a standardized project.

Ángel Santiago: Yes, and we always ask the artists to, at least, document the materials, to write them down, not just use them at random. To try to make...

IE-A: A kind of logbook, right?

Ángel Santiago: ... a logbook of information. and if possible add it to the back of the piece. Not directly on the work, but on a stamp, or...

IE-A: Added support.

Ángel Santiago: something that is in the frame so we can know that this is this, that is that, to avoid us conservators a longer process of investigation. A very important thing, unlike a restorer, the conservator has to study the piece thoroughly. It has to do with the materials. If you don't know the material, you have to do research. Call the artist if he/she is alive, ask them what they used. If they don't remember, ask for references of other works for the research. Both Lidia and I do not touch a work until we are 100% sure how it was made and what the artist's intention was. Pigment studies are done if required. Wood studies are done if necessary. It's to avoid any problems, because not all woods behave the same in the tropics, not all pigments behave the same in the tropics. And many of these materials come from the North, as we say, or Europe. And so those materials are not designed for the Puerto Rican sun or the Puerto Rican climate or the high humidity. And you have to be very sure before touching the piece...

IE-A: Yes, because the remedy could be worse...

Ángel Santiago: ... that there won't be a change... It may be worse.

IE-A: ... than the disease, as our saying goes.

Ángel Santiago: Definitely.

IE-A: In fact, that's the driving force behind this methodology of conservation through documentation. To go to the artist and obtain from the artist also the data on materials, processes, techniques. In fact, at the beginning of the 20th century, when this interest began, precisely on the part of Germans,...

Ángel Santiago: Exactly.

IE-A: ...in conservation, of going to the artist to ask, "What did you use? What is there? Why did you use it?" This documentation was basically limited to materials and techniques.

Ángel Santiago: Yes.

IE-A: Speaking of materials, I would like to move on to that specific topic and progressively talk about the piece that accompanies us. Because I understand that you have had experience as a conservator of three-dimensional objects with

these materials that are typical of the tropics, organic, natural materials, as what we are seeing here, right?

Ángel Santiago: Coconuts

IE-A: There's coconuts. Here we have…there are palm stalks. I wanted to ask you about that experience that you have had with organic materials and also materials of tropical origin, in this environment.

Ángel Santiago: As you mentioned earlier, my expertise was basically in European artworks, Spanish, Italian, polychrome sculpture and so on. It is when I start doing research on Puerto Rican woods at the Smithsonian that I realize that there are a variety of additional problems and materials being used by our artists. We're talking about the decade of the 90's already. And that is why every time a piece arrives and a new material, I stop any restoration process just to do research on the material. Because I have to know the physiochemical/biological properties of that material in the climate of Puerto Rico, not in the climate where it was produced, but in the climate where it arrives. It is the museum's job to try to keep the humidity and temperature environment as constant as possible within the facilities so that these objects do not change. But what happens? You have an object that comes from the center of the island of Puerto Rico, where the average annual humidity is 80%, and you move it to Ponce, where the average annual humidity can be 55-60%. We are talking about a 20% difference. That is a dimensional change in the piece because as it loses moisture, it shrinks. As it shrinks, if it is wood, if it is this organic material, it is going to lose much more volume. And then if it has a layer of ground or a layer of paint that does not have the proper adhesion to the support - which is what changes - we are going to end up with a flaking. The piece will lose that layer of the artist's intention, that it was painted. And that is why we see so many sculptures that were polychromed and now have no polychrome. Because the paint layer and the ground fell off. That's what I have to deal with. I had cases, for example, with carnival masks from Loíza, which are made of coconut. Ponce carnival masks, which are mistakenly called papier-mâché, when they are made of "carton Piedra."

Ángel Santiago: Because the process is not pulped paper, but strips of paper glued one on top of the other, creating a more solid structure that becomes a cardboard. Then, that requires the artist to use non-commercial adhesives. Generally what they used was wheat flour paste. In many of them, that wheat flour as it was mixed with water and cooked a little, the eggs of the borer beetles remained inside. With the appropriate conditions the beetles came out and began leaving what looks like talcum powder from the inside of the mask, which we call them in good Puerto Rican "gorgojos" (weevils). That's a deterioration that had to be

controlled. Then it was done by fumigation; but fumigation leaves an added problem that is not the artist's intention and can be both harmful to the piece because of the chemicals contained or because someone tries on the mask and comes in contact with the chemical and that is an additional problem.

Ángel Santiago: So there are other methods to avoid the spread of insects. It can be by oxygen eradication, by creating a totally oxygen-free environment. Then you eliminate the eggs, larvae, pupae and adult insects without contaminating or adding contaminants to the piece. But then you have to seal all those little holes where the insects enter and exit, you have to reinforce the piece inside so it doesn't become attractive again to another insect infection. Because chemicals do prevent infection, but they cause additional problems that we do not want. So the option is oxygen eradication and that is done in a chamber, that is removed with a chemical, not a chemical, an oxide that is put into - it is basically like iron filings – placed inside the environment. And then the iron filings start to react with the oxygen and starts to rust, it becomes rusty. What that rust does is to absorb the oxygen in the environment until it reaches an average of .03% oxygen. And it has to be left for at least an average of 21 days to a month in that oxygen eradication chamber. And that guarantees that the piece will not contaminate or be contaminated again. As long as the parameters of cleanliness, fumigation of the museum or institution and insect-free storage are maintained, supposedly it will not be contaminated again. But, there are many problems. For example, the coconut, as such, can have another type of beetle, it can be attacked by the termites or what we call moth. We erroneously call it moth because moth is that little nocturnal butterfly that we have in the houses flying around the lights. It's the "moth", in English. Well, that's the real termite. The other is the dry wood termite, the ones that do not make a colony and move from house to house doing damage as long as there is humidity. And we have "comején," that everyone knows, which can be arboreal or subterranean. It is another type of termite. In Puerto Rico there are 17 families, plus relatives, of termites here on the island. And they are not bad insects, we need them urgently because they are the recyclers of dead matter. And the artists, and the architects, and those of us who build with wood, we persist in using dead matter. And that's what we have here in all these materials, dead matter. And nature has its individuals, which are all the insects that will process and recycle that to prevent us from being up to here of soil or decomposed matter. And that is part of that process. Yes, I've repaired that kind of mask.

IE-A: How have you worked the coconut?

Ángel Santiago: I've consolidated it. On the inside, which can't be seen, I've used varnish solution, a methacrylate, the famous Acryloid B-72. It's a synthetic material and very stable. This material doesn't degenerate with time. It doesn't oxidize

like varnishes or natural resins. It's easy to remove if needed as in many occasions, and can be diluted in different solvents. What I generally use for this type of materials is alcohol. Alcohol is a distillate and compatible with cellulose and with organic materials that wood is composed of. It can be combined with toluene, xylene, or acetone. The properties change depending on the solvent that is used. In some cases acetone is a good adhesive for ceramic materials. Its only problem is that it is a thermoplastic material, and if exposed to a temperature higher than normal it tends to come off.

IE-A: But you said you use Acryloid on the reverse side of the mask. These aren't masks…

Ángel Santiago: No, no.

IE-A: …but they are coconut halves.

Ángel Santiago: Mhh hmm.

IE-A: We can see that according to its placement…

Ángel Santiago: They're seen.

IE-A: …we can sometimes see the inside or the back, the sides. Would you intervene in this case?

Ángel Santiago: I can, because…

IE-A: …the parts not painted with Acryloid?

Ángel Santiago: Yes. I can, because using alcohol I can control the shine of the varnish. Then you can't see it's impregnated with chemicals or varnish. The fibers will look pretty natural.

IE-A: In face, here we see what you mentioned before…

Ángel Santiago: Mhh hmm.

IE-A: …the painted layer is coming off. This is acrylic paint.

Ángel Santiago: That's the coconut's loss of volume.

IE-A: Exactly. It's flaked.

Ángel Santiago: Mhh hmm.

IE-A: There are lacunae. Those don't seem varnished…

Ángel Santiago: Not those, are not…

IE-A: …just painted.

Ángel Santiago: Mhh hmm.

IE-A: A restorer spoke to me about this piece with concern, knowing that it needs consolidating so the natural support which is the coconut doesn't disintegrate. It also serves as the surface for the painting, the other layer she'd like to consolidate. She's afraid of distorting the appearance…

Ángel Santiago: It depends on the concentration…

IE-A: …of those elements.

Ángel Santiago: …that's used in the varnish solution. That's the beautiful property that Acryloid has, you can water it down and have it penetrate little by little. At the end, remove some shine from the surface so it looks as natural as possible. It can also be used on cloth as well as other materials, like wood. I use it on metal too, instead of varnish. But in that case I add another chemical, BTA, *benzotriazole*, a rust inhibitor through ultraviolet light. An ultraviolet light rust inhibitor that also protects the metal. Looking at these metals they are totally shiny, with the same appearance of the varnish used…

IE-A: Yes, they're varnished.

Ángel Santiago: Do you know what varnish was used?

IE-A: I understand Daniel used oil-based polyethylene.

Ángel Santiago: Ah, oil based polyurethane.

IE-A: Sorry, polyurethane …

Ángel Santiago: That one has a little problem. It's very difficult to reverse…

IE-A: Remove.

Ángel Santiago: …the process. It can only be reversed in some cases. On metal it's by applying heat and scaling it, taking it off in flakes. Otherwise, it's going to rust, it will darken. It rusts because of the oil and darkens more than is natural. It doesn't affect metals. Maybe in the case of wood or colored pieces that have been varnished with this, there'll be a slight problem. But if the artist feels it doesn't affect his intention, I don't have…

IE-A: Yes, the transformation of the material…

Ángel Santiago: Exactly, because…

IE-A: We'd have to make him conscious about it.

Ángel Santiago: …This is important because in the past artists varnished their work with dammar, with natural resins, copal, mastic, and others. They tended to rust and darken, but the artists knew that.

IE-A: And they wanted it to.

Ángel Santiago: And they wanted that look. I once had an artwork…

IE-A: Yes, the patina.

Ángel Santiago: …with Lidia. The owner wanted us to clean it. Thanks to our research, we realized the artist oxidized the varnish beforehand in order to give it…

IE-A: Accelerated the process.

Ángel Santiago: …that ageing effect. If we had removed the varnish we would have ruined the artist's intention. Trying to explain that to the collector, and have him understand, was difficult. He wanted the artwork to be shiny. But he understood.

IE-A: It's necessary to document the artist's voice so there's no doubt.

Ángel Santiago: That's why it's important…

IE-A: …of what the artist wanted.

Ángel Santiago: …that the conservators research before handling a…

IE-A: Of course.

Ángel Santiago: …work of art.

IE-A: Returning to the varnish, Daniel Lind evidently doesn't seem to be bothered by it…

Ángel Santiago: Yes, so I see.

IE-A: …Because we see there is varnish on the metal pieces,..

Ángel Santiago: Exactly.

IE-A: …on some of them.

Ángel Santiago: Thanks.

IE-A: We notice there's varnish on the stalks. Yet, we said that the coconuts didn't have…

Ángel Santiago: No.

IE-A: …varnish. Yet, it's one of the most polychromatic elements of the piece, it has more paint. We see that the paint is flaking and transforming its appearance…

Ángel Santiago: Exactly.

IE-A: …And if we asked Daniel if he'd consider varnishing the coconuts, would you recommend it, for example?

Ángel Santiago: I'd have to talk with him.

IE-A: …Consolidation?

Ángel Santiago: …the problem is…As a conservator I can't limit the artist in what he does and how. My responsibility is to investigate and look for answers, to preserve the piece without changing his intention. Sometime ago, I mentioned that in Puerto Rico, maybe internationally, in Europe or the US, there are applied sciences in the arts. The artist works a lot on impulse, reacting to what he has, or acquires, how to place it, the effect caused. He's not thinking of the mechanics, chemistry, physics, how they interact. They often learn after they hit a wall several times. Then say, "I can't use this because this happens." That happened to ceramists when they began to mix metals with the ceramics because they wanted to melt them together in the kiln. They found that ceramic pieces shattered and they couldn't explain why. When heated, ceramic reduces in

volume while metals expand. If they left no space in between for the metal to expand, it broke. That's the importance of trying to find a way for artists, even before becoming masters, to learn how to apply science to art. Then it becomes a reflection of their creation. But, as we say, it's very difficult to teach an old dog new tricks.

IE-A: [laughs] Exactly.

Ángel Santiago: After much experimentation the artist will get there. I can't tell him that he's doing it wrong.

IE-A: No, not at all.

Ángel Santiago: That's how they create. I, or any conservator has to find the way of preserving this for future generations without changing the artist's intention. That's where experimentation comes in. It involves conservation scientists. They don't work with the piece per se, they work with the materials that make up the piece, to look for solutions for the future and for the artists. You've had an interesting experience with Myrna Báez, may she rest in peace. She would bring her artworks to the museum and it reached a point when she said, "I can't bring my paintings here anymore. You strip them naked and find things that I don't want people to know. You even find the mistakes I made." That's my job, Lidia's job, the job of the conservator.

[00:40:52]

IE-A: But we're their allies and that's also part of the artist's evolution…

Ángel Santiago: Of course.

IE-A: …throughout history. Before, artists were schooled in pictorial…

Ángel Santiago: Exactly.

IE-A: …treatises and knew all about…

Ángel Santiago: The materials.

IE-A: …the science behind their work and the materials. But, with time it transforms and it's completely valid and legitimate.

Ángel Santiago: Yes.

IE-A: But then we come in, the conservators-restorers. Perhaps we're the ones who are most dedicated to that part of artistic creation, we are also acting as allies of the artist, we accompany them a little bit.

Ángel Santiago: Mhh hmm.

IE-A: We interact with them. And I was asking you, because we're aware that he's not closed to the varnish. In this process of analyzing his work, in this moment in his life, I know he's been known to substitute damaged elements. For example, this base is not the original because it got termites and he replaced it. He's been known to transform his artworks to procure their longevity. You were talking about consolidating these coconuts…

Ángel Santiago: Yes. There are several ways.

IE-A: ...that way. Would that consolidation be sufficient?

Ángel Santiago: It would take much longer to replace the original pieces with substitutes. That's another problem. Where do I find substitutes? I wouldn't want to use an incorrect substitute that would change the history of the piece. That I use, instead of a machete made of sheet metal, one of stainless steel because I don't want it to oxidize. Was that the artist's intention? So I have to find out how to consolidate that metal so it doesn't oxidize more than it already has. The mistake we make when we consolidate metal is that we don't dry it. Metal has to dry, moisture removed. People think, "It's metal, solid, nothing happens." No. Why aren't cars painted when it's raining? Because metal absorbs humidity and when it's painted rust cankers form. It tries to escape but the paint stops it and the sheet metal is damaged. That happens with these metals. If they're not dry and are placed where humidity varies, then it tries to come out, it hits the barrier of varnish and the oxidation continues.

IE-A: Don't even talk about organic material.

Ángel Santiago: And when it's organic material and the material…

IE-A: Textile…

Ángel Santiago: …is in contact…

IE-A: …wood, you have to let it dry.

Ángel Santiago: Exactly. And if metal comes in contact with organic material…

IE-A: Which is what's happening to the stalks here.

Ángel Santiago: …there's going to be moments when…

IE-A: The nails are corroded.

Ángel Santiago: The nails begin to oxidize and in this oxidation process they produce minimal heat, we do not see it, but they are burning the wood. After some time you can take out the nail with no problem. Between the nail and the wood there's coal.

IE-A: I find it very interesting as a neutral observer…

Ángel Santiago: Mhh hmm.

IE-A: …I can see the nails in some of the stalks, that aren't holding the piece to…

Ángel Santiago: Exactly.

IE-A: …the wall. But remain because they were used in other installations of this piece to affix it. The artist has decided, consciously or not, to leave them. It speaks to me of the piece's material history…

Ángel Santiago: Of course.

IE-A: …and that appeals to me. But, as conservator I worry that the corroded metal is penetrating the organic support which is the stalk, deteriorating…

Ángel Santiago: No, it…it already penetrated the…

IE-A: Of course. The nail is a wedge. When it penetrates, it starts to generate these transformations

Ángel Santiago: Yes.

IE-A: ...like the one you mention, right, because of the heat. How would you deal with it?

Ángel Santiago: The way I have done it before -- and I have done it with the "Santos [de palo]" -- is to remove the nail, to consolidate the area damaged by coal, that is adding a fixative until it hardens sufficiently. There are different types of fixatives to harden wood. And the nail, I clean it, remove the rust and seal it with lacquer.

IE-A: And then put

Ángel Santiago: And put the nail back in the same place in the same position. It is important to document the piece during the process and photograph the nail position. Because the nail can be to the right and you put it in to the left, it wasn't what the artist wanted. It's already my interpretation of how that nail was there.

IE-A: Of course.

Ángel Santiago: That's when I need to have a physical document, which is the photo, to make those final adjustments when I finish the conservation of the piece.

IE-A: We were talking about material substitution, etcetera, and how Daniel has already substituted elements of his three-dimensional pieces; his assemblages. And in a conversation I had with him, focusing on the coconut material, which is so recurrent in these works, and not limited to the coconut as we see here. Actually, this is the external part of the coconut....

Ángel Santiago: Exactly.

IE-A: ...but we can also see

Ángel Santiago: the coconut shell

IE-A: Exactly, the coconut shell

IE-A: We see the palm tree stalks

Ángel Santiago: Mhhmmm

IE-A: we see the palm trunk

Ángel Santiago: Ok

IE-A: And he told me that he agrees that these elements should be replaced, if they had to be. However, we were talking about the fact that, if the coconut was unadorned, but we have an intervened coconut that has the artist’s imprint,

Ángel Santiago: Mhh hmm.

IE-A: it is painted. It has…

Ángel Santiago: The accidents it's had.

IE-A: ...a figuration. So it's not as easy as replacing the coconut because it's a pictorial support as well....

Ángel Santiago: Exactly.

IE-A: in the case of this piece. In others and, in fact, I'm going to refer now to Daniel Lind's pieces recently acquired by the Whitney Museum of New York. One is *Centinelas* (2013), which is from a similar year to the one we have here, *1797,* (2012). The other one is later. It is called *Maria-Maria* and as you can imagine, it has to do with the passage of hurricane Maria, among other things. And these pieces include the whole range of coconut palm elements that we just mentioned. Given the possibility of substituting and of Daniel, even stating: "as long as it's a coconut, as long as it's a palm trunk, as long as it's a palm stalk, it can replace the element of the work". However, we know that there are palms and there are palms.

Ángel Santiago: Exactly.

IE-A: True, then, it is not just any coconut...

Ángel Santiago: It is not just any palm.

IE-A: ...any palm. Because there are so many species. But I'm also concerned that, although Daniel thinks it is perfect that the coconut comes from a palm that is where it is, not necessarily here, in Puerto Rico, where these came from, specifically from the Loiza area where he comes from. Well, I am also concerned about the part of, well, not only are there different species of palms, let's say, but these palms are found in different environments. I wanted to ask you to reflect a bit on the precautions, if any-- and insisting in the conservation versus restoration--that a museum like the Whitney that holds two of these assemblages should have and could very well face the scenario of having to replace coconuts, stalks, palm trunks.... What should be the source, regardless of the species. Taking into account that this will be incorporated into a piece of art that will be in museological conditions of a different environment and climate. It's also in a different country, right.

Ángel Santiago: Mhh hmm.

IE-A: What could you say about this?

Ángel Santiago: The problem here is the following. Basically, a palm tree is a palm tree. Coconut is coconut. But the shapes are not the same. The growth is not the same. The moisture amount won't be the same. Location is important because... basically

palms are going to be found in the sub-tropics and tropics of the world. That won't change the basic moisture content of a palm tree because it will be in a fairly humid environment most of the time. There is a problem if the palm comes from the coast or the center because it will have a quantity of minerals that are not the same as the other minerals. If we have a palm from the coast, where it is planted in the sand, where it has absorbed salts, the minerals from the area. Well, it is going to be a little more oxidizing than the palm that is obtained outside the coastal area. It will have totally different properties. If that was the case here, for X reason the palm had some nails and you want to replace it but you want the nails in the same position when you put them in the new palm and it is not in the same condition as the previous one, those nails can rust faster, or maybe nothing happens to them. All this has to be visualized. The diameter, when he used that palm, if it was green when he used and he let it age or dry in the installation or it was already dry and I replace it with one that is green. And when it's dry the diameter is even smaller and it doesn't match aesthetically with the piece. All these are the things that I have to evaluate when I am going to replace a piece. If the artist is alive, "viva la pepa", as we say in Puerto Rico. Because he can do whatever he wants and replace it with whatever he wants; I cannot.

IE-A: Of course.

Ángel Santiago: I have to look as close as possible to that previous part. If it went to the extreme and I had to replace a part, I often prefer to make a mold of the original and replace it with a replica.

IE-A: A synthetic one.

Ángel Santiago: And make it known because it is not my intention to become the artist.

IE-A: That's all very interesting.

Ángel Santiago: It was done with the caryatids, it's been done with lots of works that were in danger of being destroyed by the environment and climatic conditions. What's been done is to replace it, and the original piece is kept under stable conditions in the museum with controlled humidity so that it doesn't continue to deteriorate. If the piece needs to be studied together with the original one, it's there and hasn't been discarded. But that's determined by the artist.

IE-A: It'd be convenient to ask Daniel in view of the possibility.

Ángel Santiago: Exactly, what's his position in replacing one for the other. One that's not original, a synthetic one.

IE-A: And if it had to be coconut, would you subject that coconut to a disinfection process prior to?

Ángel Santiago: Yes, definitely. It would have to be disinfected or treated against any kind of insects or fungus or bacteria that it might pick up.

IE-A: And how do you deal with the saltpeter that sodium can bring?

Ángel Santiago: Look, saltpeter is quite difficult because you have to eliminate it by immersion. And you have...

IE-A: And then the material also swells.

Ángel Santiago: Exactly. It has to be an immersion. If it swells you can replace the water in the immersion process, after several washings, then replace it with a... another synthetic material that replaces the water so that it doesn't lose volume and it's done by indirect drying. It is used in archaeological methods for the rescue of wood that has been submerged for a long time...

IE-A: Underneath

Ángel Santiago: ...in the water. They have to be washed, all the salt has to be removed. But they cannot be dried in open air because they'd be destroyed. The water has to be replaced with an inert substance, that does not degrade the cellulose that is already degraded. It is a little bit... that is why each material and each work has its own problems.

IE-A: That's what's fascinating.

Ángel Santiago: Here we have several problems in just one piece.

IE-A: That is what is fascinating. It leads us to think, not only of those other external elements, of the original context of natural materials that come from the natural environment, that add to this, but what it means for these objects, first, to be a part of a work of art, to enter this environment so different from their place of origin. In the case of the pieces acquired by the Whitney, we are thinking about the move that these materials are going to make, to a totally different climate. And I wanted to ask you, a little bit, if you can even foresee or anticipate possible challenges that they are going to face

Ángel Santiago: Yes.

IE-A: ...as a product of the acquisition of these pieces, whose morphology is eminently tropical, and New York is not a tropical climate, of course.

Ángel Santiago: For example, in the work *María-María* it has, as we say in good Spanish, bubble wrap at the bottom. This is a non-perishable material. It disintegrates under the influence of ultraviolet light. That's something that they'll have to think about. Whether they'll have to replace it or they'll have to foresee the amount of ultraviolet light intensity inside the room. The tarps, which he uses as the Virgin's mantle, are also affected by the light of the tropics. They don't resist as they resist in the United States. That is an advantage there...

IE-A: Exactly.

Ángel Santiago: ...in the US.

IE-A: You started with the synthetic materials.

Ángel Santiago: Yes, because they were the ones that shocked me the most within the piece. Some of these synthetic materials could produce acidity. That's why I started with them.

IE-A: Of course.

Ángel Santiago: As these materials decompose we'd have to see which is the chemical composition to find out if there are no vapors accelerating the oxidation process in metals or the degradation of the cellulose fiber of the coconut, or the woods involved.

IE-A: And the textile, there is jute...

Ángel Santiago: The textile because

IE-A: ...as well

Ángel Santiago: For example

IE-A: Rope.

Ángel Santiago: There are certain materials that produce acetic acid when they are decomposing. That acetic acid is highly corrosive for metals and also disintegrates cellulose. The molecular union of the fiber that maintains the cohesion of the fabric is destroyed and disintegrates over time. There are all these little details that the

artists don’t think about. There’s no scientific basis in their studies. They do it all because, "ah, I found this, I like it, [inaudible]".

IE-A: Impulse, intuition

Ángel Santiago: Exactly. The artist is more intuitive, he is less scientific. But if before becoming an artist they're given the tools, they'd think a bit more about what to use and what not to use. And if they use it, it's knowing that there's going to be a problem and they'll look for a solution.

IE-A: Or they're going to justify it…

Ángel Santiago: They're going to justify

IE-A: …as something they accept as

Ángel Santiago: Exactly.

IE-A: as part of the…

Ángel Santiago: That's it.

IE-A: …evolution and transformation process of the piece. In fact, if you look here there is adhesive tape, or what we call electrician's tape,...

Ángel Santiago: Yes.

IE-A: and it's in direct contact with organic materials and even with the metal.

Ángel Santiago: There we go. The adhesive tape has that, an adhesive, which can be inert and can be a container of acid. It can start a corrosion process in the metal and in the wood.

IE-A: But, it can even come off, right? It will come off.

Ángel Santiago: Yes, over time it loses its capacity because it's not made to last long. It's made to be replaced... every time you deal with an electrical installation you remove and throw away the tape and put a new one.

IE-A: Of course.

Ángel Santiago: That's what it's made for, to be recyclable; fast.

IE-A: Replaceable.

Ángel Santiago: And the work can be easily redone. But with a fuller purpose, well, you'd have to look for another substitute and always analyze the type of adhesive it has, if it's high in acid or not. That's something the artist doesn't know because that's what they sell. In the past, as you mentioned, great masters didn't become masters until they spent 30, almost 30 years with the master.

IE-A: In the studio, doing everything.

Ángel Santiago:q Learning to grind pigments, learning to prepare a wood panel that would take two years to prepare before he could paint his first artwork. Now you can go to the nearest hardware store and buy what they have available.

IE-A: Without knowing what they're really using.

Ángel Santiago: Not knowing what they have. There's been a lot of wood that comes from Brazil and other places, already infected with insects and the artists use it.... "Ah, but I got weevils, I got this, I got that".

IE-A: They're Brazilian and they didn't know it.

Ángel Santiago: Exactly, they were dancing to everything they like. An interesting thing about insects is that they can be in hibernation for years and years and years inside an object. At the best moment or at the least thought moment, they reactivate because the humidity and temperature conditions are right and then they become an invasion. That's what you have to fear when pieces from the tropics go to museums in the United States. That was one of the experiences that Konrad told us, when he was with us. The first job he had in a museum in the eastern part of the United States, they brought artworks from South America to be exhibited, and within a week they had an infection in almost the entire museum.

IE-A: It's what I'm thinking with the move of these pieces to the Whitney.

Ángel Santiago: Because the conditions were right for the insects to wake up from their lethargy. That’s what happens with fumigation.

IE-A: They like the trip.

Ángel Santiago: Yes, no. Another problem is that people think, "Oh no, I take the piece, fumigate it and that's it. I spray it and that's it." No, wood doesn't work like that. The way it works is that every time liquid gets in, it seals itself and doesn't allow that

liquid to go further up. That's why to fumigate wood, it has to be with steam or with oxygen removal. It's the only thing that guarantees that those insects are going to die. If I freeze a piece, I don't kill the insects either.

IE-A: You preserve them.

Ángel Santiago: All I'm doing is giving them time, winter, spring, summer, and in the summer they come back out again. They'll go to the warmest place they can find in the piece of wood and go into hibernation. When spring and summer come, they get active again and start doing their thing.

IE-A: What can you tell me about the jute? There's even a fishing net in *Centinelas*.

Ángel Santiago: The fishing nets are nylon. It's nylon fiber.

IE-A: It's nylon. But very light in color. And there's the jute, which is organic.

Ángel Santiago: Yes. Jute is a fiber from the agave plant. Generally, commercial jute is already impregnated, that's why it has a strange smell when you get it. It's impregnated with tar. Then it's quite resistant to insect attack.

IE-A: How does it react with other materials?

Ángel Santiago: It can stain…If it's still very wet it can react with the piece and give it a coloration that's not what you wanted if it's in direct contact. But, it's an extremely natural fiber. It tends to degenerate less because of the tar. It's like an oil that's been applied to it to prevent decomposition and give it more rigidity. Another problem with humidity in textiles that are cotton or hemp-based…

IE-A: Hemp.

Ángel Santiago: …hemp or linen, is that they react differently to the environment. Hemp, as well as linen, both tend to absorb humidity and when they do, they shrink. The same as with cotton, they shrink. What happens is that the fibers expand and shorten.. What happens then? When they lose humidity again, they expand. But hemp and linen shrink an average of ¼ inch per square meter. Whereas cotton shrinks about 1" per square meter. That means that it's going to shrink one inch and will expand one inch. And then what happens? That those are very noticeable dimensional changes…

IE-A: Dramatic.

Ángel Santiago: …that can make the paint come off the surface. For example, you've seen cases in which a motor vehicle crashes and the paint is dented but it doesn't fall. But when you try to straighten it out it explodes.

IE-A: Pops.

Ángel Santiago: There's no support in front of the paint. It didn't fall when it was hit because there was support. That happens with cloth. You have to be careful with that because if it's damp and you touch it on the back then there's a loss.

IE-A: Yes, we have a loss. Well, we conservators are very interested in, and you've spoken at length on this aspect, when you referred to the conditions at the museum…

Ángel Santiago: Mhh hmm.

IE-A: …not only in the work you did in the conservation laboratory directly on the objects, but also in the environment where they're presented. I wanted to ask you about any possible recommendations you might have as to lighting, temperature, humidity, not only when we exhibit them …

Ángel Santiago: But when they are stored.

IE-A: …when they are placed in storage.

Ángel Santiago: For example, here we have all the organic plant-based materials, cloth, and others, whose surface can be damaged with strong lighting. It can damage the cellulose and even destroy it. That's why we sometimes see curtains with very bright colors on the side where the sun doesn't hit. And on the other side, where the sun hits, the cloth fiber is disintegrating and that's due to the photochemical action of the light on the object. The problem is that we talk about visible light and we talk about the most offensive one within the range of light, the ultraviolet light. And in extreme cases, infrared because infrared produces heat. The ultraviolet is rays, way more penetrating that activate the electrons they're made of and decompose them in some way, and that's why it's destroyed. That is why we get burned; our skin is destroyed when exposed to the sun. But what happens? If lighting is controlled – the object is illuminated as little as possible when there are no visitors – the deterioration tends to slow down and the object can be left for much longer. There are objects that require that they be stored every so often and left in storage for a long time before exhibiting them again. That happens a lot to paper fiber, paper specifically, textiles, to every material made of cellulose. There is wood that changes color when exposed to light. It gets darker or lighter. Sometimes the artist says, "But, I didn't use a wood of

that color," and it was the light that made it fade. You also have to control the humidity because many materials interact that don't react to humidity or light in the same way.

IE-A: In the same way. That is the challenge here, the diversity…

Ángel Santiago: It's the diversity of materials.

IE-A: … within the same piece.

Ángel Santiago: For example, if I had to store metals, I have to store them in a relative humidity of 20 % or less. Wood has to be stored in a higher relative humidity, because it has water, which means 50%-55%-60%, depending on where that wood came from. Nylon rope, for example, the green one that has a stick in the middle, that central spear, that's nylon, that deteriorates with ultraviolet light, it degenerates and changes color. I had one in the laboratory, that was a brilliant orange color and now it's white, with just fluorescent light. That's another thing, fluorescent light is more dangerous to artwork than incandescent light. Incandescent light produces infrared, fluorescent light produces ultraviolet. It produces the range of blues, while the other one produces the reds. And you have to be careful how you illuminate the object if it has different materials. That's why, up to now, the one that's winning is the LED light because you can control its color temperature depending on what you need in order to prevent damaging the objects. We've been using it to illuminate objects since the 90's, more or less. Then you have the stalks, that are protected by polyurethane. But polyurethane reacts to ultraviolet light and tends to oxidize. It tends to turn brown, and when its useful life is over it begins to flake, as if it were skin. You know, that's something…

IE-A: It's a challenge. Especially…

Ángel Santiago: The challenge then…

IE-A: …when it's time to exhibit it all together, right? Because when it's stored, the different…

Ángel Santiago: …for example…

IE-A: …elements are separated and are stored in different ways.

Ángel Santiago: …yes, the base is apparently made of treated pine…

IE-A: Yes.

Ángel Santiago: …but I don't know if they painted the bottom.

IE-A: Looks like it.

Ángel Santiago: Because I see some pieces are deforming…

IE-A: Yes, they're lifting.

Ángel Santiago: …because of the loss of humidity.

IE-A: I don't think so, because the sides aren't painted.

Ángel Santiago: That's when it automatically says to me, "look, that one's not protected on the bottom," which means that that's where it'll start to lose humidity and then deform. The cut of the wood is also important. Why? Because it depends if it's…

IE-A: Transversal.

Ángel Santiago: …a radial cut or transversal, it's going to lose more humidity from one side than from the other.

IE-A: But that's a preventive measure that could be taken…

Ángel Santiago: Yes.

IE-A: …cover the back because it can't be seen.

Ángel Santiago: No, you don't see it. Then varnish it. Then I'd use a water-based urethane. Because of the emission of chemical fumes is less, and it takes less to dry and it protects. If it's interior it protects very well. I would use the same in this case here. Basically I'd use acrylic resins with an Acryloid B-72 base, because the process is reversible by immersion or with damp cotton in one of the components of xylene, or toluene, or even acetone. And you can remove the excess without affecting how the piece looks. But someone can't just pick up a brush and let's go paint, because you have to control all that.

IE-A: It's a science, never better said, right?

Ángel Santiago: And you have to control it because you don't want to change that artist's intention. Methacrylate, or B-72, is very good for metals because it's easy to remove if it deteriorates, and it doesn't change it's appearance. I can make it look matte, as well as shiny, depending on the concentration of the Acryloid I

use. I can do it in toluene, in xylene, I can do it in acetone, as an adhesive, as I said earlier, or I can use it in alcohol for wood, or on metals.

IE-A: Well, Archie, as you've mentioned repeatedly, and I totally agree with you, that many of these things we have to consult with the artist. And, as we reach the end of this conversation, without wanting to, because this isn't the end, this is the beginning of many other conversations I hope to have with you, and in which I would also like to include Daniel Lind. I know he will value the knowledge you have and share. Since we have been problematizing positively all of these matters revolving around Daniel Lind's work, I'd like you to share, if you want to, a question or questions, that, if you had the opportunity, you would ask Daniel, after the conversation we've had.

Ángel Santiago: Just out of curiosity, why did you use this material and not this other one? [laughs]

IE-A: But what alternatives would you give him? Why the coconuts and not…? Or, why this wood and not…?

Ángel Santiago: I think I may have the answer, but I would like to hear it from him. Those are the alternatives that we get commercially. The artist doesn't have a place in Puerto Rico where he goes to look for something specific and finds it. I had a friend many years ago, when I was selling cars, that he loved to invent in the house and make things and he'd say, "ay, Archie" – no, they didn't call me Archie yet, he'd say, "Angel, Chaguito, Ponce is a village with electricity." And I said, "but Jorge, why?" He said, "look, I want to do that here at home and I have to call my son in the United States for him to go to the hardware store there and get me what I need, send it by mail and I have to wait two or three weeks for it to arrive". I have that same problem as a conservator. And artists must have twice as much.

IE-A: But I don't think that's a problem for him because Daniel's hardware store is his environment, his community, it's the landscape of Loíza.

Ángel Santiago: That makes it even more difficult, there's less control…

Irene: More surprises

Ángel Santiago: …in how he acquires things. There are more surprises. For example, the process; does he dry the metals the right way before varnishing them?

IE-A: Well, those are the questions, really.

Ángel Santiago: Does he take the stalks directly from the yard behind the house and did he mount them without the fumigation process?

Irene: Well, those are the questions we should really be asking Daniel.

Ángel Santiago: Those are the ones that really call my attention.

IE-A: Yes, what's behind the scenes, right? What came before the process.

Ángel Santiago: What's trapped in there from what you found in the yard? Did you just run a paintbrush over it and set it up? Those details. Though I know he's concerned about the appearance and tries to consolidate them using varnish and all that. But why did he come to the conclusion of urethane and not consider other options? Did he have other options or it's what he was offered at the hardware store that he went to?

IE-A: Yes, it's a search that concerns us, worries us and appeals to us as well.

Ángel Santiago: Yes.

IE-A: Especially when we make those findings and discoveries. I believe that an analogy could very well be these other types of search made by those who are interested in the meaning of the object versus in its morphology..

Ángel Santiago: Exactly.

IE-A: ...and physical stability. I would like to close this by sharing something that the curator of this institution, Juan Carlos López Quintero, said, referring to these stalks.

Ángel Santiago: Mhmm

IE-A: This piece is titled *1797*, the product of a historical event when our island was invaded by the British and managed to resist the advance of the most powerful navy in the world at that time.

Ángel Santiago: At that time

IE-A: An important point that Daniel Lind makes with this piece, which, in fact, has its counterpart in charcoal on a large canvas also titled *1797* and it's prior to the assemblage, is that there was a very important participation -but which has remained, like so many other things, out of the official history- of communities from Santurce, from Cangrejos, and from Loíza, of people…

Ángel Santiago: Afro

IE-A: …African descent, right, Afro-Puerto Ricans. And Juan Carlos told me that these stalks with these painted faces act as guardians; representations of guardians. It has a strong religious charge.

Ángel Santiago: That also

IE-A: Here is the syncretism of Santeria and other religious beliefs characteristic of the Loiza region. And Oshún is very present; the great blacksmith, he's the reason for the use of metals. But Juan Carlos told me that these stalks were incorporated with that meaning and intention as a consequence of a childhood memory Daniel had when he wandered or strolled through the streets of his neighborhood and community and noticed the stalks placed on the corners of the houses. And they were there acting as guardians.

Ángel Santiago: Guardians.

IE-A: But he recognizes that the people who carried out this practice were truly unaware of the roots of what they were doing. They had inherited it, they didn't question it, they didn't go back, didn't dig, inquire, or investigate. They simply perpetuated a custom, a tradition.

Ángel Santiago: A tradition, culture

IE-A: Daniel himself accepts that, quite spontaneously, he took it and makes it part of his work. But how much more valuable it is to confront this piece with the knowledge that that history is behind that material, and what it represents.

Ángel Santiago: Or symbolizes

IE-A: And I feel that this conversation has given me and those who are our witnesses a lot of access to what is behind the materials thanks to the perspective of a specialist like you.

Ángel Santiago: No, I have to thank you, Irene, and the Museo de Arte de Puerto Rico, for this opportunity to be with you and share my knowledge about materials. We're in the best disposition to cooperate whenever you wish.

IE-A: Thanks a lot, Ángel Santiago.

[END RECORDING]