-We are in the town of Cabo Rojo.

-In Cabo Rojo.

-In the sector, in the Joyuda neighborhood.

-OK. And we're talking to Interviewee. Interviewee, am I saying your name correctly? OK. Today is February 13, 2025. Interviewee, can you tell me a little about your current work?

I work for the SeaGrant program on the Mayagüez campus as a Marine Extension Agent. I'm the liaison between the program and commercial fishermen throughout Puerto Rico, including Vieques and Culebra. I'm in charge of a magazine called Fuete y Verguilla, which is aimed at the country's commercial fishing sector. I also provide services to the Virgin Islands; much of the material we produce also goes to the U.S. Virgin Islands and is translated into English. I'm in charge of a project called Come pez (Blue Marlin, \*Makaira nigricans XLII\*) león, which educates the public on how to eat them, educates fishermen on how to catch them, and educates restaurants on how to sell them. Recipe books have been produced with them. I'm also involved in another project on underutilized species. This is so, instead of calling it sustainable fishing, we better educate people to try other fish caught here in Puerto Rico, which they call second-rate, but they are delicious, extremely healthy, and cheaper, and for families who are so deprived right now, right? Because many of them are in difficult economic situations. Instead of buying a silk snapper or a hogfish (Lachnolaimus maximus XXXIV) or a dolphin (Coryphaena hippurus), they can buy a blue runner, which can cost 1 or 2 dollars a pound, they can buy queen triggerfish, which costs no more than 4 dollars a pound, and so on.

-I want to come back to this a little bit later, but for now, if you could tell me a little bit more about how you started working, how you got this job, and when?

-Well, it's a really crazy thing. When my daughters were in college, where I work now, which is where I also studied, I saw the pleasure they had in what they were studying, and they were fascinated. And it turns out I graduated from that same university, but I didn't like what I studied. I'm a registered nurse, but I never worked as a nurse because I discovered I didn't like nursing; it wasn't for me, but I finished. But I always felt like, 'Ugh, I didn't like what I studied.' I didn't have a great time at college.

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When they were older, I said: I think it's time to study something, not because I want to be part of a structured curriculum, but for the pleasure of learning everything I want to learn, and what better than the country's university, so I formally enrolled in Political Science. And the first class I took was with Manuel Valdez Pizzini, it was Cultural Geography. And I always said: why would I want a Geography class, if I'm the person who never knows where north, south, east, and west are, and you can tell me a thousand times and I'll never know, because I'm not interested in learning it; that's what GPS is for. And I fell deeply in love with the class, because he talked about the country's commercial fishing sector, and with even more love for the fishing community of Puerto Real. And as a Caborrojeña, with ties to the fishing community since I was a child, talking about Puerto Real was a passion of mine. And why since I was a child? Well, because one of my aunts' father-in-law was a monopolist in Puerto Real. A monopolist is someone who buys fish from the fishermen and transports and distributes it. His name was Don Lalo Escobar. I heard the name Lalo Escoba, and I already knew what Lalo Escoba did when I was little. So it was like swimming naturally toward what I had learned in my childhood, and hearing Manolo speak with such passion about Puerto Real, it was like: Oh, where have I been all my life, that I'm not working in this? So, I approached Manolo and said one day: 'Look, I'm not interested in getting A's in class. I'm not here for grades, but you're not going to have a student more passionate than me, learning in your class.' And I tell you, I would arrive to class at 7:30, excited, like, 'I'm going to take Manolo's class!' When the class ended, I fell into a depression, really—well, a depression, I mean, a really deep sadness, because the class was over and now where am I going to take another course? But all the courses I took while I was back at the university were all in Sociology, Coastal Anthropology, Political Science, Cultural Science, which gradually shaped me. I took several sociology courses, demography, even a music class. And I went back to the class, and I asked Manolo if he'd give me the opportunity to do a research project with him, and the research project was on women in fishing. Why? Because women have historically been made invisible in all fields, and fishing is one where women were never talked about. So I came to Puerto Real to research who the women are in fishing, and incredibly, there are no women.

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Here, female fishermen? There aren't any, no. But women in fishing aren't just female fishermen; they're the ones who clean the fish, they're the ones who process it, they're the ones who sell it, they're the ones who take out the procession of the Virgin of Carmen when the month of the procession arrives. There are many things and there were many women, and when I handed in my essay, it said: "I couldn't find any women in fishing, because no one told me anything." But I stuck with that and went back to take another course, now at the graduate level, with Manolo. And one day, he calls me and says... Oh, I'm coming to buy fish, one Sunday morning (Blackline tilefish, \*Caulolatilus cyanops\*). I'm going to Puerto Real to buy fish, and the fishermen were arriving with all their catch, and I sat there on the dock and started listening to their conversations, and I couldn't move. In my mind, I was recording each and every word they were saying, and what they were talking about was that they had gone with their family to a beach and what they had cooked, and it wasn't the species we eat. They were talking, I'll never forget, about how they took the best home with them, and many of the species are second-rate. And when I heard that, it was like: wow, and I got home and sat down. Back then, people used to text each other through Gmail chats, and I wrote to Manolo and said: look, Manolo, I just heard this conversation, and it's blown me away... And his reply was: dude, you're an anthropologist. And when he told me that, I was like: wow, Manolo Valdez Pizzini is telling me that I'm like an anthropologist. I felt so great. The thing is, a couple of days later, he wrote me: I'm going to send you a survey, will you fill it out and not ask me any questions? And I was like: yes. The survey was: Do you know this fish? How do you cook it? How do you cook this and that? And I answered them all. Two seconds later, he texted me: 'Do you want to work for me?' And I said, 'Even if you don't pay me a cent.' For me, it was such a great honor that he thought I could work for him. And my first job was—it wasn't under SeaGrant. SeaGrant had a small branch, Ciel, the Interdisciplinary Center for Coastal Studies, and that branch did a lot of work. My work with Manolo consisted of interviewing fishermen around the island: what do you eat, how do you cook it, what is the best fish in your opinion? It was fascinating. I ate well in those days because everyone cooked for me so I could try it, and I made some discoveries about fish that people even look down on. For example, there's one called the roosterfish (squirrelfish).

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It's a fish that doesn't grow very large, it has a lot of bones, however, the fishermen filleted it, removed the bones, and made me some fillets with rice, beans, and avocado. Those were fishermen in the fishing village of La Puntilla in San Juan. It was spectacular. In fact, the best fish broth you'll ever eat in this country is made from roosterfish, and people don't have that knowledge; the fishermen do. You go to restaurants and they make it with whatever they find, but roosterfish is one of the fish that has the best flavor. After that, one day while I was working on a project, he told me: 'Are you ready, now, to make Fuete y Verguilla?' And I was like: 'No, I've never made a magazine in my life, I've never written about anything other than small things.' 'Are you ready for Fuete y Verguilla?' And they gave me the magazine Fuete y Verguilla, and from then on, that magazine, from being a simple little newsletter, grew to another level. And people asked for the magazine Fuete y Verguilla. And then they put me to work directly at SeaGrant, and my title was Researcher. I did everything they told me, whatever they sent me. Later, eventually, they made me a Marine Extensionist, and my job is—and I can tell you it escalated to other things, because from just making the magazine, I dedicated myself to it. I didn't know where all the fishing villages were in Puerto Rico, but I say where there's sea, there have to be fishermen, and we're surrounded by water. So I went all over the coasts looking for fishing villages and I found them one by one. So it was just sitting down with the fishermen, with no particular purpose other than, 'Tell me, what are you doing, how are you doing, how are things in the fishing village? Do you have any administrative problems, what's the weather like here, how long a year can you fish?' These are the kinds of things that no one asks them about, that no one listens to. That's when I began to see the difficulties many fishing villages face. Then Hurricane Maria hit, changing the lives of all Puerto Ricans forever. What was life before, is now life after Maria. Many fishing villages were destroyed, many docks were broken, many fishing villages suffered damage that hasn't been repaired to this day. So, the fishermen found themselves in a difficult economic situation; they lost their boats, they lost their fishing gear. So how does a person who makes a living from fishing, for the moment, find that he doesn't have his tools, but he doesn't have the money to buy them either, like you do, well here it comes, here I come... Hurricane Maria hit the coast of Yabucoa, therefore, we know that it was in the eastern part of the country, that towns like Macao, Yabucoa, Maunabo, the islands of Vieques and Culebra felt the impact first and the full force of the hurricane.

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Well, then I said: how can I help? Well, then I invented a dance. When we finally had electricity, I approached an organization that was created called the Western Solidarity Brigade. They told me: we can give you part of the money to collaborate with the fishermen and we'll help you with the activity as well. We raised funds, and with that money we sent to buy wire, a buoy, a rope, a hook, crystal fish, a winch, we bought consoles for fishermen, we bought watches for the divers. Well, we made a huge purchase and distributed it among the fishermen we had already documented as really in need. To this day, I have fishermen who call me and say, "Interviewee, if it weren't for what you did, I wouldn't have been able to return to the sea." Also, as part of my job, here in my town of Cabo Rojo, a former mayor and an employee who manages federal programs carried out a small project where they identified some funds and even bought motors for the fishermen. So with that idea in mind, I said, "Wow, that can be replicated in other municipalities." So I approached him and said, "Let's visit municipalities." He went with me, and we visited several municipalities. Right now, in the town of Aguadilla, the mayors embraced the idea and have been providing monetary aid to the fishermen for two years now. Of course, the fishermen have to submit some documents, but it's a form of assistance they wouldn't have had otherwise. Also in my profession as a Marine Extension Agent, I go, if there is help, for example, from the Department of Agriculture and many of the fishermen don't have a computer, I go there, I go with a group of people, we go with those computers and we fill you in so that you can... that kind of thing, basically.

-Please tell me, in what year did you start your first job with Manolo?

-I think it was in 2007.

-And when did you start with SeaGrant?

-I think it was like a year later, 1 or 2 years later.

-Well, he told me that there is a life before Maria and after Maria, he tells me a little about life before Maria, with the fishing villages, what is a fishing village in Puerto Rico?

-A fishing village is a building with lockers, which are small doors where fishermen store their fishing gear. A fishing village is where they arrive with their catch, leave their boats, and basically sell their catch.

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Practically all of them are on the coast, except for one in the town of Río Grande, which is on the banks of a river. Why? Because they don't have a ramp to launch boats and they have to take them out along the riverbank in order to exit through the river mouth to fish.

-And who started it first? What's the history of the fishing village, do you know?

-The fishing villages, I believe, if I remember correctly and I could be wrong, began through Codremar, which was a government entity that governed and carried out everything related to fishing. Codremar later disappeared, but the fishing villages remained. Right now, the fishing villages are under the Department of Agriculture, which is why the fishermen have—I don't know if in the conversations you've had they told you: we have a lot of agencies that regulate us. Well, you have: the Department of Agriculture, you have the Department of Natural Resources, you have the Coast Guard, you have the Border Patrol, you have FURA, you have the Vigilante Corps, you have the Department of Natural and Environmental Resources, they all have to do with fishermen in Puerto Rico. The Coast Guard stops you when you're at sea to check if you have a life jacket, if you have flairs. I've always been told that the Coast Guard people are very kind to the fishermen and leave them alone. You have the security guards who also stop them. Sometimes they can be a bit... this is my opinion, and it has nothing to do with my work. But I've interviewed fishermen who have told me that the security guards' treatment is often not the best, and that they've realized that they are very ignorant, not only of the laws that apply to fishermen, but of the species that fishermen can and cannot catch, and they can't even recognize them. It's a very difficult situation, often for the fishermen, because they tell them: 'Oh, no, you caught a cabrilla, and that's what you have there, that's closed season,' and the fishermen say: 'No, that's not a cabrilla, that's such and such.' Those are some of the problems we have here.

-Tell me a little bit about what the role of the fishing village was, and how did it change after Hurricane Maria? If so, did it change?

-Well, as I told you, the role of the fishing village is to ensure that fishermen have a place to store their fishing gear, a place to leave their boats, and a place to sell their catch. But what happened with María? Many fishing villages have their own generators and are well-structured. I mentioned the one on Ponce Beach, the one here in Puerto Real, the one in Guayama, in Punta Pozuelo, those that I remember. The one in Humacao suffered damage, but even so, the fishermen joined the Catholic Church and prepared several meals a day for the people of the community.

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On the beach in Ponce, since they have their own generator, they let the surrounding community bring their medications, store them in freezers, give them food, let them get therapy, give them ice, let them store food there, so the fishermen can make things easier for themselves. They want to connect with the people; they know who needs it and who doesn't. Here in Puerto Real, after Maria and after Hurricane Fiona, some groups were created—I wish I could remember the name, because they have a beautiful name—and they cooked and distributed food to people and did the same thing: leave your medications here, leave your things, come and get therapy, and people can't recognize that. The general public doesn't know that fishing villages also have that function, because they've attributed it to themselves, because the government has failed in so many ways. After Maria, I remember that when Donald Trump came to Puerto Rico, the governor at the time, Ricky Rosselló, told Donald Trump that 16 people had died as a result of the hurricane, when the reality was that more than 4,000 people died due to the lack of electricity to store their food and medication, due to the lack of electricity to provide respiratory services, because they have to have machines to survive, and there was none of that. So what happens? Obviously, the fisherman can't provide electricity so you can have an air conditioner on in your house because the heat is extreme, but if you need to keep your medication stored on ice, in a cold place, that space is there for people. So, life before Maria, Puerto Ricans were heard saying: "We are a blessed island, because hurricanes always pass over us, pass under us, and never touch us," and that's how it was for many years. But Maria came, and not only did Maria hit us hard, it hit us from end to end and devastated the entire island. I know stories from fishermen in Humacao, some of the hardest stories I've ever heard. They were in their home. The Punta Santiago community is on the coast. There's a fishing village there, and next to it are some dam gates. The sea came in and collided with the dam gates, crashing and flooding the area. And this particular fisherman's house. He tells me they arrived with water up to their roofs, swimming, trying not to drown. He lost his boat. They finally left Puerto Rico, losing everything.

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The island was left—and that's history—completely in the dark. We had no food. There are photos, I've seen photos. Obviously, we couldn't move along the roads because the trees were there, the power poles, photos of people writing on the roads, 'SOS, We Have No Food.' I personally lived through that experience. My granddaughter lived with me, and where I could get food for her? We had to receive it. Our families in the United States sent us food. And it happened to everyone, those who had the opportunity, right, and we shared everything. That's one of the most important things. And it's something that has characterized Puerto Ricans: in times of need, we're always there to lend a hand to our neighbors. And that's what our fishermen do; they're always there. If a fisherman gets lost on the high seas, they all go out to search for him and don't return until they're found. I was recently in Ponce, on the southern coast of Puerto Rico, and a fisherman had gone missing, he had already been lost in the early hours of the morning. When I arrived at the fishing village because we were having an activity there, everything was destroyed, and while I was there, they found him and brought him back to shore, thank God, alive. That's all there was to it after Maria, but normally we Puerto Ricans, I don't like it. I never liked it when they told us in school that we were 'very hospitable' and that our indigenous people were 'very good people.' No, no, it's not that we're hospitable; it's that I think we have a great sensitivity to people's needs and we like to help. We're not stupid, nor are we stupid. But we do like to collaborate with others. And that's very typical of fishermen; they help each other and their people.

-Do you think that if a hurricane like Maria were to hit again, the island, and the fishermen in particular, would be better prepared now than before Maria?

-Prepared in what sense?

-In facing what's coming. I mean, you told me the biggest problems were that there was no electricity, that people with medicines that needed refrigeration had nowhere to put them, and that there was no food or water.

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-That's correct. Are we more prepared? Well, we can be more prepared, in the sense that we already know that if a hurricane of a category like that is predicted, we have to protect our properties, we have to be prepared with enough food and water, perhaps, I'm not saying for a week, as we've been told many times; we have to be prepared with water and food for at least three months. We were without electricity in my house from September to February. Now we have solar lamps in our homes, radios, but we'll continue. The electrical system in Puerto Rico is very deteriorated; they haven't solved the problem. The people now, but yes, as a result of Hurricane Maria, which I told you about from the Hispanic Federation, donated solar panels to many fishing villages that are powered by solar energy. Perhaps that will give them a little more help, so that they can go fishing, so that we can have food in our homes, because then they have enough to keep the refrigerators working. Basically that, and I also think they've learned the lesson that they can't leave a boat in a vulnerable location. Boats must be brought ashore, far from the coast, so as not to lose them. In the case of the docks, for example, that's something that continues to be worrying, because with the storm surge, there's no way to protect the docks. At this point, there are still many fishing villages with destroyed ramps and docks. I have a video I can show you, of a fisherman arriving at a dock with a huge hole and him walking along the beam, with rods sticking out of the water, and if you fall, you'll end up there. But yes, we are a little, a little more prepared than before. I wouldn't say a lot, but there is a little. Now there's awareness, not before, because we've never experienced anything like that.

-I understand that there are fishing villages now that have more fishermen, have good structures, and there are others that are suffering, some that recovered after Maria, many that haven't recovered, that still don't have the building, that was ruined, they don't have refrigerators. Why is there that difference or is there a difference in geography or why is there that difference?

-No, I think the difference is in attitude. There are many fishermen, fishing villages that: the government won't fix my dock, won't let me fix it, oh, but I don't care, this is the dock we use; between us all we buy the boards, we buy the nails, and we're going to fix it, and God grant us luck, because it's better to ask for forgiveness than permission. So with that attitude they've set about fixing the fishing villages and getting them in good condition.

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Others, simply, it's like: the government doesn't help me, but they don't do anything either, but I think that happens in all walks of life. There are people who are more: Well, when I can, I'll do it, and if the government doesn't help me, well... Look, the government doesn't help me, I don't do anything, but the fishing village of Puerto Real is still waiting for the pier to be fixed, but they can't fix that pier, but they did paint their fishing village, they've put it in good condition, they're well organized, they pay the fishermen's Social Security, they pay the fishermen well, they pay them on time, and they have a lot of fishermen. And you saw that it's in very good condition, very clean, the scaler area is clean, but go to fishing villages and they have the scaler dumped on the seashore, without water, they wash the fish in the water, and that's the kind of attitude that drives them to the bottom. Because if they don't organize, they can't withstand whatever comes their way. So the fishing villages that are organized, that have a leader with a sound mind, those are the successful fishing villages. On one occasion, the Humacao fishing village, the one in Punta Santiago that I mentioned, was adrift. They had about 30 fishermen and weren't making any progress, and it occurred to me to ask them: what if I invite you to come to the Aguadilla Fishing Village so you can see how that fishing village works, are you willing to take whatever they tell you and use it there in Humacao? Yes. I helped them get a school bus (Oilfish, \*Ruvettus pretiosus\*) there in the municipality. They all came to Crash Boat in Aguadilla, which at that time, that was before Maria, was operating. I think it was one of the most well-functioning fishing villages; everyone worked there. You were a retired fisherman and quite old, so you were in charge of cleaning the sand outside. You're a fisherman's wife and you don't have a job, so you come to the kitchen, you cook well, you're good at management, oh well, you keep the books here, you're in charge of the chapel of the Virgin of Carmen... And that fishing village ran like clockwork. But, darling, you went around the surrounding areas, everything was organized. The Ministry of Agriculture gave them refrigerators because they saw that everything was being done well, and the fish sales there were good, it never ran out. Until Maria came. Maria destroyed practically the entire fishing village; a little piece of it remained. They saved it, got it working, and months after Hurricane Maria, a bravado arrived. Bravado is what it is, do you know what a bravado is? It's like a very strong wave that can be produced, your husband should tell you, I can't explain that part well, by a very strong cold front, which brings very strong waves.

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And the waves were so severe that what was left of the building collapsed. Those fishermen, right now, are without a fishing village; people still come in and say, "But wasn't there a fishing village here?" They have a food truck that the Hispanic Federation donated to them, but government bureaucracy hasn't allowed them to get it up and running. The demands they're making are completely ridiculous, because the fishing village was in the maritime-terrestrial zone, where a fishing village has to be because, for the fishermen to arrive, they need to be near the water. Now they're not allowing the food truck or the ability to build again. And the Department of Agriculture, the Department of Natural Resources, or the municipality can't reach an agreement. So, Easter is coming soon. Last year, we had to apply weekly for a permit from the municipality of Aguadilla so that the fishermen, who have historically been in the same place for hundreds of years, could set up a light from the food truck, put up a glass box to sell empanadas, and a cooler with ice next to it to sell fish. We can't operate like this. There are problems with the contracts of many fishing villages; they've increased the lease, and fishing is a problem. There are many fishermen who make a very good living from fishing and have learned not only to fish, but also to do other things related to fishing to generate more income, and they live very well. But you take away their space, you demoralize them, you throw them under the bus, and they don't move forward. Humacao, the fishing village that had been operating for years, beautiful, I loved it there, is once again adrift; the management has changed. That's why I tell you, a leader is very important, and now it's not functioning well; it's barely opened, and there are many differences. Crash Boat in Aguadilla has no structure, the hole in Peñuelas, the pier is broken, in Puerto Real, which is the largest fishing village in Puerto Rico and the fishing community, the pier has been damaged for years, but it's serviceable, and the fishing village is in good condition. In Maunabo, which is on the east coast of the island, after Maria, the fishing village functioned for a while but is so messed up that it's closed as well. And so on. Sometimes, years ago I made a presentation for law school, for a law school, and my presentation was called: Fishing, a profession in danger of extinction. Why? Yes, there are fishermen and there are young fishermen, but they have so many obstacles in their way, that I feel that sometimes things get really difficult for them that what they say, they are right to feel like the government doesn't listen to them,

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It's like they're always the forgotten ones, which isn't necessarily true, but when you see things, you say: is it true or not true? But then you're inclined to say: yes, it's true, it's as if they don't matter. And yet, during the pandemic and after the hurricane, the pandemic, who were the only ones who could go out to work? The fishermen, because fishermen are on the high seas, they don't mingle with anyone, they don't have contact with anyone, you wear your mask and you can go out and sell your catch, and it feeds us. The fishermen, after Maria, were the first to say, because many of them work as scientists: look, the seabed is bleached, there's no fishing, the conchs moved, the lionfish moved to the deep or came out of the deep, with the turmoil of the hurricane, and they're coming out again. Fishermen have a lot of information that scientists need and that is often underestimated, simply because perhaps they are not educated people; many of them don't know how to read or write, even at this point. But that doesn't mean they don't have knowledge. They're the ones who go out to the water every day. They know. When they tell me, 'There's a north wind,' I say, 'Where the heck is north? Where's the wind coming from?' You know, but they know. A fisherman, you can, he says to me. I'm telling you, the knowledge of fishermen is such a wonderful thing. When they tell you, 'Oh, I threw in the drowned traps,' do you know what a drowned trap is? A trap that hasn't been buoyed, because with the buoy, the fisherman knows where it is. But many people, when they see the buoy, know there's a trap there, and they steal it, or empty it, they empty the fish out. So it's better to throw them in drowned, as they call it, without the buoy. But then I say to them: ‘But how do you know where the trap is? ’ They say to me: ‘Do you see the cow (Butter hamlet, \*Hypoplectrus unicolor\*) that’s up in the mountain up there and the pink stone that’s down there? ’ There are a lot of pink stones. He says to me: ‘But the pink stone that I know, I know where it is. ’ And when we go, because I’ve gone with them, the trap is exactly where it says it is. The cow (Butter hamlet, \*Hypoplectrus unicolor\*) is no longer in the mountain of course, but the trap is certainly there. The knowledge of the fishermen is a wonderful thing. You know, sitting down to talk with them without having a plan or a structure and you start asking questions because you want to listen to them, it’s so enriching, you learn so much with them, I find it simply fascinating.

Do you think the knowledge they have is being lost now with the newer technologies that are coming, with GPS, and all of this?

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-No, I don't think so. It's impossible to lose that knowledge they have. Because you can have a thousand devices, but they have the experience of being on the water. And you can't measure that with a device. You can use a Fish Finder to know where the fish you're looking for are, yes, but you have fishermen who know where to find them without needing a Fish Finder. And you spoke with one of them recently, when you interviewed his wife. He doesn't know how to use a GPS, he doesn't know how to use a Fish Finder, and yet he keeps fishing.

-But what I'm asking is, do you think that when this generation of fishermen is gone, because there are a lot of them, almost all the young people use...?

-But I know many young people who appreciate the knowledge of the elders and those young fishermen sit with the elders and share with the elders and that's how the knowledge is passed on, one by one. And you have the case of Abdiel in Vieques, when you talk to Abdiel, he informally tells you: there's an old (Burro grunt, \*Pomadasys crocro\*) fisherman here, that I sit here with him and that old (Burro grunt, \*Pomadasys crocro\*) fisherman has taught me that if you see a spiny lobster (Panulirus argus) of a certain color, it's because it's eating in such a place and it's eating this and that, and that changes the color of the lobster, (Spiny lobster, \*Panulirus argus\*) and you can tell where the lobster comes from. (Spiny lobster, \*Panulirus argus\*) And that is knowledge that is passed on from one generation to the next. And as I said, I've seen young fishermen sitting with older people, talking, and there's enormous respect between them, both from the older man (Burro grunt, \*Pomadasys crocro\*) toward the younger man, and from the younger man toward the older man. (Burro grunt, \*Pomadasys crocro\*) So I don't think it's likely that this knowledge will be lost. I have the case of Pucho in Puerto Real, an old man (Burro grunt, \*Pomadasys crocro\*), and his son is a fisherman, dedicated to fishing, and Pucho's knowledge, and the pride the young man feels for his father's work is incredible. And I think that's part of what keeps the knowledge alive, the pride you feel for it.

Do you think this is unique to Puerto Rico, with young people?

I couldn't tell you, but I was recently in Cartagena, in Murcia. And Cartagena has a fishing sector, and I saw young people with old people there, you know, I can't really tell you that it's the same in other countries. I don't know what it's like in the United States, but for example in the US Virgin Islands, I saw that too, with old people with young people, passing on knowledge, working together, and the young people know who the fisherman is who did what, they know who the one missing a leg is because he caught a bend while diving, they have all that knowledge and it's still there. Yes, I've seen it, I think it continues. It has to continue; there's no way it can be lost. It's as if you take away a people's culture, you leave them devoid of their history, of everything, and as I said, the pride they feel for what they do, and they are very proud of their work, they won't let that be lost, there's no way.

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-Let's talk a little more about the fishing village. After Maria, you told me that there were many villages that were destroyed and that it seems there are some that couldn't be rebuilt, just because of bureaucracy. Are there many like that, suffering because they don't have the permit?

There are several, there are several, and I wouldn't want to have to say this, but I've realized over time that many of the fishing villages that have been rebuilt have been rebuilt for political reasons and used to the advantage of particular parties. Because the governor comes, says: I'm going to fix up such and such a fishing village, and he arrives with the Secretaries of Natural Resources and Agriculture, takes a picture, and everyone says: oh, the current governor supports fishing, no. He went to the fishing village, took the picture, and after that, things continued the same. I know a fishing village on the east coast that you visited when we went to Vieques, where we ate when we returned from Vieques and Culebra. They allocated more than $500,000 to fix up that fishing village. Speaking with the president, he told me: I don't know where those $500,000 are, because practically all the repairs that have been done here have come out of the fishermen's pockets. We know they fixed the building's fence, replaced a couple of windows, and I think they fixed the floor, but they had to buy all the equipment, the freezer, and all that, which I've never understood. And when you go to the fishing village, you say, OK, where are those $500,000 invested here? There's another fishing village that the government also fixed, which was largely destroyed by Maria and has five fishermen, but the president is a politician, so he got the aid that way, and not all fishermen operate that way, nor do all presidents. There are presidents who prefer to stay out of politics and try to do things as best as possible, without having to get involved in that type of activity. And they've succeeded; they've brought their fishing villages forward.

What is the future of Puerto Rican fishermen, in your opinion? Do they have a future?

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-At one point, I thought they were going to disappear. Sometimes I still have my doubts, but for there to be fishermen, there has to be fishing, and our fishing, even though it's still quite good, is being impacted by many things: coastal development, because there's no respite from coastal development here, sedimentation, pollution from sewage discharges, pollution from oil discharges, gentrification, poor planning, the use of pesticides and fertilizers on agricultural lands that then flow into the sea, overfishing—all of that has an impact. And if things don't adjust now and the fishermen and scientists aren't listened to, fishing could disappear, because if you damage the habitats. Look, here where we're standing, here, from my balcony I saw a coral, that every day, every time the tide went out I would see it: how beautiful that coral is. From my balcony I would say: how beautiful. One morning I woke up, looked at the coral, and it was bleached. Do you see those green spots floating in the water? Those green spots come from sewage discharges here, and that type of algae grows. That affects fishing. Microplastics, heavy metal pollution; I wouldn't eat a piece of shark for anything in the world, because we know its meat can be full of heavy metals. Basically, I think fishermen can continue to exist because there are young people who want to fish, but if we damage the habitat of the species they want to fish for, there won't be any fishermen. So, it has to be a combination of both. We have to take care of the place where we get what we want to eat or what we want to see in a fish tank in our homes, so there will be fishermen.

Have the fishermen told you about what they've noticed in the maritime environment in terms of environmental changes? Do they talk about this sometimes?

-They've told me about how the water, that before they had to jump in wetsuits, that the water when they go down even deeper, that the water was very cold, and now they don't have to, because the water is so warm that it's not done. They've told me about how the arrival of sargassum has been increasing more and more and we know the reasons, right, it is presumed the reasons why quantities of sargassum arrive at levels never seen before and I am completely sure that this sargassum began to arrive in that way in 2011, no attention was paid to it, and in 2012 we documented it,

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And I saw concentrations of sargassum. I said: "My goodness, I sometimes see patches passing by here, but huge patches. But here the current flows in a direction I don't know which way it is, so it doesn't accumulate much here, but it ends up in fishing areas. So, the sargassum that reaches us, thanks to what's happening, often doesn't allow fishermen to take out their boats and it affects them." And what else have you noticed? Well, after Maria, what I told you: the seabeds were bleached, there were no queen conches; they had moved or hidden in the sand. Fishing was quite difficult, but it's starting to pick up again, and I've heard fishermen say, for example, that silk snapper fishing is getting better and better. They tell me that silk snappers are being caught more and more now, and queen snappers, which are red fish and are the most sought-after in all the restaurants. They tell me, look, Interviewee, they were telling me yesterday, they're getting bigger and bigger, and they're getting bigger and bigger conches. We never saw that before. What's going on underwater, I have no idea. But the reality is that there are some species that are apparently recovering better, and those are the species that are of the most commercial interest here in the country. So fishing in Puerto Rico looks like it's going to continue for many years to come, that it's still healthy, and obviously, you heard Manolo when he said that we don't produce enough fish here to have a fishing industry and be able to export it to the country, but we can feed ourselves with it.

-Very well. I wanted to ask you a little about what you learned in your study of women involved in fishing.

"Thanks for reminding me, I'd forgotten. Well, look, when they hired me to make Fuete y Verguilla, I don't think a month went by that I didn't go to Manolo's and say, 'Manolo, I want to make a Fuete y Verguilla about women in fishing,' and Manolo was always like, 'No, no, because he was my boss.' Until it seems I caught him tired one day, and I said, 'Manolo, I want to make a Fuete y Verguilla and I'm going to do it, about women in fishing, I'm not asking you anymore, I'm going to do it,' 'Well, do it.' I made a Fuete y Verguilla that became an icon, among Fuete y Verguilla, that's his girl, because Fuete y Verguilla is a girl to me." I got some artwork for the cover from a Paraguayan artist who did a drawing of a woman with a fish, like on her face, something, and she gave me permission to use it.

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Then I discovered that there were women in fishing, there were women fishermen, there were women processing fish, there are women who are proeles, who go with their companions or with the fishermen, to collaborate with them in the fishing, I went to Santa Cruz, the fishermen's wives are the ones who: when the fisherman arrives, they go there to clean the fish, pack it and distribute it to the restaurants, there are women in charge of the chapels of the Virgin of Carmen and they maintain it and make arrangements for the masses to be said and for the procession to take out and for everything that has to do with that, there are women who are hoarders and distribute fish around the island, and they have all the knowledge that the fishermen have, because they are in the day to day with them, there are women who are in charge of cleaning the fishing villages, there are women cooking fish, and all of that is documented in Fuete and Verguilla. Every day there are more women involved in fishing, and the more I visit, the more young women want to start fishing, and the more little girls say, "I want to learn to fish." And it's not about learning to fish so you can throw a hook out there and see what I can catch. No, it's about going commercial fishing. And you see young women, and when you look at them and they say, "I'm a commercial fisherman," you say, "But you look like a model." But they're commercial fishermen and they have the same knowledge as men and the same strength as men, and they're excellent fishermen. I mean, there's nothing we can't do when we want to do it. And they're not discriminated against, which is interesting. I've asked them the same thing: Do you feel different? Right? Because when you think of fishing, you automatically think of a fisherman; we don't think of a fisherwoman. As I said, women were made invisible. Following that magazine, newspapers began interviewing female fishermen and then bringing them into the spotlight. At least I have the satisfaction of having contributed to this issue of women no longer being invisible in every field. In fishing, we now know there are women.

-Do you think there were always women?

-Yes, yes, in Puerto Real there was an ice cream vendor. I'm trying to remember her name while I'm talking to you, but she was well-known, and I'm talking to you about possibly the 1950s, 1950s, and she was already selling fish. In Puerto Real, there was a little old lady, she was deaf, who went out, already very old, very old, in her 90s, and she still fished. In Joyuda, in my area, there was a woman, also old, 80 years old, who still fished with her daughters. And in Puerto Real, that little old lady I'm telling you about, who went out fishing with her husband, is tiny, very tiny. Her sons, her daughters, they all fish, because she made sure they learned.

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-When we went to Vieques, I spoke with Abdiel's mother…

-Erica?

-Erica, she was very modest, but it seemed to me that she played a leadership role after Hurricane Maria, when she filled a leadership role that wasn't there at the time. Have you seen stories like that in Puerto Rico?

-On the Big Island?

-Similar, that is, women who take on the role of leader or helper…

-Here in Puerto Real, there's Vanessa Ramírez. I have to give her credit for the fact that, after María, she's the one who always keeps the fishermen in Puerto Real on the straight and narrow. She works with them when there's government aid, and they have problems with licenses: 'Let me take care of that.' She's a success in the Puerto Real Fishing Village. I don't think anyone else does that there, in all of Puerto Real. I think all the fishermen have to go through her for everything, because she's a leader there.

-But what is your day job?

She's also a hoarder; she sells fish. But her husband, her life partner, is also a fisherman, so she has it all. And currently, she's the vice president of the Caribbean Fishery Management Council. And she basically makes a living from fishing. But again, ask all the fishermen in Puerto Real, and they'll all tell you: yes, Vanessa helps me with everything. Like her, in other areas, let me think... No, Érica and her, for now.

-And have you noticed in your career women who have stood up, not necessarily to protest, but to fight against things that are seen as injustice in the community?

-In the community, but within the fishing industry? I haven't seen any women at demonstrations other than the fishermen's wives. There's one in particular, the wife of Miguel Ortiz, who is the president of FEPDEMAR, an organization that brings together fishermen from all over the island. Her name is Lizy; she's everywhere, documenting everything that happens around the fishermen. And she's her husband's left-hand woman in the fishing village in Guayama; she's there all the time, collaborating.

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And there, too, there's a fisherwoman named María de los Ángeles, who's a tremendous fisherwoman, and I remember a phrase she told me that I said: you know what, you're absolutely right. She told me one day in an interview I did with her: 'You have a little fish and with rice and beans, you already have a complete meal.' And you're absolutely right. Maybe you're missing the vegetables, but you have the protein and the carbohydrates, there, and possibly at a reasonable price, accessible to everyone.

-What makes you most proud of your work?

-The feeling that I've been able to collaborate so that they can move forward, the feeling that they know they have an ally, the knowledge that I've never let them down, that I've never promised something I couldn't keep, going to any part of the island, having fishermen there and at least one of them remembering who I am and saying: look, thank you for what you did, or thank you for being here, thank you because we were forgotten and no one paid attention to us and you brought us this activity, thank you because you did this other activity so that we could move forward, or that one calls me, after many years and says: thanks to you we can continue fishing, what could be better than that, and those are the words of fishermen. And they document it, because sometimes, I have a Facebook page called Come pez (Blue Marlin, \*Makaira nigricans XLII\*) león and sometimes I post things, I haven't posted anything for a while, but they've written to me separately and the comments are always very nice. And when you go to a fishing village and one of those big men, coming back from the sea, tired, sees you coming and gives you a hug, you know you're doing something right.

Is there anything you'd like to say to the people listening to this interview about fishing and Puerto Rican fishermen?

-Oh, yes. I believe that Puerto Rican fishermen deserve great respect for the work they do, for keeping us fed. I think the scientific sector shouldn't take advantage of fishermen's knowledge, and I think fishermen should even be compensated, every time a scientist approaches them. This is something that has hurt them greatly, because they feel used by the scientific sector. Because many scientists have come, they take their knowledge with them, and then you see the recognition for the scientist and the fisherman who gave them all the help and everything they know, no one remembers them. But what that scientist achieved, he achieved because a little fisherman took him to a fishing spot, for recognition, for whatever. Fishermen have to be paid when there are projects, they have to be paid when a scientist approaches them: 'I need you to tell me this or that,' and they have to be respected for that knowledge, and they have to be listened to.

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Fishermen know more than scientists, obviously. Scientists have the knowledge they get from university, right? And they also have experience, but fishermen are the ones who are on the water every day, practically. Fishermen are the ones who know where the deep is, where this is, where that is, while scientists don't. So they need respect and compensation.

-One more thing, what do you think is the biggest challenge Puerto Rican fishermen will face in the coming years?

-The work of government agencies. For a fisherman, the fact that it often takes a year for a license to arrive and they can't fish, because they can't fish with just a little piece of paper saying 'I applied for a fishing license,' is serious to me. So, these fishermen often have to go fishing without a license, with the possibility of being stopped by one of the agencies, fined with money they don't have, and then the problem worsens. I think the government agencies all need to come to an agreement so they can move forward, because the reality is that they certainly make things very difficult for them, with all the regulations, many of which are necessary, like closed seasons, for example, but the fishing license issue is a situation that has been going on for years. So, there's a complaint, which I know is real, that many fishermen don't report accurate statistics. But do you know why they often don't report accurate ones? Because in Puerto Rico, recreational fishermen aren't regulated. They are regulated, right, regarding the quantities they can catch, but there's no one to check on them. They're not stopped on the high seas to see what they have, what they're catching, and what they're not. Commercial fishermen are stopped, so there's no balance, right? And we have the problem that for every 1,000 fishermen, there may be 200,000 recreational fishermen, and no one knows how much they're catching, what they're fishing, and they're selling their catch to restaurants at a cheaper price. So when the commercial fisherman arrives, he finds himself faced with the question: What do I do with the fish? If he sold it to me for 50 pesos, and I have to sell it for 5 pesos a pound? You know, it's a struggle. I forgot what the question was, I got excited and forgot the question.

-No, but let's continue with what is the biggest challenge for fishermen.

-Go beyond the system and demand their rights to be addressed and heard within all branches of government that regulate them, and above all, that fishing licenses be issued on time so they can fish. And that fishing statistics require recreational fishers to submit fishing statistics as well, because how are we going to know the state of the fishing supplies if recreational fishers don't submit statistics and aren't telling us how much they're catching, how they caught them. Did they catch them undersized, or did they catch them within the regulated size? We don't know.

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So any information we have about fishing supplies, I think, is incomplete, because no one is asking recreational fishers how much they're fishing and how they found the fisheries.

-Was this always the case with arcades, or when?

-They have never been regulated, recreational games have never been regulated.

-But are there more now than before?

-There are what they call the weekend warriors, who, thanks to the pandemic aid, many people took the money—I can't understand how they were able to do it—that they gave us from the PUA. Do you know what the PUA was? It's aid that the Federal Government gave to people who couldn't work because they couldn't go out. So, aid arrived weekly, and with that, I survived thanks to that aid. But many people took that money, and instead of using it or saving it, right?, for a future need, they bought boats, jet skis, or built pools. And those who bought boats don't know the rules at sea well; they don't have the training offered to go fishing. And you see them, for example, passing through here, which is a manatee area, and they have to pass far from the coast. I think it's 5 miles away. I forgot how many miles from the coast for the moment. But they have to pass at 5 miles per hour, very gently, because it's a manatee area, because there could be people diving around here. And you see them passing like crazy, up and down, and you see the jet skis going crazy, without any kind of regulation. All of that has an impact. It has an impact because the noise, everything, affects fishing. But again, they're damaging everything and affecting commercial fishermen, and if no one regulates them, no one is keeping an eye on them, there's no way we can balance and know and have clear knowledge of how the fisheries are doing, if they have an opportunity for the future or if we're simply impacting them in such a way that we're going to lose many of the species.

-Interviewee, one more question, maybe.

-I've already seen you and you don't fulfill that part.

-You live in the city of Maya…

-From Cabo Rojo.

-Cabo Rojo, I always, because I am in the city of Mayagüez, but on the coast, and you have been living here for how many years?

-All my life, except for 4 years I lived in San Juan.

-Do you think the quality of life in this city, which many of them are, especially Cabo Rojo, are cities with a specific economic and cultural focus on fishing? How has the quality of life in these cities changed?

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-Are you talking to me about fishermen or in general?

-In general, the community.

-Well, there are so many situations we have. Because, for example, what did you see?

-Little crab.

-Cangrejito. I think the quality of life has declined; we have more noise, we have people who aren't from here, who have come to dictate how we should live, where we should live, there's a lot of displacement, there's an increase in the price of the products we need to eat, the increase in electricity bills is totally ridiculous; I think we have one or two increases in electricity every year. Also, the water service has gone up. If all that goes up, the price of food goes up, the price of food in restaurants goes up, the price in supermarkets goes up, the price for fishermen goes up, they have to raise the price of fishing, our quality of life has dropped dramatically. Yes, we can have a home, but at another time, perhaps I would have said: 'Oh, my furniture is damaged, I have this little bit of money, I can go buy some furniture.' No, no, no, it's just that I don't have enough money now. I can't buy anything at all, I can't treat myself to anything. We're losing our coasts, we're losing our living spaces, we're losing part of our history; they're trying to erase it. Hey, I know this is political and perhaps not the topic of conversation, but after Hurricane Maria, it was uncovered here, which is what led to the governor's removal: there was a chat, on—I don't remember what app it was—and that chat was made public. It had about 800 pages, and one of the people in that chat said: 'How nice a Puerto Rico without Puerto Ricans will be.' He's Puerto Rican. His name is Edwin; I keep forgetting his last name. And basically, that's what we're experiencing. We're experiencing a Puerto Rico that's increasingly emptied of Puerto Ricans, because the quality of life has declined, because the opportunities—I mean, we have a public university that has become so expensive that it's almost at the level of private universities, when it was one of the most important universities in the world; it was ranked among the top 10 around the planet. For example, the Neurosurgery program at the University of Puerto Rico School of Medicine was left without accreditation due to political reasons.

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Little by little, they've been shrinking our cultural spaces, and it's the government. You'd think, right? With these conspiracy theories, that this whole "Puerto Rico without Puerto Ricans" thing is real. And why? I don't understand. Why do you want to hand over your country to foreign interests, to other people who aren't from here? What's the goal? The goal is economic because you're going to profit from it. So, look, I'll give you an example: the fishing village of La Puntilla in old San Juan. They have a very large space, and little by little they boxed them in and boxed them in, leaving them with a very small space; people don't even know that fishing village is there. They left them in a tiny corner. And they want to kick them out. There's another fishing village in a community called Vietnam in Cataño, in the town of Cataño, and it's on the seashore with a view of the hill, a spectacular location. The mayor of a municipality bordering Cataño wanted to remove all those people from there to build a housing development. The capitalist vision that progress means building, building, building, and giving money to people is leaving us without a country. And the coasts that were previously a place of poverty, people who didn't have homes in the cities, came to live on the seashore, in the mangroves, in the wetlands, where nobody wanted to live because it was a place of mosquitoes, of dirty water, which is not dirty water, it is water with a level, some concentrations of organic things, but it is not dirty, it is an area of ​​much life, so people used to live there, well we have already lost the mangroves, so people have discovered that: how nice it is to have a view of the sea and everyone wants to live by the seashore, but in the maritime terrestrial zone and the Government gives the permit for that, but a poor person who built a house by the seashore has it knocked down and made to be removed. We're certainly on the right path, then, Puerto Ricans, every day the population is getting older, there are many problems, the country's demographics tell you that every day fewer boys or girls are being born, because no one wants to give birth, because what is the future we have? We have fewer job opportunities, we are losing the pharmaceutical companies, we are losing all kinds of industries, the construction that is being built, before you had housing estates for people with little purchasing power, now you don't, now they are building, which, I still don't understand, housing estates where homes cost $500 to $1 million, who can buy there? I can't buy it. So, who are we building the country for? It's not for our people, it's for people with money that comes from outside.

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So, in communities like Puerto Real, which is a fishing community, many foreigners have come, offering you a lot of money for your little house, remodeling it, turning it into a short-term rental, but where are you going to live? Because what they paid you for your little house isn't enough to buy a house? Oh, well, I have to leave the country to look for opportunities in the United States. And what's happening in the United States? Many people who left have had to return. So now you don't have a home; you have to live with a relative, with a family member, because you can't find a house and you can't find work. The situation is very difficult, and what we're experiencing is very worrying. I have two grandsons and a granddaughter, and it terrifies me to think about the future they're going to have. I'm very worried because we want to educate them, we want to give them many opportunities, but even the education in public schools is deficient. I asked my grandson, "What do you study with your books?" They don't have any books. When I was little, I had books for every class and they gave me the opportunity to go to the library to study and learn other things. Now I don't. In fact, I feel that unless you have really committed teachers, the pride in our Puerto Rican identity, in what makes us so unique in the world, has been lost. You're talking to a child, when I was little, and I think this is a symbol that I'm getting old, (Black margate, \*Apisotremus surinamensis\*) I'm remembering things from when I was little, the songs they taught us, the poems they taught us, the readings we did were aimed precisely at teaching us to love our country, to respect it. Not to create independence supporters, or... no, no, that's not what it was about, it was about loving our country, learning from the people who formed us, that's not happening. And I remember when my daughters entered, they were in a private school, on September 23rd, the Grito de Lares is commemorated here. The Grito de Lares was a historic event where a group of Puerto Ricans took over the town of Jayuya and declared the Free Republic of Puerto Rico. That was in 1898, that was on September 23rd. And there, the Puerto Rican flag was raised and flown for the first time, declaring the Free Republic of Puerto Rico. It was a woman named Blanca Canales, women always playing a very important role in all struggles. I asked one of my daughters' social studies teacher, "Are you going to talk to your students today about what September 23rd is celebrated?" "What is being celebrated today? What is being celebrated today?" I was like...

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'Today is September 23rd,' 'Yeah, and what are we celebrating today?' I'm talking to you about a woman older than me, I didn't know. No one talks to her about the Grito de Lares, no one talks to her about who Blanca Canales was, no one talks to her about who Juan Morel Campos was, no one talks to her about who José de Diego was, who Virgilio Dávila was, who our great painters have been, who Arnaldo Roche was, who Antonio Martorell is, all of that has been lost, all of that. You talk to young people about all those things and they come up blank. Thank goodness we have Bad Bunny, who reminds us of some of those little things, but I wouldn't want it to be that way, of course. But yes, it's a conspiracy theory; they want to get us out of the country and hand us over to other people, and that's everyone, sadly.

I don't know if that's what you wanted to hear, but that's my view of things, now, of course, I've stepped back from my role as a worker with the fishermen. It's my personal view of a country that I see increasingly mired in misery, increasingly impoverished, without a clear direction, and, as I say, it saddens me because it's the country we older people are leaving to the younger ones. And that's why you see me involved in so many things, that there are nights I can't sleep, that I wake up at 3 or 4 in the morning, with my head spinning: what can I do, how am I going to help, how am I going to collaborate, how am I going to do this, how am I going to do that, because even though I'm old, (Black margate, \*Apisotremus surinamensis\*) I have hope that a grain of sand, a little seed that I sow can bear fruit so that things improve, and that reminds me: years ago I saw an advertisement on the Discovery Channel, of a little Chinese man standing in front of one of the, in Tiananmen Red Square, standing in front of a war tank and stopping the war tank, and the advertisement was called 'the strength of one'. And I never forgot that advertisement, and I believe that one person, just one, can make great changes and that is my inspiration. I plant that seed, at least in the minds of my grandchildren, and I know I planted it in the minds of my daughters. There is hope.

-Well, I'm going to stop, because this is a very good time to stop, I'm going to say that. Thank you very much, Interviewee.

-Thanks to you.