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*Archives of American Art*

# Oral history interview with Al Qöyawayma, 2010 March 30-31

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## Transcript

### Preface

The following oral history transcript is the result of a digitally-recorded interview with Al Qöyawayma on March 30 and 31, 2010. The interview took place at his home in Prescott, Arizona, and was conducted by Mija Riedel for the Archives of American Art, Smithsonian Institution. This interview is part of the Nanette L. Laitman Documentation Project for Craft and Decorative Arts in America.

Al Qöyawayma and Mija Riedel have reviewed the transcript and have made corrections and emendations. The reader should bear in mind that he or she is reading a transcript of spoken, rather than written, prose.

### Interview

MIJA RIEDEL: This is Mija Riedel interviewing Al Qöyawayma in the artist's home in Prescott, Arizona, on — what's the date, Al? Do you remember?

AL QÖYAWAYMA: No. That's the good thing; I don't keep track of dates.

MS. RIEDEL: April 30.

MR. QÖYAWAYMA: No, no —

MS. RIEDEL: No, March 30 [2010]. [They laugh.]

MR. QÖYAWAYMA: We're in March.

MS. RIEDEL: March 30.

MR. QÖYAWAYMA: Yeah, 30 and 31.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: Paul McCartney — I remember that. Okay.

MS. RIEDEL: Okay, March 30, 2010, for the Archives of American Art, Smithsonian Institution. This is disc number one. Good morning.

MR. QÖYAWAYMA: Good morning.

MS. RIEDEL: We've got the date out of the way, so it should be easy now.

MR. QÖYAWAYMA: Now that we're all done? [They laugh.]

MS. RIEDEL: Now we're set.

So, Al, by way of starting this conversation, I thought, as a way of framing what's to come over the next couple of days, we would start with a concept that I think will run through our entire conversation - and which you've referenced multiple times in reference to different aspects of your life and your work - which is this concept of bridging worlds, having a foot in two worlds.

In your experience as an artist and as an engineer, and your experience as a Hopi, and also then living in the modern Western world, in both science and art, it seems to be something that you have experienced throughout your life and that continues to shape your life. Do you think that's accurate?

MR. QÖYAWAYMA: Yes, we do have a foot in two worlds, namely, that we're naturally exposed today, and can't escape it, to everything that's modern, whether it be any kind of media. But we also have an ancient world which most of the public, even the United States, does not see, and I like it because sometimes it's kind of hidden.

I mean, for instance, there will be something that will come right through here. I live in Prescott, but — you'd say, oh, that's a long ways from the reservation, but actually we occupied this area as well, throughout the Verde Valley [central Arizona].

But the point is that there's these things going on that the mainstream public never sees, and the ceremonies, even religious, they're usually, other than the public ceremonies, restricted to Hopi. So the world never really gets to see something that's very old and ancient and that particular part of the belief system.

On the other hand, we're all exposed to the modern world. To varying degrees we understand maybe science or maybe engineering, or maybe we like, you know, the entertainment media, whatever it might be. So it has been a thread through my life that I've been exposed, and education had been the core of that. We'll talk more about my Aunt Polingaysi, or we can call her Elizabeth, for her English name.

Elizabeth came out of, as she said, the "Stone Age," and she became very interested in that education, because she saw that the process of acculturation — that we're going to be exposed; we're going to have to operate in a new world — and she felt that our young people should know as much about that world as possible.

Later, taking her dreams, I expanded, in the educational sense, to all of our tribes, and not just the United States but in Canada and wherever else it went, and it became a little bit international. So that was the educational component. She always encouraged education, as did my immediate family, my mother and my father, not knowing exactly what I would be pursuing, but I pursued engineering.

I didn't really understand the world itself. When most of us were young, we don't. Even if we see all the media going on today, we think we have an understanding, but a lot of young people really have trouble surviving in this world because it's also economic as well, and you have to balance somehow gaining a degree of freedom, because you've still got to eat and have a place to live.

But that's where education — not necessarily that it always leads to a good economic situation, but it's an important part of our training for our Indian young people, not just, what is it you're going to be? Are you going to be a doctor, are you going to be something in science or forestry or engineering, but they have to, in each case, manage their own personal budget and their family budgets.

We weren't used to an economy like we have today. We were a trading economy, and suddenly we've gone, almost in one generation, from a trading economy to a money economy. I only touch on that because that's an important part of our education. Even Americans in general don't seem to have the education relative to how to live and gain — do something with their money, invest, whatever you want to call it — and to manage their money.

So even today we have lots of government programs to cover the mainstream population because of that. Meanwhile, we've got tribal people who have had to learn to survive. I mean, they didn't have the stores and anything in the modern economy, so we still survive on the reservation; not that we couldn't survive better. We might look like Appalachia a little bit, in terms of our buildings and housing and things, and yet that's the way we lived for thousands of years so - and we survived, and a lot of us lived a long time even without the modern medicine.

So the education comes back into it. In my case, I picked up the technical, because what it allowed me to do was to focus on something that was kind of a universal language. Take mathematics. Everybody knows that math is kind of a universal language. Almost everything outside of that depends on your culture and your upbringing and what have you.

MS. RIEDEL: So you're saying that education has really been essential — another line I'm sure that will come up for us multiple times — and has been one of the great aids in helping you bridge those worlds.

MR. QÖYAWAYMA: Yes, and "bridge" is a good thought. I'll again refer to my own — it became part of my philosophy, and that is, not to look down upon our older people who didn't have that kind of education. For us, we would learn something, but it wasn't necessarily part of our cultural education. It was part of our being able to live in the mainstream world education.

And so sometimes our young people tend to get a little lost. We'll maybe talk a little bit about AISES [American Indian Science and Engineering Society] later —

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: — but I was going to mention the term — I think of "horizon children," neither sky nor earth. A lot of times Native American young people move away from reservations and are living in an urban area, and they lose track of not only their relatives but whatever has gone on culturally previously, and they're a little bit lost.

MS. RIEDEL: Al, would you describe what you mean by "horizon children"?

MR. QÖYAWAYMA: Well, I use the term "they're neither sky nor earth."

MS. RIEDEL: What does that mean?

MR. QÖYAWAYMA: Well, the idea basically is, as I just mentioned a moment ago, they lose track of the day-to-

day things that happen in their own culture and language, what's happening in their families. They're trying to reach out. Particularly if they don't have, let's say, a really good educational background, they're just trying to reach out, like everybody else, on a day-to-day basis to live and survive. They are caught at the horizon, neither of their own heritage or the culture of the mainstream world.

We all know what it's like surviving either in the inner city or even what you might call the individuals who are intermediate income levels. Even today, people are finding it hard to match all the parts of their economic life with the life they'd like to have.

MS. RIEDEL: But this has been true of the Hopi way of thinking of themselves for generations. Is the idea of "horizon children" more recent?

MR. QÖYAWAYMA: Well, it's more my idea.

MS. RIEDEL: Oh, it is? Okay.

MR. QÖYAWAYMA: I think it's there; I'm just defining what they've seen. They don't use that terminology, necessarily, but they do understand this disconnect —

MS. RIEDEL: I see.

MR. QÖYAWAYMA: — between the mainstream world and an ancient culture.

MS. RIEDEL: Okay, so not successfully bridging the worlds —

MR. QÖYAWAYMA: Right.

MS. RIEDEL: — being switched back and forth, and feeling not wholly of either world.

MR. QÖYAWAYMA: Yeah, we find ourselves going back and forth, as you just suggested, and depending on how much you lived in an urban area and went to, let's say, modern public schools, compared to something on the reservation — which has been modernized, too, and in more recent years we have the school systems, the elementary and high school systems.

Like any school, it's a question of, are they competitive with other mainstream high school systems in the United States? But they're doing their best, and even though we maintain this cultural root, at the same time we all understand right across the board, including our traditional leaders, that it's important to get that outside education, and a substantial education, one that leads to, let's say, medicine, for instance.

It might lead to forestry for those who have forests. It might lead to fisheries for those [who] have fisheries. It would lead to engineering, because engineering has many, many different fields; science, in the same way.

I know we had a traditional young fellow that became a biologist, got his Ph.D. in genetics, actually. I know of another one of our really traditional leaders that became a Ph.D. and a professor at the University of Arizona [Tucson], Emory Sekaquaptewa. Emory is passed away now, but he had a law degree. He went to West Point [United States Military Academy at West Point, West Point, NY], as I understand, and he was really responsible for our Hopi dictionary [*Hopìikwa Lavìytutuveni: A Hopi-English Dictionary of the Third Mesa Dialect.* Tucson: University of Arizona Press, c.1998, an effort led by a fellow Hopi, Dr. Emory Sekaquaptewa].

So he could live in two worlds. He knew our language just so integrally well and the nuances that go with languages. He wasn't politically motivated at all, a very kind gentleman. So he would listen to different sides and try to interpret what was happening, and yet he was a full professor at the University of Arizona and a very interesting —

Just another example; within the Hopi realm, we could go to — we have about 250 active tribes in the United States, so we're not going to have time to talk about the individuals —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — but there are just hundreds, if not thousands, of stories now about individuals, each one a little different.

MS. RIEDEL: This goes back to something we touched on yesterday, which is the idea of taking the best of both worlds and finding a way to blend them together.

MR. QÖYAWAYMA: Yes, and that was something that you had seen in my aunt's book [Polingaysi Qoyawayma (Elizabeth Q. White). *No Turning Back: A Hopi Woman's Struggle to Live in Two Worlds.* Albuquerque: University

of New Mexico Press, 1964; 1992], the idea to blend the two together. And it's a question of how you blend those things together.

MS. RIEDEL: Right. Right.

MR. QÖYAWAYMA: "Blend" could be 99 percent of one thing and one percent of the other. That wouldn't probably be a very good balance, so we need to kind of bring in the word "balance" —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — between the two. So "blend" implies a balance, and exactly how that balance works for an individual and their situation is different, but there is a significant amount as being a Native American and as somebody in the modern world. And that would be true for other groups besides Native peoples here.

MS. RIEDEL: Sure.

MR. QÖYAWAYMA: We have to remember that all peoples, once upon a time, were indigenous —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — wherever they came from. I've had experiences, as you know, with the Maori in New Zealand and the Hawaiians, and I've gone and visited various groups in the Western hemisphere. Even some of the groups that we worked with in Guatemala, they were really interested in coming out of, so to speak, out of the jungle and out of their — just their immediate tradition, in learning what the rest of the world consisted of.

They wanted to join the Internet world; they wanted to be able to communicate, to find their way educationally so that they would have a voice about their own future. And I think that's probably a key point: we all want a voice. Whether you happen to be Native American or not, you would like to have some voice in your own future.

MS. RIEDEL: I think you have just hit on some major themes that we'll address, certainly, over the course of the next couple days. One is all the research that you've done with the Maori and in Peru and — well, not Ecuador but Peru and Mexico and Guatemala, all the archeological and art research. Certainly we're going to address your career as an engineer and science and the back and forth between science and your own art practice.

As an introductory question, before we go back and start looking at things from the beginning, how or where do you see your artwork fitting into contemporary art, or don't you? Do you see it differently?

MR. QÖYAWAYMA: I see that it fits in a certain genre of art that is known as Native American art. I prefer some of the — one particular gentlemen, his name was Lee Cohen, that had Gallery 10 [Santa Fe, NM; Scottsdale, AZ], and he always referred to it as, "This is American art, and this individual happens to be Native American."

I kind of like that because, actually, with all the cultures in the United States, you could say that about a lot of different cultural backgrounds. They're American now, but their traditions come from someplace else. We just happened to be here to — I'm not sure if it was to greet [Christopher] Columbus, but anyway we're here — [laughs] — and only a few of us — our immigration requirements weren't quite as strong as they are today. [Laughs.]

MS. RIEDEL: Right.

MR. QÖYAWAYMA: That's always a joke in the Native American world. [They laugh.]

Could we go back to the question again and just focus on the —

MS. RIEDEL: How or where do you see yourself and your work fitting into contemporary art?

MR. QÖYAWAYMA: The first thought I have about our own ancient traditions in terms of looking at our ceramic work particularly - because we had a very unique background in Sikyatki and specifically to the Coyote Clan and old traditions.

It's well documented, starting in about 1895 with [J. Walter] Fewkes by the Smithsonian, or actually, I call it the American Bureau of Ethnology at the time ["Archeological Expedition to Arizona in 1895." *Seventeenth Annual Report of the Bureau of American Ethology to the Secretary of the Smithsonian Institution, 1895-1896.* Washington, DC: Government Printing Office, 1898, pp. 519-744]. So that has been brought out and is in our major museums in Washington [DC] and other locations.

MS. RIEDEL: Now, you trace your own ancestry back to that Coyote Clan —

MR. QÖYAWAYMA: Right, we are Coyote.

MS. RIEDEL: — to say that right up front. Back to the 1700s, is it?

MR. QÖYAWAYMA: Well, the period of production of the ceramic that we call Sikyatki yellowware ceramics was probably in about 1300 A.D. to 1550. It just depends on whose dating you're using, but it's roughly in that 200-year period.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: There's some preproduction and post-production, certainly. The point is that they did painting on some incredibly constructed ceramic, and high-fired, which was unusual.

MS. RIEDEL: Was it coal back then?

MR. QÖYAWAYMA: Yes, they coal-fired.

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: So they were going above the vitrification [water proofing] temperature required for ceramics. But, in terms of contemporary, I could continue to that tradition, and there's certainly potters today — the Tewa and the Hopi-Tewa — which moved to Hopi and saw all this work. They have sort of — they've created their own tradition, using our ancient work as a basis.

For my own purposes, I've gone a different direction. I didn't exactly want to copy — just replicate just to be what might be called authentic or traditional, and those terms are — really, they have dimensions. Nothing is really, quote, traditional. Things were always changing is the point.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: And so I like to think of my work as a continuum of what we might have done had we never had European contact. Now, obviously, we have, so I can't really — [laughs] — I can't really think of that precisely. But it's contemporary work. It would be considered to be contemporary, and comparing it to other Native people's ceramics —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — or I'm sure if you compared it to mainstream ceramics — as I said, we're kind of a niche in the big picture, but so are other traditions around the world even today; I mean, whether you're talking about Greek or —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — European countries or what have you.

MS. RIEDEL: Well, some of the forms are very modern. They're ancient as well, very streamlined, very aerodynamic. Some of them are very sculptural; they're very minimal. They can be understood in a number of different languages even within art itself.

MR. QÖYAWAYMA: I think what you're referring to is, really, clay is at the very base level of human existence. Every person seems to be, to some degree, interested somewhere in their lives in just at least touching clay if not actually making a little pot — a pinch pot. I mean, it's the experience of a lot of children in the world.

And people always like — they're fascinated sitting around watching somebody else doing that, even if they don't do it themselves. And it's one of the core technologies that was developed by the human species, you know — fire and then finding materials that, at least in this case, that you could work by hand and didn't have to process, like metal. I mean, metal came into the picture, too, over the millennia.

But just sticking to ceramic, I think it's kind of a universal language for everybody, because we all have a little bit of earthiness in us, whether the children think that milk comes from someplace in the television set. They tell them about it, but they forget to tell them that it comes from the cows. We still all need to touch bases with where things really come from.

And I think the environmental movement, to some degree, and various aspects of that all help younger people. I see that they're actually more aware and more sensitive than previous generations.

MS. RIEDEL: Interesting.

MR. QÖYAWAYMA: They understand better where things come from than maybe earlier generations did.

MS. RIEDEL: Really? The current generation?

MR. QÖYAWAYMA: Right. Well, there was a period of time — I don't know whether it was in the '20s, '30s, '40s, where we were creating all kinds of modern things. At least we thought they were modern. They're pretty crude by today's standards, although we use a lot of them. And we got away from being on the farm, for those who were certainly in the European tradition, and even for tribal peoples who were taken off the reservation.

I mentioned education. There was the whole circumstance of the government school system, starting in probably the 1850s or '60s and carrying on into the 20th century, probably 1940s, '50s, and then tapering off. And that's a whole other discussion —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — about what happened, but the key point is that very early on we were trying to make Native people meet mainstream European standards, and so we tried to get rid of the language. That is, the policy was try to educate, but they didn't know quite what they [our people] were good for in terms of, yes, they could do various things like maybe house construction or matrons or what have you, but that's where this idea of science and engineering and medicine come into this, because now we have found that they are absolutely capable of that, just as any other group of —

MS. RIEDEL: Right. You're talking about the Native American children and education again.

One thing you said a couple of minutes ago strikes me as especially interesting in relation to your work, which is, there is a real historical reference in your work, and while that's not uncommon in art, in your sense it's very personal. It's generational. You can trace it back to your family and your family experience with ceramics and then your ancestors' experience with ceramics. How much does that consciously inform your work?

MR. QÖYAWAYMA: Well, actually, in some ways it's subconscious, really, information, because it creates a comfort zone. It says, not only am I living in the same general areas, and I know about how our people moved around, and I know what they did — and I don't know everything precisely because we don't have necessarily a written history, but we do have an oral history — I'm very comfortable with that.

And so in that sense, let's say compared to somebody European, they could go back — let's say somebody that was Greek and wanted to understand their own culture, they could go back and live in Greece —

MS. RIEDEL: Absolutely.

MR. QÖYAWAYMA: — and learn and — I mean, it's rich.

MS. RIEDEL: It is.

MR. QÖYAWAYMA: And they would have to look all over Europe to see all the things. And, in a sense, I have to look all over the United States to see our things, now that have been excavated and taken and studied. But still, we're in the homeland, if you want to put it that way.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: And we moved around. It wasn't like we were always fixed in one spot. Even today we are on mesas in northern Arizona on the reservation. We did exist as groups outside that, and we have oral histories that support that idea.

MS. RIEDEL: And certainly, you yourself grew up in southern California. You've moved back to Prescott. You're much closer now to where you spent your summers. But it's interesting that you, in a hundred miles, can revisit those mesas that have family history going back hundreds of years.

MR. QÖYAWAYMA: It's probably a thousand or more years. And, language-wise, even in southern California there's a number of tribal groups in southern California that have Uto-Aztecan language [among the oldest, most widespread Native American languages] as a base.

The main point is that it's not a spoken language, probably, as much among those tribes, and there's a dialect difference between every tribe. So where you hear it is where there's a group big enough, like at Hopi, that it's still a spoken language. And that's always one of the shames around the world, losing a language, because there's always a certain degree of richness in everybody's language.

MS. RIEDEL: We will, at some point, address the similarities and the differences between your experience as a

scientist and as an artist, and how scientific research complements and differs from art research, and scientific methodology complements or differs from art practice. Any initial thoughts about that?

MR. QÖYAWAYMA: Well, I think that you used the word "complement" — some people would like to perhaps imply that when I do my artwork, that somehow it's been engineered. I always have to kind of chuckle at that.

I think what is important is knowing that the method of discipline isn't just necessarily Western — I mean, China today and India and other civilizations or groups, cultural groups around the world, all use that discipline to process information and make discovery. And since I only have one lifetime, I needed a process that was going to recapture a lot of our tradition, but I didn't have five lifetimes to do that.

So the natural discipline to lean on was the methodology that you learn in science and engineering. I'm sure it comes up in other fields as well, but the main thing is not to keep reinventing the wheel. Know what you did, discover from your experiments, come up with an idea. And from just a pure art standpoint, I mean, people can still have that kind of discipline.

MS. RIEDEL: Absolutely.

MR. QÖYAWAYMA: They don't necessarily have to go to any engineering school or what have you, but there's a certain exhilaration that does occur in having these ideas.

Now, I'm mostly right-brained, according to individuals who believe in that sort of thing and have tested me, and so I decided to learn more of the left brain, which is the things like math and science and what have you. I learned to be in that. So I was comfortable in both, and I don't really differentiate when I'm in one mode or another.

MS. RIEDEL: A foot in each world again, going back and forth.

MR. QÖYAWAYMA: Right, it is a foot in each world. Right. So I don't think one way or the other. I'm really looking for the aesthetic. I would like to create some kind of ceramic that nobody has ever seen before. And there are certain shapes and pieces, particularly in my — oh, the architectural series — I call them Mesa Verde series — because I'm able to do some things with my clay that others likely cannot.

And, in a technical sense, I went back and learned what our old people were doing, because the modern Hopi didn't necessarily have precisely the materials that were experimented with many hundreds of years previously. Nobody ever wrote it down. So I had to rediscover that. And in the process, it allowed me to do things that are hard for other — practically speaking — for other ceramic potters to do. A lot of potters just go out and buy clay —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — and produce their work and don't think about the source. One of the big points about — if we want to mention something science or technological or however you want to phrase it — is know your materials. Knowing the material right from the source and how it's processed, you will gain a lot of intuition.

And I don't say that you'll ever precisely know. I mean, you could run chemical analyses, but that doesn't really tell you how the clay is going to work, mechanically speaking, in your hands. There's a beauty in that whole process, and when something that you have as a material can do whatever you want, wow.

I know people - for instance, they want to make bronzes. They work in wax, and the wax tends to do what they want. It's a little fragile, and you don't want to get it too hot, but imagine clay, the same thing — water-based clay. You get to do that.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: And I said "wax." Usually that's an oil-based clay, is what they call it. So I get to work with wax, but it becomes the final product. I don't go through another process. It is the process. So there's an excitement about that.

MS. RIEDEL: You developed a clay formula that has extraordinary elasticity, the ability to sustain very dramatic forms. I'm thinking of the low-shoulder form in particular, and the double-sided form that we looked at upstairs as well.

MR. QÖYAWAYMA: Double wall.

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: There's some double-wall pieces I haven't even shown, major double-wall pieces.

MS. RIEDEL: And the Mesa Verde series, just the variety in thickness and thinness of clay. Technically speaking, the fact that those pieces exist without blowing up or cracking is pretty extraordinary.

MR. QÖYAWAYMA: Yeah, there's a lot of pushing and pulling that go on without adding much additional material at all, and at some points on some pieces, you begin to add like a wall or something like that. In that particular series, I think the key point there is that I didn't necessarily discover — rather I was trying to recapture what our ancestors had.

And we'll kind of go through that, because I haven't even shown you the examples. I've verbally described them, but I have some examples here of prehistoric pieces that show that something else was going on other than simple ceramic techniques that we think — sometimes we call them "coil and scrape" if we're hand-building pottery. It's still hand-building, but it was a little more sophisticated than that.

MS. RIEDEL: Because it wasn't just clay that was dug and used as is; there was often something added to it?

MR. QÖYAWAYMA: Well, added and processed. And I think a lot of that process came through experimentation. Experimentation is very much part of what we call the scientific process, because the whole idea behind science, besides all our things that now are on television that we don't seem to understand about astrophysics, the real idea is to observe something long enough and come up with an hypothesis about, well, okay, this physical process must end up doing something.

And we do some experiments to understand that and then replicate it, and then over time it becomes accepted practice — yeah, that did work or it didn't work. Our ancient people could do the same thing.

But there was experimentation, a lot of experimentation. Often discoveries are made not by thinking, well, this is what I'm looking for. Actually, you get going in one direction, and you make some accidental discoveries along the way. And I would have to say ceramics is that way, even in just a pure artistic sense. You think you want to do one thing, and you suddenly find yourself doing something else.

I know a lot of people like to work in probably two schools of thinking. One is to just immediately not even think about the idea; just work with the clay and come up with some kind of object and art form, and the other is to think ahead of what you want to do. I have a good visualization process, so I've got all these little ideas in my head bouncing — dancing around.

MS. RIEDEL: Do they change or evolve as you're working, or do you pretty much conceive them as they'll be in their finished state and then execute them in that fashion?

MR. QÖYAWAYMA: I have the good fortune of having such good control of the clay that most anything I can conceive of, I can do. Now, that doesn't mean that I don't make a discovery in the process. There may be a real problem of either shrinkage or some — whatever the difficulty is to make something completely flat, for instance, without warping and make it large in diameter.

There can always be technical problems that you have to look at and solve, but by and large, I know that's within my capability. So I'm not thinking so much on a day-to-day basis about my materials. I spent a lot of time researching materials for myself after I initially got working with my aunt at Hopi in clay, and then I discovered what I didn't know. [Laughs.]

MS. RIEDEL: Right.

MR. QÖYAWAYMA: And so, based upon my educational discipline, it led me into really learning a lot about clays in general, then finding out, okay, what did we do in the past? Now that I'm at that point — and there was a lot of discovery process through this; it wasn't just a linear process —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — a lot of mistakes, a lot of dead ends. In fact, that's where you learn — I pointed that out — and that's where you make discoveries, and you learn about yourself. You learn everything.

In fact, there's this little idea — I see people sometimes on some little program throwing clay at a wall or something because they're upset. I have never thrown any clay at a wall. It's just — it's a little too sacred. It's too earthy; it's too much a part of us as — at least Hopi — to be throwing clay around because, I mentioned, depending on your clay source, it could have some of the dust of our ancestors in it, and I'm not going to throw our ancestors around, you know?

So there's a great deal of respect for the media of clay. And it's close enough — I mean, it hasn't been processed

like a piece of metal, where you can't tell which molecule came from where. The clay, you know where it came from, and you know what you —

MS. RIEDEL: Well, specifically you do, because you go and dig it.

MR. QÖYAWAYMA: Right.

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: That's right, and I've dug a lot of different sources and, as you know —

MS. RIEDEL: But it's all —

MR. QÖYAWAYMA: — through my Smithsonian research —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — and Smithsonian took this on as well. We did a major multi-million-dollar study of our ancient — just the yellowware ceramics [Ronald Bishop, Veletta Canouts, Suzanne De Atley, Alfred Qoyawayma, and S. W. Aikens. "The Formation of Ceramic Analytical Groups: Hopi Pottery and Exchange, A.C. 1300-1600." *Journal of Field Archaeology* 15: 317-37 (1988)].

MS. RIEDEL: What year was that, the late '80s?

MR. QÖYAWAYMA: Well, we started that one probably — I think we started that study in about 1985 or so.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: It was fairly early. And then, that study — actually, in some ways, it's still running today. There's some questions that others have picked up. But the individuals who did this work and were scientists at Smithsonian apply a lot of their knowledge and work with respect to, oh, Mayan ceramics and Central American ceramics, but Mayan is a major core research area.

MS. RIEDEL: And where was this published?

MR. QÖYAWAYMA: Oh, the *American* — I guess it —

MS. RIEDEL: *Journal of Archeology*?

MR. QÖYAWAYMA: Yes, the *Journal of Archeology* [sic].

MS. RIEDEL: And the authors were — was it Ron Bishop?

MR. QÖYAWAYMA: Yes, Ron Bishop, Vel — and I hope I pronounce her last name right — Canouts —

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: — and myself. And that particular paper, because we used neutron activation, which is a real high-tech technique — and there were some reasons why we went that direction. I don't want to necessarily get off on that right now —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — but there was a reason the Smithsonian was working in these areas. And we used some mathematical techniques, as well, that were fairly new. What we were trying to do is fingerprint the source of raw clay and compare it to the fired clay.

And what happens is your trace elements in the clay don't change during the firing process. You might drive off water and burn off carbon and those types of things, but the trace metals — I don't want to say metals; I should say trace elements — elements that we don't often deal with but are measured — we had about 20. So it was a —

MS. RIEDEL: Well, let's hold this —

MR. QÖYAWAYMA: Okay.

MS. RIEDEL: — because we'll go into this in greater depth. This is really interesting, and it's a great illustration —

MR. QÖYAWAYMA: But that's how we got off into it —

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: — because we had these techniques available and suddenly could apply them.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: And my core point was that it became a really basic paper. I've seen it in other languages now — it's been translated — and it's referred to in most of our Hopi literature since that time that have anything to do with ceramics, because we finally defined how we could source something and find it and what happened to it.

MS. RIEDEL: And that involved a merging of your scientific and your art background, in particular on the Hopi mesas, because that's where the research took place.

MR. QÖYAWAYMA: Right.

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: And it really helped with the art in the sense of prehistorically — of course, we didn't call it "art," as you know. We didn't have really a word for art. But the point is that we produced things for cultural and ceremonial and religious purposes, and it looks like art.

MS. RIEDEL: And those things could be pottery; they could be clothing; they could be —

MR. QÖYAWAYMA: - wood objects, but ceramics survived, whereas a lot of other things don't survive as well.

MS. RIEDEL: Interesting. All right, well, I think this has been a good extended introduction to some of the things that we're going to cover in greater depth over the next few hours, but let's go back and address some early biographical information that will help define how we've gotten to this point.

MR. QÖYAWAYMA: Can we stop right here just for a second?

MS. RIEDEL: Absolutely.

[END CD 1 TR 1.]

MS. RIEDEL: So when and where were you born?

MR. QÖYAWAYMA: I was born in Los Angeles [CA] in 1938.

MS. RIEDEL: Nineteen thirty-eight. And the date?

MR. QÖYAWAYMA: February 26.

MS. RIEDEL: February 26. And your parents, their names?

MR. QÖYAWAYMA: My mother's name was Mayme — first name was Mayme — and my father was Alfred. Alfred was the name given to my father in Indian school. His first name was Poliyumptewa.

MS. RIEDEL: And how many siblings do you have, Al?

MR. QÖYAWAYMA: I had none.

MS. RIEDEL: Oh, you had none. You're an only child.

MR. QÖYAWAYMA: Right.

MS. RIEDEL: I didn't know that.

MR. QÖYAWAYMA: Yeah, firstborn, only child. You know that syndrome. [They laugh.] Achiever.

MS. RIEDEL: I see. I see.

MR. QÖYAWAYMA: It works to a certain degree.

MS. RIEDEL: Clearly. Your father did some painting, did he not?

MR. QÖYAWAYMA: Yes, watercolor.

MS. RIEDEL: So is there a strong artistic thread that runs through your entire family? Certainly your aunt.

MR. QÖYAWAYMA: Yes. Some of it was probably motivated by the fact that, in the years in which they were going to school, our economy had — the United States economy had experienced the 1929 crash, and people were trying to survive, and particularly on reservations.

My father went to school earlier than that, but when he got out, he would do whatever tasks and jobs that he could find. This was true of most people in the United States at the time. He would paint individual Christmas cards, and his brothers would do the same. I mean, it wasn't a full-time occupation.

He did spend some time when he went to Los Angeles and worked for Disney [Walt Disney Company] for a while. It's a wonder he didn't continue with Disney.

MS. RIEDEL: It is.

MR. QÖYAWAYMA: [Before I go on with my father and family, I have to say, the love of my life, my supporter in all things, the mother of my two children, Leslie, is an artist, too, a master quilter. My children, Kathy and John, were brought up in a home environment of love and artistry. I couldn't have accomplished the success of my art without her. A wife is often not given the credit or is forgotten. Not so my wife Leslie. She is my partner in my artist pursuits.]

[Returning to my father, he,] then he worked for another little company called Lockheed [Corporation], and again in drawing. So drawing and painting were not foreign to us, even in prehistoric times. I mean, we had lots of kiva [religious ceremonial room] drawings, paintings and we did massive kiva murals.

MS. RIEDEL: And it's interesting, because both he and your aunt were born on the mesa, right?

MR. QÖYAWAYMA: Yeah, the six brothers and sisters, yes, at Old Oraibi [AZ].

MS. RIEDEL: And they all went to the Indian school in California [Sherman Indian High School, Riverside, CA]?

MR. QÖYAWAYMA: All except for Anna, the oldest.

MS. RIEDEL: Okay. And where was that?

MR. QÖYAWAYMA: Sherman Institute, and my aunt often referred to it as "the land of the oranges." And when I say "aunt," I'm principally referring to Elizabeth —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — because there was Anna, the oldest. And so they would go to — she would call it the land of the oranges because all these stories would be told, and they built the Santa Fe railroad in their lifetime through Winslow [AZ] and Flagstaff [AZ] and going into Los Angeles.

So to people who were restrained in one area, in a sense because they chose to, but then the rest of the world is opening up to them —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — and so they were very curious, even though they were very concerned about leaving their own traditions as well, because they knew that it wasn't exactly a Hopi school. And then this feedback started coming back that Indian schools were — they were run like military schools —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — and they were — you know, the hair was cut, and they couldn't speak their language, and they had to very formally do a number of things, including getting up, you know, certain times of the morning. It's the whole description.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: There's been certain books written on the Indian school era. It was different in different areas. A lot of times it had a particular religious group that the federal government let oversee it. It could be Catholic; it could be Presbyterian; it could be some other Protestant group that had oversight in running the school.

MS. RIEDEL: It's interesting that your aunt really wanted to go to this school. She had a real sense, it seemed, at

a young age, of wanting to broaden her sense of the world. She was a real adventurer, it seemed, and very brave. She headed out on her own with other children from the mesa when she was, what, six or seven, eight?

MR. QÖYAWAYMA: Yes. Yeah, she was hunted by the military "Buffalo Soldiers" [African American regiments, U.S. Army], actually, as other children were. She was hidden from federal troops for a number of years, as you read in her own biography. Eventually she wanted to be found, because she was so curious.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: That's a characteristic of any human group, curiosity. She just had this outward view, but her heart inwardly — she knew who she was. That's an important thing for any being. If they don't know who they are, they have a real tough time. You know, you can live in a ghetto, but if you still don't know who you are, all you know is you're from the ghetto, just like we were from the reservation, but you don't have any core to go out, and a value system.

She did have the values and the core, not necessarily perfected. That got perfected by the testing that went on outside —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — a little bit like clay being fired.

MS. RIEDEL: Yes, absolutely, a real test.

MR. QÖYAWAYMA: A real test. We could talk about that whole analogy, but —

MS. RIEDEL: Exactly.

MR. QÖYAWAYMA: She went out and did what you just suggested. I have some recordings where she says, "I was looked down upon by the women in the village because, in a sense, I was an outsider, yet I understood everything on the inside perfectly well, because they couldn't understand me. I gained some additional knowledge."

Hopis have some ideas or expressions for individuals who were meant to do that. In fact, I've never mentioned to you, but the Coyote Clan — and I didn't learn this until I was an adult — its duty was to be the peoples, the group that went ahead, like pathfinders.

MS. RIEDEL: Sort of the vanguard.

MR. QÖYAWAYMA: The vanguard that went out front — and that included things like education or learning something new.

MS. RIEDEL: Really?

MR. QÖYAWAYMA: And several of the leaders that I know are all — they're Coyote Clan. It's kind of interesting. And we're also to bring up the rear and keep the entire group together. What that meant overall — it's a little bit more metaphorical, possibly, than it was physical.

MS. RIEDEL: Absolutely.

MR. QÖYAWAYMA: But the point was there was a degree of acceptance: "Oh, they're Coyote Clan. They can go out and do these things that we can't." That cultural value system, saying, well, we're just going to stay traditional. But that's their role, to go out and learn something new. Of course, it ultimately became the role of everybody in the acculturation process.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: But Hopi, we're a little bit slower than some other cultural groups to adapt —

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: — modern Western education, and much of the major conflict that we could talk about wouldn't have anything to do with ceramics; it just had to do with the period of the turn of — from the 18th century to the 19th century. In that period of time, we were one of the last groups to really have interface with the American government. It's a whole very, very interesting period.

MS. RIEDEL: It is very interesting. We'll get to that.

MR. QÖYAWAYMA: A lot of books are written on it.

MS. RIEDEL: Right. But growing up in Los Angeles — in Los Angeles proper, in the city?

MR. QÖYAWAYMA: We were out in San Fernando Valley, but there was an enclave in Pasadena of Hopi people.

MS. RIEDEL: Woodland Hills. Did you grow up in Woodland Hills, or did you move there later?

MR. QÖYAWAYMA: Well, that was later.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: No, it was in Sherman Oaks and Van Nuys, in that area.

MS. RIEDEL: Okay. So you went to elementary and junior high there. And while you were a child, did you have a sense of this ancestry and a sense of this history, or were you growing up pretty much as a kid in the Valley?

MR. QÖYAWAYMA: Well, I knew my relatives. They would show up on the doorstep, and they would visit and encourage us. We'd help them, and they'd help us in some way and bring things — and my wife has funny stories about the mailman bringing — later on bringing packages with what looked like perhaps marijuana or something, and it was really hohoysi tea [Hopi herbal tea]. [They laugh.]

You know, these things — I mean, they always were very curious as to what it was that we were being shipped.

MS. RIEDEL: Interesting.

MR. QÖYAWAYMA: Or piki bread [tortilla-like bread using blue corn]. You know, there's all these things that are not in mainstream culture that people are not familiar with. As a child, though, we had a Mexican-American community, and they lived on one side of the tracks, almost literally, and there was all these places they fired bricks and things in Van Nuys. I happened to live beyond where they lived but on the same side of the tracks, towards Sherman Oaks, actually —

It wasn't a bad place or anything; it was just that people — oh, once in a while I would get beat up on the way home, or, you know, the kids, they thought you were Mexican. And not that — I love Mexican culture but — I didn't have any negative feelings towards Mexican —

MS. RIEDEL: You just didn't want to be beat up for it. [They laugh.]

MR. QÖYAWAYMA: Yeah, I wasn't interested in getting beat up because I was somebody different.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: And that's just part of American — United States — America growing up. We had those periods. We know about all of those periods, particularly with regard to blacks, but it happened in other cultures as well, and still does to a degree. It just depends on the community and what's happening in that community, you know?

One culture group feels threatened by another cultural group, or, you know, it usually has an economic core as well as maybe just how you live, you know, that core difference.

MS. RIEDEL: And Los Angeles is such a rich mix of cultures constantly coming in contact.

MR. QÖYAWAYMA: Today it is, wow. Yeah.

MS. RIEDEL: Yeah. As a child, were you drawn to the arts? Did you draw a lot? Were you interested in clay from a young age?

MR. QÖYAWAYMA: I was told I was curious in building things, and so I guess even before I remember anything about myself, I was building with blocks, and everybody thought that was curious. I guess they knew that building things meant you could be an engineer or something, so I guess that was mentioned along the way.

As I got to, let's say, junior high school, I did take a ceramics course, but our school system was entirely different back — public school systems then - than they are today. They offered all these shop courses, and because I was very manually oriented in terms of skills, I took every shop course I could get, and it turned out I really had high skills.

MS. RIEDEL: And what classes were offered back then?

MR. QÖYAWAYMA: Well, there was machine shop and casting. I'm not sure what the definite names were, but they involved —

MS. RIEDEL: Wood shop?

MR. QÖYAWAYMA: Wood shop, yeah — a pretty broad section of skills, including ceramics.

MS. RIEDEL: And so were you throwing? Were you casting molds, hand-building?

MR. QÖYAWAYMA: I was hand-building. I think most of the schools back then started out with hand-building, and I don't know whether there was an advanced course with wheels, but one thing is — and it's not a matter of pride; I just never got drawn to the wheel. I watched the wheel. I can imagine to a degree what it feels like. I'm sure I'd be a novice at it, but I never had a need for a wheel. Everything I needed to do I could do by coil.

It wasn't speed that was the determinant; it was the feel of the clay and adding one coil to another and then having it conform to whatever you were trying to do. Another style, of course, would be totally free-form, and let it go wherever the clay was going to take you.

But utilitarian ware amongst Native peoples, they had a pretty good idea ahead of time what they were going to make. They didn't probably do so much free-form. My ancestors didn't do that. They had to have a certain economy in terms of digging clay and getting materials to fire their clay.

And you can hear husband and wife, you know, the husband saying, "Dear, you're going to have me out there digging coal," because we use coal as well as wood, and, you know, "It's dangerous getting in there, and I don't want to have to dig anymore coal than I have to, so can you limit your pottery?" [They laugh.]

MS. RIEDEL: So primarily functional or utilitarian work, not a lot of sculptural work?

MR. QÖYAWAYMA: Not a lot of sculptural. There were animal and other types of sculptures that have been found. But the functional work was, of course, decorated.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: That's what — it got developed to a very high degree.

MS. RIEDEL: And was that what you were interested in from the start, functional work primarily?

MR. QÖYAWAYMA: I don't know that I really was thinking about it. My relatives did functional work, and I was a practically oriented person. By that time — and this is in high school — I had got on what was called a four-four plan, which even today I think is great because, for whatever reason, I didn't think that science and math and things were really things that were difficult. I kind of just did those. History, it was dull. [Laughs.]

MS. RIEDEL: Interesting.

MR. QÖYAWAYMA: I didn't have a whole lot of interest in history. And maybe English, to a little bit more degree it was practical. I needed that. But then I would work, actually, outside in a machine shop, and I had shop courses in high school. Back in that era, you know, I had that sweet era of the Beach Boys, and I saw that life by going to the beach and surfboarding and doing all the things — that was a very idyllic period.

I don't think today — I mean, there was no worries. There was very little use of drugs. And the big thing, if somebody smoked a cigarette, that was a big deal, or maybe having a little — some kind of alcoholic beverage — but they didn't go out and have big beer parties or anything like that.

So it was a really interesting era. It was very idyllic era. So just coincidentally, I happened to be in that era. And of course, I thought that's the way the whole world was. [Laughs.]

MS. RIEDEL: Interesting. And every summer you would go to visit your family on the mesas.

MR. QÖYAWAYMA: Yes, and starting early on — now, this is before the '50s. It was the '40s. And reservations back then were still dirt roads, sandy roads, clay. We'd take the mail truck from Flagstaff on the back of an open truck. There was a Navajo culture also that was integrated into our area, and that would be — they didn't group in villages, so they would live out, and they'd raise sheep or something.

And so they would have a bag of flour and coffee, and they'd bring it from Flagstaff, which is the closest center — you know, you'd be out 50 miles, and suddenly the truck would stop, and off would go the — at least from a Navajo perspective — and they would be taking something over the hill. They lived over the hill, and you didn't even see where they lived. Hopi, we lived in the villages.

Eventually, after rebuilding the road — because thunderstorms would come up and wash out the road or make it muddy, and we'd have to fix up the road a little bit, but that was just normal. And the wind would blow and get all sandy. That's the northern Arizona desert even today, except now, of course, we all have modern roads and communication systems.

All that's been brought in, and just like — as an interesting side note, like the rest of the world, instead of putting in a hard-line telephone system, it's all cell phones, so the cell phone industry really had a big expansion where there weren't any infrastructure that is in the ground lines for telephone. You know, the United States developed a lot of land-line telephone, so in a way we were a little slower at the cell culture initially, but now, of course, everybody is well adapted to cell culture.

MS. RIEDEL: Absolutely.

MR. QÖYAWAYMA: And the reason I bring that up is because Hopi got — one of the last things we were to get is cell service because, first of all, we were remote, and it costs money to put that in. But we do have one service. And another area we've gone heavy into is solar.

MS. RIEDEL: This environment is perfectly suited for that.

MR. QÖYAWAYMA: Yeah, because they're remote —

[END CD 1.]

MS. RIEDEL: This is Mija Riedel for the Smithsonian Archives of American Art, with Al Qöyawayma in the artist's home in Prescott, Arizona, on March 30, 2010. This is disc number two.

It sounds as if, from your earlier descriptions, that the back and forth was a fairly comfortable one for you as a child, from a traditional elementary school experience and junior high in southern California to your summer experiences here with your family and your traditions in Arizona.

MR. QÖYAWAYMA: Yes. It's not the kind of process where I'm super-sensitive to the culture. I don't think about other individuals and their cultures and where they may be visiting to. I just didn't have that perspective. It was just something the family did, and was normal. Some of our Hopi relatives would come to southern California, and sometimes we would go off and do something together there.

So it just seemed sort of normal. I just lived in a different place. I didn't really necessarily understand the depth or the breadth of the Hopi culture, being young. I would hear various things. And I didn't live in the village all year long, so unfortunately, I didn't see, necessarily, a whole ceremonial cycle. But then, I didn't question it either. And the teachers in school, I'm not sure they really knew my cultural background, so I didn't get any special questions from anybody.

MS. RIEDEL: Was you aunt already working in clay when you were visiting during the summer?

MR. QÖYAWAYMA: At that time, no.

MS. RIEDEL: Okay, she hadn't started yet.

MR. QÖYAWAYMA: She was still a teacher. And, oh, I know she was working at different things, but she hadn't developed her own clay — call it career or activity - like she did later.

MS. RIEDEL: Well, what motivated your interest in engineering? Is this something that started in high school, even earlier than that?

MR. QÖYAWAYMA: Well, I found — as I said, I didn't have any particular difficulties with science, math, chemistry. As a matter of fact, my mother had become a nurse, who trained in New York, and she wanted to be a chiropractor. I don't know that this had anything to do with where the books came from because I don't know where the source was, but she had a chemistry book.

And back then they used to sell chemistry sets without restrictions like they do today, because now kids can get hurt with them. But like every kid in the neighborhood, you know, if I can build a smoke bomb or do something, that was — and so I played with all the chemistry.

But I actually learned the tables — periodic tables. In sixth grade I remember I really went through the college chemistry book, plus I had the chemistry set. I had a masterful chemistry set I had bought myself. I had had jobs on the outside, like paper routes and things. I mean, they don't do those things so much with kids anymore.

MS. RIEDEL: I don't think so, no.

MR. QÖYAWAYMA: But, you know, I learned to be self-sustaining. And I went to school — I didn't necessarily go to school in the local neighborhood. I was sent to some special schools down in Los Angeles. So I was gone, just in the transportation process, two hours a day, and I think I started —

MS. RIEDEL: Was this in junior high or high school?

MR. QÖYAWAYMA: No, I started in third grade.

MS. RIEDEL: Really?

MR. QÖYAWAYMA: So I was pretty much on my own, but as a 3rd grader I never thought much — once I knew where I was going, I mean, I wasn't scared or anything.

MS. RIEDEL: Why was that? Why did you —

MR. QÖYAWAYMA: Well, first of all, I didn't have any brothers and sisters to tell me anything different, and I just had the confidence; I knew where I was going and what I was doing. And I remember specifically learning how to save a nickel. If I could walk two miles to avoid this transfer, I could go to Punch and Judy's and get a — [they laugh] — I could get an ice cream cone for a nickel. That was a big deal.

MS. RIEDEL: Absolutely.

MR. QÖYAWAYMA: But it would take me an extra 20 or so minutes, 30 minutes. And of course, I had to know what the schedules were, sort of. I had a sense of the schedules and —

MS. RIEDEL: And was the school somehow superior to the local school?

MR. QÖYAWAYMA: Oh, it was — yeah, it wasn't a public school; it was a private Christian school —

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: — in downtown Los Angeles called Culter Academy. It was a Christian-based school. I'm not too sure how we got connected up with that. Maybe I was having some difficulty with the local public schools. I don't remember exactly. [Anyway, it led to me becoming a Grace Redeemed Christian! Just as my aunt, Elizabeth.]

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: I think I can kind of remember maybe I didn't like some of the teachers or something, the way they were doing public schools, but that was a good school because they were very disciplined.

MS. RIEDEL: And in third grade you took the bus from Sherman Oaks to downtown L.A.?

MR. QÖYAWAYMA: Oh, even better than that. There was a bus involved, but they had the trolley system then.

MS. RIEDEL: Oh, my goodness.

MR. QÖYAWAYMA: And I loved the trolley system, riding the rail, you know, which essentially is a railroad track, and even to getting to throw a switch at Hollywood and — I forget the boulevards there; it was in Hollywood. One day the conductor let me do that. It was a mechanical switch. Oh, wow, you know. And I would always ride right up in front going home.

MS. RIEDEL: What an extraordinary experience, and you must have been eight, nine.

MR. QÖYAWAYMA: Yeah. Right. So to me, that was just normal. Kids — you just don't ask other kids about their experiences. I know there was a gal, one of the students, and her parents were coming to pick her up from Van Nuys, and sometimes I'd get a ride to Van Nuys the other way.

I knew enough where I was going that they'd drop me off there, and I'd either walk — I mean, it was nothing to walk two or three miles. And that's still true at Hopi today; run, walk, you know, great distances. Distance wasn't a big thing. Sure, it would take a little time, but —

MS. RIEDEL: Then where did you go to high school? Did the Culter Academy go up through high school?

MR. QÖYAWAYMA: I don't know that it did or didn't. I just went to high school — a public high school, and it was Van Nuys High School.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: Interesting experience in the sense of — I described already this four-four where you're four hours —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — in academics and then working four hours in — it turned out to be a machine shop, but then that turned into tool-making because I moved to another company, called Herant Engineering. That was really one of my first real, solid-core experiences in practical engineering, because that's really what they were doing. Today that would be considered to be definitely an area that engineers would work in.

MS. RIEDEL: And you mentioned that hands-on, very practical skill became invaluable later.

MR. QÖYAWAYMA: Yeah. One of my first mentors was — when I think of "mentor," I mean outside mentor, aside from my aunt, which I had interface with, but I didn't know she was really going to be my mentor.

But it was a fellow named Pete Solakian, and his family all came from Armenia, and of course, there had been all kinds of tragic things happening back there in Turkey and what have you. That's a whole other history story, but they were very kind, and they were very skilled — extremely skilled at what they were doing.

MS. RIEDEL: So he was quite a bit older than you.

MR. QÖYAWAYMA: Oh, yes.

MS. RIEDEL: He worked there, and you were a student.

MR. QÖYAWAYMA: Yeah, then I went to work for them, and I started learning what we call machine tool, which means learning every kind of precision process there is — very, very high-precision processes, which boded very well for me when I graduated, eventually, in engineering.

In fact, it helped pay for my engineering school, because during the summer I learned to design — they were building molds, experimental molds for Cannon plugs. They were doing the experimental work for Cannon Electric. And some of it was very, very precision, and we had to learn to make all the cavities to make the molds to do these experimental plugs that we were doing.

MS. RIEDEL: What were you making them out of?

MR. QÖYAWAYMA: Well, the actual tools were made out of high-carbon steel.

MS. RIEDEL: So you were working with metal at this point.

MR. QÖYAWAYMA: Yeah, those were all steel, and they could be polished to a mirror finish. I mean, it was all kinds of things.

MS. RIEDEL: Interesting, which makes me think of how beautifully burnished your pots are.

MR. QÖYAWAYMA: Right.

MS. RIEDEL: You talk about polishing.

MR. QÖYAWAYMA: Yeah, I learned to use diamond dust when I was —

MS. RIEDEL: Really?

MR. QÖYAWAYMA: — just out of high school, I guess. How do you burnish something — I mean, really make it high-polished, so that they could inject plastic, because this — we didn't mention the little slight — well, why were we doing this? To inject plastic.

In the meantime, we had a lot of other work, precision work, from companies like Rocketdyne, which was just down the road, and we were just getting into the space program. I didn't know too much about rocket engines, but I made a lot of pieces for engines in a practical sense.

But the drawing — all my drawing skills were used — I mean, we didn't have CAD/CAM [computer-aided design/computer-aided manufacturing]; we didn't have all the modern things back then. The word "drafting" meant you actually took courses in drafting in college, particularly if you were in engineering.

So I used that, and I would actually do drawings in San Luis Obispo and ship them down to southern California and back and forth, and they would build tools based upon my drawings.

MS. RIEDEL: Interesting.

MR. QÖYAWAYMA: And by that time, I was only one year — two years - out of high school, so I was already contributing to an economic enterprise which was doing something that was experimental and on the cutting edge, really.

MS. RIEDEL: Absolutely.

MR. QÖYAWAYMA: That's a term I might use some other places, but I always felt like I was able to float — like a surfer on the front end of a wave, my life has always been on the cutting edge, being able to ride that wave on the front edge, which is exciting if you're a surfer.

MS. RIEDEL: Absolutely.

MR. QÖYAWAYMA: You know, you catch that wave, and you ride the wave. Now, it doesn't last forever, so you have to go out and find another wave.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: But that's a good analogy for research in life, because I've always been in research in one form or another —

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: — and be able to define my environment, as opposed to others telling me what I had to do. I mean, now I'm advancing way into the career, but I could set up and say, okay, here are the kind of people I need. I get to choose the people I want. I have the money to spend for them. I have the objective — I can even define our objective and policies. Wow, that's a great experience. A lot of people today going into the workaday world don't really have that kind of freedom.

MS. RIEDEL: No. That's true.

MR. QÖYAWAYMA: And there's the other word, cutting edge and freedom. We talked a little bit earlier on our own about economics and money, but what does it buy you? Does it allow you to buy things to just satisfy your wants? Well, certainly your needs, but more importantly, properly managed, it gives you a degree of freedom.

Even in ceramics and what I do now, you know, I can carry myself for a long time and do what I want to do. So I'm doing what I want to do, and I have the freedom to stop or start. But I don't have any particular — clay is so intriguing, I just — it's like a musician, I imagine. Once they become a good musician, you want to play whatever instruments — you might compose, you might do a lot of the peripheral things, but still your music becomes your core.

MS. RIEDEL: So you took — speaking of core and ceramics, you took it in junior high. Did you take it in high school as well?

MR. QÖYAWAYMA: No, I just — it was an incidental course. I took the course. I'm not even sure — I remember some of the pieces, and I remember getting —

MS. RIEDEL: What were they like?

MR. QÖYAWAYMA: Well, I had a little — I thought cars were wonderful, so I tried to model a car, and I'm sure I did some balls in different shapes, and they were glazed. And, you know, I just did what the assignments were. I do remember getting the highest — the teacher told me I had the highest ceramics score that any of his previous students had had, but that didn't really register anyplace.

And, by the way, during that same period of time I mentioned the machine shops, because it was the same period of time, the metalworking shops doing castings, we actually made sand molds and poured aluminum and things — I still have some of those castings here — and metalworking, just whatever it happened to be.

This was the same period of time. But at the same time — I mentioned the chemistry book because you were going there. And slide rules were something that I guess had been around for a long time, but I became aware — they made some little, simple slide rules. And a slide rule then is like having a little calculator today.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: And I remember when the first calculators — I bought one of the first Hewlett-Packard, really nice, super-duper — as good as anything you can buy today, the first one was, but it had LEDs [light-emitting

diodes]. Nowadays you've got to read these crazy screens. You can't see them. So I learned to work the slide rule, and all the kids didn't know what I was doing. You know, I was like magic.

MS. RIEDEL: Right. Right.

MR. QÖYAWAYMA: But I sat down and read and learned how that was done. I don't think there was any teacher that ever showed me how to do it. So there was a certain degree of exploring, because I would go out and explore in a native environment. We lived along a river system that now is today part of the urban area, but I'd spend all day out, you know, cutting reeds, float down the river, tie them up with a rope, and take just enough food with me to go.

And I was always by myself, so when I went in the Sierras [mountains] or wherever, I was never afraid of going out — you know, I wasn't a mountain man, but I could fish and get things and cook. So I liked doing that. And of course, I had friends that I went with from time to time, or my family.

MS. RIEDEL: So you felt very comfortable out in nature by yourself.

MR. QÖYAWAYMA: Mm-hm. [Affirmative.] Yeah, even to where it was like — in northern Arizona it's so quiet, it's deafening.

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: It's a roar.

MS. RIEDEL: Yes. Yes.

MR. QÖYAWAYMA: And I've had professionals — I had one doctor ask me, does it feel like just a completely alien environment? No, just seemed pretty normal to me — [laughs] — not an alien earth. So natural things weren't alien to me at all.

MS. RIEDEL: So the exploring took you off in the direction of science and engineering through college and through graduate school. Is that right? You were at San Luis Obispo [California Polytechnic State University] and then USC [University of Southern California, Los Angeles]?

MR. QÖYAWAYMA: Mm-hm. [Affirmative.]

MS. RIEDEL: And when did you graduate from high school, and then when did you graduate from San Luis?

MR. QÖYAWAYMA: I graduated in 1956. And, coincidentally, this turns out to be a thread later on, not to get into, necessarily, Hollywood, but we were close to Hollywood, and we had a lot of people from our school — one was Robert Redford. It turned out I had family that had interaction with Bob over the years.

That's a different story, and we don't necessarily need to go there, but it's pretty funny stories, particularly regarding my wife, Leslie, and his interaction with her. But we had a lot of people that kind of migrated to Hollywood from high school, as you might imagine. I mean, there's a certain percentage, being that close to Hollywood.

MS. RIEDEL: Absolutely.

MR. QÖYAWAYMA: And baseball players. Don Drysdale is another name. Some of those names wouldn't be known today, but if somebody looked back — I think it was the Dodgers and what have you — you'd find these different people that —

In any event, I'm trying to put together — there was something out of, kind of, the Native culture that — it wasn't necessarily inferiority, you know, feeling inferior to others, but I was always slower in testing, and at first I thought I was inferior. Later on I learned that — I would take the full time on the test and discipline myself to take a test. Eventually, in a full graduate school environment, I learned that I could exceed others.

It was an interesting evolution in the way you thought about yourself, you know, from being inferior to, wow, I can compete with anybody.

MS. RIEDEL: Did that feeling of inferiority come from a personal sensibility, or was it related to ancestry and background?

MR. QÖYAWAYMA: Well, it could be things like incidents on taking trips or vacations. And, for instance, my father being refused service as being Native American —

MS. RIEDEL: Really?

MR. QÖYAWAYMA: — people of color. Yeah, I've seen that firsthand. So you know, it's not like something that only occurred in the South.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: But as a child I wasn't angry about it. I just thought, you know, well, I guess that's the way the world is. I don't know that I ever thought about it. But it also leads to a degree of, well, okay, maybe you're somehow inferior a little bit; I guess maybe knowing that you're a Native American out in the middle of nowhere. Somehow Indians were in the past history, and you didn't have anything to do with the modern world.

I knew I was intimidated by just purely theoretical things; that is, concepts. So I was afraid to go to a major university when I decided — I had friends that were going to schools that were ahead of me a year or two, and so — UCLA [University of California, Los Angeles] didn't seem like a place I wanted to be anywhere close to, even though I was pretty close to UCLA.

I wasn't going to go there, so I went to a learn-by-doing school. I later learned that that was all false. I went to UCLA for a while. So you know, that was just a phase of life.

MS. RIEDEL: It was a conception that you had.

MR. QÖYAWAYMA: Right, a conception, and I'm sure that happens to every person.

MS. RIEDEL: Oh, I'm sure, absolutely.

MR. QÖYAWAYMA: Something in their lives tells them they can't do something. We talk about women in engineering, and mainstream culture says, you know, you're a housewife, at least in the '50s and what have you. You stay home, have the children, bring the children up, and husbands go out and do all the work, right?

MS. RIEDEL: Right.

MR. QÖYAWAYMA: And it's only a single-earner family. Now we know better, or at least that's the way it is now. And I've described, in the Native American world, we never had that, so as many women succeed. It's about a 50/50 mix.

Anyway, I was intimidated. I didn't go there. But it was a good choice.

MS. RIEDEL: To go to San Luis Obispo.

MR. QÖYAWAYMA: Yeah, because a lot of what I had already learned much earlier was there. And then it was a good choice because, when I then came out of there and went to work for Litton Industries, which happened to be the Guidance and Control Division, I was so far ahead in a practical sense, that from the day I walked in the door, I could — and it didn't hurt that the company I'd worked for previously was just down the road, and that I had all the contact with them, and I could use their facilities anytime I wanted, personally.

MS. RIEDEL: Which was this? Was that —

MR. QÖYAWAYMA: Herant Engineering. [Pete Solakian, the owner, became my first mentor.]

MS. RIEDEL: Herant, right.

MR. QÖYAWAYMA: None of that really hurt —

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: — because it turned out that they were trying to do a lot of things fast, and they were in research. At first, I got sort of in the production, and they didn't know what to do with me exactly. I was just, you know, a young engineer and they had needs for — but I learned how their system worked within six, eight months.

Ultimately, and very soon — a year and half or so — they put me in advanced research and it was a whole different world. I was put with a fellow - I was very young - that already had 300 patents or something with Litton, but he wasn't trained as an engineer. But as an experimentalist, he knew all the engineering aspects or research aspects, so we could design and build things very fast. I'd already done that, and I knew the machine tool industry; I knew how to get things through the system much faster.

That led to one of the really exciting things for me, you know, that gave a lot of confidence. To fast-forward a few years in the research, I had already worked on the X-15 [rocket aircraft] guidance system, and it was a very sophisticated system. And meanwhile — by the way, I was all practical —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — in the sense that I had learned, but I knew that theoretical was coming in. So I just reached for it all the way, and that's where graduate school came into the picture and I learned the electrical side of things and conceptually — you know, all the circuits, the computers, everything. They taught internal courses.

I took everything I could take, because it was part of my aunt's admonition, you know, "Take the best from other cultures, and add it to what you already have."

MS. RIEDEL: Right.

MR. QÖYAWAYMA: So I ended up heading up one distinct part overall of the research. And they finally pulled that off as what we often call kind of an independent think tank. In fact, I've read the story of how the Apple computer was developed, and the environment that we were in was about the same —

MS. RIEDEL: Interesting.

MR. QÖYAWAYMA: — because the environment — typically then, you wore a tie and a suit, and you had this little plastic pocket pencil holder, nerdish —

MS. RIEDEL: For holding your pens?

MR. QÖYAWAYMA: Yeah, and slide rules and things —

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: — because they didn't have the calculators.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: And I remember when IBM first came in, and we had — I learned Fortran [computer programming language], and then it was programming in Fortran, but of course, everything went into a card — maddening.

MS. RIEDEL: So this was a different environment, though, or was it that environment?

MR. QÖYAWAYMA: Oh, I was growing up with the environment.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: Everybody else was growing —

MS. RIEDEL: But you said this was a very creative environment. It was very much like —

MR. QÖYAWAYMA: Yes, so I was assigned to a small, advanced R&D [research and development] group to develop new ideas and designs — sort of a "Skunk Works" [Lockeed Advanced Development Programs].

MS. RIEDEL: And you hold a number of patents yourself —

[Cross talk.]

MR. QÖYAWAYMA: Right. That's correct.

MS. RIEDEL: Yes. And they're for what, Al?

MR. QÖYAWAYMA: They are for parts of the inertial guidance systems that were used, ultimately, in commercial aircraft — 747, Litton Guidance and Control Systems Division [Woodland Hills, CA], "tri-nav system" [also used in Air Force One] — but prior to that, they were also used in F-15, F-4, [fighter planes,] the earlier versions. They needed better ways to produce and less complexity and more accuracy. [This was based on a prototype design I worked on and installed, the inertial platform, in the X-15 experimental rocket aircraft.]

I was doing the theoretical mathematical work, as well as that. I would actually design the control systems, the very high-bandwidth loops to control various parts of the inertial platform system. I also worked on state-of-the-art star trackers [to position spacecraft].

We actually had a lab that looked like — before *Star Trek* even came about - that looked like *Star Trek*, part of the *Star Trek* mockup, you know, where we actually were trying to find certain stars in the sky.

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: I worked in a particular research group, and that was another phase I was working in. We actually developed a star tracker, an optical star sensor chip that nobody in the world had, including the Russians. We had the highest-accuracy systems in the world. It was all top-secret work.

MS. RIEDEL: And this was in the early '60s?

MR. QÖYAWAYMA: Yes, this was in the mid-'60s. I had, literally, a whole career from 1961 to 1971. In that 10-year period, I went through so many things — the graduate school, the total environment.

It didn't hurt that Litton, at the time, had many of the industry's entrepreneurs, because they — you know, we can name names, but if people went back and looked at the names — Henry Singleton, George Scharffenberger — these names were individuals who went out and created Teledyne [Technologies Inc.]. Some had come from Sperry Rand, Sperry [Flight] Systems.

There was a lot of conglomerate work going — if you were in the stock market at the time, conglomerates were the thing back in the mid-'60s, and they were making all the money. And Litton had developed the klystron tube. I actually worked in Beverly Hills. That was an unusual place to work.

MS. RIEDEL: I'll say. To be an engineer?

MR. QÖYAWAYMA: To work in Beverly Hills in developing — and then we moved to Woodland Hills for a much bigger facility. But they were moving so fast and making so much money — the klystron actually funded their work in the guidance systems — we were just really the major force guidance systems.

And that was really good work because it went from this practical mechanical thing to learning how to make systems really work, and spatial systems, things in three dimensions in space that computers keep track of.

So your mind — it fit in my mind just fine, and it let me start to work with people. I was having a hard time — I remember in junior high school, we had to do, in a class — it was an English class or something like that — where we had to give our own individual little talk, and that was absolutely — I just didn't have the ability to be in front of a group. That was just the worst — you know, for me it felt like the worst experience.

I got through it all right, but it just wasn't something I sought, and by the time I got to college, I said, you know — second year — I've really got to learn to speak. So I took a special course in speaking. And then I said, I'm going to take on the responsibility to become a student, you know, the vice chairman of one of the student groups, or become a chairman, and I did, because back then we had AIAA [American Institute of Aeronautics and Astronautics], we had the SAE [Society of Automotive Engineers] and other groups.

And so that started to teach me some leadership skills, which they were also teaching. That was good.

MS. RIEDEL: It sounds like a very methodical march through education — to address anything that you needed to learn, recognize it, and then to address it.

MR. QÖYAWAYMA: Yeah, if you have a deficiency, I learned that, you know, you tried to work at it. You may never be most proficient at it, but at least you would be acquainted and be able to handle that situation.

Gee, it took years until I discovered it was really fun to give public presentations. And in fact, I remember specifically, it was [Supreme Court Justice] Sandra Day O'Connor — I was doing a presentation at the Heard Museum [Phoenix, AZ], and she came up to me afterwards and complimented me — and I was able to interject a lot of humor into that presentation.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: And so, it just really went well.

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: Not all technical presentations go well. [Laughs.] But this really went well, and I said, hey, this is really fun, you know, as compared to being in junior high school scared to death.

MS. RIEDEL: What were you talking about at the Heard Museum?

MR. QÖYAWAYMA: Oh, I was talking about my own artwork and Hopi culture -

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: — and some of the things we're talking about right now, but a segment. I knew less than I do now, but I had done — I've done a lot of different talks —

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: — in different groups in the Heard Museum and got involved in — back then they called it the men's group, Heard Men's Group I guess it was called, but then it became the Heard Museum Council. It became a group with men and women professionals.

It was a group that helped fund-raise and put on various activities, the kind of activities that a Rotary Club or a Lions [Club] or things — you know, they carry on various activities - except it was for the Heard. And now it got to be really well developed.

MS. RIEDEL: I'm sure.

MR. QÖYAWAYMA: Yes.

MS. RIEDEL: Right. Before we leave college and grad school altogether, is there — when you look back at the first 25 years of your life, is there a particular educational experience that you feel was especially rewarding?

MR. QÖYAWAYMA: Well, I've described some already that, in and of themselves, they were little increments that helped me that were rewarding, but in a technical area, I remember I had got something wrong in the math class, and then I took the math exam, and I really blew the exam.

I don't even remember whether I retook the course, or I just did the best I could, but getting something wrong and then learning what was right. Overcoming the defeat, I can remember that.

MS. RIEDEL: Interesting.

MR. QÖYAWAYMA: And then there was the experience, as a senior in the school, which was an exploratory course in control systems, which involved all the kinds of real-world aspects of things but also a combination of theory and electrical systems, electronic systems. It doesn't even have to be that; it could be light; it could be a lot of different things — in other words, the physics of systems. And that turned out to be the keys to the "magic kingdom" for me.

MS. RIEDEL: The combination of the practical and the theoretical.

MR. QÖYAWAYMA: You know, for the very first time — it was exploratory, so you weren't coming out being a competent person in that area, but enough that I said, this is really — this is opening up the world, you know. I could see being really competent at this. Because most young people wonder if they — they have textbooks in high school and then in college, and you wonder, somebody wrote the textbooks; could I ever get good enough that I didn't need a textbook to solve problems?

Well, I think most professionals now know that they get good enough to do that usually, and some of them get good enough they could write the textbook.

MS. RIEDEL: Right. Right.

MR. QÖYAWAYMA: And I had that experience by the time I'd gotten through Litton. So there's a lot of great confidence that came from that. And it's not just that you can do the work; it's how you involve people in the work and how you create motivation and enthusiasm and how you get through all the difficulties.

I have to go back to Litton just for one second because I got just to that point for a moment. In my practical skills, I learned that to produce something. In a typical governmental process, particularly since we're doing military work, they have a purchasing agent, and you have to go through this whole thing and get your drawings - you get it all bid out, and you get different people bidding. And then you get the lowest cost, and you can go ahead and build it. This is a methodical, time-consuming process to go through.

But, being that I had come from the research environment in producing the actual items from sketches and drawings, I could do it much faster than the system. So I was used to what I call time and material — I've used it my whole life — which means you find a competent outfit that you trust, and then you go in there, and you write a blanket contract, and you bring in whatever you're going to work on, and you get it produced.

And it turned out it's much less expensive if you have a trustworthy outfit. Of course, you could get ripped off by that.

MS. RIEDEL: But that worked for you.

MR. QÖYAWAYMA: Well, it was using the same company I'd worked for, so they did a lot of the work. I knew they were the best, and they could do it very fast. I could talk to them personally and say, okay, you know, we need to really get this done inside. How fast can we get this done? And nobody else in the company could do that, because they didn't have that experience.

And, more than that, most of the kids out of school — I called them kids at the time, but they were coming in — I remember these individuals coming from MIT [Massachusetts Institute of Technology, Cambridge, MA] and eastern schools, and they didn't have any practical training.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: So I could just look at something and say, you know, we could build that, and here's what it's going to take. And they would, on the other hand, not have a clue. So it wasn't very long before the management had me having one or two trainees going around with me to learn how to get things done in a system.

But how to get things done when we got into advanced research, and we were actually pulled off as a separate group, a research group — had a separate building, had our own senior vice president of research. But just prior to that I had proposed that we use this time and material system.

Now, this doesn't have much to do with pottery, necessarily, instantly speaking, but it was that confidence-building, because I remember the purchasing agent, which was much older than I was, telling me, you know, you, as an engineer down here, you know, we get guys like you fired, and we're not going to do this because — the government purchasing world was their world, and that was a big piece of what was done in contracting.

And I said, "Well, that's all fine and dandy, but you won't even have a company unless we come up with new designs products, and we can outcompete other companies if we can have the time and material." That's one element of outcompeting, of course, ideas and — that's a whole other discussion, because I got put in charge of ideas.

MS. RIEDEL: So by "time and material," you mean that your practical experience and knowledge of what actually had to happen allowed you to understand and be able to project exactly what would need to happen in order to make this thing real —

MR. QÖYAWAYMA: Right. We take our drawing in —

MS. RIEDEL: — in order to design and build and — yeah.

MR. QÖYAWAYMA: — and we took the first drawing, and we'd go in, and we'd work shoulder-to-shoulder with the individuals in developing. And I knew what instructions to give, and I'd leave them alone and go away. We could get the things done in three times the speed, more like five times the speed, and half the cost.

MS. RIEDEL: Interesting — very interesting.

MR. QÖYAWAYMA: So we were able to put our systems together. And I could apply this not only to what I'd learned, but in other arenas as well, because there was all this electronics and things that we had to do.

We just had this room where our particular systems that we were developing, we developed them so much faster, and we came up with the methods where — the patents, what I got on the guidance systems — that were so much easier to put together, and so we could be super competitive. And then ultimately, they became commercial products.

MS. RIEDEL: Interesting. So now I'm going to suggest we shift focus.

MR. QÖYAWAYMA: Sure. Yes, I'm just telling you that that was a confidence-building experience, in that 10 years, not only in the technical but in the people, since — there's still a lot of things I had to learn, but that was an important aspect of building my background. And it would be important for an artist as well.

You know, an artist, maybe they come out of school and are artists to begin with, but there's a lot of practical business skills and other things that they — a lot of artists fail because of that, and I see that, and I've — well, we can go to the Institute of American Indian Art [IAIA], and when I was vice chairman there for six years —

MS. RIEDEL: Well, the —

MR. QÖYAWAYMA: — and the students, you know, and seeing what art students lacked when they didn't have this other background.

MS. RIEDEL: And you took over the vice-chairmanship of that in the '70s. Is that correct?

MR. QÖYAWAYMA: No, I took over — that was about 1988.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: That's another story.

MS. RIEDEL: We'll get to that. But I think practical skills are an interesting and important point, and one that isn't made frequently. But in a practical world, they're really necessary.

MR. QÖYAWAYMA: Yeah, you know, if we have total freedom, you can create any art you want. You don't have to be responsible to anybody, and, I mean, it's a grand and glorious world. But that's not the story you hear about most artists. They usually struggle, and the struggle usually teaches them a lot of things. If they don't learn some of the practical things, they don't survive.

MS. RIEDEL: Here is my next question: This was clearly a very exciting, dynamic time for you — '61 to '71, something like that — mid-'60s to mid-'70s while you're working at Litton. There was so much going on. You were clearly having a lot of success, you were fully engaged, but at about this time, in the mid-'60s — '67, I think — you also started to work in clay with your aunt when you were visiting. Is that correct? Is that when that began?

MR. QÖYAWAYMA: That's, you know —

MS. RIEDEL: What about clay drew your attention when so much else was going on?

MR. QÖYAWAYMA: Well, I was used to going out home, to Hopi [Indian Reservation] because of earlier experience, you know, coming over Yarnell Hill through Prescott up to Flagstaff and going out from Los Angeles, okay? And so, it was a normal thing to go out and visit and also —

MS. RIEDEL: This would be vacation or —

MR. QÖYAWAYMA: Yeah, vacations, right.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: By then my life was compartmentalized, so I would take a vacation out there, sometimes with my family, sometimes just by myself. My aunt was out there, and that's a whole other story, about how she ran what would be like a bed and breakfast. They didn't call it that. And she had guests like Ernest Hemingway and the Roosevelts. [Hemingway encouraged Elizabeth to write her story.]

I have right here, on the shelf here, I can show you Ernest Hemingway's and his wife's signature. And there's a whole part — I went down and talked to — in Florida they have a whole historical society —

MS. RIEDEL: Sure.

MR. QÖYAWAYMA: — and there's a piece of his life they're missing, and our family has a piece of that life, the stories I have, at least verbally.

MS. RIEDEL: So your aunt — was this after she'd retired from teaching?

MR. QÖYAWAYMA: No. Let's see —

MS. RIEDEL: It was something she did on the side during the summer? She had built her house —

MR. QÖYAWAYMA: No, this was actually before she was fully engaged in teaching. I think — you know, there were summers that she was off. To tell you the truth, I don't know exactly what the mix was. She was teaching — she started out early — but I can't tell you — I mean, she had to have a place to live, and so she was doing more than one thing.

MS. RIEDEL: So you would go visit there during the summer, during holiday breaks, and somehow you began to work with clay.

MR. QÖYAWAYMA: I just started watching her, yeah. And I was interested in everything else that was going on, all the interesting people that were coming in, and our cottonwood tree and just stories of — of course, I had known my grandmother and grandfather, but then suddenly I was translated to, here's the place to have the expression.

My grandfather was born in Mexico. My grandmother was born in New Mexico. My father was born in the territory of Arizona, and I was born in a state. And of the first three, they were all born in exactly the same place, Old Oraibi, which describes what's happened.

What seems to be ancient history to us today was all still real in our family in everything that had happened, the original Mexican — or I should say Spanish and then the Mexicans — the military I'm speaking of.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: And then later the U.S. military came in; the stories my father told — we were being treated by the U.S. military much like the Mexican military treated us, and we just, you know, looked at them at a distance. Even today there's expressions — I just saw one recently the other day about, you know, well, we've gone through this culture and that culture; we'll still be here, and it will be some other culture that will be around us.

Well, I don't know whether that's true or not, but there is that feeling that we're permanent, and everybody else is transient.

MS. RIEDEL: Interesting. I can see why, given the history of being in this place for a thousand years, if you can take it back that far, why there would be that sense of history.

MR. QÖYAWAYMA: I'm sure other cultures, to a degree, have that feeling. Of course, if we were all wiped out or something, that would be a different story.

MS. RIEDEL: And what was it about the clay that drew you, or did it just start as curiosity?

MR. QÖYAWAYMA: It was just because my aunt was becoming my mentor, philosophically, because she was matching up the ancient world and the real world. She had had practical experience with matching up worlds.

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: And I was one that needed to catch up and match up worlds. In that sense, my father hadn't really fully had that experience and neither had my mother. So she had had far more experience at that.

MS. RIEDEL: Going back and forth.

MR. QÖYAWAYMA: And going back and forth, yes.

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: — and listening to her talk to other people when they came to visit, and being there at the same time, and how interested the other people really were in what she was saying. And even she would come out to southern California and speak to a class. She could take children and talk to them two hours — you know how they squirm around — and they would just be awed by her. She just had this awe-inspiring quality.

And here it was — she had all these abilities — we have all these relatives, but they didn't necessarily view her quite the same way I did, because maybe they hadn't had as much change in their life. I saw that there's a dynamic, and by implication she knew something about that dynamic, and I didn't know about that dynamic.

It would be like any artist today trying to get into their field and their world and what have you. Now they're probably dealing through universities and through galleries and things, but still there's this dynamic of introducing yourself into the world and then getting your feet grounded. She had that culturally. That's almost bigger than a discipline like art. It could have been science; it could have been math; it could have been teaching; it could have been history; it could have been being an anthropologist. I mean, it could be anything, you know?

MS. RIEDEL: So the ceramics was an entrance to a cultural world.

MR. QÖYAWAYMA: Absolutely! Yes, it was. I discovered I liked it, and I began to realize — she had books. In our interview here I haven't shown you some of the books here, about from 1895, and I would look through those books, and bingo, here was something that was very dynamic, really good-looking, and somebody had really studied and put a lot of effort into it, and I didn't know anything about it.

MS. RIEDEL: Documenting the ceramics of Sikyatki and the Hopi going back over a hundred years, right? We're talking — well, no, 1895: 50 or 60 years.

MR. QÖYAWAYMA: Well, since Sikyatki ceramics had been dug up, yes, the 1895 period, but of course, it had been made much earlier. I have been through those books so much now and different books and had interaction with anthropologists, or archeologists, really — more archeologists — that I've actually found, in the Smithsonian system, errors - not in the original books, but I found in the translation from the book to the acquisition system — I've found and helped correct errors in their acquisition system.

That was interesting to me, and I found pieces they didn't know they had by being there and studying. Even when I was working at Litton, and I'd have to go back to Washington, D.C., or something, I'd go to the Smithsonian. Somewhere along the line, you know, in my interests, I was going in to look at the Natural History Museum [Smithsonian National Museum of Natural History], because there was no National Museum of the American Indian at the time.

It was still — anything that was Native American was in the Natural History Museum because we're natural history, right? [They laugh.] We're just a piece of the environment. Just like we're part of the Department of Interior; we're just a resource. We're used to these metaphors and this interaction.

Also, more recently — we may not go there, but having interacted with major utilities and Peabody Coal and the Department of Interior, we've come far enough to be able to beat them at their own game. We're not proud about that, in the sense that we know that it's a continuing competition of minds for resources, but we had arrived at a point where we're competent enough to compete on a political level, on every level possible.

MS. RIEDEL: And to take control of the resources that are on your land —

[Cross talk.]

MR. QÖYAWAYMA: Well, trying to, I say.

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: It's not that simple, but, yes, that's the objective. I mean, the people's voice is always important, but to actually get it done is something else.

MS. RIEDEL: So it sounds as if — if I'm understanding what you're saying correctly - that your aunt was offering insight into that core sense of self that you were talking about earlier.

MR. QÖYAWAYMA: Yes, and she'd been successful — Secretary Ickes [Harold L. Ickes, Secretary of the Interior, 1933-46] — in changing the whole education for the Native American community throughout the United States. She had been successful and recognized for that. I've safely stored the Department of Interior gold medal in a safe deposit box.

MS. RIEDEL: For coming up with a new way to teach —

MR. QÖYAWAYMA: Right.

MS. RIEDEL: — that would really engage children —

MR. QÖYAWAYMA: Right.

MS. RIEDEL: — and get far superior results —

MR. QÖYAWAYMA: Correct.

MS. RIEDEL: — to what had been done before. Right.

MR. QÖYAWAYMA: And they were far more capable than anybody was ever giving Native people credit for.

MS. RIEDEL: And a lot of that — we should say just to clarify — she was doing by adapting lessons to include situations and stories that were familiar to her students, as opposed to stories and situations and scenarios that had nothing to do with their own life experience. In a sense, she was making the learning very practical, based on her experience.

MR. QÖYAWAYMA: Yes. I mean, just to take a simple example, she would have stories about birds or something that might be a Hopi story, but then there would be more than one bird and two birds and three birds, and then pretty soon she was actually getting them to count, and simple things like that to go towards the math.

MS. RIEDEL: Exactly.

MR. QÖYAWAYMA: Basic math, not some advanced math, but that's where you start.

MS. RIEDEL: And something about her philosophy was held in her clay practice.

MR. QÖYAWAYMA: Definitely. Well, I wonder if the clay practice didn't come in the other way around.

MS. RIEDEL: How so?

MR. QÖYAWAYMA: Well, she was reaching out and learning the various aspects of her own history, not unlike myself. That's probably where we were partners in crime. But I had more access, ultimately, than she did.

MS. RIEDEL: Interesting.

MR. QÖYAWAYMA: She had more personal access, because everybody wanted to know who she was because she was so different, but I had the physical access to things.

MS. RIEDEL: And also a conceptual and theoretical and trained methodological access.

MR. QÖYAWAYMA: And I could ask an anthropologist. You know, I'm not some crazy student out there asking for some information. No, I have the specifics I wanted to find out about, and they would let me loan with objects or things. So a degree of trust was established, and then I established a lot of relationships that way.

MS. RIEDEL: So you spent almost 10 years — you have a lovely way of describing this, I think: you said you went through the ignition of a process in wanting to work with clay, and you recognized that, and from, say, the mid-'60s to mid-'70s, you really focused on learning how to develop a ceramic practice.

MR. QÖYAWAYMA: That's true, and that's very important to our discussion and why you're here, you know, in art because I wasn't thinking art per se. I really wasn't, not initially. I was thinking about mastering some old techniques. My aunt was doing them to a degree, and she was mixing different clays and going out and experimenting with different things — she was an experimentalist, too — not unlike science.

And she had a very good mind — she was keeping track of things — but aesthetically they were coming out very pleasing. And so, a couple of summers I remember I came out, and I made — I haven't shown you the bell, but she liked to make these Corn Maiden bells [in 1968 or so]. And I made one.

I watched her, which was our technique of learning, and I brought it home. And my wife, Leslie, saw it, and she thought — you know, because we were on a budget back in those early days with a family — I had spent my money on some art. You know, "Are you crazy? We've got things to pay for." And she was really surprised. "No, I made that."

Then we were running around in our local community trying to figure out, well, if I made something, and she could appreciate it, is this the type of thing that could be sold, because everybody knows about Indian artifacts, you know, and the train station [Fred Harvey bringing in tourism via the Santa Fe Railroad] and all that.

There weren't that many galleries out in southern California that were handling American Indian art, and at least at that time, I didn't have any gallery connection, because everybody knows in the arts if you reach the inner core of the collectors, and you have something unique, you'll do pretty well. It will carry you along. You may even get a patron or two along the way.

So we didn't have that experience. This was by the time we'd moved to Thousand Oaks, California. That's where we lived while I was working with Litton, until I left Litton. I didn't really have a gallery experience or anything, but I knew by that time that I had some capability. It was when I came to Arizona and started applying a lot of my experimentation.

When I first came here [Arizona], even though I was working full-time, I was experimenting, because there was just one question right after another. I was getting into the old books, and, okay, where did they get their clay? How did they process it? There's nothing written down.

Yes, the Tewas were doing their thing, but I know that we were coal-firing; they were not coal-firing. I knew that they were coil-and-scrape to a degree, but from what I could now see — and I just showed you about the clay and how it was pulled — it had a taffylike quality. I said, "That's not necessarily the clay mixture that's being used today."

MS. RIEDEL: And you figured that out by looking at shards.

MR. QÖYAWAYMA: Yes, I had been already into the Smithsonian and the [Smithsonian National Museum of] Natural History and, as I said, the attic, the dusty attics back then. Now they've moved it all to Suitland, Maryland, conveniently.

The National Museum of the American Indian has this incredible — I have to just express this because it's an emotional thing. They have this incredible site where they house all the objects, and then next door to it is the Natural History Museum. They built a similar facility, so you can walk from one to the other. That's nice.

But the first time I went in — I saw the National Museum [of the American Indian, NMAI] when it opened. There's a whole story about art leadership and AISES and how all that got involved. We did provide the leadership for the arts from the sciences. That's really interesting.

MS. RIEDEL: Let's hear about that.

MR. QÖYAWAYMA: The simple part of that story is that the first chairman of the board [of NMAI] was the executive director that I'd hired for AISES, the American Indian Science and Engineering Society.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: AISES is not a household word in mainstream America, but today, after 30 years, it's a mainstream word in Native America. You can be in the backcountry and up in Alaska, and you say the word "AISES," and some little grandmother knows what you're talking about, because that's the metaphor for education in a family experience. And even though they happen to be Alaskan, I can work with the Hopi; I can work with the Mohawk. You know, I can work with somebody else. It really has just cut across everything.

MS. RIEDEL: It's a generic reference to education, which had to do with the founding of the museum?

MR. QÖYAWAYMA: Well, what happened was that we just had natural leadership. Norbert [Hill, first chairman of NMAI] was just a tremendous communicator and outward-expressing individual. He's now vice president of the campus at the University of Wisconsin at Green Bay.

And he was able to really, more than myself, communicate with people. He didn't have necessarily all the technical ability — he was an executive director; he wasn't expected to have all of that. And there's a whole description of how we did the search and couldn't find anybody, and then we figured this out.

This gets to A. T. [Andy] Anderson, who is another mentor, since passed. That's a whole — A. T. Anderson is a whole story, and there have been people pursuing A. T. Anderson's story. And that takes us to Ely S. Parker [Seneca, engineer, attorney, and tribal diplomat] and [President Ulysses S.] Grant's administration. I mean, we've got stories that tie us into various pieces anyway.

MS. RIEDEL: One thing you told me about A. T. Anderson: "We are tomorrow's —

MR. QÖYAWAYMA: "Ancestors."

MS. RIEDEL: — ancestors." Is that it?

MR. QÖYAWAYMA: That's an expression he used. He also created this family expression — "We are a family" — and he made it stick.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: And it sticks — after his death, years later, it's still — it's the core of AISES. And, I mean, anybody that wants to belong and participate with us can. We have major national conferences. We have regional conferences.

Anyway, back to the leadership. Norbert was the first chairman of the National Museum of the American Indian board of directors. The second chairman, when the museum was actually finished and built, was Dwight Gourneau, and he had been — I think he was the sixth chairman of AISES.

One of the things that was important for a American or any organization was to actually survive. There's so much money that goes into specialized things, and then those people that have the glorious ideas, when their energy dissipates, the effort usually is finished. But we particularly wanted to have governance, so we had to pass executive directors, and we had to pass chairmen, and to elect a board and have that core interest, because it gets passed on. It becomes the value system of somebody else, and they hold it with the same value you hold. That has happened.

So that's the position of being the first chairman of AISES, not only hiring some of the key people, but actually —

initially we didn't have the funding to —

[END CD 2.]

MS. RIEDEL: This is Mija Riedel for the Smithsonian Archives of American Art, with Al Qöyawayma, in the artist's home in Prescott, Arizona, on March 30, 2010. This is disc number three.

You'd just started to talk about the Ely S. Parker Award?

MR. QÖYAWAYMA: I was talking about AISES, and wherever the tape shut off there — I was talking about our leadership for the National Museum of the American Indian. And of course, there's art housed there, and how important that is to us, but NMAI's leadership had come out of AISES.

I was talking about Dwight Gourneau, and I think I'd covered that. He was the chairman of the board at the time that the National Museum was dedicated [September 21, 2006]. And that was a tremendous dedication because that whole [National] Mall was filled with the different American Indian groups, including Hawaiian groups and other Canadian [First Peoples] groups.

It was just a tremendous experience. They were all in Native costume, and it took quite a bit of time to seat all that. And then the museum was open, and — everybody went through it, so that as an experience by itself. But Dwight and others, we'd all together created something called the Ely S. Parker Award, and whether we missed it or not, I'll just repeat it.

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: You know, who was Ely S. Parker? He was a general, and he was an aide to General Grant, who later became President Grant. And at Appomattox [VA, Confederate surrender to Union, 1865], Ely S. Parker was the third person present in the room when General Lee [Robert E. Lee, Commander, Confederate Army of Northern Virginia] walked in. General Lee initially was taken back because [Parker] was dark-skinned, and he thought he was mulatto. But he realized immediately that this was a Native American, not somebody in the African background, so his insult dropped, and his composure regained.

Lee said, "Well, at last, sir" — he was talking to Grant — then he said, "Well, at least we have a real American." To that Parker said, "Sir, we are all Americans." And that's a tremendous statement for Parker to make, given — if you knew his history. He had saved Grant's life. At Appomattox he had actually worked on the final draft of the terms of surrender and written — he had all the skills, leadership, engineering, and legal.

MS. RIEDEL: Interesting.

MR. QÖYAWAYMA: And so, Native America was alive and present at Appomattox —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — and a key turning point of what we call a democracy in the United States, but it's a story that's not often talked about. And there's a lot of pieces about Parker we could talk about. His grave is in Buffalo, New York. We've found relatives. There's books written on Ely S. Parker.

So we'll leave that aside for the moment, other than to say we give an award at AISES called the Ely S. Parker Award. It's the single-highest award that we give annually to a Native person. There will be a lot of names that you might even recognize that we've given that award to. It is given for service to the American Indian community. It can be in different forms, so it isn't purely technical or what have you. Leadership.

MS. RIEDEL: Something else that you had talked about that we missed on the tape was the quote from Chief Seattle about —

MR. QÖYAWAYMA: Oh, okay.

MS. RIEDEL: — being present —

MR. QÖYAWAYMA: Yeah, and I think we arrived —

MS. RIEDEL: — that tied into the sense of timelessness that we hadn't gotten to yet.

MR. QÖYAWAYMA: Yes, we were talking about timelessness, and we might have missed a few metaphors and thoughts, but many people have read at least edited portions of what was Chief Seattle's — one of his major speeches. He had several things to say, but basically he said, you know — and I'm paraphrasing — "In time and space," he says, "you're going to have these streetlights, and you'll have the trolleys" — because he lived long

enough to see that, and he says, "but know always that the spirit of our people will always be here, walking these very streets with you."

So in the Americas, it was that timelessness. And I remember the next thing we said after that, and namely — maybe we've captured this twice — the National Museum of the American Indian held a convocation between potters in all the hemispheres. Jody Folwell and I represented the western portion of the United States in terms of ceramics.

And we had this exchange — a lot of translation going on. We had the Inca. We had the Central Americans and, of course, Americans in Canada. So they were speaking Quechua down there, so we had to go through —

MS. RIEDEL: Was that in Peru?

MR. QÖYAWAYMA: No, we were meeting in Washington, D.C.

MS. RIEDEL: And when was that?

MR. QÖYAWAYMA: We put an exhibit together — gee, it's been about four years ago —

MS. RIEDEL: Two thousand six, right —

MR. QÖYAWAYMA: — '06, around there. I've got the books here of the exhibit we produced from that.

Anyway, the point was we had a feeling, was what was common to us. We shared a common spirit beyond just the clay. We certainly — there was a lot of emotion on the part of the Quechua-speaking people and the Central Americans. I can remember husbands and wives — they were all crying when we had to leave because we had shared experiences in our clay.

We had to get earthy and down to the basics. Yes, different cultural environments, different education; we did things maybe a little differently, but in the ultimate experience we experienced the same thing. I could be from a modern world and from the highest scientific standpoint, but still my experience was the same as their experience.

MS. RIEDEL: Can you describe that, Al?

MR. QÖYAWAYMA: So in a way they knew me. They knew me through my clay, which is — we didn't make that point before. They would know — Elizabeth would be known through her clay. Anybody indigenous would know somebody else, and perhaps even a modern potter would know us through our clay; I'm not sure —

MS. RIEDEL: Sure.

MR. QÖYAWAYMA: — but to particularly dig your own clay and process your own —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: I mean, it's part of the Earth, so we're earthy. We always said that. We're part of the Earth.

So now, you asked a question —

MS. RIEDEL: Now, this tied in directly to the sense of the clay object being a way of participating in the timeless history of your ancestors.

MR. QÖYAWAYMA: Well, yes. In my own thinking, from time to time I would think, having done all these research, I actually have a time machine now, and if I could go backwards a thousand years, I'd be comfortable with the culture, my ancestors in that time.

Even with my knowledge today, yes, I'd be trying to explain things to people that would — I'd have to stop explaining them because they'd think I was crazy, but in terms of living with them, I could be comfortable because I understand part of their life.

My aunt always explained that to me in different metaphors and ways, and we even discussed briefly, the other night, being able to tell the personality of a potter from examining the pot.

MS. RIEDEL: Sure.

MR. QÖYAWAYMA: That's all part of the same arena of dealing with the ceramics. So even different groups that we deal with today, when we can really just sit down and talk, we find we have a commonality.

And I imagine a lot of modern potters — I don't talk to many modern university-trained potters, but I've got to believe they've got some of that. Maybe they create for a whole different reason. I'm creating out of, perhaps, a tradition — at least in my imagination it's a tradition, because I can only study so much and see so much, but I'm not too far off the beam. [Laughs.]

MS. RIEDEL: Right, and that leads directly into the experience that you and your aunt had — she was already making very beautiful, simple, modern-looking, streamlined, minimal pots. We're thinking of the vase form with the three or four [corn] —

MR. QÖYAWAYMA: You were talking about Valdivia, Ecuador?

MS. RIEDEL: Right. Valdivia, Ecuador.

MR. QÖYAWAYMA: Yeah.

MS. RIEDEL: And that she was making this pot—the same form — before you two went to see the exhibit of the pots being made in Ecuador how many thousand years ago. Two or three —

MR. QÖYAWAYMA: It's about — I'm trying to recall. Let's see, about 1500 B.C.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: Somewhere in the 1500 to 1200, if I have the dates right.

MS. RIEDEL: In Validivia, Ecuador. They're almost identical —

MR. QÖYAWAYMA: Which is on the southern edge of Ecuador, near the ocean. It's actually very near now the country of Peru. And they were using — they had corn and they were using repoussé techniques. And the corn motif was pushed out from the inside.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: And there were several different shapes. There were large olla objects [unglazed, widemouthed cooking vessels], containers with rims, and then there were small objects. I showed you one the other day. I have to find the photo of it, but there's one — the Smithsonian has been studying — Betty Meggers is the name of the anthropologist, and they had a whole exhibit that I got to see in Washington, D.C., on Valdivia.

So the question is, you know, where did that ceramics — it was so complete when it was found, and yet it's some of the oldest ceramics. They're trying to figure out, well, was it transition or — the technology transposed there by perhaps the Japanese? They were talking about the Joman culture — J-O-M-O-N, which is in northern Japan.

MS. RIEDEL: As having influenced the Ecuadorian potters back then.

MR. QÖYAWAYMA: Right, and have to realize that, well, you get into other questions: were they — the Japanese, in the sense that we think of them today, are where they actually — they were — I'm trying to think of the term they use in anthropology, but they had more of an Anglo background. They had an Asian background; they're northern Japan. That term is "Caucasoid."

But, anyway, the question is, how did that pottery style get there? How did it translate? There are a lot of questions like that, because the old models in anthropology assume there was just the Archaic, and then there was Athabaskan, and then there was the Aleuts that, in time, came in. And of course, the ancient route was blocked by glaciers in crossing the Bering Strait. We've all heard those stories — they're taught in high school or wherever — and that's called the "Stanford model."

But, today, archeologists have been turned upside down, and as a result, of course, any objects, including ceramics, are a part of that. So it looks like we've got time depths now in South America that are older than North America, and the time depths are 25[,000], 30,000 years. And who knows? And the question is, where did they come from?

It's all part of our human history: how did we all get to where we were, and what were our experiences along the line? We probably share a lot in common and don't really realize it.

MS. RIEDEL: Right, and in terms of your ceramic practice and your ceramic objects, they became a way of understanding and researching your cultural traditions —

MR. QÖYAWAYMA: Mm-hm. [Affirmative.] You know, they —

MS. RIEDEL: — and then participating in them, adding to them.

MR. QÖYAWAYMA: It's the way of my celebrating the piece of what I am. I could take that to a higher degree. For instance, I haven't composed songs sitting in a kiva. There are individuals who do that, that will probably never be heard by the Anglo world, but carry on a tradition. Mine can be seen, and it's my own idea of the tradition, as with every artist —

MS. RIEDEL: Sure.

MR. QÖYAWAYMA: — who produces anything, is their own idea. So that way, it gives me a connection; also helps me communicate with young Native peoples that some part of their heritage and tradition, they ought to carry on.

Even in the modern world like we are today, in our economic system, I don't think of just Native Americans. I think — I mean, I'm just as interested in Mexican Americans. Our AISES organization has a lot of relationships with Puerto Ricans, blacks in terms of other organizations — and we work together on various things.

Even just the high school down the road here, these young people, they all have the same needs of grasping who they are and their place in time. They have traditions, and of course, for most, we hear complaints about people listening to whatever music they happen to be listening to, from hip hop to rap to whatever.

And it seems like the older generation has lost track of the younger generation. We're more concerned about how basically they understand the fundamentals in education — reading, writing, and arithmetic — and at the same time becoming the future leadership of the United States.

So notwithstanding the fact that maybe Native America always talks about having its original independence, we are, as a practical matter, as is the native peoples in Mexico or any other country, they're now part of some other political system, but we still don't have to lose who we are, our identity.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: And that's true of non — when we say Native Americans, I mean, we have the Sami of Finland that worked with us, and they're certainly not Native American in that sense, but their philosophy is the same. That's interesting. Indigenous philosophy — that's why working with the Maori was so interesting, because we're just like brothers and sisters.

MS. RIEDEL: You just said something, Al, that I want to touch on. You said, it's important to not lose track of who you are, and I think that's one of the things that's so interesting to me about your ceramic work. It's not unusual to have historical reference to previous artwork in one's work, but yours is very personal, and it feels very much alive.

It does not feel like making reference to a historical past, to some other tradition. It feels very engaged, as if you were bringing the tradition into the present time, bringing it into the 21st century through your own personal interpretation and experience.

MR. QÖYAWAYMA: Yes, the closest I can get to that is when my aunt would see some of my work when she was still alive. I mean, she would praise it and say, "Wow, this is" — in her own Hopi expression she would just say, "This is wonderful. You have the essence." She liked to use that word "essence" all the time. In a way she was saying, "This embodies who I am, but you've taken it a step further." I know she used that term, "You've taken it a step further than I can."

And of course, eventually she waned and unfortunately — obviously, she passed away, but I still hear her words.

MS. RIEDEL: What was she responding to in specific? Do you know?

MR. QÖYAWAYMA: Just forms or ideas of perhaps more perfection than —

MS. RIEDEL: The collapsed-shoulder form in particular.

MR. QÖYAWAYMA: Yeah, she didn't do that —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: I refer to that as the Sikyatki low-shouldered form.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: And I think literature pretty much refers to it that way. She wasn't actually doing that particular shape, but I, eventually — and that was a whole story — learned to do that.

MS. RIEDEL: Which is an incredibly difficult shape to make and have survive [the drying and firing process].

MR. QÖYAWAYMA: Well, you know, after you've done it for a while, it's not quite as incredible, but when you are approaching it from trying to figure out how it was done —

MS. RIEDEL: Well, and that's an interesting story — let's talk about that. That wasn't just trial and error. It wasn't just experimentation. You did a lot of research into how the old ceramic was made. There was actually temper [medium/mixing agent] or some sort of fiber, some sort of other material added to the raw clay, which was dug from the ground, to give the working clay that kind of strength, so it could sustain that shape.

MR. QÖYAWAYMA: What we call workability and green strength —

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: — as opposed to a fired structure.

MS. RIEDEL: Sure.

MR. QÖYAWAYMA: They had both, and that's why Sikyatki ceramics were so widely traded, and the yellowware, as it's referred to in the anthropological circles. When you say "yellowware," you don't even have to say Hopi or Sikyatki. Everybody understands what yellowware is.

MS. RIEDEL: Well, they were high-fired as well, or higher-fired —

MR. QÖYAWAYMA: Right.

MS. RIEDEL: — so they were more durable, and the designs were incredibly beautifully painted.

MR. QÖYAWAYMA: Right. They were taking sedimentary kaolin-type clays that were laid down in ancient seabed formations of clay, and it had ball clays mixed into it. So it was a very workable clay by itself, but to get to more complex shapes and things, there were a couple of more aspects to it.

One was that it had kind of a natural beauty. The other was that, technically, they obviously had something that they could work with, and when you looked at broken pot shards, you'd find that it had been pulled — because you could see sometimes different colorations and clay — and pulled over a distance of maybe an inch, inch and a half, depending on the size of the pot.

And the coils that were being used, which was different than some of the experiences that I had seen in, let's say, along the Rio Grande [river], where the clays — their source of clay is different. They use riverine laid-down clays, and because they're in a volcanic area, it has a lot of plasticity, probably has a lot of what we'd technically call bentonite or hectorite or some version of the volcanically derived material that isn't really, truly clay.

Hectorite is used as drilling mud [oil drilling], or bentonite as drilling mud, and also it is used to make sand molds, particularly back in the early days of the United States technological — [inaudible] — when they're casting everything with molds and casting steel or metal into sand molds.

And so, along the Rio Grande they had this, but they had so much of it that they had to mix it like 50-50 with what was natural to them, which was a temper, which was volcanic ash. So those deposits of volcanic ash - still is today. There's a little industry going of mining and refining it and making it available to potters.

It's a real fine ash. It was finer — I've used Mt. St. Helens ash, and it's coarser. The ash in northern New Mexico is much better, particularly for the carving processes, because any time you use a sharp blade against even wet clay or even dry clay, the particles can't be too big. It's got to be — you don't want to be pulling, like, sand particles while you're carving. Otherwise you're forever fixing up your carving job.

So that's the way they had this clay. It was about a 50-50 mixture of ash and their dug clays. And they would use coils. They were pretty wet, and they used a paddle-type system a lot to form a pot to get it into its final shape — it was a pretty normal tool — whereas over here in Arizona, the Hopi and even the Tewas and their efforts, they were more hand-forming, so they were more the coil-and-scrape, which is a classic term that's used sometimes in pottery.

I could tell that this old Sikyatki — you could see it in broken shards — was pulled this inch, inch and a half, so it

was like taffy. So it had to have a quality — I knew where the clay sources were but I was not necessarily seeing all that technique being used. So I said, well, they must have adjusted their clays in certain ways by experience — just a lot of potters trying a lot of different things, and somebody hits upon something really good over a period of several centuries.

And so it's grinding the temper in different grades, pre-firing it. They actually use pot shards. That's how I kind of partially discovered that. Plus you can learn something from the analysis that archeologists do, because they do that kind of thing in studying pot shards. So you can learn — there was a lot of work done before I was even born that's written.

MS. RIEDEL: But you dug hundreds of samples, correct, and looked it up —

MR. QÖYAWAYMA: Yes, I did that, but that was a different part of a study on Hopi ceramics for the Smithsonian.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: But I could do that because I already had a pretty good idea of where we would have got clay —

MS. RIEDEL: And the variety, the different types, and where they were located.

MR. QÖYAWAYMA: — so I wasn't collecting everything under the sun; I was collecting what I had judged as something I would — as a potter, if I was walking on the land — it's another one of those experiences being transposed in time.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: I'm no different than the ancient potter looking for material —

MS. RIEDEL: Exactly.

MR. QÖYAWAYMA: — and I've had enough experience to know, okay, this looks like it might work pretty good, but I've got to take some home and try it out, and if it is, I'll come back and get some more, you know.

So I learned from those things. And, yes, we did collect for that particular Smithsonian work, which I'm not sure we've —

MS. RIEDEL: No, we'll get to that. I don't want to jump to that yet, but —

MR. QÖYAWAYMA: Yeah, we don't need to cover that at the moment.

MS. RIEDEL: I'd like to address a significant change in your own work. Your work can be broken down into three major —

MR. QÖYAWAYMA: Three categories.

MS. RIEDEL: Yes. The earliest work was primarily monochromatic, minimal simple lines, very much involved with the repoussé technique, and there were some figures. In 1989, 1990, the work became more architectural. What provoked that change?

MR. QÖYAWAYMA: Oh, it's just an evolution. I was looking at different styles of figures to put on pottery, and naturally, we had dwellings, and we had katsina [spirit being] figures. Of course, the carving tradition in katsinas, or "kachinas," as said in English, is well known.

So I wanted to kind of represent a little of the feeling of that on a pot, and I started to put ancient ruins on a pot, that is, a katsina head or just a little a piece of architecture. And then I put a little half-inch relief arch, but I'd use repoussé to push it out. That started to develop. It was just a little relief representing an arch. It was half an arch, a quarter of an arch, on a pot, and it was very linear.

It looked fine, but it was something different. I hadn't seen anything like that. Then ultimately, that just began to develop, and I learned to take whole sections of what would otherwise be a — I think of it as a shouldered vessel but pushed in, and push it in like in a volleyball that was under-inflated but not have the clay crack, be at the right stage in your material.

This had a lot to do with developing the materials and finding out what our old potters had access to besides the clay and the temper. They had other certain things, the volcanic clays and things, that they could have certainly used and got a really great paste or mixture of clay.

Anyway, by having that — and by that time, in the 1990s, I was pretty sure I either had clay close to our ancestors back several hundred years ago, or if it wasn't, I had something as good as, because it really worked well.

And its green strength was double. I tested all kinds of commercial clays. I was not unfamiliar with Laguna Clay and these other suppliers back then, Westwood, whoever they were, that your commercial potters or artists are familiar with - they buy their clays from. And I tested a whole series of them, taking graduate courses at ASU [Arizona State University, Phoenix] and listening to them talk about — and listen, because they're buying and using the clays.

And they wondered, where did you get your clay, you know? And it's all specially formulated. I have variations depending on what I'm doing with it. Some, of course, are finer.

And this allowed me to start to really make complex shapes. And then I was able to form in multiple directions — that is, I could push and pull this clay in and out on different surfaces and still be in the original clay. That is, I wasn't adding anything to it at that point because it maintained the moisture and the workability, because workability is a big thing for —

MS. RIEDEL: Absolutely, for those forms.

MR. QÖYAWAYMA: Yeah, whether you're doing —

MS. RIEDEL: And the density of clay too.

MR. QÖYAWAYMA: — wheel-throwing or hand-building. It just has to work for you. You have something in your mind, and it's got to do what you want it to do, and the clay was doing what I wanted it to do. Then when it would dry — of course, it wasn't cracking — and I was still being careful. I mean, all potters have to be careful.

And as a result of that, I was able to start to actually create — for instance, usually the cliff dwellings have a very concave erosion of sandstone, so that it creates a cliff above it and cut out. So I could start to actually produce that look, and it just slowly developed one step at a time. And now I can have some really significant architectural scenes. They're not replications of an actual scene, but they carry that feel.

I usually try to — for instance, for a rim on top, you could just make it — you could just square it off and make it flat. But I'm thinking of the San Francisco peaks, and the peak isn't flat. It usually — a volcanic peak has a rim, and it's always usually — it's at some slant. So I can put the slant in. So I get the landforms into it as well as the architectural forms.

And I slowly learned to make the stonework, using tools, how to replicate in a several-step process. It wasn't the first time — the first time I did it, it wasn't that way. I was trying to impress a stone shape, and, well, you can do that, but it's a very time-consuming process.

I learned to come up with a carving technique that would do the same, but then I'd have to later shave and develop that carved surface, because the carved surface looked rough. But when I shaved — after it almost was dry, and I shaved it off — but not dry, because then it would all chip.

When I get to that stage, boy, it will look really good, and then it would dry, you know. And, slowly but surely, I learned all these different techniques, and it just got better and better. So that became what I call my Mesa Verde series. It wasn't only in an olla shape, but I would use an hourglass shape. I got ideas out of Central America for architecture. I'm still thinking of new shapes and architecture.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — that I can still do new things in.

MS. RIEDEL: Is it important to you that these architectural reliefs, though they're very complex and deep reliefs, are part of a vessel, because they all are, as far as I've seen.

MR. QÖYAWAYMA: Well, my media is clay. I've seen, certainly, paintings. In some ways it would be easier to do paintings, but —

MS. RIEDEL: It could be tile reliefs.

MR. QÖYAWAYMA: Yeah, it could be different — it could be different reliefs but —

MS. RIEDEL: Because they're all inset into vessels.

MR. QÖYAWAYMA: Well, when I do that technique, yes, and that became sort of an evolution from my original work, but it's specialized enough that I noticed, interestingly, in the marketplace — first of all, your own wife says, "Well, you know, somebody is going to be copying that." And here's my statement about copying.

Well, first of all, that's supposed to be a compliment to the artist, but I said, second, "They don't have the material." I said, "If they can do what I'm going to do" — and this is not a matter of pride or ego, but, "if they can do what I'm doing, then that means they have the material, and they've developed the technique, and by that time they have their own ideas. They're not going to be doing what I'm doing."

At the same time, I started to see lots of things that weren't very well done, and some very just difficult — sandstone, all kinds of things that different Native people were doing, but not complete like I could do. And that's out there in the market, and some of it's pretty bad, and you get a lot of chuckles out of it.

Even gallery owners have had fun occasionally bringing in some fugitive piece from someplace that somebody has tried to make and say, "Oh, is this your early work?" you know, just kidding. [Laughs.]

MS. RIEDEL: Right.

MR. QÖYAWAYMA: Then we get a lot of chuckles out of that.

So that is the second technique. And the original technique not only involved the corn you mentioned, which was our mainstay, our staff of life, but I would do actual realistic, sculpted, dancing figures. I think one of the challenges in our repoussé was to develop — you know, I can think of a buffalo dancer, and the dancer — by doing it right, it almost looks like the dancer is dancing on the pot. I mean, it looks like just a still frame of something that actually has action and motion.

That's a little bit hard to do in sculpture sometimes, but that's something I would always try to do, is to get that — just that little feel of action. And there has to be a degree of realism with that.

So now we've gone from the repoussé, the sculptural shapes in many different forms, to a specialized form, which is the architecture, which has had a life of its own. And then that's developed, not necessarily as a transition, but I was using my techniques and started towards the polychrome, which was actually where I wanted to go originally with the painted wares. But there's a lot of painted work out there that's very well done by the Tewa-Hopi and relatives of Nampeyo.

And, as a practical matter, just like in the corrugated ware that I'd seen, when there was somebody very competent doing that, I wasn't interested in doing necessarily exactly what they were doing. In the polychrome, I was really thinking of that future, if we had to transition from the past into the future.

We were doing carving, and I had seen — obviously, there had been carving in ancient wares as well. What might we have developed? How far would we have gone with the aesthetic? Because, again, we have to get back to the point that we didn't have a word for art, and our ceramics was being done for ceremonial purposes, you know, to go with ceremonies or burials.

There certainly were very well decorated bowls that were used for — stew bowls and things that were used eat with and were decorated. So it wasn't like it was reserved just for, let's say, a burial or a celebration of somebody's life, but they were actually used in everyday wares.

And, by the way, I found that these shapes — a lot of these shapes and the way things are found in Central America as well. I mean, I could have been —

MS. RIEDEL: Sure.

MR. QÖYAWAYMA: I saw collections, and I thought, well, this looks pretty Hopi to me — [laughs] — you know, and I can see some of our Hopi being around here. This isn't all that foreign to me at all, which was nice to know. And so I developed the polychrome because it brought color, and then I came up with new shapes — shapes that weren't really traditional shapes.

MS. RIEDEL: And that's much more recent work. The polychrome just started in 2000 or so, correct?

MR. QÖYAWAYMA: Yes, and developed — well, rather than be just a completely symmetrical round shape — which pottery doesn't have to be, obviously — I came up with these triangular shapes. I could just as easily do box shapes. I could do any number of sides, but the idea was to really just come up with a feel of a shape, and highly polish it, because that hadn't been necessarily my major thrust initially, to get super polishes, mirror finishes.

MS. RIEDEL: Really, because some of the early pieces are so brilliantly polished.

MR. QÖYAWAYMA: Well, they're relatively well polished, but there's large surfaces. My idea there was to get a sheen as opposed to mirror finish. They're not rough. There's not scratches in them, generally speaking. It's just a nice, smooth sheen to it.

MS. RIEDEL: I'm going to pause this for just one second.

[END CD 2 TR 1.]

MR. QÖYAWAYMA: So I continued to develop the polychrome. I was influenced by seeing some of the ancient Chinese bronze — incredible. There was an exhibition at the Phoenix Art Museum.

MS. RIEDEL: Bowls as well?

MR. QÖYAWAYMA: They're all different shapes. They're very complex, actually. The craftsmen and artists of China and the various dynasties were just magnificent.

MS. RIEDEL: Incredible ceramics, too —

MR. QÖYAWAYMA: Yes.

MS. RIEDEL: — but you were taken by the bronzes.

MR. QÖYAWAYMA: Well, I was taken by certain shapes. We had our own canteen shape, but they had a nice canteen shape. So I didn't make their canteen shape, but it gave me an idea for emulation of a shape — a double-sided shape that I could come up and carve all kinds of figures on the shape and around the edges. So there was a little bit more geometry involved in that, as there are in the triangular shapes.

MS. RIEDEL: These are quite different, these lidded triangular vessels, than anything we've seen from you before. When did these start?

MR. QÖYAWAYMA: I started the lidded triangular shapes about four years, five years ago.

MS. RIEDEL: They're far more colorful, very sculptural, very minimal.

MR. QÖYAWAYMA: Right. What makes it different — anybody can produce a lid, but I have very close-fitting lids. It makes the shape feel like a jewel box. That's the feeling that I think of. So it was getting a lid matched up to the shape, because the lids were large, and they were not round. As you can see, they're triangular, and they're all curved surfaces, so there's a complex curve in all directions.

I had to depend on my clays being stable in the green state and then to fit them — stability in the clay and precise shrinkage, without warping in the drying phase.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — and then to have them fire and not warp.

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: So they're reinforced in just some practical methods I've learned over the years. The first one or two were a little unstable, and there were problems, but now at least I've got the hang of it. They look simple.

MS. RIEDEL: And the design sense is very different.

MR. QÖYAWAYMA: Mm-hm. [Affirmative.]

MS. RIEDEL: These were influenced by designs that had been found at Pottery Mound [Rio Puerco, Los Lunas, NM] and a couple of other places in the area. Is that correct?

MR. QÖYAWAYMA: Well, all of my designs more recently were probably influenced — any [Sikyatki, Pottery Mound, Hawikuh, etc.] of the polychrome, whether it be the triangular or just our Sikyatki shapes —

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: — it turns out — and that's another part of anthropological history — there are at least three major locations in which the style of our family's pottery — and I'll say "our family" — extended family's pottery is found.

One is Sikyatki, principally now, that we know about. Then another location was called Hawikuh [Zuni Pueblo,

AZ], which is west of Zuni in the state of Arizona, just over the state line, and it was an ancient site. The village probably existed when Coronado [Francisco Vasquez de Coronado, 16th-century Spanish conquistador] first came through — the Spanish — as I recall.

And then there was another major site at Pottery Mound, which is outside of Albuquerque, about 20 miles to the west and to the south of [highway] I-40. It's been studied by the University of New Mexico [Albuquerque]. And out of it, not only was there ceramics, but this design element we call Sikyatki ended up in kiva murals. And they're not only in kiva murals there, but they're here at Sikyatki.

And another — there's yet another site. I guess it's a fourth site, really, but it's at Hopi. It's called Awatovi [Hopi Reservation, Navajo County, AZ]. And next to it is a site — almost right next to it is Kawaika-a, which is another site that is — it's actually Kawaika-a.

As I understand or — I'm probably not pronouncing it right in the Keresian [Keres] language, but it's close — it's a Keresian word. It's not a Hopi word. And it relates to the Laguna area. I think we — somewhere along the line we might have mentioned Laguna and Acoma and others that were Keresian-speaking peoples.

MS. RIEDEL: And where were the Laguna?

MR. QÖYAWAYMA: Laguna is next to Acoma [between Albuquerque and Gallup, NM]—

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: — which is about, I guess, 40 miles west of Albuquerque along I-40 — on either side of I-40 there. You can't help miss that when you're driving through there.

They also have — in their oral traditions — they're Pueblos, and they're similar in ideas to the Hopi or Zuni or as far north as Taos. And so, conceptually, here was another site. But what was interesting about Pottery Mound is that it also had elements of Mesoamerica in it, and shield designs and characters — characters we can't exactly identify.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: And then when you realize there's Chaco Canyon [McKinley, NM], and there was definitely a southern influence, and you understand there was trade — there was turquoise going one way, and parrots and feathers coming the other, and who knows what else was a trade element?

Pottery Mound seemed to be kind of a central area for exchange of ideas, not so much so that you'd call it a Mesoamerican site at all, but if you visit Central America and see the classic sites, realizing that the Aztec were really present when the Spanish came and so —

And since they're modern, because there was a history associated with them - prior to that were all these other different cultures, Mayan being, of course, the one that most people know, and the Toltec, the post-classic Maya, who are Uto-Aztecan-speaking people.

Uto-Aztecan — or another term they use in the Central American area, because it's a distinctly different dialect, it's called Nahauatl — Nahauatl, if I'm pronouncing —

MS. RIEDEL: Nahauatl?

MR. QÖYAWAYMA: Nahauatl.

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: That particular —

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: — version of Uto-Aztecan language.

MS. RIEDEL: Right, I think of that as Azteca, but —

MR. QÖYAWAYMA: So this certain affinity in our oral histories at Hopi about the interactions with the south, and even descriptions of what would have been either Mayan or potentially post-classic Mayan and Toltec. The pyramids, the water systems; lots of things were described. So there was knowledge. There was at least a general knowledge that —

MS. RIEDEL: You were talking about the murals. Were the designs similar to this, because this is a real deviation from what you've done before. We don't have any figures. We don't have any architectural illustrations. It becomes — well, actually, there is a figure on this side, but it seems far more abstract and more stylized.

MR. QÖYAWAYMA: Well, for instance, I use a lot of — because feather figures come in different forms —

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: — and this one is really — in these forms, these simplistic forms, I think of them as being from Sikyatki. They're more complex, very distinct.

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: — ornate feather forms, but the simpler ones that usually have two or three — they could be bird figures or feather —

MS. RIEDEL: Oh, okay.

MR. QÖYAWAYMA: Well, feathers come from birds so I guess —

MS. RIEDEL: They seem much more geometric.

MR. QÖYAWAYMA: Yes, there's geometric designs, and I suppose that leads to the whole question of why there are a lot of complex geometric designs. You can go into Mimbres pottery [1000-1250 AD, geometrically painted pottery] and see something that we sometimes refer to as a butterfly design. But where did some of these complex geometrics come from? Maybe they were just mental constructs of groups that was aesthetically pleasing, or were [they] referring to something else that doesn't look very natural?

Which is a whole other area of research that, more recently, I've come upon, and that is — well, I'll call them astronomical, within our own solar system, of things that were observed and transposed. You can see a comet potentially being transposed. You could see some event from a meteorite coming, you know, but that would look like a streak or something. I don't know how they would reproduce that.

But if you had a auroral phenomenon, like the aurora borealis — at least in the northern hemisphere, and the same thing happens in the south — there is some indication that we had a very strong — we call it a plasma event phenomena.

We certainly know the sun has the sun spots and goes through cycles and throws out a lot of plasma. Now the satellites are all in orbit, and it's a danger to astronauts and any kind of satellite with electronics because it can pretty much fry the electronics, so they have to be hardened and protected.

And if these same things occurred in stronger fields than we've been seeing in modern historical times — which there's an indication they have been — then it turns out that from the physics labs of places like Los Alamos [Los Alamos National Laboratory, Los Alamos, NM] and Sandia [Sandia National Laboratories, Albuquerque, MN, and other locations] and other places around the world —

We now know that there is very complex phenomena associated with very high-intense fields. We don't know why Mother Nature picks the things the way they do, but there's something that is known. It's called a Z-pinch, and it's known in the physics circles. It comes from a very intense — ions flowing at a very high rate and creating an electrical potential.

And then that, in turn, creates a magnetic field, very strong magnetic field, and compresses and does — it comes up with physical — you can see figures from the radiation coming off of this that can be some of these complex geometries, as well as things like certain circles, "stick men" images, and many more.

Circles may have intense luminous points that are — they're actually called Birkeland currents. They're twisted pairs, and you can see 28/56 [compass points] as a common combination. And why, you know, nature picks 28/56, I don't know precisely. They can combine in other odd numbers but the most common form is 28/56, and can pair down further.

And the point is that cultures around the world have somehow zeroed in on that and some of the geometry. Now, it may be totally coincidental.

MS. RIEDEL: And was this at Pottery Mound too?

MR. QÖYAWAYMA: Not that I fully recall. I'm just thinking through my Pottery Mound information. We need to give it a time scale. We think that the phenomena that was last seen by man of the intensity is —

[Cross talk.]

MS. RIEDEL: This is the "celestial event"?

MR. QÖYAWAYMA: Yeah, the celestial event, as we call it.

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: "The second sun." It's an oral story that occurs in different, old, ancient cultures. It was probably about 5,000 years ago, it lasted for maybe a thousand years in different phases. We're dealing with just at the edge of known history, so we're looking for old cultures.

And in terms of some of the research we're doing, you know, if we find cultures that were starting to develop — there are some in South America; there's certainly cultures in Europe and Asia.

MS. RIEDEL: The idea is that something was observed in the sky around the world and it shows up in many different sites as petroglyphs [rock carvings], also in artwork.

MR. QÖYAWAYMA: Yes, well, naturally. It would have been awe-inspiring, and it would have been very luminous, bright, and multicolored. And if it continued to occur over a period of time, it would have occurred through some generations. So to ancient cultures it would have appeared as something — the gods were sending a message or whatever.

And in actuality, the Z-pinch is really a point — I suppose it's a point of controversy, but it's a point in space where stars are likely formed.

MS. RIEDEL: And it was the inspiration for your *Heavens of the Sun* [2003] shield.

And let's stop the disc now —

MR. QÖYAWAYMA: Okay.

MS. RIEDEL: — and pick up with that on the next one.

MR. QÖYAWAYMA: Okay.

[END CD 3.]

MS. RIEDEL: This is Mija Riedel for the Smithsonian Archives of American Art, with Al Qöyawayma, at the artist's home in Prescott, Arizona, on March 30, 2010. This is disc number four.

We're going to start this disc talking about the *Heavens of the Sun* shield. That's an interesting piece for you, because it's an interesting meeting of your art historical and your archeological research with your experience as a scientist.

MR. QÖYAWAYMA: Just on the earlier tape we've been talking about the National Museum of the American Indian —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — and I had been doing research both in the Museum of Natural History repository and [the repository] of the National Museum of the American Indian, which are both in Suitland, Maryland. One of the outstanding pieces that has sort of double security and the director took me to see was a piece that was from Mexico, the Mixtec shield. And that piece has about 50,000 pieces of turquoise — very finely cut turquoise - in it, and it's been the subject of articles and what have you [Gerald McMaster and Clifford E. Trafzer, eds. *Native Universe: Voices of Indian America.* Washington, DC: National Museum of the American Indian, Smithsonian Institution, and National Geographic Society, 2004 (NMAI inaugural catalogue), p. 88].

So I got in and actually saw it one-to-one and took some photos, and of course, they had photos. I was really impressed by this shield, the Mixtec being one of the Uto-Aztecan-speaking cultures, and dealing with the pyramidal complexes and the platform complexes and things that are either Mayan or Central American, which our Hopi always alluded to in one form or another.

So having seen the workmanship and the beauty of this, and trying to find out, you know, how did they find it, where did it come from, and what have you, I was impressed. And I had started to work on my own impression of that shield in ceramic.

About that time, serendipity came along. I get lots of visits from "Miss Serendipity." [Laughs.] Through a totally different organizational affiliation, I found out about some scientific work, and the scientist specifically, that was going on in Los Alamos.

And so I contacted the intermediary, and they put me in contact with that person. His name is Dr. Tony Peratt. He became immediately interested in what I was doing, because the shield turns out to have certain properties which are part of a much greater genre of scientific interest in — call it anthropological interest — of a phenomena that occurred that we refer to as Z-pinch. Much is explained in his 1991 book, *Physics of the Plasma Universe* [New York: Springer-Verlag, 1992].

And the reason that Los Alamos is working on this is because nuclear weapons is one area, and fusion is another area, which is supposedly, you know, our future in energy, if we can ever get a fusion-confinement device working — an environmentally sound way to go.

In any event, we did start talking, and it turns out that the shield has the same general formulation of other objects and sites around the world. They include a really interesting site on the Nazca plain [southern Peru].

MS. RIEDEL: Are you talking about the Nazca Lines [ancient geoglyphs, Nazca Desert]?

MR. QÖYAWAYMA: Yeah, well, the Lines are also part of it, but there's actually a site that has a configuration that's similar in configuration to, for instance, Stonehenge [Wiltshire County, UK].

MS. RIEDEL: Now, when you're talking about configuration, you're talking about mathematical proportions. Is that correct?

MR. QÖYAWAYMA: Well, I'm talking about the general construction when it comes to the points. They're not necessarily just cardinal points [principal compass points]. There is a configuration of circles with 56/28 points —

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: — that shows up at that site — both sites. And the one at the Nazca plain is so explicit that you could almost say, well, did somebody read a research paper someplace and decided to plant this site? No, that's not the case.

MS. RIEDEL: And what is it, Al? What is the —

MR. QÖYAWAYMA: Well, what it is overall, in the simplest terms — first of all, in the laboratory, they used what is called a witness plate to show what happened to the Z-pinch, and they get this circular, 56-point configuration.

What they are is, basically you get such a high-energy field that it creates currents, and these currents create a very high magnetic field because, in electromagnetism, the two go together. They're better known as Maxwell's Equations.

In any event, Mother Nature creates a phenomena that, once you get a very high current level with ions moving near the speed of light, you then have theis high magnetic field, and it causes these independently — well, they're really — current or plasma fields — I use the word "current;" it actually is a plasma field, and it develops into currents because there's a difference in potential, so then you start to get a flow of electricity in the field.

And of course, they put a lot of energy into the field and the actual experiment. So then you get this twisting pairs, and they — and in an ideal situation they tend to form into 26 — first 56 and then 26. The currents themselves start out at 112.

MS. RIEDEL: And they break down into 56 twisting pairs?

MR. QÖYAWAYMA: Yes, and then they combine again to go to 28 twisting pairs.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: And they can go lower —

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: — all the way down to four.

MS. RIEDEL: And these are depicted on the Nazca plains as drawings or as stone carvings?

MR. QÖYAWAYMA: They're actually — they're stone monuments in a circle.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: They're in a circle, and there are two circles — one 56, one 28.

MS. RIEDEL: I see.

MR. QÖYAWAYMA: And the orientation of the fields, the Nazca Lines, are to the south. This is getting beyond necessarily the scope of the discussion here, other than to say there's a physical phenomena that is a hypothesis, like all science, that is not necessarily well known or well held, but it appears that, at least in the world of physics, there's this phenomena that occurs. And it could occur not only on the scale of being in the laboratory; it occurred at a solar system scale and is very likely occurring in a galactic scale because the things that have been seen have been seen at those scales as well, like Supernova 1987A.

And the one in the solar system would have been created when potentially the sun would have had a tremendous plasma — throwing off ionized particles from the plasma — we call those solar flares — at a level much higher than we've seen in historic times. And by whatever physical process, they were captured in the earth's magnetosphere, and because the velocity of the particles was high enough, they created this energy and this phenomena called a Z-pinch.

It can occur naturally as well as in the laboratory because it's just part of physics. It's not terribly well understood, and it's a whole region of future study that I think science will find very interesting.

Well, the question is, did something occur? Well, I don't know precisely whether it occurred or not, but this shield happened to have the configuration. And when you're working with a hypothesis, you're looking at different objects. And so, of course, the shield immediately got involved with our discussions, because here is something now the Mixtec — that recorded something that was probably 5,000 years old.

MS. RIEDEL: Now, when I look at this, I don't see any configuration that sounds like what you're describing.

MR. QÖYAWAYMA: Well, the number of pieces of turquoise on the outer edge are 112.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: And the number of holes in the circular pine mounting, which would probably have been used for feathers, is 28.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: Now, that may totally be coincidental, but the serendipity, as I said, brought us together. Whether or not the shield really has anything to do, ultimately, scientifically is well in the future to be shown, and even, at the best, any object or site on earth will still be some subject of controversy, I'm sure.

There have now been a number of published papers on it. I've been involved somewhat in the publications, and there's future publications, so this is going to become more and more defined as we go along. Certainly, the physics of it, on the pure physics end, is known.

[Many manmade sites will reflect this phenomena as well, such as Stonehenge, Nazca Plain, etc. That's another upcoming paper.] And there's many properties. If it turns out to be true, I mean, just sitting here in a pipe dream, you could say, well, it could be our future energy source.

In fact, there's somebody that is working on a device right now — in fact, there's three different somebodies, and Paul Allen has put a huge amount — $40 million — into one of them. He's, you know, the associate with Bill Gates.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: So we don't know what the future really holds, and this is art we're talking about and not science —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — but serendipity — you know, art and science sometimes come together in strange ways. Michio Kaku [*How Science Will Shape Human Destiny and Our Daily Lives by the Year 2020.* New York: Doubleday, 2011] says that in scientific studies of the brain, art is believed to play a major role in the evolution of the brain.

MS. RIEDEL: Absolutely.

MR. QÖYAWAYMA: Because mankind may have indeed either observed his natural environment and interpreted it in whatever way and recorded it, or they may have actually seen something purely physical, which they didn't have an interpretation for initially but had to come up with some explanation.

And this event that I talked about — and I call it a phenomena or event — probably could have happened 5,000 years ago and lasted through its various phases for about a thousand years. It would have been a tremendous phenomena for humans to witness. Even today it would just blow our minds. The movie industry hasn't seen — [laughs] — what this could produce.

We certainly look out at the galactic plane, and we see all these things. You know, we have all these theories. We see stars being formed. We see supernova nebulas, black holes, dark energy, dark matter. Here are all these things that are in astrophysics that most of us don't understand, but electromagnetic phenomena may be whole new field. While we have motors and — our whole technology is based upon electromagnetism — our computers, everything else.

While we understand how to use it, practically speaking, for our own uses now, it may have dimensions beyond what we fully understand. Science always seems to find that. You know, it finally comes to the conclusion that we understand everything, and then we find out we don't —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: I'd like art to be pretty much that way. We think we've pretty much created everything, but I think most — really, artists would agree there's still an infinite number of things to produce in art.

MS. RIEDEL: That makes me think of a quote that was written in that early catalogue that I was having a look at, called *Qöyawayma*.

MR. QÖYAWAYMA: *Qöyawayma.*

MS. RIEDEL: Yeah. Someone had written an essay about your work, as trying to find a balance between directed thought and intuition, and that that was something that you were interested in developing further. Does that feel to you like what you're talking about here in terms of balancing science and art?

MR. QÖYAWAYMA: That could be a part of it. There's a different part of it we call nurture and nature, you know, and how much do we carry with us? We know animals carry certain knowledge with them; otherwise they wouldn't survive. And how much do humans carry with us?

I mean, it's a really interesting area of discussion. And this, I'm not really prepared for, but I'm naturally interested, as I think most human beings are to a certain degree, if they have any extra time in their life besides earning a living. [Laughs.]

MS. RIEDEL: There's one other piece I want to talk about specifically, and that's the *2001 Space* [2001] pot, because that's such an interesting synthesis of Sikyatki form and the image of corn and then of something flying through space in a guided rocket.

MR. QÖYAWAYMA: Well, there's really two parts to it, and one is — we've talked about AISES already. And it turns out one of our AISES board of directors was an astronaut [Commander John Herrington, Flight STS-113], and then he got an assignment, and it was to do construction on the International Space Station, which he did. And he took a number of objects, including one of the small, little Sikyatki miniatures, because they could only take so much in their personal kit.

It seemed like they were more concerned about my pot's volatility, its weight and its size and all those little dimensions that were little engineering-type things, not artistic things. They understood a feather. He took some eagle feathers with them. They understood a feather pretty well, you know.

MS. RIEDEL: But you designed this pot specifically for that event.

MR. QÖYAWAYMA: Well, I made it up. It kind of happened kind of in a hurry. I didn't really realize he was going to have the request and that it was going to happen, it was going to be approved by NASA.

But, anyway, that all happened, and I got it made, and he put it in his little pack of personal items that each astronaut is allowed to take, and he took [it to] the International Space Station. There's a document that said it went — I'm trying to remember — it went 5 million miles. I called it the fastest pot in town — [they laugh] — at 17,000 miles an hour. And it worked very well, I mean, you know, for a pot — [laughs].

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: — with 5 million miles on it, it's nearly worn out. It's just something — I used to think of — for whatever reason, I used to think of "pots in space." Actually, as part of AISES, I was asked to apply for an astronaut position. That's not necessarily well known, but I have all the documentation. They uninvited me, but that's all right because I was getting older. But I did have the right kind of knowledge, guidance systems, and some of the things that they were interested in.

But, anyway, we all do things sometimes in our lives just to see what would happen. I wouldn't mind having done that. It would have been an interesting thing. But I got to know a lot of interesting astronauts over the years. And so this pot went and came back, and is a permanent exhibit at the National Museum, along with Commander Herrington's story.

MS. RIEDEL: In Washington, D.C., the National Museum of the American Indian. ["A New Journey." Introduction. *Native Universe,* pp. 13-15.]

MR. QÖYAWAYMA: Right.

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: John Herrington. Yeah, John, actually, I know really well. John represented a Native American tribe - who was fortunate to get the education — you'd have to hear his story, but in short, he got the education and ultimately became a pilot and test pilot and got in the astronaut corps.

So to Native peoples — young people - he represents an icon. And so I did a pot in 1999 —

MS. RIEDEL: Ah, yes.

MR. QÖYAWAYMA: — called *Into the 21st Century*.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: And then I did a second pot that was almost identical, but it was called *In the 21st Century* —

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: — but there was a difference between the two pots. It was a metaphor for education. How do you put education into art? And the metaphor was this: in the first scene, there was a series of dancers. I think there was about 10 dancers, Native American dancers —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — done in a Hohokam-style figure [one of the four original cultural groups; settled in south-central Arizona], but they were facing an astronaut with his helmet on. So you couldn't tell who the astronaut was. So you could say, well, it's somebody that just arrived from another planet, or, you know, they were greeting, and so that was a Western, European astronaut.

But in the second pot, I reveal — the astronaut is Native American [long hair] — and he's dancing in the line of dancers — he's no longer facing the line of dancers, and his helmet — the little child behind him is holding the helmet — [laughs] — and just carrying the helmet behind him, so he's part of the group. This is a metaphor for scientific and engineering education.

So overall, you know, the idea — and that's the way John was. John was — and still is. He's up in Livingston, Idaho, and going to get his Ph.D., and just sent me a little tape of him flying a single-engine plane around in the canyons up there.

But he really enjoys working with young people and encouraging them, as we all do, you know, whether they be Native American or just seeing an average young person on the street. I'd just as soon get them out of the hip-hop and — not that I'm against their music, but you've just got to think about how to use your life, and in a way art does that, right?

Art is probably — because it's not automatic that they're going to get an education engineering; somehow you've probably got to get employed. But an artist doesn't quite have that advantage, so they've got to really think about, in a sense, what they're doing. You can say, oh, it's all inspiration, but, I don't know, I think a lot of artists —

MS. RIEDEL: Oh, I don't think — [they laugh] —

MR. QÖYAWAYMA: — have that much inspiration.

MS. RIEDEL: No, it's a lot of work.

MR. QÖYAWAYMA: Yeah, it's a lot of work.

MS. RIEDEL: A lot of work.

MR. QÖYAWAYMA: And it's more uncertain — their future is more uncertain than somebody that's just got a scientific medical education or, let's say —

MS. RIEDEL: Absolutely.

MR. QÖYAWAYMA: — engineering education.

MS. RIEDEL: Absolutely.

The bronzes started in the late '80s — 1988, correct?

MR. QÖYAWAYMA: About that period — '89, somewhere in there.

MS. RIEDEL: And what was the reason for that shift? Why the desire to go into bronze? Some of the forms aren't any more difficult physically than the clay, so it wasn't a desire to make something that was more durable.

MR. QÖYAWAYMA: Well, it was really two parts. One was that I've always been interested in material processes, and here I was doing castings when I was in the seventh grade. I was fully familiar with the lost-wax process, because it's used in major large pieces as well as jewelry and other things. And I could see certain of my pieces sort of fit that general vessel shape; others don't. Those just didn't strike me as something I wanted to do in bronze.

MS. RIEDEL: Now, the bronzes are all sculptural, aren't they?

MR. QÖYAWAYMA: Yeah, they're sculptural. So I wanted something to be done with that. I was just interested in the process. And that also allowed people to have a bronze piece. They come in series. And it allowed more access at a lower price. It was a practical — well, a lot of people were really interested in the bronzes. In fact, other than one series that's not quite finished, I've sold the series, but I have not focused on bronze as a media.

I have some bronzes I would describe to you in mind that I'd like to do in the future, which would start out — they don't have to necessarily start out in water-based clay. I might actually use oil-based clay, like a lot of bronze artists do, and go from there. I haven't decided on that portion of it, but I'm still going to pretty much focus on the clay, because that has my passion.

MS. RIEDEL: Certainly, the scale would be one reason to move into bronze, and I know —

MR. QÖYAWAYMA: Right, scale —

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: — because I've done a large, monumental five-foot — yeah, you can scale it up. That's another important reason. And I would do more of that, but I'm not — you know, you can make a career just doing large bronzes and sculpture, but I started off in ceramics.

And you know the history with regard to the family and Sikyatki and everything, so I'm going to stick with probably pretty much my passion — it's the ceramic — because I still think there's a lot of things that could be done that I haven't done. It's just that I have to dream them up first. [Laughs.]

MS. RIEDEL: Let's talk about your travels, because you've traveled fairly extensively, and the trips have had some significant effect on your work. Let's see, the first — we were trying to decide when the trip to New Zealand was.

MR. QÖYAWAYMA: That was first. That was in 1991. When I say "first," I've been traveling, but I haven't been that much outside of the United States, although it would be a nice thing to do. I have a lot of places I'd like to go. We all would.

MS. RIEDEL: This was a Fulbright to study with the Maori.

MR. QÖYAWAYMA: Right, to work with Maori, and there was a cultural exchange as well as an exchange in ceramics, because they were all ceramic artists that were part of Te Waka Toi. Baye Riddell and Manos Nathan were two of the principals that I've worked with, and we took, on that particular trip, Blue Corn and Jody Folwell.

We all worked together, and we worked for about a month, and we did a lot of cultural exchange. It was about 100 percent hosting. And we learned a lot from them and their materials. They have a tremendous carving tradition down there, but in terms of — at a cultural level, yes, their culture is obviously different. It was maritime, and we tend to be from the deserts and what have you here, at least the ones that went down. They were all Southwest.

But, at a personal level, it's like we were brothers and sisters. We recognized that early on. So indigenous cultures can have that quality, and particularly, a lot of the Rio Grande Pueblo individuals tend to be independent thinkers, and so do Hopi, and strong views at times. So are the Maori. So we could just — we just got along dandy, you know? [Laughs.]

MS. RIEDEL: And you were working with them on ceramics, correct?

MR. QÖYAWAYMA: Yes.

MS. RIEDEL: And what were you doing?

MR. QÖYAWAYMA: I went there to help them form new, different pastes, because I could adjust pastes to do what they wanted to do. And plus I did make some pots, and a lot of the teenagers, you know, older adults, they were copying some of the elements, incorporating them; I shouldn't say exactly copy.

But I think the thing that was the most fun was just working with the young people, the children. I would have whole classes of children — I mean, 30 children - and they would obey so well. They were so quiet and so attentive and really paid attention. It was a different experience than a similar class here in the United States — well behaved, a lot of fun. It wasn't because they were behaving; it was because they were learning —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — and that learning process is a great process. They would ask you questions, and it was just a lot of fun interacting with the adults and the elders, all the way down to the children. In their culture they have what they call the *marae*, which are individual village sites, homes, and they have a lot of objects and carvings inside the one main room, which venerates their ancestors.

You do things like if you're going into — you take your shoes off to go in. And there's many practices that are different, but there is a really nice protocol. And they like us. We speak our Native language, and they in turn speak in theirs, and we exchange gifts, and it just goes on.

MS. RIEDEL: Did you grow up speaking a Native language?

MR. QÖYAWAYMA: Only to the degree that I would pick it up off the reservation, because one of the components of the Indian school was to really —

[Cross talk.]

— instruct the adults not to — first of all, to speak their own language, although my father spoke it. But there had to be agreement within any family as to where you were going to speak English or not, which immediately leads me to an experience that I can think of in the Salt River Indian community, doing a lecture with high school students, college age, just at that age.

MS. RIEDEL: And we should just clarify that after Litton you went to work at Salt River Project in Phoenix, Arizona.

MR. QÖYAWAYMA: Yeah, we haven't really —

MS. RIEDEL: — because we haven't talked about that on tape at all.

MR. QÖYAWAYMA: Yeah, we haven't talked about Phoenix.

MS. RIEDEL: And that was, what, '71?

MR. QÖYAWAYMA: One.

MS. RIEDEL: And that was for about 10 years?

MR. QÖYAWAYMA: That was for 20 years.

MS. RIEDEL: Twenty years.

MR. QÖYAWAYMA: So in any event, the point in my presentation there were that couple of girls were in that from the Salt River Indian community, and they started crying, and it was the same feeling I guess we all have, namely that their parents said, okay, up to the sixth grade we'll teach our traditions and the language, and then after that you're going to have to be on your own, and basically, you pick up the ways of the Western world.

And they were crying because — as I learned - because I was saying they really do have a role in the mainstream world, and that they don't have to stop being who they were, not being counter to their parents but — and I had two young Hopi boys that didn't say much, but I could tell that they were pretty moved too.

It's just one of those transitions that goes on. The language is one of those things that I wish we would spend more time — and Hopi, fortunately. We have a really incredible dictionary, and we have many Hopi speakers. And so, we've really worked to maintain that language.

I wish I would have been in, sort of, that natural environment. But then if you lived in Los Angeles, and you're in the third grade taking the streetcar down the street, there's nobody that speaks Hopi, so — [laughs] — you know, as a practical matter, you don't think about it when you're young. You just — you go with what works as a young person, you know?

MS. RIEDEL: Right. Right.

We were talking about travel. There was also a fairly significant trip to Central America, in Mexico, Honduras, in '93?

MR. QÖYAWAYMA: In January — actually, it was '94.

MS. RIEDEL: Where did you go —

MR. QÖYAWAYMA: It was January '94, pretty close to '93.

MS. RIEDEL: Where did you go, and how did that affect your work?

MR. QÖYAWAYMA: Well, I did a number of things. By that time, I was working with the Counsel of Mexico. AISES had recognized that the way in which we were helping young people get their education could be exported to other countries.

We had a number of students who were members of AISES, some in Canada, because we weren't exclusive to the United States. But they had come from places like Guatemala and Mexico and other places, and even South America, depending on which year and what group and what they were studying.

So we had this interaction, and we recognized that most of the western hemisphere, at least south of the United States, speaks Spanish. So we produced AISES materials in Spanish. And I set up a mission with the Counsel of Mexico [Nicholas Esclante Barrett], who at the time was resident in Phoenix, and he set up a whole series of meetings in Mexico City.

So one of the things I did is I met with not only the arts people, but I met with their equivalent at the Department of Interior, and discussed education. About that time, they were having that — the Mayans were having the — there was a little shooting war going on to the south. The Mexican army was trying to quell that.

MS. RIEDEL: Was this the sub-Comandante Asiro [Marcos] uprising in the Yucatan?

MR. QÖYAWAYMA: Hmm, well, it was the Zapatista Chiaps Rebellion, partially in Mexico and partially in Guatemala at the time.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: My wife wasn't sure I was going to come back from there when I went to the Yucatan, but it turned out to be all fine.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: But I spoke to the Mexican government about the things that were possible. They had a whole roomful of people. It was a really good exchange. And then the arts as well, because I met with a number of small arts commissions and things that they had in Mexico City.

MS. RIEDEL: Were they potters or mixed media?

MR. QÖYAWAYMA: Mixed media. I was talking about all the arts. I wasn't just focusing on ceramics. And then I

set up some things with the director of their museum.

MS. RIEDEL: Which museum?

MR. QÖYAWAYMA: The National Museum they have in Mexico City, Museo Nacional de Antropologia.

MS. RIEDEL: Okay, the archeological museum — yeah.

MR. QÖYAWAYMA: Yes, and I toured them all. That was just one place. Then I went from there — oh, I visited — very importantly, I went to Teotihuácan and did a lot of just fooling around in there, and really took a lot of photos and looking and studying.

MS. RIEDEL: Was that your first visit to the Mexican or the Latin American sites?

MR. QÖYAWAYMA: Yes.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: In some ways I wasn't surprised at what I saw, because the Hopi had talked about it in a prehistoric sense. And then ultimately, I went from there down to Yucatan and went through a lot of classic sites — Uxmal, Chichen Itza, Coba, and other sites as well. And I was with George Stuart, which was really great. He was with the National Geographic [Society, Washington, DC]. And so we had a lot of —

MS. RIEDEL: That's wonderful. What a wonderful way to see the sites.

MR. QÖYAWAYMA: Yeah, we had a lot of interesting discussion. And then we went from there out at Cancun to — I'm trying to think of the city. I want to say Pedro San Sula. That's not it. San Pedro Sula, Honduras. I've got the city right. Anyway, we flew in there. It was an interesting experience.

MS. RIEDEL: Why?

MR. QÖYAWAYMA: [Laughs.] Because all the guards at the airport were teenagers with their girlfriends, and they all had AK-47s hanging over their shoulder. It was kind of an intimidating place at the time.

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: It was interesting, though. It was kind of what I expected. [Laughs.] You know, I'd read about it, but to be there was another thing.

MS. RIEDEL: Absolutely.

MR. QÖYAWAYMA: Even Honduras right now, the government is all upset. At this point I'm not sure exactly who's in charge.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: Then we drove over to see the Guatemalan Mayan sites.

MS. RIEDEL: Tikal and —

MR. QÖYAWAYMA: No, that's in — Tikal is in — I said Guatemala. I should have said Honduras.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: And we went to Copan.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: We went by road. We didn't fly or anything. And so, you know, you saw a lot of the country. We had several days in there, and lectures. And Bill Fash, he and his wife are still — sort of made their lifetime work doing Copan and that area. And you've seen National Geographic specials on that Mayan site.

And so I observed lots of things by actually being on site, as opposed to looking at pictures and reading; you know, the cardinal direction of stairways and why certain things were the way they were. And I had questions for Bill.

In fact, one of the key questions I had for Bill — and apparently, he wrote a paper. I never got a copy of it, but he said he wrote a short paper on this. And the question was simply, you know, you're doing a lot of discovery and

a lot of interpretation around here; do you ever talk to the locals?

And it turns out he does, but he had a big complaint about archeologists never talking to the locals. They always come up with their theories but never — because the locals didn't know anything, right? [Laughs.]

MS. RIEDEL: And then you made pieces based on the sites — Uxmal pieces and Palenque, and there was a tribute to your southern ancestors. This really had a big effect on your work.

MR. QÖYAWAYMA: Yeah, it did, because of the stories in Hopi. It was like, you know, we already felt connected, and we've had — subsequently we've had missions down there, and we've interacted with various native groups.

So anyway, I flew to Tikal and ultimately came back, but I interacted with our tribe and suggested a number of things. I had found out that there was —

MS. RIEDEL: So you did go to Tikal, from Honduras up to Guatemala.

MR. QÖYAWAYMA: We drove actually through to Guatemala City.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: That had a big site that's pretty much in ruins, built over as a city, but it was supposed to be a replication of Teotihuacán —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — reconstruction, really. That was very interesting.

MS. RIEDEL: Absolutely.

MR. QÖYAWAYMA: And it's more modern there at the airport at Guatemala City, but we flew in and out to Tikal. So all of that was interesting and, as you said, influenced me, only because I could see in three dimensions what I had heard described and had read about, of course.

And then I still have that question about our Hopi, and one of the — what is the one thing that survives? It's ceramics. And so I just decided to reproduce some of those things, in what I call my Mesa Verde style, but certainly Chichen Itza and the round tower that was supposed to be for celestial observation, Venus, et cetera.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: There were sacred sites next door. The whole thing impressed me as being almost Hopi, but we didn't have many round structures, you know. Chaco in New Mexico would come closer than our Hopi structures, although there are some round structures in the Four Corners areas [where New Mexico, Arizona, Colorado, and Utah meet].

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: I'm not saying that there was a relationship per se. I mean, we could get into the whole subject — I'm trying to think of the work at Chaco — Sun Dagger is what I'm thinking of, doing all of that Sun Dagger exploration, because there is definitely some kind of southern influence at Chaco [Fajada Butte]. I'm not going to get into that at this point.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: So the whole Mexico trip was important for me and having some of the contact with George Stuart and some of his sons. David Stuart was another one. I didn't actually get to meet David, but he's the one that really worked on the Maya written language.

MS. RIEDEL: Did the doorways enter your work after these trips, or were they there previously?

MR. QÖYAWAYMA: The "tee-doors." Yes, there's always a lot of questions about where the tee-door, or keyhole[-shaped] door, comes from. There's various stories about that. I don't know that I have a precise thought about the origins of those doorways. I mean, I could even project them into the Z-pinch work.

I really don't know, but they certainly occur in the Southwest, and to some degree there's elements of them in Central America. I think they're more of a Southwestern phenomenon. It's just that Mesa Verde [Mesa Verde National Park, Montezuma County, CO] has so many of them. The structures all have them. And they're unique, so they're a doorway, an entrance and an exit to some point in life. I think we've talked about a little bit.

Doorways, to me, really tell the story, you know, and a simple question would be, do you remember the last time you left your childhood home through a doorway? For some, they may have lived in a lot of places so that is not a significant question. For others, they may have had to give up something to leave that.

But then, by the same token, do you remember the first time you walked into a doorway in the university that became your passion or your pursuit, or when you exited it, or any other significant location, of relatives or otherwise?

Doorways are an entrance and exit in space, and so, to all of us, they bring back memories. For that reason doorways are important. So I've made pieces that have different-shaped doorways. The Voyager series has that. I think I have up to six different doorways.

The *Voyager* — I've never talked to you about the *Voyager,* but it leads to who the Hopi say we were at Creation. Some say we were just from the stars. And then, taking us from the third to the fourth world, we voyage in some kind of vessel or reed to what sounds like the Pacific — the West Coast in the Pacific in South America. But again —

MS. RIEDEL: When you say "vessel" or "reed," do you mean a reed boat? Is that what you're referring to?

MR. QÖYAWAYMA: Could be. Could be.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: That gets to all my work with Herb Kané and the hokule'a [ancient Polynesian sea-faring canoe]. That's a whole other subject.

MS. RIEDEL: It makes me think of the reed boats, too, in Bolivia and Peru.

MR. QÖYAWAYMA: Yes, scientists know that there's certain plant species —

MS. RIEDEL: Whole floating cities, actually.

MR. QÖYAWAYMA: — that are in New Zealand that came from South America, and Herb — we haven't talked about Herb, but, in short, Herb is kind of a historian for the Hawaiian people and recreated the hokule'a and the navigation system to go with it [the *Hokule'a,* Polynesian Voyaging Society, launched 1975 from Hawaii].

So there's navigation, you know — there's star navigation systems, and just the whole idea of recreating from petroglyphs — a little bit like I tried to recreate who and what we did in our ceramics —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — different things, but nevertheless that whole feeling of going back into the past and pulling out what you think is right. Now, in terms of Herb, maybe he didn't get the vessel just right. He recreated the vessel, and they've sailed it.

I mean, they've sailed it all the way from as far — they've built five of them now, but the original [recreated] *Hokule'a* sailed from the Marquesas, I think Fiji — not Fiji; Tahiti [Oahu, HI, to Tahiti, 1976] - and then the Marquesas [French Polynesia], and then it went the Marquesas to Hawaii. You know, to them that's a tremendous story, and he's really documented it very well. It's available on the Internet now [hokulea.org].

So we stay in touch, and we have different theories about the sailing — contact between Polynesia and the Americas, definitely. It happened. The question is, what direction? And the next question is, it's the wrong time frame. The time frames we're looking for — some of the transportation, like when I talked about the Valdivia pottery of Betty Meggers. And if her ideas are right, there had to be other kinds of contact much earlier.

So there's transpacific — we did briefly mention transpacific and transatlantic contacts. And I have references to probably 2,000 different articles written by different peoples. And we do know that the Nordic peoples made it to Newfoundland and —

MS. RIEDEL: Sure.

MR. QÖYAWAYMA: So that's not all that big a mystery. The question is, what happened earlier with the Phoenicians being the great sailors? Did they make [it to] South America? And we talked a little bit about the mummies and finding the tobacco, cocaine substances which didn't occur in Africa or Middle East.

MS. RIEDEL: Where is this?

MR. QÖYAWAYMA: When they were doing analysis, I guess, in a methodical way in France — I'm not sure, probably Egypt; I'm not sure where all the locations were — they found what they thought were contaminants, and over 60 percent of the mummies contained substances that are really cocaine-based from South America — cocaine type.

MS. RIEDEL: Well, they chewed coca, no?

MR. QÖYAWAYMA: Yes.

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: And they still do.

MS. RIEDEL: For energy and to quell hunger.

MR. QÖYAWAYMA: But the question is, how did they occur in mummies? They thought that the laboratory technicians had been maybe imbibing a little bit, and they found out that they weren't, and this is when the discovery came. And it's been documented. So there's this mystery now about contact. What I'm really talking about is, was there contact between Africa, let's say, and South America, and was there contact?

I mean, we can get into, did it happen, or didn't it happen? I don't know that we know. All we know is that Native peoples were probably here in South America 25,000 years ago, earlier than we date the Clovis culture [c. 13,500-13,000 years old] in North America.

MS. RIEDEL: Al, I would like to move the conversation. We've talked about Herb Kané —

MR. QÖYAWAYMA: Yes. Right.

MS. RIEDEL: — and we've talked about your aunt. We've talked about your Sikyatki ancestry. We've mentioned A. T. Anderson. I'd like to talk about the most powerful influences in your career.

MR. QÖYAWAYMA: Well, the mentors.

MS. RIEDEL: Yes, the mentors, and then other powerful experiences; for example, the amount of archeological research you've done. But, sure, let's start with mentors. Is there anyone that we haven't mentioned yet?

MR. QÖYAWAYMA: Well, let's see. We have Pete Solakian —

MS. RIEDEL: We mentioned Tess [ph].

MR. QÖYAWAYMA: — as a practical personality, not necessarily cultural, and then my aunt, who is always there in one form or another, Polingaysi Qöyawayma — Elizabeth. Let's see; who else do we have? A. T. Anderson —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — for a different reason.

MS. RIEDEL: You know, we touched on that. Is there anything more in particular you'd like to say about him and why you consider him a mentor?

MR. QÖYAWAYMA: We connected particularly well because he had come through, I would just say, a Native upbringing, but then had really connected with the corporate world and was involved. He had direct involvement in developing the atomic bomb. He worked for Union Carbide [Corporation]. And he had just made lots of connections all over, and he was —

MS. RIEDEL: And that was something that you admired, his ability to connect?

MR. QÖYAWAYMA: Yeah. Something else that he connected with is the U.S. Congress had had him oversee and become the principal in directing the study on the status of Native peoples in the Americas. It was the last study that was done. It was done in the '70s. He finished about 1974 or '75.

I have his — what do you call it — these casual papers, plus I have the actual final federal reports. He had just finished up that work when we got AISES going, and so he had had all this tremendous contact right across the board, and he was really educationally oriented. He just really understood what it took, and he had learned the language of corporations.

MS. RIEDEL: So he could have an effect.

MR. QÖYAWAYMA: Yes, and when we started out with AISES, nobody wanted to believe in us. They thought we were nuts. They'd read too many of the old books about Native peoples, I guess. [Laughs.] Even the Bureau of Indian Affairs thought we were nuts.

MS. RIEDEL: Why was that?

MR. QÖYAWAYMA: Well, you'd think they would be — you'd think BIA might be our protectors, but — you know, I'll put it on record. My general impression in working with the Bureau of Indian Affairs is it's our link to the past and our relationship to the government, but as a practical organization they're really less than useless.

They're positioned very badly. They're one of the departments in the Department of Interior, or Resource, the department in the United States where everything is out of tune. So I guess it's pretty natural that things wouldn't work too well at the Bureau of Indian Affairs.

MS. RIEDEL: So A. T. Anderson was an example of a new way to get things done.

MR. QÖYAWAYMA: Right. And so we got things done. He and I, with a minimum amount of communication, were able to set up and perform the initial operations of AISES, which took a huge amount of work. Back then we didn't have computers; that is, e-mail, to communicate with, and so a lot of it was, okay, Andy, you're doing this, and I'm going to do that, and we didn't have to talk about it a lot because we just had a shorthand, so to speak, of corporate speak, of priority in things that needed to be done, which was fantastic.

But I appreciated him as a person. As a person, he was masterful. You know, he's the kind of person you would like to emulate. I'd like to be an Andy Anderson. Andy wasn't an artist — [laughs] — but Andy had everything else, you know.

MS. RIEDEL: Two artists that you've mentioned, but we haven't talked about on disc, are Henry Moore and Allan Houser. And I can certainly see —

MR. QÖYAWAYMA: And Charles Loloma, my own relative. [Grandfather's side of the family.]

MS. RIEDEL: Right.

MR. QÖYAWAYMA: Besides my aunt, Charles was definitely an influence on me. We did shows together, but it wasn't like — well, at one point he actually had to ask if I might be interested in working with him. I don't know if it would be apprentice or whatever, but I was working full-time, and I just really couldn't make something like that work.

Allan Houser was a more distant relationship, but [I] appreciated his type of sculpture. If you look at his style of sculpture and look at my style of ceramics, there are some similarities. We were both minimalists.

And we just spent some time alone together, one particular day I remember. He had his studios out away from Santa Fe, and we went through all of those studios, a house he had built out there and a foundry, which is now pretty much an institution on the circuit of public tours.

Allan just had a soft way, and he was far more talented as an artist. I mean, I don't even try to compare myself with Allan. He's just a masterful artist in every way. But that was his entire life. For me, it wasn't my entire life. But he shared things, and he — actually, we would compare a little of the work, because I was careful; I didn't want to do things that would copy Allan's work. I mean, I was aware of Allan's work.

That's always a problem when you have a mentor, and he was a mentor in the sense that he decided to come to one of my shows at Santa Fe East and just do a critique, and he did that, and he took the time to do that. He was so gracious in the way in which he described the work. It wasn't like he was recommending anything. It was just he was encouraging.

And I would have to say that was true of Charles, and it was true of Allan. And it's the kind of projection we would all like to make on other people, to be encouraging to the people, even when they — well, in art we don't try to change their direction, but in real life, in some things — of course, with young people — we're trying to make sure they take the right direction.

MS. RIEDEL: What in particular did he have to say that was helpful?

MR. QÖYAWAYMA: It wasn't so much what Charles said — it was like my aunt — it was what he did. Namely, he would take the time. Later on, I was the vice chairman of the Institute of American Art in Santa Fe, and he would spend time with me, and, you know, we would get together in meetings and what have you, but just his ideas, just sharing ideas.

But the fact that he did it, like he did the critique, and would take the time — I mean, he's a busy person; he didn't have to take the time. What does that mean to an artist to have somebody who is a master artist come and take the time? I don't remember all the words he said during the critique. It was complimentary. I don't remember anything negative — maybe projective of my work a little bit.

I do remember one incident much later with Allan when he had an exhibit in Scottsdale, and he had gone from just pure casting to fabricated work with sheet bronze. And he saw me, and he ran over to me, and he said, "Al," he says, "this is the greatest thing that I've ever done." He says — there was this freedom, I could tell.

And he was explaining to me, but it was the fact that he knew me well enough that he could — almost like a child saying to another child, wow, this is really great; let's go build another fort — [laughs] — you know, or whatever. It was just that kind of exchange. And so it was personal but it wasn't that we did things together ever. It wasn't that kind of thing.

And in that same era, there was Lloyd Kiva New, and he was more of a organizational person. I was trying to actually bring the AISES model to the Institute of American [Indian] Art, because we'd been very successful with AISES, and we wanted to be successful with the students at the Institute. There are some stories to tell — I don't know whether we can tell them now or later, but the Institute story of how I ended up there was kind of different.

MS. RIEDEL: Let's talk about the Institute [IAIA].

MR. QÖYAWAYMA: Yes.

MS. RIEDEL: We'll stop this disc here.

[END CD 4.]

This is Mija Riedel for the Smithsonian Archives of American Art, with Al Qöyawayma, at the artist's home and studio in Prescott, Arizona, on March 31, 2010. This is disc number five.

And we are going to start this disc — Al, if you would be so kind as to pronounce your last name so we have it correctly once and for all.

MR. QÖYAWAYMA: Yes, I'm going to do it in two or three different ways here just briefly because it's always a question, and the same question relative to other Hopi names too. There's a kind of hyphenation that occurs, usually between syllables, three or longer, in terms of names or words, and it's after the second syllable, generally speaking. So if I just say it in English it would be Qua-YAH 'Wy-Mah. And I hesitated a little bit after Qua-Yah. Almost like two words. I could just say Ko-Yah-Wy-Mah as one word. That would be pretty Western, and English-sounding.

Then, as you drop into Hopi, the first thing I have to note is it's an umlauted O, so we have six vowels. That's what throws the sound. And all the vowels are pronounced pretty much like Spanish.

MS. RIEDEL: That's helpful.

MR. QÖYAWAYMA: Yes, so they're moderated.

MS. RIEDEL: It almost sounds — it reminds me of Hawaiian, one A follows another A.

MR. QÖYAWAYMA: Mm-hmm. [Affirmative.]

MS. RIEDEL: Yeah. Okay.

MR. QÖYAWAYMA: And my first name — and we haven't really covered that — is Kuwanwisiwma [Ku-WAN 'Wi-siw-ma].

MS. RIEDEL: One more time.

MR. QÖYAWAYMA: One — let me see. Notice I just hesitated a tiny bit, after Kuwan. In that case, I'm dealing with pretty much English vowels, and so there's no — there's not the throaty sound in it, as in the umlauted O [Ö].

And different names — or certain names have parts that actually are words, like "kuwan" means beautiful. And the "Qoya" is not a word, but, as I indicated to you, "wayma" was meant to be walking. So one of the interpretations of our name, given the clan, is "grey fox walking at dawn."

MS. RIEDEL: I saw that in one of the early catalogues. And so that's the last name?

MR. QÖYAWAYMA: Mm-hm. [Affirmative.] The first name, Kuwanwisiwma, has been interpreted as "beautiful leader walking down a path with small ones following behind him." That's one interpretation.

MS. RIEDEL: It sounds like the way you defined the Coyote Clan yesterday, walking ahead.

MR. QÖYAWAYMA: Oh, yes —

MS. RIEDEL: The leader walking ahead.

MR. QÖYAWAYMA: — being those who go — who went ahead, the pathfinders.

MS. RIEDEL: So let's start the conversation today with what we were talking about in your studio, which is material, and how that is really the perfect subject for us to use when looking at the overlap between your science and your art experience.

MR. QÖYAWAYMA: Yes, it's definitely one of the areas. There's probably no single way to define the connection between the arts and the sciences.

MS. RIEDEL: Sure.

MR. QÖYAWAYMA: I've seen various things written. I mean, you can think of Leonardo da Vinci, and you can think of how he studied various things and did drawings, and then he produced art. You can think of some of the old classic painters. They produced their own paints, or at least had others —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — that they worked with that produced the paints. And then of course, they became later refined materials and commercially available. But before the things were commercially available, you had to process yourself. So in that sense, my work, when I'm trying to reach deeper than something immediate in the last, let's say, 50 or 100 years, I'm going to have to reach into what resources were available at the time.

And then I've got the problem of trying to keep track of everything I'm doing. So now you get into using what I might term the scientific method, or at least the discipline in science, because otherwise you're reinventing things over and over again, losing your mixtures, forgetting what you did, where you collected something.

So all of that needs to inventoried and kept track of in a way in which it doesn't become a full-time job for you. I record both in notebooks and scientific lab notebooks.

MS. RIEDEL: Right. So you're talking about the actual raw material, the clay that you mine on the mesas, as well as the temper.

MR. QÖYAWAYMA: Well, the temper is made from that clay.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: And realizing that a lot of the paints and the pigments that I use for coloration — I go — wherever I am, including when I was in New Zealand or wherever, I'd pick up samples. I have samples here. They're inventoried by a number, and once in a while I'll pull something out, because I have an idea about them, and try them.

MS. RIEDEL: These will be materials you dig from the ground.

MR. QÖYAWAYMA: Right.

MS. RIEDEL: And the temper is something that you dig and make in different grades of fineness.

MR. QÖYAWAYMA: Well, I don't dig the temper; I take the basic material, which is Hopi clay —

MS. RIEDEL: And fire it.

MR. QÖYAWAYMA: — from a site, and then I fire it just like pots, old potsherds [shards], and the pots they came from.

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: Because I don't want to — there's kind of an emotional thing. I don't want to pick up and destroy the potsherds —

MS. RIEDEL: Right. Of course.

MR. QÖYAWAYMA: — even though archeologists go through and collect things, and I've asked what they've done with the potsherds, and they put them in the dump after a few years, which is — you know, it just doesn't seem at all right. Pots and potsherds are our relatives.

MS. RIEDEL: Wow, that seems odd.

MR. QÖYAWAYMA: But, you know, what do you do with materials? Which is the whole reason — [laughs] — I guess you're going through an archival process here, because things do end up, quote, in the dump or someplace.

MS. RIEDEL: Right, they disappear.

MR. QÖYAWAYMA: Yeah, they just disappear.

So I take that basic clay as a material and then fire it. Then it's ground to different fineness, and that's used to mix with the clay, along with other processing that I use with the clay. And I mix it all together, and I do come out with a paste, or a mixture, clay mixture, which is pretty much Hopi, the old Sikyatki clay, as I know it.

And I say Hopi because we have Tewa-Hopi doing ceramics, and to a degree, they're processing their own clay. Probably individual potters process it slightly differently, but I'm sure there's just an overall way. It's not something I have watched over their shoulder because I'm really concerned what I'm doing.

And, based upon our discussions that we've had, I spent time in the Smithsonian back in the days when we were really up in an attic looking at old pieces, and I was looking at pieces, of course, in museums throughout the country, and I was making a lot of observations, so —

MS. RIEDEL: About the forms?

MR. QÖYAWAYMA: Well, not just forms —

MS. RIEDEL: The designs?

MR. QÖYAWAYMA: — but whether or not — the degree which a shape took — like a low-shouldered shape, how low was the shoulder, what was the angle of the shoulder, let's say from the horizontal, and then also what was the width of the shoulder annulus [ring, band]?

Now, these typically — I'm talking about a specific kind of pot, which we refer to as the Sikyatki form, low-shouldered form, in the yellowware class, and would be well known to both the Smithsonian Museum of Natural History and the National Museum of the American Indian, and to other anthropologists as well, particularly here in the West. And a lot of the Sikyatki pottery was originally dug in about 1895 by Walter Fewkes.

In any event, the relationship — the closest relationship I can think between my particular pursuit, discipline, would be in the materials, because I had to figure out what our ancient relatives were doing with materials - not only where did they get them, but how did they mix them together and produce such fine material that allowed the construction — the very fine construction, thin construction — and ultimately, when it was fired with coal — because they actually vitrified pieces, where most tribal groups in the Americas didn't vitrify their pieces.

So they had to run about 1,800 degrees Fahrenheit or more in order to achieve vitrification, and the coal would allow this. In fact, they built what would be called a kiln in the ground and covered it with potsherds, and I even have questions and evidence that they may have used either ceramic tubes, reeds, something to blow air into, which would supply more oxygen and create a hotter fire.

And, as a matter of fact, this was the technique that was not only used in South America when the metal technology came along; also this has been discovered to be used in Africa, because Africans actually came up with a carbon steel before Europe — while Europe was still in the bronze age, but that's a different subject. The point is that the Hopi, I'm sure they're experimentally trying lots of things.

So in a sense, you know, when does science become modern science versus an old science, because by trial-and-error experimentation — which is a lot of what science is anyway - where it differs, generally speaking, is you come up with a hypothesis, and then somebody else — you test it and show what you think the results are or show the results, and then somebody else can replicate it.

That's generally, quote, the scientific method. So it crosses over into the arts. I would say that maybe the difference is that the — I'm just thinking out loud here a little bit — one idea I have is that science would be a shorthand for a learning process, because if I had enough years and time, I could just experimentally keep trying

things until they work. And I'm sure that's the way it really worked with ancient cultures.

But I have to use something that, in my lifetime, allows me to get to the answer more quickly and try to see what our relatives were doing. And so materials was a natural place to apply the scientific method. I've already described keeping track of what you have, keeping track of your experiments, making —

MS. RIEDEL: I should say, you have extensive notebooks with charts —

MR. QÖYAWAYMA: Yes.

MS. RIEDEL: — notes going back to 1975.

MR. QÖYAWAYMA: And there's all kinds of little tests that I did for myself. No normal artist probably would do that, but I wanted to know how different clays outgassed. I wanted to know, you know, their outgas firing curves. I wanted to know the strength of the clay. That was really important, the strength in the green state as opposed to the fired state, and the amount of shrinkage.

I mean, there are practical things: How does the material perform as a media to work with? Does it kind of obey you or does it resist you? And I think anybody that's been a potter or worked with ceramics knows — has a feel of - how some materials can resist you, and some materials will work with you.

And we all have that general knowledge, but it's the specifics that make the piece ultimately —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — and allowed me to do some of the shapes and forms, because I can form and deform and still keep a certain moisture content.

MS. RIEDEL: And would you describe the temper? It's an absorbent temper that allows you to keep this moisture content to some degree, which is an interesting detail.

MR. QÖYAWAYMA: Right. Our old, ancient — our Sikyatki forms, which was the name of a village, actually, where our Coyote Clan was, they had — and other groups as well. They weren't, certainly, an independent group that did this, but they were using pottery shards that were reground, probably in a metate [concave stone for grinding corn] pretty much. And they probably refined what they had by winnowing [separating heavy and light elements] in the wind. It would be a logical way to get different grades of material.

And when you add that to the core clay in different amounts, you get different workability of the clay itself.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: Too much and it gets very short; too little and you can have a clay that's too plastic, depending on what you start with, because a lot of clays come with materials in them. It could be really fine sand. It could be volcanic ash. I mean, it just depends on the source of the clay. And anybody who knows clay, there's a whole variety of, certainly, clays from porcelain, the fire clays, to whatever you want to name.

MS. RIEDEL: That strikes me as so unusual. This clay is incredibly soft and fine. It almost feels like a porcelain in that sense, but it's much softer than a porcelain; it's much more elastic than a porcelain. But I would expect it to have a much higher grog [previously fired clay particles] content than it does in order to achieve those sculptural shapes, and it doesn't. It's incredibly fine and soft, yet it can hold those incredibly demanding shapes. You were referring to its tensile [longitudinal] strength.

MR. QÖYAWAYMA: Right. Well, the green strength is —

MS. RIEDEL: And it barely shrinks, five percent.

MR. QÖYAWAYMA: You can take some of the commercially available clay and double the green strength by refining it in the right way. And also, I told you, I'll let it age, and that's a well-known principle too.

MS. RIEDEL: You'll work with clay that's 10 years old, routinely.

MR. QÖYAWAYMA: Mm-hm. [Affirmative.]

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: You know, I make it now and use it later. That sort of says I'm looking ahead.

MS. RIEDEL: And people have referred to this, you said, as the "magic clay."

MR. QÖYAWAYMA: Yeah, the magic clay —

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: — compared to what they're used to working with in a typical university, or, you know, they buy commercially — because people just buy the material and start working with it. And of course, there are all kinds of clay that you can buy.

But, for me I'm specializing it for my own processes, and those that see the photos of the work, or you actually see the work, will see the kind of style and what I'm doing with my work. But a lot of it in the architectural has a lot of relief. And I also talk about using repoussé technique, which is to push out — it's a French term that really means to work metal and push it out, but I use that for the clay —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — to try to maintain a constant thickness, whatever the shape is and whatever I'm doing. And that really shows up in the architectural pieces because —

MS. RIEDEL: It's unusual to have thin and thick co-exist so well without cracking or pulling apart.

MR. QÖYAWAYMA: Right. And of course, naturally, it's part of the process that you're careful about drying, although if I have a simple shape, I can dry at a very high rate. When I was living in Phoenix, I could put it out in the sun and dry at the rate — at 110 degrees, and it wouldn't crack. That was a simple shape, because everything is kind of uniformly shrinking at the same rate.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: But it also had something to do with the clay, because a lot of clays wouldn't allow that.

MS. RIEDEL: Absolutely.

MR. QÖYAWAYMA: They tend to dry on the outer surface and be wet on the inner surface. That creates a tension on the clay, and then you get a crack. So naturally, if I'm going to put all this work into things, I want to maintain the ability to avoid cracking. And the other thing that the temper does, that we've discussed, was minimizing shrinkage.

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: And so I'm typically trying to work — well, my clays are typically in the five- to six-percent shrinkage range; whereas [when] I worked with other Native clays, it will be in the 10- to 12-percent range. And they temper differently. They have to use different techniques and use a thicker cross section to achieve a ceramic. They still do beautiful work, and they live with the material in a way we can learn to live with any material —

MS. RIEDEL: Sure.

MR. QÖYAWAYMA: — if you work with it long enough, and you can learn what it can do. I tend to — I use coil, and then I pull the coils — I call it, like, taffy, although it's not as stiff as taffy - and I can pull one coil over another and create a thin section, and other techniques: like along the Rio Grande, they might use more of a paddle because the clay is so short. First of all, it starts out very elastic, and then you have to add a lot of temper or grog to it, usually volcanic ash. A 50-50 mixture wouldn't be unusual.

And then they have to use a paddle. Part of it's mechanical, with their hands, and the other part is to cause the water to work to the surface, a little bit like how people pour concrete and then work the surface of the concrete to bring up the fine material. That's a little bit the way it's done on pottery with a paddle, the same general idea.

MS. RIEDEL: And one of the really interesting things about this temper is that, because it's not vitrified, it absorbs water, and it changes the quality and the consistency of your clay.

MR. QÖYAWAYMA: Right. It kind of retains moisture, and then if I get a dry — something a little bit dry as I'm going along — because I'm always in what I call moisture management mode. Some things I can't leave too long, such as particularly a complex piece of architectural-type ceramic.

I need to get through the really heavy forming processes in a period of a few days. Otherwise the clay actually tends to set up a little bit and gets stiff in some sections and what have you. Or if you try to keep it too wet, then it kind of settles, and it easily cracks. Either way, you can have problems with — any of those that are really working in clay would probably know this. To those that just see the objects, they wouldn't really realize that

these things are going on.

MS. RIEDEL: You apply a finer slip to the exterior of the pot in order to get a nice polish, a nice burnish. At what point is that added?

MR. QÖYAWAYMA: Once, of course, you've formed your piece, and I say that you have all the element of the piece that needs to be done, and that includes — if it involves carving or texturing, forming, whatever that is - you're ready; you let it dry. At that point, the dry piece, you could set it on the shelf or —

MS. RIEDEL: Is it bone dry?

MR. QÖYAWAYMA: Yes. You could let it sit on the shelf for a while if you wanted to, because now it's safe in that sense.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: There's nothing to shrink, as long as you keep it in a safe place, nothing to break, but then you can come back to it. And that's another thing; I tend to — obviously, I only work on one piece at a time on a momentary basis, but I may actually have two or three pieces in process.

There's a lot of timing involved in the clay — you know, I'm going to wait just a little while, while that dries out a little bit; maybe it got a little too wet — whatever it happens to be, and you gain — you've done ceramics long enough, and hand-building, that you gain this sense of timing: I can leave it alone for this long, and then I need to come back to it.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: Then it's dry. You do the finishing processes, which is a lot of clean-up, and you —

MS. RIEDEL: Fixing the edges.

MR. QÖYAWAYMA: Yeah, fixing —

MS. RIEDEL: You said you like to clean those up a little bit if it's been carved.

MR. QÖYAWAYMA: Well, you can use blades. You can use sandpaper, emery boards, you know, anything that you find practical for finishing a piece. And the grade of what you're using, of course, depends on how deep the scratches are on the surface.

But you get the form, and you get basically the shape, and then you clean the piece up. That is, you need to take the extra — oh, there will be powder and what have you that is perhaps in some of the sanding marks. And you'll find little imperfections, so you clean those up.

Now it's all pretty bare clay and cleaned up, and you're ready to slip. And I use what I call a base slip. It's my own idea. I don't know that you have to do that, but I use a base color which is made out of the original clay.

But it's slipped, and one coat of that tells me very quickly — first of all, it makes everything uniform in terms of its reflection, color, or shadow, and I can immediately identify anything else that needs to be fixed. And you certainly identify if you have, let's say, a crack or some other kind of problem.

Then, once your base is on, you're ready to put on your color coats. And there are a couple of different ways of doing that by different potters. You can put multiple coats on, or you can put a very thick single coat on. And you can either polish immediately after putting the thick coat on, or you can rewet the multiple coats and repolish.

MS. RIEDEL: Do you use a stone? Do you use a spoon? Is it anything in particular?

MR. QÖYAWAYMA: Yes, I use a stone. I [have] polishing stones of different kinds. I've got one that I think has a million miles on it, and it's just amazing, with all the abrasive material that it encounters, that it's still, you know, really whole, and does the job.

And you use different surfaces of a stone and different shapes, so I have a lot of different shapes. You don't have to use stones only. I mean, if you get in a really tight area or something, you may be using metal. Some people use plastic. Those who burnish pots use all kinds of ways of burnishing. If you don't want a high finish, you can cloth-polish it.

And then of course, there's the whole thing of refining your slips because —

MS. RIEDEL: And your slips are primarily based from clays that you've dug —

MR. QÖYAWAYMA: Yes —

MS. RIEDEL: — colors that you've dug, materials —

MR. QÖYAWAYMA: — in a lot of different locations.

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: A lot of it comes from the Hopi, but the idea there is you refine them down to a pretty fine quality. You can either take a mixture and mix it up and let the heavy parts drop out and then decant the water; that is, put it in a container — pull off the top and then let it dry out, and you end up with a pretty fine clay that way. Or you can run it through really fine sieves.

Either way, each slip is different, because some are what I call "hard," and some are "soft. "Those who are familiar with ball clay, you know, it polishes pretty well, and some of the clays in ball are fairly soft as compared to something that has a heavy mineral content of iron or something that could be what I call hard. It doesn't have to be hard.

That's one of the things that you experiment with so that you can get a nice polish, and yet there's a timing involved in the polish too. You have to get over a surface —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — in a certain amount of time, get it pretty well worked in, and then you can come back using — different potters use different kinds of lubricants. It usually involves anything from chicken fat, the lard, to olive oil to - you name it. It depends on what works for you and what works for the surface.

I don't use a lot of it, although I know some potters that use a heavy amount of it. I don't know what every potter does. I just do what works for me —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — and seems to get my job done.

MS. RIEDEL: And what do you use?

MR. QÖYAWAYMA: Well, I use a lard that's mixed into a cloth, so that I don't really oversaturate the surface, although I have experimented with putting, directly on, olive oil, and if you time it right and do everything right, you can come out with a really good finish. I just prefer not, necessarily, to do it that way.

And then I have to renew the little cloths that I have. Of course, lard can get rancid, so I have cloths that I keep in the icebox so they don't — they stay kind of fresh, and eventually you have to either wash them out or get a new cloth. That's a pretty good method. It works well. But, as I said, other potters have other ways that they've traditionally used to — and I'm sure they use other kinds of fatty materials that I probably wouldn't know what they were right off, the source. It's what a person gets used to.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: That's the whole — that's part of a tradition, a little bit like the Old Masters painters. I'm sure they had different sources, but they tried a lot of different things, and certain things worked a lot better than others. They didn't crack, for instance, after the paint dried, as an example.

Some people like acrylic colors because they dry fast, and they can paint right back over them, and then oil is much slower. Personally — now, this has nothing to do with ceramics, but I paint.

MS. RIEDEL: Really? We haven't talked about that at all.

MR. QÖYAWAYMA: No.

MS. RIEDEL: You paint?

MR. QÖYAWAYMA: Yes, but I'm not a painter. I'm just — I can show you a few paintings around. I do it because, you know, it's a discipline, and I really appreciate people that paint. It would be fun to really kind of just maybe go off and do that for a while, but I'm so intrigued with clay that I just can't seem to get away.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: But I have painted, and I like oil, and I like the Old Masters' style of painting, so I can appreciate the Old Masters and then the derivatives of that from Europe. I mean, I am influenced — you mentioned seeing the books that I had here on Henry Moore.

And of course now, we're talking about sculpture and bronze. But a lot of the older — I'm not talking about the Old Masters now; I'm just talking about more modern sculptors or what have you. They might actually use a water-based clay, although they probably tended to use oil-based or other materials to create their sculptural surfaces.

And I don't mean to deviate completely, but, you know, you know that I do bronze once in a while, and I'm familiar with the lost-wax process and how it's used on sort of a massive scale versus a jewelry scale.

MS. RIEDEL: Right. We'll get to the bronzes —

MR. QÖYAWAYMA: Right, okay.

MS. RIEDEL: — but I just want to keep — just a quick question about the paintings, too.

MR. QÖYAWAYMA: Yes.

MS. RIEDEL: What do you — what is the content of the paintings?

MR. QÖYAWAYMA: Just learning in class-type settings. It's drawing and painting and —

MS. RIEDEL: Still lifes?

MR. QÖYAWAYMA: Yes, it can be still life. Probably the ones that I actually have hanging are still life, like just a bowl and grapes, you know, the typical things that are done — take different objects and work with them.

MS. RIEDEL: Interesting.

MR. QÖYAWAYMA: Learning to sketch those things but then doing quick sketches. Particularly when you're working with models and things, you have to try to get movement and motion and thrust, all those kinds of things they teach you in drawing, you know.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: They're all useful. And Henry —

MS. RIEDEL: You've talked about trying to do that with your figures, to get a sense of motion and movement in the figures.

MR. QÖYAWAYMA: Right. Henry Moore mentions in his books, memoirs, whatever, that he thought that great sculptors were the ones that could really draw. Allan Houser definitely was an example of that. In my mind, I would like to draw better, but on the other hand I tend to capture these three-dimensional images in my head. So sometimes —

MS. RIEDEL: Right, we were saying that you really don't draw before your pieces.

MR. QÖYAWAYMA: Well, sometimes I do, and sometimes I don't. Yes, sometimes I do a detailed layout, but one thing I've learned on a two-dimensional scale, that when you go to work the three dimensions, you learn that there's a lot of things that happen in three dimensions that you can't easily draw in two dimensions. You can, but you have to imagine what's going to happen to certain surfaces. They can be sketched, but I always know they're subject to modification when I'm actually working with a piece.

If you have a sketch, or you work with a drawing, one of the first things when people are looking over your shoulder or looking at what you're doing, I say, "You know, what's important is how it looks, what is aesthetically pleasing, not what I just drew." Because what I see when I turn a piece, particularly like in an architectural piece, that has — definitely has three dimensions to it - so you could make all kinds of drawings in different dimensions.

But it's what I see that's important, and I think that's pretty much true of most people that work in the arts, in ceramics or otherwise. You adjust things and define it by what you see, and you know also when to stop. That's another aspect: how far do you go with something?

MS. RIEDEL: How do you know when it's done?

MR. QÖYAWAYMA: Yeah, how do you know when it's done, right.

MS. RIEDEL: How do you know when it's done?

MR. QÖYAWAYMA: I've kind of described it as, when it feels and looks right.

MS. RIEDEL: So it's an intuitive sense.

MR. QÖYAWAYMA: Right, and I tend to be more on the minimal side, so if I stop something, it will be to actually take — sometimes I'll take something that's a little bit complex, and after I looked at it, if it's still wet, I'll make it less complex, just on purpose, because I think it gets overdone.

MS. RIEDEL: I think with the —

MR. QÖYAWAYMA: That's my own style, you know.

MS. RIEDEL: Right. I think of the *Path of Life* [1986] pieces as being among the more minimal.

MR. QÖYAWAYMA: Yes, that rim — the rim defines the path, and the doorway is a life experience of in and out. Of course, I do things with doorways in a lot of things, but that piece is pretty much defined by that. And it's a minimalist piece.

MS. RIEDEL: It is.

MR. QÖYAWAYMA: But just as a note, in a gallery setting there's a particular slip I use that I call pink. Now, it's not a real sharp pink. It could be a mauve, or, you know, somebody would describe it as another color. But I make a large piece of that form, and for whatever reason, I have — particularly the female gender will tell me the same things about that piece repeatedly, no matter my gallery show location.

I mean, I've heard the stories over and over again, to the point that I just smile, because I know what they're going to say.

MS. RIEDEL: What do they say?

MR. QÖYAWAYMA: Well, first of all, because that particular piece allows just a lot of open area and it's very tactile — it looks smooth and it —

MS. RIEDEL: Is it one of the low-shouldered pieces?

MR. QÖYAWAYMA: — it feels like skin. Yes.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: And they say — well, and we're talking about the *Path of Life.*

MS. RIEDEL: Right.

MR. QÖYAWAYMA: And they'll tell me it feels like skin, and they'll use the word "sensual." They use a lot of descriptive words ,but it's very — it's just a feeling to them, and the shape really speaks to them. So I just find it kind of interesting that they —

MS. RIEDEL: Well, it's certainly a very pregnant shape.

MR. QÖYAWAYMA: Yeah, the reaction is always — I get the same general kind of reaction, no matter whether it's an old woman, a young woman, professional, nonprofessional. I get the same reaction — not necessarily so much from men. Men have — they sense the world differently.

We talked a little bit about right brain, left brain, and I suppose maybe women tend to be a little bit more right-brained, a little more sensitive to the world around them and less analytical. I don't want to state that as a truth. [They laugh.]

MS. RIEDEL: Right, you'll get in trouble.

MR. QÖYAWAYMA: Yeah, but it applies to the pottery, because I tend to work on the right brain, but then the science that we were talking about a little earlier tends to work on the left brain.

MS. RIEDEL: Two more quick points about the working process. The first is just to clarify that the pots are fired once in an electric kiln, and that you fire to a lower temperature than what we were discussing originally about

the Sikyatki, which I think you said was closer to about 1,800 —

MR. QÖYAWAYMA: Oh, about, yeah.

MS. RIEDEL: — about 1,500 to 1,600 degrees.

MR. QÖYAWAYMA: Right.

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: And the principal reason for that — well, there are two questions there. One is using a — I'll call it a mechanical firing process as opposed to more of an organic one where you pit-fire — I've done pit-firing.

I've done all of those things, but I've also lived in urban areas, so I got used to using that. And my joke is that the pots really are coal-fired, because the coal comes from a reservation around the power plant, and so they just send a different version of the coal down to me, and I get to use it.

MS. RIEDEL: There you go.

MR. QÖYAWAYMA: But that's a little side note.

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: The reason for the difference in temperatures is, when you're stone-polishing, you're really aligning all the little clay particles so that they reflect light. And once you vitrify them, you lose that sheen that — the bright but soft-looking surface.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: Of course, you may create a glaze by that time, depending on what you put on it, but —

MS. RIEDEL: Exactly.

MR. QÖYAWAYMA: — but you go — one, it's not a glass surface. That's why I think a woman feels that it has that feeling of skin, because it isn't as cold. It doesn't feel slick.

MS. RIEDEL: No.

MR. QÖYAWAYMA: It feels much more natural as a surface.

MS. RIEDEL: Yes, you're right; when it vitrifies, that sheen goes. Something changes chemically and very perceptively visually as well.

MR. QÖYAWAYMA: I think, generally speaking, I have observed that women prefer to touch the pieces, as men kind of look at them in the distance, just basic differences in our gender, you know, the way we approach and see the world.

MS. RIEDEL: One more point about the working process, Al. We were talking, before we started on disc this morning, about the document from 1895 and the Fewkes excavation.

MR. QÖYAWAYMA: Yes, the annual reports of the American Bureau of Ethnology —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — publication series to the Smithsonian Institution in the late 1800s and early 1900s.

MS. RIEDEL: We were looking through that book, which has about 50 beautiful color plates of all the different designs that they discovered or excavated, and you were saying that you like to immerse yourself in the — well, would you say that again?

MR. QÖYAWAYMA: Yes, ideally, if I had my little time machine, I could go back to a period when these things were being produced, and I would learn from all the potters what was going on in their minds at the time. I'm sure I'd get a few surprises even today, notwithstanding what I know different potters do.

But it's the designs. You know, how much of it came out of ceremonial or other motivations, because it's a mindset, yet there's a lot of geometry; there is a lot of beautiful surfaces that overall are geometric but may form real figures, like the butterfly that you've seen that almost looks like a butterfly, but, you know, it's more stylized, abstract, but with a humanlike quality.

We haven't talked about that, but you've seen my pieces that have very realistic figures on them, carved as a realistic figure. Hopi *Buffalo Dancer* [1991], I think, would be an example. My *Blue Corn Mana* [1984], *Mexica Warrior* [1994], these are all realistic figures, but then we can also go to abstracts.

In the Hopi way of doing things, when men carved katsinas, there are secular, and then there are religious. So, generally speaking, those that are sold and produced today were all of secular figures. They don't represent something sacred. Otherwise they wouldn't be sold.

But they're an abstraction. Sometimes they're very realistic. There's all variations. They can be quite an abstract figure. A child's katsina can be just almost a flat piece of wood that's painted with some different colors.

So the same way in my ceramics. Obviously the *Path of Life,* with the rim that spirals around, and there's a single doorway, that's pretty much an abstraction. My *Corn Maiden* [1986] that you're looking at right now, sitting there, is an abstraction, but it includes elements of things that I know we're sensitive to that were part of our life. And so if we go back to the American Bureau of Ethnology and the Sikyatki period, there's a lot of abstraction, and yet there's some figures that are quite realistic.

So what would all that motivation and design capability be? I mean, there was a tremendous imagination and design capability. If you tried to sit there and figure out some of these things yourself, just in an empty room without some idea where you're going, it would be pretty hard. So even having access to this, I'm still intrigued.

It's not so much being mystified, but it's just I'm intrigued by the degree of capability that my ancestors had. And it wasn't because they were thinking of themselves as an artist; it was because they were trying to show us what was in their minds in day-to-day life.

A lot of these designs, by the way, got into kivas and what are called kiva murals, so at places like Awatovi, Kawaika-a, Pottery Mound — Pottery Mound was big-time, a lot of archeological work done on that. Pottery Mound is over by Albuquerque. But there are other locations that there are kiva murals.

But anyway, when you talk about "immerse," I'm talking about trying to really gain thinking of our own ancestry. I don't know that it's a fully intuitive process. Anyway, I'm influenced by style, but my designs may be different, quite different.

MS. RIEDEL: You were saying that the object — the goal - was not so much to make a piece of art but trying to show us something about the culture. Could you say a little bit more about that?

MR. QÖYAWAYMA: Well, I'm not sure one has priority over the other. I do things that were not done. We just talked about the *Path of Life*. I mean, there is no piece like that, culturally speaking, in the past. So you can call that contemporary and modern. I did mention to you the question, what would we have done had we never had European contact?

MS. RIEDEL: Right.

MR. QÖYAWAYMA: And where would we be today in our work? Nobody will ever know the answer to that question, but the evolution of different design forms and elements and shapes that are pleasing I think would be taken, and they may take all different forms. And we have different materials and processes today besides clay — bronze, glass, et cetera.

They could be carved. Certainly earlier cultures, particularly down in Central America, stamped pieces. They rolled images on pieces. Obviously, everybody painted pieces. They used textural techniques such as corrugated ware. There's just a number of different ways that pieces were decorated and formed.

It depends also on your form. More modern, maybe more contemporary potters — pueblo potters — have used what's called the wedding vase. It comes from a stirrup form, and you could find those stirrup forms in South America and then in Central America.

We've abstracted it more to — actually, the stirrup part of it becomes a whole form that's elongated and much bigger than the form that we see in prehistoric pottery — again, aesthetically pleasing, and perhaps we have more time to work our materials.

There are a lot of factors that control pottery, and you certainly go outside the western hemisphere, and you go to Europe or wherever, and you see all different kinds of forms, yet, you know, clay is clay, and whatever the abstraction and the forms that it takes, there were potters that did those techniques.

And interesting — you didn't ask about it, but, you know, the Mayans signed their pottery. They even essentially had a story that identified who they are, and a lot of times part of the story of who - their names were actually in the Mayan glyphs, which now can be read. So a lot of information comes off the ceramics, more so than we do in

modern times. So that's kind of interesting.

MS. RIEDEL: Absolutely.

MR. QÖYAWAYMA: We don't put much information. We might put our name and date on there, but the Mayan actually went the extra distance to say who they were and what family they were from. Mayan potters had their own social class.

MS. RIEDEL: I was just reading an introduction — I think it was the catalogue from the opening of the National Museum of the American Indian — an essay [quoting], I think, Richard Hill. And he wrote, "The objects speak across the generations, across cultural boundaries, and allow us to see what the Indian way of thinking is all about." [*Native Universe,* p. 14] Do you think that's true of your work too?

MR. QÖYAWAYMA: Yes. Again, I come back to that simple piece, *The Path of Life*, low-shouldered. It represents a very old shape, and one which we technically had to master. On the other hand, it has a very simple abstract curve on it, and the doorway, and I've explained to you what the doorway means.

If you just looked at the piece and had no explanation, you'd say, well, that's interesting, but with the explanation it becomes more interesting. We often are reserved and don't speak about things inside the culture, because if you're in the culture, there's already a presumption you know them. But then you're now presenting objects outside your own cultural bounds, and they need — from time to time they do need explanation. Or perhaps they're just aesthetically pleasing and people don't really care — [laughs] — you know.

But a lot of people do want to know. They won't ask the question, necessarily, before buying a piece, but afterwards they want to know more about it. I get more, probably, questions about the architectural pieces. I mean, they can see what the architecture is and kind of what it represents and what have you, but they want to know the techniques. It just fascinates them.

I've actually done demos working on that. I'll have doctors and lawyers and people sitting around during an important period of time, such as Santa Fe Indian Market, when they have their families, and they'll spend a couple hours here, and they'll come back in a few hours and look some more, because it's — for me, it's a slow process. But they are intrigued and ask a lot of questions.

That's something we haven't talked about. I'm not in a hurry. It's not a race to see how fast I can build a pot. In fact, part of the enjoyment is just taking my own time. I get lost in my world of feeling the clay, and I can do it without probably thinking about it very much until I get into something that requires some decisions. But a simple shape, I could probably pretty much be on autopilot. It might not be autopilot for a new potter.

MS. RIEDEL: Of course not.

MR. QÖYAWAYMA: And probably there's less autopilot if I was throwing the pot, because I'm hand-building everything. Certainly, I probably should learn the wheel, but I just never had that much need for the wheel, and yet there's certain simple shapes I could do 10 times faster than the wheel. And I'd probably enjoy doing the wheel. I just haven't done them that way because that wasn't the way they were done. So I have no excuse for that. I should reach out and do a little bit more.

MS. RIEDEL: Is it a meditative process for you, making the work?

MR. QÖYAWAYMA: I would say definitely clay can be a meditative process — I was taught that by my aunt — because it was more than just an object and perhaps producing it for the public, for either a combination of viewing or ultimately for sale. Yes, you can just do it for yourself, and I think clay, of all the materials, has got to be more of a meditative material. Aunt always told me, "Clay is healing." I suppose a painter would say the same thing about their paints, but either way.

MS. RIEDEL: Does spirituality play a role in the work?

MR. QÖYAWAYMA: It certainly does. I've produced a DVD on my aunt — and I keep referring to Elizabeth, one of my aunts actually, Polingaysi. Elizabeth explains what the clay really means — it's God's role in our lives. The analogy is made with man's life and all the things we're subject to in life. And I wrote about that. I created some free verse of poetry. You've seen the booklet that you —

MS. RIEDEL: The catalogue.

MR. QÖYAWAYMA: You call it a catalogue, but it's four sets of free verse, and I describe the development of the human form, so to speak. You know, you have clay that is nothing. It's just — it's the essence of what's going to be, that's wet, kind of like an embryo. And then it starts to take all its form and goes through all the childlike stages, being very flexible to drying, and ultimately being polished and adding other surfaces to it, and the

being fired.

Of course, firing is a defining process, because people go through trials in life, and you could make that analogy with the trial in life. And one of the key points is this, though, from a psychological standpoint, and that is that even when a piece is fired, the potter himself, or herself, may know that there's some imperfection in it. That imperfection may or may not show up after the firing. That's like the imperfection in our lives which are known to us, but may be unseen by others.

But even if there's a flaw in the piece, it can still be a beautiful piece. Most human beings grow up with some flaws, if you want to call them flaws. It's all part of the human development. The other is the brightness, the brilliance, the color. Things that were put on as slips and polish will change color and will have a reflection.

And now you've taken an idea or inspiration you intended to become something, and then it does become what you intend. That's like taking somebody maybe from grammar school all the way through the university.

Anyway, that philosophy can be found in the writing there. My aunt has some poetry, and I've included it some places. And I guess in the long run we'll make sure that her words get heard as loudly as mine, but my words really reflect a lot of her thought.

What's interesting is that we've been in conferences, Native American conferences on ceramics, and they've used the free verse ideas as a centerpiece for other potters with that thinking. I've been with potters — as I explained, the Smithsonian has had a convocation of potters from South America, Central America, and North America - and there's one thing we really share in common. They all come from different educational backgrounds, different language groups, different cultural histories, and yet the philosophy of our approach to clay seems to be really common.

We're all dealing with the same material stages, all the way up. I think there's something missed a little bit if you just — you have clay, and you buy it commercially. I'm not against commercial clay, but you buy it, and then you start making pieces. There's a lot of philosophical meaning in actually digging the clay and taking a coarse, hard material that looks like nothing — dirt.

Some of my Native American friends, they'd say, "He's the dirt man," you know, "dirt, dirt, dirt. I work in gold and diamonds, and he's the one that does all the work that comes out of dirt, and he's doing much better than I am" — [laughs] — as far as financial or sales. I mean, we don't really know, but the whole point is that they make a little bit of a joke out of that.

But in reality, that is a common tie for various cultural groups, and those groups, when we met together and have had to part after three or four days of exchanging in different languages and everything else — Quechua, Spanish to English, vice-versa — wow, they are very emotional. Are they emotional about their work? Well, they work on their work, and they probably don't get too emotional.

It's emotional because they realize that other people share their values, that we've experienced the same thing. So there is a kind of spiritual, religious core to this whole process. When you take the process from the raw material, as my aunt suggested in her DVD that we produced, there are different mixtures, and some mixtures work better than others, but who is to know what is the right mixture? Only our creator has that soverign choice. We all were created with the right ingredients and qualities.

She makes an analogy with race. Some people are against — well, at least in the past - certain people of color, and they're discriminated against, but that's not the way clay is. I mean, there are different colors. And, in her own expression, she doesn't understand why humans discriminate — people discriminate against other colors, other creeds - because they're all needed. That's the point that she makes. They all can produce beautiful works of their own, and they're all different, and that's great.

So you can see there's a spiritual content to that, if not just philosophical content. There's definitely an aesthetic result of all that. And people do sometimes, in these abstract particularly, see — if it's realistic, you see what you see, you know, and it may be moving. Obviously, there are pieces in art that are very moving, as in paintings or in sculpture, but then if it's an abstract, people see different things.

MS. RIEDEL: Sure.

MR. QÖYAWAYMA: They're really reflecting on themselves, their inner selves, and that's interesting to watch. So it's been a great process of what —

[END CD 5.]

MS. RIEDEL: This is Mija Riedel for the Smithsonian Archives of American Art with Al Qöyawayma —

MR. QÖYAWAYMA: Okay. That's great.

MS. RIEDEL: [Laughs.] Getting closer.

On March 31, 2010, at the artist's home and studio in Prescott, Arizona. This is disc number six.

A couple final questions about the work and the process.

Do political and social commentary figure in the work?

MR. QÖYAWAYMA: When they seem to be appropriate. I told you about the metaphor for education in the olla that was — I call it a Gila-shoulder-shaped olla, but it had the dancing figures and the astronaut on it.

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: One was called *Into the 21st Century,* and the other was called *In the 21st Century*. Here's the difference between the two — same figures, but in the first piece the astronaut looks like he is confronting a line of Native American dancers. And the second piece, he is at the head of the line of dancers; he is Native American, see? The astronaut in this case is John Herrington, Chickasaw, Mission STS-113. See the introduction to the Smithsonian's inaugural book of the NMAI, "A New Journey."

MS. RIEDEL: And the child then is —

MR. QÖYAWAYMA: We've crossed over, and the child is carrying his helmet.

MS. RIEDEL: Mm-hm. [Affirmative.] That makes sense.

MR. QÖYAWAYMA: So that's a kind of commentary politically and educationally on how far we Native Americans have come.

There are protest artists, particularly in Native America. There's a lot of protest art and it has its own value. I'm not sure it's the kind of aesthetic art that people just hang up to enjoy over their mantle or keep coming back to, but it has its function and place. I'm not a protest artist.

MS. RIEDEL: Does the function of objects play a part in the meaning of your work? Certainly, there's reference to function, but today you don't intend them to be functional, or not utilitarian; let's put it that way.

MR. QÖYAWAYMA: Yes. Well, we have funny stories about that, but in general, no. They're not meant to be functional. I do have some semi-artistic pieces that I use for cooking out of, micaceous clay pottery that I cook my tamales and things in — it's a beautiful piece. It sits there with my — I didn't show you, but it is displayed with my own clay pieces.

I pull it out and go cook with it, and then I clean it up and put it back. [Laughs.]

MS. RIEDEL: Interesting.

MR. QÖYAWAYMA: So it's a — definitely a functional piece. It doesn't have a lot of design on it; it's just a nice shape. Micaceous clay is always kind of pretty.

Somebody has tried to make a flower vase out of one of my pieces. But remember, I said they're not vitrified.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: And actually, there's usefulness to pieces — ancient pieces in a canteen shape and what have you. They actually could cool water, because it would absorb water and evaporate water on the surface. And so they actually got some cooling out of that — the evaporation process.

The slipper bowls, which I really do as a piece of artwork, not as a functional piece - we didn't talk about the ancient concern with the conservation of energy, but basically, if they had to go out and get their fuels to cook and burn and do — to fire ceramics - of course, I said Hopi were using basically coal. At least the — when I say Hopi, I should say the Sikyatki Coyote Clan was using coal. Today they still use either sheep dung, cow dung, wood — different materials for firing today. I don't know anybody, other than experimentally, [who] has really used coal more recently.

But I'm thinking — the reason I'm talking about burning and fire and energy is because the slipper bowl, which you saw upstairs, is — it was used — my aunt described how it was put in between two functionally round bowls that were [for] cooking. And in order to conserve energy, they would put these little bowls. Some of them have a

pointy tip on them.

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: Some of them have a round tip, but they would just slip them in between to heat up other — call it soup or whatever. Liquids.

MS. RIEDEL: It's interesting that they could take that uneven heat too.

MR. QÖYAWAYMA: Yes. Well, that was a point I mentioned to you. My aunt has a perfect description — I need to get that down — of Pyrex ware and the function to resist thermal shock. I can't repeat it word for word how she said it, but in an ancient way, they had an understanding of the need to temper and have it take the thermal shock. That was the whole point.

Pots could take thermal shock. And they learned it, I guess, just from practical circumstance to make a piece. But she could describe that. And there's pieces — for instance, there are ancient ceramic pieces in the museums that she gave me a names for, and we'd talk about them. Snow-melting bowls. You know, people can't just go out and eat snow when they need water. Here it is right here. You use solar energy to, on a day where the sun is out, to melt snow.

They have colanders, sieves, different things that they made out of ceramics. I don't see them in the museum, but she's described them to me and has given me their names. So I have that kind of thing. Now, I even have a basket bowl — I used a basket base to make the outside. It's decorative.

Again, none of my pieces I have made really as functional pieces, other than pencil holders — no. [Laughs.] Somebody — I have one my collectors that bought something and then gave it to her son, and he then he uses it as a pencil holder. Now, they were pretty well off, so it was a very expensive pencil holder. However, Mom got really upset.

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: She got after him for that. [Laughs.] The poor woman that came and one time says, could we — you know, if we had one of these, could we put flowers in them?

And well, I said, you could. She didn't know the price of the pieces. Then she came back to my wife, Leslie, I don't know, a few months later. And she said, oh, I really feel bad about asking that question — [they laugh] — because I see that they're art pieces, and they're not functional pieces.

MS. RIEDEL: They're all vessel shapes, though, with the exception of the shield, correct? They're all vessels.

MR. QÖYAWAYMA: That or sculpture, which I guess you could call a vessel, as long as it's hollow. I'm trying to think — I guess most of them have an empty space inside.

MS. RIEDEL: Is that important? Is that significant for some reason?

MR. QÖYAWAYMA: Well, no. I think it's just the nature of clay. It's a three-dimensional material. I mean, what are you going to do with clay, just like what are you going to do with bronze?

I'm not saying things aren't cast flat — plaques and what have you.

MS. RIEDEL: There are sculptures that aren't vessels.

MR. QÖYAWAYMA: Right, yes. I guess it's — it depends what you're trying to achieve.

But I guess most clay objects are pretty much three-dimensional vessels of some sort. I never thought too much about that.

MS. RIEDEL: Okay.

What are the similarities and the differences between your early work and your recent work?

MR. QÖYAWAYMA: Well, my more recent work has — as I've explained — has gone from the repoussé and monochromatic, simpler forms to, then, the architectural forms, which are more complex. But the trade-off there was to have the complexity to represent something that looked real, but at the same time not overdoing it so that it looks like — well, I'll use somebody else's term, tchotchke [trinket] or, you know, because it just looks — it doesn't look right. It looks like you just really were trying too hard. And art often can look that way. And then I went to the polychrome, using some of my earlier techniques.

So I would say the clays are a little bit more refined; my techniques are a little bit more refined. I have a little better idea of some of the lines I like to produce. But yet I still feel that there are objects and shapes and things that I have never done that are out there. And maybe I ought to be one of those totally free artists that doesn't think about whether it has to have this decoration or that. Maybe I ought to be just doing forms. [Laughs.]

MS. RIEDEL: Does that intrigue you? Is that something you entertain?

MR. QÖYAWAYMA: Abstract?

MS. RIEDEL: Mm-hm. [Affirmative.]

MR. QÖYAWAYMA: To some degree. I mean, I've done some of that abstraction in coming up with the shapes I have now.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: The triangular-shaped pieces, the bowl. Well, the bowl that has the large lid on it that's really — there's no straight side on the triangular piece. It gives you the feeling of a — when you're looking at it head on — of a boat or a ship coming at you, yet it has — it's so highly polished, it feels like a jewel box. That is extremely attractive to people.

Or the other triangular piece that actually has a small top to it — and I call it the vase as opposed to bowl — it has a lid on top. That has produced surfaces. A lot of times, these pieces produce opportunities to put in different designs. You can do combinations of all kinds of designs. You know, they can be polished; they can be incised. They can be painted. You get a canvas, in a sense; the pottery surface is a canvas that you get to work on.

MS. RIEDEL: So does the form normally precede, in your mind, the surface, and the design follows?

MR. QÖYAWAYMA: Well, form certainly is — you think about it in terms of what you want to present as — I could use the word "decoration," but doing full sculpture on a vase is not, quote, a decoration per se.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: It's a sculptural form. And it has to be big enough, first of all. Keep it in practical sizes from the standpoint of individuals.

There are some things that I see that, if you try to take an architectural piece, I guess some people think it's going to be a lot easier and less expensive to make a little one than a big one. I find it's, yes, there's more material on a big one, but actually — there's a scale that people are used to in seeing things. If you're doing a painting, it can be the large scale. If you have a decent wall or place to put the painting — a lot of paintings are small, naturally.

But same way in ceramics. There is probably an upper practical limit in terms of what you would want to handle as a piece of ceramics. But if you try to do certain kinds of design work at a small scale — sometimes they call those miniatures, and I have done some miniatures, but that's kind of a discipline by itself. Some people want something small and a certain design. And I just say, well, that's — it's just not going to look right; it's not going to feel right to me. Let somebody else do that.

MS. RIEDEL: Actually, that leads perfectly into a question about commissions. Have you done many of them, and what are your thoughts about them?

MR. QÖYAWAYMA: Oh, probably — maybe — I don't have a number — five percent. I mean, people will say, I'd like you to — I've got some designs, actually, out there right now that people will say, I just want something with this kind of idea in it.

Well, I may or may not get to that idea. And if I have commission work, I never ask people [to] give me money ahead of time. I never want the pressure of a deadline or if I even accept it.

MS. RIEDEL: So it has to be something that intrigues you.

MR. QÖYAWAYMA: Yes. Otherwise, I just say, "Well, why don't you take a look at my next set of work and see if you can find something you like, you know?" That's another way to approach the client question.

So it's acceptable to do a certain amount of commission work — maybe particularly for a certain individual. It may not be, per se, a commission. It may be that you want to do something for somebody. You have people who actually approach the patron level really, and I've had a couple. And you do something for them, and you can

give it to them. A lot of times they obviously want to pay you for it. Or they just — they always want first call on certain pieces. They want to know. They've often tapped my wife's shoulder and said, "Would you send us a picture as these things are being produced, because maybe we'll want them, and I want a chance to look at it."

Interestingly enough, I can think of one individual, owned many pieces they acquired over many years with certain kinds of design elements. The individual would see certain design motifs and say, "Oh, I don't like that." And it got to be a big joke, because it turned out that they owned pieces that had some of those motifs. My wife would ask, "What do you mean? You already have pieces that have motifs like that."

And then they would go back and check up at the ranch or this place or that place, and they'd say, yes, I do. "Well, I guess it's all right; I must like that after all."

So it shows that people can enjoy an overall aesthetic either in the shape, color, form — perhaps it's personality. It just means something to them. And they don't necessarily see everything all at once, which is, I guess — that's why people see different things in art.

MS. RIEDEL: Right. And over a period of years, I'm sure certain collectors evolve along with you and your work. Things that were once new become old, and they've moved someplace new, and then it becomes new again.

MR. QÖYAWAYMA: That's a whole arena of a lot of funny stories and jokes, you know? So we don't have time for all those things, but I'm sure that some other artists have experienced the same things as well.

MS. RIEDEL: Do commissions sometimes present an opportunity to work on an idea that you may have had, or an inkling you may have had, that was intriguing that you would be interested in pursuing, and the commission allows you to do that?

MR. QÖYAWAYMA: I think commission work is probably a little bit more restraining, because you're trying to match something to a personality or a person or an idea that they have. And I think all my original work is not based on a commission.

MS. RIEDEL: Yeah. I'm sure not.

MR. QÖYAWAYMA: Yeah. I just do it. I do what I want to do.

MS. RIEDEL: Right. I was just wondering if sometimes —

MR. QÖYAWAYMA: And we'll let them follow along, you know? [Laughs.]

MS. RIEDEL: Have your sources of inspiration changed over time?

MR. QÖYAWAYMA: Yes, as you come in contact with new material — I was showing you some books here. For instance, there's an exhibition on that features different dynasties in China, and bronzes and shapes, and just finishes and textures. That's an example of exposure to new material.

I run into the same thing in ceramics. My friend, dean of engineering — Dean Peter Lee, I should say; he's now retired. But he had a collection of ceramics from China, prehistoric. So as you'd come in contact with these things, and then you explore them more, you know - I like Greek ceramics. I like — you know, you can get into something maybe that are big or other cultures — Egyptian — you want to see what other people were doing. In fact, see, there's that translation again in time. You get an inkling, and you have an understanding.

When you examine prehistoric pottery, you can find fingerprints in the work. In our Hopi work — I mean, I've looked at a lot of prehistoric work — I know exactly what their finger was doing, their hand was doing, what they were doing timing-wise. I knew what they had to do. So why are we in the same place? [Laughs.]

But what I see in another outside culture, they have techniques that they've developed that are not ones that are native to us, but they're still of great interest. And so I really like looking around the world. And it may not be just ceramic. It could be the bronze, which was used, or even more contemporary, say, in glass. There's a lot of ideas floating around out there, and it's whatever catches your interest and seems to fit something you're thinking about. And there's ideas that you're having that maybe you just haven't fully developed yet.

Some pieces you think about for a long time before you do them. And others you — I've had the experience of, in a millisecond, I picture what the entire piece will look like. Maybe because I've been somehow subconsciously thinking about it, and then I see something that triggers it. And then all of a sudden I can sketch it.

MS. RIEDEL: Interesting. Can you give an example of each of those?

MR. QÖYAWAYMA: Well, there's one piece. It's — I'm trying to think what I called that piece. It's an intermediate-

sized vessel that's — I'll call it a little bit of — it's a vase shape — vase, vase. And it has kind of an egg shape to it. But it had to do with ancient kiva murals that are Hopi or Sikyatki that had flowers in a bowl.

And I saw — I'd seen it before. I saw something. I can't remember exactly what it was, but it had the flowers and the bowl, and I knew that I could decorate the piece and make it look — sort of like flowers in a bowl as a ceramic object. I knew it was old, and I knew why that — exactly what the meaning was is of great interest. Why would a bowl have flower petals piled in it. Why? That does reach you.

My Aunt's name is Polingayasi, but "poli" is the Hopi word to mean "butterfly." And there was one Sikyatki piece that had a butterfly next to a flower, and so the flower was represented — something you don't see too often.

MS. RIEDEL: Yeah — I was going to say.

MR. QÖYAWAYMA: Yeah. And that really — the butterfly almost takes on the humanoid characteristic, but the fact that the flower was there, it was just personalized. Little discoveries like that get exciting.

Now, I'm not sure we got along to your question.

MS. RIEDEL: Was that an example of a pot that you conceived of in an instant?

MR. QÖYAWAYMA: Yes. The one I said had flowers in a bowl.

MS. RIEDEL: Flower petals.

MR. QÖYAWAYMA: And I knew in an instant what I wanted to include in our connection, in our stories, of the south and what I'd seen in my trips to the south, Central America. So I actually — I told you about this: a few ancient ceramic stamps I'd gotten from Mexico, and I could use those as part of the image and sort of tell a story — even though it wasn't written out — you know, with the tee-door and some of the architecture, and flowers, and the stars and so on.

Putting it all together it kind of tells an ancient story about migration and what have you, even though I don't know the details of all that. Nobody knows the details of all our past.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: But it's my own imagination, which I guess is basically the definition of art.

I mean, a painter can paint a scene, and he or she is trying to pick a scene that has a meaning sometimes. Sometimes it doesn't have — it only has meaning for the artist. Or it could be just landscape. So they're trying to replicate that. It's very creative in that they have the skills to make it look like a photograph almost.

MS. RIEDEL: So you're talking about realism.

MR. QÖYAWAYMA: Yes, realism.

MS. RIEDEL: Photorealism there.

MR. QÖYAWAYMA: Yes, versus abstract. So I'll use realism, or abstract. If you're trying to tell a story, how do you get the story across without knowing —

MS. RIEDEL: What is the story? What best serves the story.

MR. QÖYAWAYMA: Yeah. If it's a cultural thing, you know, take an Old Master's painting and something — whatever — even some of the more modern painters are painting a scene. You kind of know what that scene's all about and you know what they're doing. Just take *Mona Lisa* [Leonardo da Vinci, 1503-19]. But the mystery there is maybe not so much who she is, but just the fact that he captured a person in time, and it was so well done.

Sometimes you don't have to have a tremendous amount of total mystery in it. You're just capturing something in time.

MS. RIEDEL: Or capturing the mystery in time.

MR. QÖYAWAYMA: Yes, or that too. But then the viewer doesn't really know, necessarily, what the mystery is unless you're explaining it to them.

MS. RIEDEL: Don't you think it's possible to invoke mystery in the work?

MR. QÖYAWAYMA: Oh, sure. People do that, particularly with paintings, all the time.

MS. RIEDEL: But I would think —

MR. QÖYAWAYMA: I think that's a great thing about painting, because, you know, with a single stroke, as compared to in clay, a single stroke you can do — in a way, I'm really saying that painting is a great media, because with a stroke you can do a number of things.

MS. RIEDEL: I think of your Mesa Verde series, though, as invoking mystery. Does it not seem that way to you? Certainly there's historical and cultural reference, but there's also —

MR. QÖYAWAYMA: Yes. Well, almost to the same degree that people are awed by going to Mesa Verde itself and looking.

MS. RIEDEL: Exactly.

MR. QÖYAWAYMA: Or going to central Mexico, because I've used those figures, too, or a pyramid, whatever. And they're awed, either by size, scale, and what was its function; what was its use; who went to all this trouble to build it? So I'm capturing that idea.

People are aware that those things are out there, but the fact that now I've got it captured in my living room, and it's not a photograph —

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: — it's three dimensional. And I'd never mentioned it, but on my series — the architectural series — one of the things I tell people is, if you can, put the architectural piece in a location where you have direct sun and the sun moves during the day. I've said, you will get shadows you won't believe in these pieces, because they have that degree of complexity. And as the sun moves across the piece, you're going to just get — it's going to look different at different times. And it'll look real, because I've worked towards getting colorations, and what have you, that look like real stonework.

I actually had a photographic artist — Jerry Jacka, who was my early photographer, who actually helped me with my career in the sense that he did a lot of work with *Arizona Highways,* so I ended up on a lot of pages of *Arizona Highways*. I ended up in a lot of his books.

But Jerry would actually make the transition from a real photograph of an architectural scene — a small portion of it — into just, meld it, dissolve it into my scene in the architectural piece. And sometimes it was hard to tell initially that you weren't just looking at a real scene — if the lighting's right.

You know, I've dealt a lot with photographers, and there's a lot that isn't captured. We have all this modern digital photography, and there are certain things that we just — the subtleties we just can't capture with the digital photography that we can capture in the old transparency. And the photographers agree with that.

Another thing is the lighting. I make them — what they call the temperature of the light. Get the temperature to daylight. I want absolute daylight on this. Or take it outside, and let's photograph it, because this piece is designed for daylight.

MS. RIEDEL: There's such deep relief in those pieces that good lighting is essential.

MR. QÖYAWAYMA: Yeah. It makes it really interesting.

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: Yes. You can just sit and watch it as the sun moves, and it'll change the look. Well, that is, if you like to watch grass grow. [They laugh.]

MS. RIEDEL: Let's talk about the Institute of American Indian Art.

You were the vice chairman there —

MR. QÖYAWAYMA: Yes.

MS. RIEDEL: — from 1988 to 1994?

MR. QÖYAWAYMA: I believe those were the years —

MS. RIEDEL: Nineteen eighty-eight to 1994.

MR. QÖYAWAYMA: Yes, pretty close.

MS. RIEDEL: How did that come about, and what did that involve?

MR. QÖYAWAYMA: Well, earlier, I mentioned my friend Herb Kané in Hawaii. He made me aware of some legislation, and it involved reconstituting the old Institute of American Indian Art in Santa Fe. It was an institution that, interestingly, my own relatives had been part of — Charles Loloma, Otellie Loloma, his wife — some weren't necessarily direct relatives, but people that I knew. Lloyd Kiva New, Fred Kabotie — and more specifically, somebody that really is known, Allan Houser.

But the school had become somewhat defunct because the Bureau of Indian Affairs — which I think I mentioned previously was less than useless in a lot of cases, but still provides our tie to the old treaties. There's a reason why we don't get rid of the Bureau, from a Native view of year. It isn't often vocalized — verbalized, I should say. But you know, it is a tie to the past and those relationships that are supposed to be there.

In any event, with this new legislation, the proposal was to rebuild the old school. It was recognized that there were collections. There were actually collections started at the Santa Fe Indian School and other places. They weren't in humidity-controlled environments; they didn't have protection; they weren't insured. And on protection, I meant fire. So there were — I think there's about a dozen trustees, plus they had a couple members of Congress that would be appointed.

But at the beginning of this reconstitution process, the legislation provided for two presidential appointees — the chairman and the vice chairman — and then the rest were congressional appointees, which is pretty common, I guess. I'm not fully aware of all the processes used in government. And I was chosen as — or asked if I would serve as vice chairman. They needed somebody full-time — I was working full-time, so they needed somebody full-time, and they picked Bill Johnson, who had just retired as the head of human resources for IBM. Very capable individual with a lot of good corporate connections and obviously the discipline to organize and make something happen. And he lived in Santa Fe — all the better! Because that's where the Institute was to be located.

And myself — they needed a Native person, and I'm sure they could have had a lot of selections. I can only guess, because I never gave my name to anybody, I was never contacted ahead of time, but obviously, they looked at candidates. And I had worked with AISES as the first chairman and cofounder and had helped in getting that off the ground, and it's still running. Every organization needs help, so we're always getting off the ground.

I suppose somewhere along the line somebody knew that and had that contact. It was in the [President Ronald] Reagan administration. So in short, without overdwelling on it, I was asked to do it. And really found myself — I was really overwhelmed with other things that were going on, and I thought best, perhaps, if they could pick somebody else. But they made it clear to me that it was necessary that I come. And I mean that in very direct, explicit terms. I can show you letters and other things. Maybe those will go into the papers.

But anyway, they made it explicitly clear that — and it was the White House staff that made it clear — that if this Institute was going to be, I needed to be there. So, okay, I did that. From then on, it was an adventure — working with Congress, getting — the first thing, really, of order was, of course, the school itself — just getting the right kind of curriculum. It already had a curriculum, but beginning to examine it, getting the approvals and the Northwest — I'm trying to remember the proper terms, but we had — there are agencies that oversee the educational process and that you have all the appropriate curriculum, and qualified teachers.

MS. RIEDEL: And was this a college or high school?

MR. QÖYAWAYMA: Yes, it had been a two-year school.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: And it was — you would say at a college level. It wasn't a high school.

MS. RIEDEL: Okay. Like a junior college?

MR. QÖYAWAYMA: Yes.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: Later on, we wanted to see it become four, and I'll fast forward to where it is today. It actually has worked out in a system where it works with other universities and colleges around the United States to create a four-year degree. It's fully accredited, and that — the whole system and the teachers and the process are accredited. And it has included a lot more of other disciplines. Like now they're now getting into science and

math.

MS. RIEDEL: Interesting. It began strictly as art.

MR. QÖYAWAYMA: Yes. But it's — you're not going to get a science or math degree out of there, but they teach it as part of the curriculum.

Anyway, aside from the students themselves, it was the whole question of history and the art collections and the archives. A lot of these individuals had come out of the Indian school era where there were teachers there — Dorothy Dunn was well-known. And some of them escaped out of her control. I think Allan Houser for one, for sure. He has a lot of explicit things to say about her control.

But the point is that there was a lot of artwork from a lot of different artists that wasn't really well protected or well-known. For instance, they wanted us to sign off on accepting the collections officially as part of the Institute of American Indian Art. Bill and I wouldn't do that. And the reason we wouldn't do that is because they didn't have any funding for the proper housing, the insurance. All the elements —

MS. RIEDEL: Where was it at that time?

MR. QÖYAWAYMA: It was at the Santa Fe Indian School on Cerrios Drive.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: So a long story short is we were able to acquire a federal building. I think it was an old CIA [Central Intelligence Agency] building right across the street from the Cathedral Basilica of St. Francis of Assisi, a block of the plaza in Santa Fe. We converted that building — including all the proper kinds of humidity control, the air-conditioning, and then committed ourselves to having a staff and a training program to archive material, and to properly curate the art collection. That involved a lot of actions.

MS. RIEDEL: Absolutely.

MR. QÖYAWAYMA: That's a whole discipline by itself. And so we brought all that in.

And we had a general idea that we're going to build a campus, which was another little challenge we had going.

MS. RIEDEL: So this was going to be a museum. Was it going to be a learning institution? How was it —

MR. QÖYAWAYMA: Well, it already was supposed to be a learning institution, and it did have students, and they took classes. We needed to rebuild the curriculum and get the proper north central accreditations. However, as noted, we started by establishing a flagship museum — and we did that.

MS. RIEDEL: And the collection was part of a —

MR. QÖYAWAYMA: We were to re-house ourselves. And so we had to get some temporary housing on the College of Santa Fe, which we did over a period of — I'm trying to think how long it was — six, seven, eight years, because I had left there and we were still at the College of Santa Fe and leasing facilities from the college, but we had already planned — see, I'm jumping ahead now a little bit.

But in the process we established the museum that was to be kind of our, the IAIA, centerpiece for the public, for fund-raising and what have you.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: Not only to preserve what was already there and to show what the institute had previously done as a centerpiece, but then that would be used to fund-raise. And there were certain commitments about how much the government was going to fund, and how much private funding had to be raised. We negotiated for land outside of Santa Fe, because there wasn't really any piece of land or anything inexpensive. And I don't mean it was inexpensive, but we were able to negotiate a commitment of land and donations to help pay for the land just outside of Santa Fe.

I helped in the search for an architect. We planned the campus layout and architecture and dedicated the land. That was about the time I left. But subsequently, the money has been raised, the buildings built, more different types of instructors and teachers and improvements and all the education process. And now IAIA is very functional. Students are housed on campus. They have their own dormitories and living quarters.

MS. RIEDEL: How many students? Do you know offhand?

MR. QÖYAWAYMA: Well, that's a good question. Right now I would guess it's on the order of 250-300 students that go there. And they have a catalogue and scholarship program. So students — not only — mainly Native peoples come there, but they also have a certain provision for individuals from other countries and other people to study there. I've encouraged, for instance, short-term programs, like two weeks long or maybe a month long, for Native people who come from other disciplines but want to associate with artists and make an artistic connection.

So you get some mainstream artists there, or they have the opportunity to come in and lecture and what have you. So there's a lot of exchange of ideas between not only what has been established and all the curation — and of course, the students can now have their sales in the IAIA Museum. The museum is the centerpiece that people see first, if they don't see the campus, because the campus isn't in the center of town.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: So put together, it is really a learning institution for Native peoples. An encouragement — I have to say that — because in the arts, in two years of all the programs you might take, you still have a lot to learn on your own about yourself and about what you're going to do and be. So a student artist graduating in two years may not be a finished artist. They can go on to a four-year college, you know, take — I know they have an agreement with the Chicago Art Institute [School of the Art Institute of Chicago, IL]. And you can go on to a B.F.A. or M.F.A.

So there have been — students have gone all the way through a four-year program and more.

MS. RIEDEL: And they offer a range of media? They offer painting and sculpture and —

MR. QÖYAWAYMA: Yes. I didn't say that — metalwork, printmaking, ceramics, writing.

MS. RIEDEL: And also history classes? Is it strictly studio work, or is it art history as well?

MR. QÖYAWAYMA: Well, it's both. There's art history. And as I just said, there's some practical things that they have — science and math and English.

I don't know exactly — I haven't really studied the curriculum recently, but I know they're trying to get a good base curriculum. I know early on we were working with Kansas City Art Institute [Kansas City, MO] and what they were doing for their students. And in fact, the chairman of that institute was on our IAIA board, and it was a she, and I had a lot of interaction with her. We went to the Kansas City Art Institute and saw everything, and I really had a lot of appreciation for the school, because in my background, I [never] worked in a university other than going to one — not running one or building one. So I had a lot to learn.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: And the discipline, though, from the AISES experience was really good, because I — you know, you could learn how students would interact and how they interact with adults. We tried to put some of those ideas into place — the feeling of — that you're a "Family." In fact, that's a term we use at AISES; we're a family. It took awhile, because there were a lot of ragged edges — [laughs] — but in time, each one was worked out, and we had a lot of really good professionals working with us that were either on the board or outside and contributed their time and efforts. We had a "working board of directors," as opposed to just a governing board.

MS. RIEDEL: It's interesting how you've been instrumental in two significant organizations — one focusing on science, math, and engineering and the other focusing on art.

MR. QÖYAWAYMA: Well, in both cases we're doing it with Native peoples and that cultural thought-process, and, sometimes, the distance we want to place between ourselves and mainstream society, and those things that we think have been wrong.

I mentioned protest art. You'll see at the student level a lot of protest art, because, you know, they hear the 19th-century stories from their families, or they feel it. So there's a lot of emotional release in that process.

In the university academics, when you're in science and engineering, there isn't exactly that same emotional release. Your release is to do well and be motivated by your family to do well. And we all know today — if we just looked at our whole educational system in the United States and competing with the rest of the world — that family, and personal involvement in the family, is really important.

You have to realize, a lot of Native American families, it's not some grand process. They're all broken, and some of them — about half of native peoples are in urban areas today, and the other half on reservations. We're often remote. Yes, we have casinos, but, no, we're not all rich. [Laughs.]

In fact, at Hopi — we've voted twice against casinos, based upon our own oral history about the role of gambling and how it degraded Hopi and the society and our whole process of philosophy of how to live. And so that's — of course, that's a Hopi choice.

It might change with age, and the youth may have a different feeling, because now economics — which never dominated any tribe — now is a dominant question, because the land to live on, the way we used to live, it's not there. So we have to substitute and yet hold onto the culture. You already know the expression, you know, "Take the best that there is from our own culture and then add to it what we can learn on the outside." Not all that we learn on the outside is necessarily beneficial for us.

MS. RIEDEL: It's interesting. I don't want to spend a lot of time talking about this, but I think it's pertinent, this idea of voting down the casino, [in] that you've recently been involved with a lawsuit centered around the stores of coal located on Hopi land.

MR. QÖYAWAYMA: Right. It had to do with the permitting, leasing and approval, to Miur Coal. You know, without crossing any boundaries, it's pretty well recognized that the Bureau of Indian Affairs really did the negotiations, along with outsiders, and that happened to be certain attorneys, and specifically one attorney who we've later learned was operating on both sides — was representing Hopi and at the same time was representing Peabody Coal, which is there.

MS. RIEDEL: But there has been a decision not to access the coal. The Native people have chosen not to mine it for the time being.

MR. QÖYAWAYMA: Well, really, the reason for that decision didn't have so much to do with the mining — although, that is an entire question. I mean, the disturbance of not only the land, but the use of our sacred water resources and disturbance of the cultural resources, sacred sites and what have you.

The principal question had to do with the taking of water — pristine water — and the loss of the use of springs, because the water levels had dropped in the different aquifers. That was one part of it; another is pollution, both water and air. I'm just talking about things that will wash downstream and washes from the mining operations. So there's quite a few different questions that came up.

So the mainstream core of people really objected to this because of the misuse of water, which they didn't — I don't think they fully realized what was going to happen. And the reason — you say, well, okay, you know, how did they misuse water?

Well, they actually made a slurry of coal and water, and piped it off about 250 miles to an electrical generating station along the Colorado River called the Mojave Generating Station [Laughlin, NV]. So the objection was the use of that water, principally, but there are a lot of other questions: were we getting the right amount of money for our resources, and were the leases really approved by the tribes? There were two mines. One was called Kayenta, and then Black Mesa Mine is the other mine. And so there was a presumption, I guess by the Department of Interior and Office of Surface Mining, along with the coal company, that the coal mining permit process should be combined between Kayenta and Black Mesa mines, and that mining proceed into the Black Mesa area.

And all of these other site issues — actually, the water was not a site issue; it was a more ubiquitous issue. And there's obviously other issues — air quality. And if you look at the National Environmental Policy Act and the policy itself, there's, I guess, about — I think there's 10 different objectives in the policy, and several apply directly to us. That's a policy. That's not a law or a requirement. But the federal government is supposed to operate by the National Environmental Policy Act, which came into being in 1969 as a result of Rachel Carlson's book —

MS. RIEDEL: *Silent Spring* [Boston: Houghton Mifflin; Cambridge, MA: Riverside Press, 1962].

MR. QÖYAWAYMA: Yeah, *Silent Spring* and then Club of Rome [global think tank, Rome, Italy]. And that's another thing. I did go to the U.N. I did work with Club of Rome for a short time, but that's another story.

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: That's another area. And I had relatives. You know, we talked about Thomas Banyacya and how he went to the U.N. and wrote his own passport.

MS. RIEDEL: Oh, right.

MR. QÖYAWAYMA: But again, those are other subjects.

MS. RIEDEL: Yes.

[END CD 6.]

This is Mija Riedel for the Smithsonian Archives of American Art, with Al Qöyawayma, at the artist's home and studio in Prescott, Arizona, on March 31, 2010. This is disc number seven.

Let's talk a bit about your exhibition history. When did you first begin exhibiting and where?

MR. QÖYAWAYMA: I started, actually, in Scottsdale, but the whole idea of what an artist is kind of enters into the exhibition question. Because when you go to school, you're — unless you're at this Institute of American [Indian] Art — you may not have the opportunity to exhibit initially, at least on a broader scale. So as I often say, there are three steps in an artist's life. One is discovering that you can produce something that the rest of the world is interested in. Step two is to somehow make a living, and that's a very wide scale. You can be a starving artist; you can be of wealth. And then there's always your day in the sun, which is the third level. And they can occur at different times, and depending on what you're doing, obviously, they may reoccur.

I actually had some pieces — I guess I had a couple pieces I'd made and decided to put them in the Scottsdale National Indian Art Exhibition in Arizona. It's an organization and an effort that doesn't exist today, but it existed in the 1970s. It was fairly broadly known; Scottsdale, as an art community, promoted that. So I entered in a few pieces, and they not only sold, they did well. They weren't major pieces. I can't even remember exactly which pieces they were. But soon thereafter, I had produced — I remember the *Blanketed Figure* vase, and it was really one of my better pieces for that period of time, having sort of mastered a lot of the basics for ceramics.

MS. RIEDEL: This would be the mid-'70s, Al?

MR. QÖYAWAYMA: Yes, it was still, yeah, '78. I think it was somewhere in that period, '79, and it went to the Heard Museum, that and maybe one or two others pieces. But anyway, it had won first place there. I'd entered it, and they had a nice, beautiful exhibition, in that they put it into a kind of a gallery setting; that whole process that they have now for market has evolved. It's a little different format now than it was back then. But back then it was grand, because it was in their gallery for several months.

MS. RIEDEL: In the museum galleries or in the shop —

MR. QÖYAWAYMA: Yes, mm-hm.

MS. RIEDEL: Okay, so —

MR. QÖYAWAYMA: Yes.

MS. RIEDEL: [Inaudible] — took over in the museum galleries?

MR. QÖYAWAYMA: Well, it did, in the sense that there was obviously other winners in other categories who were all exhibited. But people got a chance to see the piece. That was the whole point. And I hadn't really looked at my work from a distance. I was always up close to it you know and I could see that people really admired the pieces. That was very encouraging. I was also engaged in other activities at the time, so you know, the fact that I had put the time into this and had learned enough to put all the pieces together and get the aesthetic into the piece itself all played together to be very, very encouraging to continue the work into the future.

So we're just kind of giving a brief overview of that kind of experience. That work was seen, and I'd produced a few more pieces. And it turned out that an Alfred King — and I'll refer to a different King later on; they're not related — but Alfred King had a gallery in Austin, Texas. And there was an intermediary from Scottsdale, had shown him the work. And they liked it, and there was another gentleman — that has been a jeweler and friend — his name was Larry Golsh. And so he and I ended up having our work exhibited in Austin, Texas, and they — way outside the proportions of what we could bring them financially — they brought us to the gallery and really put us up. And of course, being a little younger, I'm thinking to myself, "Boy, this is really a great experience." My wife was busy taking care of the kids, so she didn't go. And —

MS. RIEDEL: They brought you in and put you up?

MR. QÖYAWAYMA: Oh, yeah, they really took care very well. And they had —

MS. RIEDEL: That's extraordinary.

MR. QÖYAWAYMA: — a major exhibition on top of Bank Building and brought all their friends in Austin. And you know, it was 400 or 500 people there. I mean, it was just incredible. Their gallery was incredible, and they were the King —

MS. RIEDEL: Was it called the King Gallery?

MR. QÖYAWAYMA: Well, no. It was called Santa Fe East.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: But it was in Austin —

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: — and they also were starting an operation, had an operation in Santa Fe.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: They were related to the King family of the King Ranch genre [Kingsville, TX]. So they had lots of other assets, and art was a pursuit that part of the family had pursued and deciding on these gallery settings. So that was a very pleasant experience.

MS. RIEDEL: Sounds it.

MR. QÖYAWAYMA: And they treated us very, very well.

MS. RIEDEL: Was that your first major exhibition?

MR. QÖYAWAYMA: As I said, outside of — yes.

MS. RIEDEL: That's —

MR. QÖYAWAYMA: Well, besides the Heard, yes.

MS. RIEDEL: What an introduction.

MR. QÖYAWAYMA: That — right.

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: That was. That was an eye-opener.

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: I didn't know those things could happen.

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: I was too naïve.

MS. RIEDEL: That's quite extraordinary.

MR. QÖYAWAYMA: You know, I've been more in —

MS. RIEDEL: For a premier exhibition.

MR. QÖYAWAYMA: — a formal world of — we've talked about the science and engineering.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: I mean, that world operates differently —

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: — than the world of art.

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: So I'm saying to myself, "This could be a grand world." And to have that happen early on, it was through their good graces really. They were really gracious people. I can't say enough, because even to this day I meet with them every year for lunch, and sometimes we have some parties together, even though they're not precisely in the gallery business anymore. They do own the facilities where there's a major gallery in Santa Fe and lease it. In any event, that proceeded to have exhibitions at their Santa Fe gallery.

MS. RIEDEL: Was this once every couple of years?

MR. QÖYAWAYMA: Yes, they would — no, they would do it every year, and they would do it during the summer at the same time as Indian Market, which is always the third weekend in August.

MS. RIEDEL: Would this be a group show? Would it be a two- or three-person show? Was it a solo exhibition?

MR. QÖYAWAYMA: It usually was two major Native American artists, and it turned out, for at least three of those years, it was Charles Loloma and myself.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: Because he was my relative and —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: That was a grand experience. So it wasn't solo. There was usually at least one other artist involved.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: And meantime, Gallery 10 in Scottsdale had come into existence during the winter season. Lee Cohen, the owner, was a very influential individual, and he had really — don't want this to sound wrong — he had really worked with a lot of artists, and in a sense cornered the best of the artists. And he had the financial means to do so because he came out of a business and architectural background. He had done metal fabrication and design work for I. M. Pei in Washington. He owned a steel processing company. I believe it was in Texas.

So anyway, he had other financial means, and he loved American Indian art, so that was the best part. And so he attracted all the best artists. And the good part about that experience over several years is that a lot of them were young artists, and we got to really know each other from, obviously, different places in the United States. They were potters and weavers and carvers, a good scene of carvers, painters, sculpting — it was just a grand experience, because he would do shows out of town. We'd do Beverly Hills [CA]. Four Seasons —

MS. RIEDEL: So, outside of Scottsdale?

MR. QÖYAWAYMA: Yeah, Four Seasons Hotel in Beverly Hills, for instance.

MS. RIEDEL: Would he take over a banquet room or —

MR. QÖYAWAYMA: Yeah, he would —

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: — take over a piece of hotel. He'd pay everybody's way. I mean, it was really — treated very, very well. And he got really good results. I mean, people really believed in Lee. And he wrote books. I've got his books here. You could see them, books on American Indian Art. I'd have to show them to you, but —

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: He published some books out of that, and so he was a grand experience. And then unfortunately, in the '90s, he contracted cancer and passed away. And his son took over that gallery and moved it from central Scottsdale to north Scottsdale, Carefree area. Meanwhile, Santa Fe East was still in business, but then they decided that they were going to retire.

They would lease all their facilities, and so that did fade. Then I was with Gallery 10 in north Scottsdale, and later they opened a gallery in Santa Fe, and so I showed there with them. Lee, actually, was still alive when they started the Santa Fe operation. So we had that experience. And I'm trying to think of the — Adobe East was another gallery on the East Coast in New Jersey, close to New York. And they had sought to have me represented, and so I did a number of shows and lectures back in that area.

MS. RIEDEL: And again were these primarily two- and three-person shows?

MR. QÖYAWAYMA: They would be, yes.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: Two to three. As a matter of fact, because of, just, the philosophy of Native peoples, it's a little different, I guess, than mainstream art in America. You want to be solo; you want to be front and center,

and there might be two principal artists or maybe even just one at Gallery 10, and I had to teach them. I said, "If you're going to have these other artists in, and you're going to show them, what we're going to do is, my name will be [in] alphabetical order, and I won't be represented any better than the rest of the artists." That's just the philosophy. It's different. I know that's different, but I was never hurt in any way by that. But I did have to do that, because that's kind of hokey: nobody tries to really outdo somebody else. I mean, yes, it happens politically. Yes, things do happen where there are personalities involved, but not so much like the Western world is.

MS. RIEDEL: Community is extremely —

MR. QÖYAWAYMA: Yeah.

MS. RIEDEL: — important.

MR. QÖYAWAYMA: Yeah, cultural community is important.

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: So then I did the Adobe East, and then they opened a gallery in Miami [FL], and I did some work down there in that area.

MS. RIEDEL: What was it called in Miami?

MR. QÖYAWAYMA: It still was Adobe East.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: They just moved it. That's all.

MS. RIEDEL: I see.

MR. QÖYAWAYMA: Meanwhile, about that time, one of our principal artists in the gallery was Tammy Garcia. She and her husband, Leroy, started the Blue Rain, and they started it in Taos. Tammy Garcia is a really fine potter. There's books here on the shelf on Tammy, who's got into more than just ceramics now, sculpture, jewelry, and glass.

In any event, about that time, things were winding down a little bit with Gallery 10. They eventually closed their gallery, and so I started working with Blue Rain Gallery. Initially, for a few years, it was in Taos; eventually they opened a major gallery in Santa Fe. And then they closed the gallery in Taos. Now, while I was with Gallery Ten - yeah, Gallery Ten and then Blue Rain, and even now if I decided I would also do what's called Indian Market - now Indian Market is —

MS. RIEDEL: This is in Santa Fe?

MR. QÖYAWAYMA: In Santa Fe — I call the venue the Olympics of American Indian art.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: Simply put. And a lot of people come to that.

MS. RIEDEL: Eighty thousand, 100,000?

MR. QÖYAWAYMA: Yes, easily.

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: Yeah, you have to make your reservations a year ahead of time for even a restaurant. I mean, it's just crazy, and it can be. As the economy slows down, it's not so crazy. But anyway, it's still a pretty active place, and Blue Rain in their later gallery in Santa Fe on Lincoln Street, and there's some really fine galleries on Lincoln Street, and other major artists including Allan Houser after he passed away, Dan Namingha, who's Tewa-Hopi —

MS. RIEDEL: Sorry, what was that name?

MR. QÖYAWAYMA: Dan Namingha.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: Just recently they've created a whole history of, basically, New Mexico and opened the new New Mexico History Museum, right there, just within a few doors from —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — these galleries.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: It's a really fine museum.

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: Beautiful. Plus there there are other museums —

MS. RIEDEL: Up by —

MR. QÖYAWAYMA: — just right around the corner. Yes.

MS. RIEDEL: — Museum Hill, too. Yeah.

MR. QÖYAWAYMA: Well, no, I'm talking right there off the plaza, IAIA Museum, the New Mexico Museum of Art, and the Palace of the Governors.

MS. RIEDEL: In downtown?

MR. QÖYAWAYMA: Yeah, next to the plaza area.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: Yeah, and then there's Museum Hill, of course.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: With all three museums up there.

MS. RIEDEL: The Indian Fair happens every August?

MR. QÖYAWAYMA: Right.

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: And it's called SWAIA, Southwest Association for Indian Arts.

MS. RIEDEL: Okay.

MR. QÖYAWAYMA: Will probably be insulted if I didn't get it. But SWAIA does put a major effort into running that effort every year. And have improved, steadily improved it over the years. Basically, what an individual over there does is - participation is direct with the public, but you get to have juried competition. The artist has a booth on or close to the plaza.

And I should indicate that today the Heard has also developed and learned from the things that SWAIA did. They have a winter market down in Phoenix, and they have a juried competition too.

But still the Santa Fe is still the place to go. There are a lot of —

MS. RIEDEL: Dates —

MR. QÖYAWAYMA: — people —

MS. RIEDEL: Dates to the early 1920s, doesn't it?

MR. QÖYAWAYMA: Right. Well —

MS. RIEDEL: Originally?

MR. QÖYAWAYMA: Yes, I mean, now you get into other artists that are not American Indian that are all experienced Santa Fe or Taos. Names you can't forget, like Georgia O'Keeffe. And those are other stories, but Santa Fe's always been well-known. The lighting, just the ambiance of the area. Wealthy people were there,

Santa Fe Railroad.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: You know get into —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — lots of history.

MS. RIEDEL: [Inaudible] — factors.

MR. QÖYAWAYMA: Yeah, all the factors. And the fact that the Pueblos are up and down the Rio Grande, and Santa Fe was the first European capital in North America, which we we established with the Spanish.

MS. RIEDEL: Interesting.

MR. QÖYAWAYMA: A lot of people forget that that —

MS. RIEDEL: Yeah, I did forget that.

MR. QÖYAWAYMA: — it was preceded Plymouth Rock by - I think it was about 30 years or so.

MS. RIEDEL: Yeah. Yeah.

MR. QÖYAWAYMA: So it was going while the turkeys were being hunted down. I mean, the story sounds so different —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — and you hear the Spanish had — they hadn't conquered the Pueblo peoples, but they were certainly dominating them, and that leads to a lot of other stories that we won't get into here. You can read in the history books, the resistance against the Spanish and later the Mexican revolution. Then the acquisition of land in the 1848 Treaty of Guadalupe Hildago that would become New Mexico and Arizona.

MS. RIEDEL: Right. We won't get into that.

MR. QÖYAWAYMA: We won't get — but it does play into the whole picture of how —

MS. RIEDEL: Of course.

MR. QÖYAWAYMA: — arts came later into the picture as far as Native peoples, because art wasn't a definition of something that we did.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: Anyway, back to the Market. The Market, certainly if you were a prize winner, that helped the client make a decision, because a lot of clients or collectors or new people to the Market don't know who or what to buy. They're influenced first by their interest. You know, there might be painting, or it might ceramics, and so then they look to that classification. And then they look towards who are the prize winners and who are consistent over time. Now, I've had the good fortune of doing well there, as well as at the Heard Museum. Plus you'll —

MS. RIEDEL: You won a prize there in 2003, yes?

MR. QÖYAWAYMA: If that was the year.

MS. RIEDEL: I think that's right.

MR. QÖYAWAYMA: I've had others, but that was probably my highest position in that particular SWAIA competition.

MS. RIEDEL: And that was for best in nontraditional ceramic form, is that correct?

MR. QÖYAWAYMA: Mm-hm. Yes. There's several classifications.

MS. RIEDEL: And was for a polychrome piece, —

MR. QÖYAWAYMA: Yes.

MS. RIEDEL: — correct?

MR. QÖYAWAYMA: The Heard Museum also has a best of show, as they do at Santa Fe, and actually — oh, I can't remember exactly what year that was, but it was — trying to remember the best I can. I think it was the late '90s, I was in a show, and I was fortunate enough to receive an award that was the best of the ceramics classification. But the way their competitions worked, at some point - paintings are now competing against ceramics against jewelry against sculpture against kachinas, and all the classifications come together for the grand prize. And I was in the final. It was just two; there were two objects. It was my ceramics and some beautiful jewelry by an artist that I know. And that artist and myself had a few little laughing sessions over that, because, really, the judges make these decisions. And you know, different set of judges would make a different decision.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: So I didn't receive the best of show there, but the prize winning is not something I consistently go after. Occasionally, I'll enter the competition, and I've been a judge in those same competitions. And obviously, I'm not judging the year that I'm —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — I'm entering an object.

MS. RIEDEL: No.

MR. QÖYAWAYMA: So to a degree, looking to compete has not necessarily been a primary motivator.

MS. RIEDEL: I would think not.

MR. QÖYAWAYMA: But it does establish you and there's other things that establish you. For instance, auctions, Sotheby's, Christie's. A lot of my work has been auctioned through collectors that have, either through death or — [inaudible] — changes in their life that they've made. And so they'll call and ask about the pieces and what have you, and that does establish as a market underneath.

MS. RIEDEL: The secondary market, sure.

MR. QÖYAWAYMA: Yeah.

MS. RIEDEL: Mm-hm. [Affirmative.]

MR. QÖYAWAYMA: And eventually, if you're in the market long enough, you're sometimes competing against yourself. At least from an —

MS. RIEDEL: Sure.

MR. QÖYAWAYMA: — economic standpoint. I often wonder why the pieces sometimes sell more at auction, the older pieces than new pieces, which I feel are better than the old pieces. I was just, "Come and see me." You know?

MS. RIEDEL: Right. I think that's an ongoing —

MR. QÖYAWAYMA: I think we have something that might —

MS. RIEDEL: — conundrum, right.

MR. QÖYAWAYMA: Yeah, but anyway, Santa Fe Indian Market is a grand place, and you can meet a lot of interesting people, as all artists with experience with galleries.

Now, galleries, there's a lot of topic about galleries, particular in non-Native — and we could have the same conversation in the Native portion - but it's finding honest gallery owners who have a genuine interest in who and what you are and promote your work in an appropriate manner. And it is somewhat influenced by what the economy is doing. I could think of the oil money in the mid-'80s; there were just sellout shows. We could just dynamite the place in 30 seconds, and we'd have people wait for 24 hours. These were exciting times, when people would come and wait and send individuals to wait in their place, wait in line for a show. And you'd sell a show in 30 seconds, and you'd —

MS. RIEDEL: Wow.

MR. QÖYAWAYMA: — have 20 pieces or something, and bingo, it was all gone.

MS. RIEDEL: How extraordinary.

MR. QÖYAWAYMA: Yes. Anyway, and it happened, and so many people felt sorry for us. Not really. That was a joke too.

MS. RIEDEL: I don't remember that.

MR. QÖYAWAYMA: Yeah. The point is, as I said to you, sometimes you have your day in the sun. But at the time, and this is being realistic, I said, you know, number one — I'd talk to myself — I said, "You shouldn't expect this; it's grand if it happens."

MS. RIEDEL: Right.

MR. QÖYAWAYMA: "And it won't always be that way, but you could still progress in your art." That's really important, because I've seen artists go down drain who have been really good young upstarts, if you want to put it that way, and they've done very well. And then they raise their prices, and then suddenly they're sort of out of the market, or they get discouraged or - for me, I was very fortunate in having alternate disciplines —

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: —- to work with, and I was active in the whole period of time. There is activity working with youth in science and engineering, and youth in the arts.

MS. RIEDEL: And Al, throughout this whole time, when did you retire from the Salt River Project?

MR. QÖYAWAYMA: In 1990.

MS. RIEDEL: Oh, okay. And you worked full-time in ceramics from then on?

MR. QÖYAWAYMA: Mm-hm. [Affirmative.]

MS. RIEDEL: So for the first —

MR. QÖYAWAYMA: Yeah, I —

MS. RIEDEL: — 15 years of your career?

MR. QÖYAWAYMA: — finally, I finally saw the light.

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: But actually, some of these shows were occurring in the mid-'80s. That's when Texas oil money was present, and the art market and economy were more robust than today.

MS. RIEDEL: Right, so the first 15 years or so of your ceramics career, you still had your science career —

MR. QÖYAWAYMA: Right.

MS. RIEDEL: — and engineering career?

MR. QÖYAWAYMA: Mm-hm. [Affirmative.] [Inaudible] —

MS. RIEDEL: And for the past 20 years —

MR. QÖYAWAYMA: Yes.

MS. RIEDEL: — you've focused on the clay?

MR. QÖYAWAYMA: I had a chance to look at two worlds, and they're quite different worlds. Yet, let's say at the business level; I don't know that the principles are all that different. And learning one and the other, and then translating them, and helping other young people to do well at it. I just mentioned some that get into the burnout mode; obviously, addictions to something, all kinds of things happen. We have all heard about the different stories of artists.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: American Indian artists didn't necessarily get all of their training or work in a university, and we talked about the Institute of American Indian Art; that's at two years. But not all Indian artists go through the Institute. They may have their own talent; they may have had a mother or father or uncle or somebody. In my case I had an aunt who was active in pottery. She was known well to the Heard Museum and others.

MS. RIEDEL: Do you think there's a difference between artists that have been educated in a universities and artists that have developed their work outside of a university setting?

MR. QÖYAWAYMA: Well, that's actually a question with a broad spectrum. It's as individual as the personality.

MS. RIEDEL: Mm-hm. [Affirmative.]

MR. QÖYAWAYMA: I think some are definitely influenced by whatever environment they happen to be in, and the art schools are so different. I've seen potters like Richard Zane Smith. He went through Kansas City Arts Institute and graduated. And he's a grand potter. I kind of discovered him and, to some degree, helped him.

MS. RIEDEL: Interesting.

MR. QÖYAWAYMA: He made it on his own; he didn't really need any help. But I could see he was doing some things that I was extremely appreciative of. I really learned something from his school. Coincidentally, I had visited the Institute several times. IAIA even had board meetings at Kansas City —

MS. RIEDEL: Kansas City.

MR. QÖYAWAYMA: — Art Institute.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: Yeah. But it was with the Institute of American Indian Art. We were actually there because they were a good example of what a school should be. They were well-disciplined, very good instructors and teachers, and I got to know some of them. And of course, there's a Henry Moore collection at the Nelson-Atkins Museum of Art just — or next to the Kansas City Art Institute.

So you ask the question about the university training, and I think, to some degree, the individuals need to probably, if they're going to replicate their culture - because the university system that we have in the United States is not oriented to Native cultures. So you can learn technique, and you certainly can learn about European artists and other artists in the world, and I think those are all good things. But maintaining your own individuality, I think, is really the question.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: And I'm sure that non-Native artists feel sometimes their individuality is taken away from them by —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — this set of instruction that they're given —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — because art is that kind of thing. If you're in science or engineering, you learn a certain set of things that everybody has to learn, but in the arts, first of all, they're diverse, and second, we don't all react the same way to instructors and situations. So there are a lot of people that go through art school that never become artists.

MS. RIEDEL: True.

MR. QÖYAWAYMA: Maybe they shouldn't go on to art school to begin with. I don't know. I mean, I've not done a study of that. But you asked the question. And I know Native artists who are good artists who don't want to be identified as Native artists. They're just American artists, which is grand. But they really almost deny their culture by doing that. Some are able to manage both worlds, and be Native but at the same time be a top painter or what have you. And not necessarily be looked at the genre of just American art.

MS. RIEDEL: Right. Right.

MR. QÖYAWAYMA: But for the most part, American Indian art forms is a segment of America's art heritage.

MS. RIEDEL: Absolutely.

MR. QÖYAWAYMA: It was looked at as a craft or what have you, and it naturally did come out of the culture that didn't really have art for art's sake. That's more a European idea. So universities definitely can have a good influence, or otherwise. You've interviewed others, and they've certainly have a lot of interesting comments about the university and how to restrain them, or constrain them.

MS. RIEDEL: One quick question in relation to "art for art's sake" as a European concept. We talked briefly about art as a way of entering into Hopi culture, or into ceremony. Is there anything else in particular that you'd like to say about that while we're addressing what art is or what shape it takes? How it would even be described in Hopi culture?

MR. QÖYAWAYMA: Well, there's an intermediary, and they're called anthropologists —

MS. RIEDEL: Right. Sure.

MR. QÖYAWAYMA: — or archaeologists or a combination of the two.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: And so they define lots of things. We have the whole area of what's called primitive art —

MS. RIEDEL: Right. Right.

MR. QÖYAWAYMA: — whether it be in Africa or the United States or in South America, and there's a great market —

MS. RIEDEL: Sure.

MR. QÖYAWAYMA: — for primitive art. We don't even know who the artists, quote, unquote, were. It's defined as art by anthropologists. So the art community's buying off on the anthropologist. I don't know what to do with —

MS. RIEDEL: But —

MR. QÖYAWAYMA: — contemporary art -

MS. RIEDEL: Right.

MR. QÖYAWAYMA: - per se, because they don't really get that much into contemporary art. I mean, anthropologists don't. Maybe there's some specialists that do, I don't know. They're usually looking at the past.

MS. RIEDEL: But in terms of your own cultural background and historical background in your — the Coyote Clan and your Sikyatki history — is there a way you would describe those objects?

MR. QÖYAWAYMA: Well, the objects from that period were obviously for — they could be for ceremonial purposes. They could have been and were for funerary purposes. I think the human being has a spirit where, when they saw the objects and their durability, they were definitely encouraged; they had enough time. They had an agrarian kind of society, and they had permanent structures. And so by definition, they had some extra time to actually work and perfect objects.

MS. RIEDEL: There's a functional aspect.

MR. QÖYAWAYMA: Yeah, they were, yes, very definitely. And there was a big differentiation between cooking vessels and these funerary and ceremonial —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: However, some of the culinary ware, a bowl, a stew bowl, they were a great object, for Sikyatki anyway. I think half of the objects, or at least stew bowls, with designs inside them. The bowls are pretty common in shape and size. So there is a crossover. It had a functional aspect to it. And then if you made a ladle for the bowl, you decorated the ladle. So objects got decorated, and there was an appreciation aesthetically for that. But of course, there wasn't an economic base in a sense of money. Certainly objects, we can see that Sikyatki was traded long distances possibly because of its durability and, you know, for its aesthetics.

MS. RIEDEL: It's beautiful. Absolutely.

MR. QÖYAWAYMA: Others came to appreciate it, so I can't say that we didn't have our own art appreciation.

MS. RIEDEL: Absolutely.

MR. QÖYAWAYMA: It's just that it was on a different level than purely a collector level.

MS. RIEDEL: That's what I was trying to get towards —

MR. QÖYAWAYMA: Yeah, yeah.

MS. RIEDEL: — is that level.

MR. QÖYAWAYMA: Yeah, we weren't that; I don't think we had a collector level in Indian America.

MS. RIEDEL: I wasn't thinking that.

MR. QÖYAWAYMA: We might today, but not —

MS. RIEDEL: There was another level.

MR. QÖYAWAYMA: - not prehistorically.

MS. RIEDEL: That actually leads into another question. You have been a member of an extraordinary number of communities. Community is right up there with education as an important through line of your life. Is there a community that you feel has been important to your development as an artist?

MR. QÖYAWAYMA: Well, naturally, and we've already — the subject of what we're talking about is our own Native community. Again, as part of this record, probably at some point we'll have my aunt's DVD in there because I'm still sort of working on it. But —

MS. RIEDEL: And we haven't mentioned on disc that your grandfather was a weaver.

MR. QÖYAWAYMA: Yes, he was definitely a grand weaver, and my father was a painter, and uncles were painters, and aunts, a lot of them, did basket work of different kinds, which were very intricate. The culture, not just what we were and the way we practiced things, but the community itself had a kind of humbleness, but human beings being what they are, sometimes fall out of their humbleness too. So we all have egos. But the community largely controlled how we interacted with one another, which is, I guess, the definition of a cultural community. So that definitely had an impact, and it obviously was impacting our prehistoric work as well. There are a lot of oral history stories about Sikyatki; it's separate from ceramics but, anyway, stories. You were asking about influences, and I don't know whether you were trying to restrict them to my Native community or —

MS. RIEDEL: No, any community.

MR. QÖYAWAYMA: Oh, okay, any community.

MS. RIEDEL: Any community.

MR. QÖYAWAYMA: Well, once my own world was opened up educationally, I think the core was always was the question - and I'm still asking the question; it isn't a ceramic question: it is, who are we, and how did we get here? Now, I think any group of human beings that have a little extra time on their hands start asking that question. Aside from maybe their culinary practices or religious practices or whatever they might be, they still want to know who they are.

And I think, genuinely, people, if they had the time - because that gives them a centeredness in their community. When they lose that centeredness, things really go astray. And we've seen it in America. There's every reason in the world to believe that any person in America could have a centeredness, but they may have got too far away from relatives or from the information on who they are. Now, a lot of times there's a rediscovery process, and that's highly emotional and significant process. That even happens with Native peoples, because I've mentioned - they moved to urban areas; they get away from families; families break up; you know, all kinds of things happen just like it does to mainstream America.

MS. RIEDEL: Sure.

MR. QÖYAWAYMA: But we still, in a sense, we're still there. There's still active communities speaking languages, and not all of them active in their language, but at least they're there. And they have a sense of who they are. But moving outside of that, it allowed me to see Central America, South America, to realize these are really Native peoples who — and I don't know fully in a gene sense — but they're probably pretty much of the same

gene pool.

And how we all got spread out, and we each adapted to our own environments, whether you were down in the Amazon, up in the Andes, or here on the deserts. They're quite different environments, and yet the old Stanford model that I call — because in the last, I'd say, five to 10 years, the whole field of anthropology and archaeology has changed quite a bit, particularly with the genetic work, and worldwide for that matter. So the ideas that there was only one way that Native peoples came here — it was a theory, really. You know, the Bering Strait theory —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: Well, in time we may find — for instance, Clovis points [shaved projectile points first discovered in Clovis, NM]. It was always thought to be something in the west. And in a nutshell, more recently they found it more prevalent in the east, and when they looked at technologies in the world in terms of making points, they couldn't find any Clovis points in Siberia or Asia, but they found it Europe, big time. So question is, you know, how did it get here?

I think we're a mixture of a lot of people. Human races sort of — other than perhaps our height and our skin color and a few other things — we're pretty much interchangeable. And so we all have a common history. It's just that individually we've lived in groups and have developed our own cultures. All this we know.

What I was trying to get at is, though, once I could break out of my own community and see the rest of the world, like my aunt did, it really opens your eyes. First the western hemisphere, and of course, I was interested in Greece and all of the Mediterranean and the Egyptian. I mean there's lot of things to be interested in.

MS. RIEDEL: So it sounds like this extended sense of community somehow supported your work, a sense of Native peoples around the earth, as opposed to just in this particular area?

MR. QÖYAWAYMA: Well, of course, people around the world, I do have some collectors around the world, but they don't —

MS. RIEDEL: [Inaudible] — Maori or no?

MR. QÖYAWAYMA: — well, the Maori did.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: Because we had the direct interaction —

MS. RIEDEL: Hawaii, Central and South America.

MR. QÖYAWAYMA: Well, I'm talking about people, actual communities. I feel very close to the Maori community. I can't say I have a community in Africa or in Finland —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — or something —

MS. RIEDEL: No, no —

MR. QÖYAWAYMA: — as close.

MS. RIEDEL: I wasn't —

MR. QÖYAWAYMA: Yeah.

MS. RIEDEL: — thinking of those, but —

MR. QÖYAWAYMA: Yeah.

MS. RIEDEL: I'm trying to get at what might have, as a community, influenced your work.

MR. QÖYAWAYMA: Well, I told you we were conservative and try to act in a humble manner; however, it does slip out. And even recently I was in a particular meeting, and individuals who present were leaders, and they chose to introduce me as, you know, this major artist within our own cultural community. I don't ask for that, and normally that's not done. But it was just interesting that it was done, because it seemed out of the ordinary. I didn't expect it.

It was fine that they did that, but it's probably a little bit more unusual than normal. Your own community knows you are there, and they know, just like I know, other artists are there, and we appreciate it on an individual level. We appreciate each other because we're in shows; we associate in different environments; we have maybe same clients, and that type of thing. But individuality, boy, it's hard to define. That's really kind of part of what you're getting at, because in Western cultures individuality had been promoted quite a bit. And I mean —

MS. RIEDEL: I think it's safe to say that.

MR. QÖYAWAYMA: — it's not in just the arts.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: In science and engineering, it's murderous —

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: — particularly in science.

MS. RIEDEL: I imagine.

MR. QÖYAWAYMA: You think the arts is bad.

MS. RIEDEL: Right. That's true.

MR. QÖYAWAYMA: But they just play different games.

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: That's all. And I'm familiar with them. So in that sense we're able to preserve kind of who we are as an individual, and I get the chance to ask the questions and bring them into my own artistic work as I learn something. I may learn something, but I can't use it necessarily immediately in my artwork, but it reinforces my confidence in what I'm doing. Or I know I'm reaching out, and maybe people won't even recognize that for 50 or 100 years, because I'm working more in a contemporary area. But that's all right. I'm not really concerned about that.

MS. RIEDEL: Bringing new ideas to the long tradition of Hopi work — rediscovering how this low-shoulder vessel is both a classical Sikyatki form but also can be evolved into a piece like *Path of Life*. So it's bringing your own experience and the 21st-century experience into this long tradition of Hopi and, specifically, Sikyatki work?

MR. QÖYAWAYMA: That would be right. But would probably be the definition of contemporary if you could put a dimension on contemporary. I didn't start from ground zero in the sense of tradition. And I don't think a lot of the painters and people we see in mainstream America, even if they came from specific groups in New England or wherever, early on, they all had traditions that they were emulating.

MS. RIEDEL: Certainly, but I don't know that everyone is quite as immersed in them.

MR. QÖYAWAYMA: Well, yes, because they were transported here to America; that's why they weren't immersed.

MS. RIEDEL: Or as consciously trying to understand their history and evolve it into the future.

MR. QÖYAWAYMA: Yes.

MS. RIEDEL: Certainly on an inspirational level, but in my conversations with you, I have more of a sense of a continuum. That it's a conscious continuum, bringing the past into the future, of generational presence.

MR. QÖYAWAYMA: Yes, that's an important concept. And we often, in our meetings amongst Native peoples, talk about the "Seventh Generation" and what we're doing today —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — that affects seven generations from now.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: That, at least in mainstream economic America, Wall Street, is not really giving that a lot of thought at this point.

MS. RIEDEL: [Inaudible] — early reports, right.

MR. QÖYAWAYMA: We all know. We just went through the phenomena we have in real estate and everything else that happened financially. We could, and I think when we get back to basic values, we probably will think longer term. People, certainly as a practical matter now, will be saving their money a little bit more and trying to figure out how to spread it out a little better. And get education for their children and to achieve dreams and hopes. I think we all have that.

And Indian Americans have been kind of forced to have a dream and a hope, in a sense, to survive as a community, because they don't — Lakota, for instance, don't have the buffalo culture. It just doesn't exist, other than on the film. Maybe economically it would be *Dances with Wolves* [1990] or something, you know. So we're going to have to learn to survive in an economy and in a situation that's foreign to us.

We grow up with the television and the music and the games and the drugs and the alcohol and everything else that forms mainstream culture. But there is still the sense of community and sense of values. And I think anybody that disturbs your sense of values is probably more subject to, for instance, an addiction of some sort. That's trying to escape.

MS. RIEDEL: Interesting.

MR. QÖYAWAYMA: So community always forms a value, and that community can be, as much as anything else, a religious community. There are a good strong religious communities. A lot of things are said negative about religious systems and values, but there're definitely of a great value, particularly if you have a belief and that belief is really the mantra and direction for your life.

So we have that, and even within Hopi. Now, that's one interesting aspect of AISES, that I can't say this — you're asking a question about community, and at the same time, we learn within AISES — we had 250 different cultural groups, and they all had different religious traditions. We have a — what I guess you'd call community prayer. We don't open and close anything without prayer.

In one sense we're very secular, and in another sense — but here's the key: we don't have a prayer, you know, this person's prayer is the only way we're going to pray, or this is the only specific belief we're going to have. So everybody, in their own tradition, prays. And our elders, interestingly, have had some really, almost comical examples of performing a ceremony. One turns right, and one turns left, and then they start arguing with each other in front of the public. But they're doing it purely as theater, to teach us a lesson.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: Saying, "No, I'm right." "No, you're right." Or, "No, I'm right." And anyway, you know, who's right?

MS. RIEDEL: Yeah.

MR. QÖYAWAYMA: It doesn't matter who's right. They're not being generalists, and they're not saying everything's right.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: They're simply saying, we have respect for one another. And we —

MS. RIEDEL: Wow.

MR. QÖYAWAYMA: And that's big.

MS. RIEDEL: That's very big.

MR. QÖYAWAYMA: Huge.

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: That's what makes AISES tick. And that's what I was trying to bring to the Institute of American Indian Art. They asked me to bring the prayer component in there. So they had me doing that all the time, and I'm very comfortable with that. But I would've much preferred that we had a "Circle of Elders." I was trying to get more of a way we were running things at AISES, where we had a broader representation of who we were.

So that's been successful, very successful at AISES and even for non-Native peoples coming into that

environment. Boy, they just instantly get it! And we do things that — boy, they don't have anything to do with art. They have to do with value systems and how we interact with each other. We have circles where we have men and women who get together and with the elders, young people, and essentially they're discussing their lives and what's gone wrong. They're asking for advice and for forgiveness. There's something that happens that I don't even see happening anywhere in mainstream America, that men and women get together in a collective session and are open publicly about what they're doing. This just doesn't happen in mainstream America.

MS. RIEDEL: What do you mean, they're open publicly?

MR. QÖYAWAYMA: I mean, they ask if they had a girlfriend or somebody that they had abused or just whatever. They speak directly to that person.

MS. RIEDEL: That does sound unusual.

MR. QÖYAWAYMA: Yes. And of course, they're not justifying what they did. They're asking for forgiveness, or they're wanting to do better. But they're getting it off their conscience. It doesn't mean they go away without a consciousness. But that's part of community, and that builds the systems and the values and kind of how we operate. Anyways, it affects a whole art community — and I've seen this in the Maori community —

MS. RIEDEL: Right.

MR. QÖYAWAYMA: — as well.

MS. RIEDEL: Right.

MR. QÖYAWAYMA: So it's not totally something abstract or separate from art.

MS. RIEDEL: I understand that. It's an indirect influence.

MR. QÖYAWAYMA: Yes, but it's strong!

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: It's strong. My aunt was a strong influence, and it's such a core value that you just keep going no matter how bad things get.

MS. RIEDEL: We'll stop here because this disc is about to end. I just have a few summary questions. I think we've done an excellent job of covering an extraordinary amount of material. So we'll finish this up in just a minute.

[END CD 7 TR 1.]

This is Mija Riedel for the Smithsonian Archives of American Art, with Al Qöyawayma, at the artist's home and studio in Prescott, Arizona, on March 31, 2010. This is disc number eight.

I just have a few, two or three final questions. We've done a good job of approaching diverse material from different angles and making sense out of it in a number of different ways, so I'm pleased with all we've accomplished, and I hope you are too.

MR. QÖYAWAYMA: Thank you.

MS. RIEDEL: The first of three final questions. Would you discuss your views on the importance of ceramics, clay, as a means of expression, what its strengths are, what its weaknesses are, and what it does that nothing else can, the essence of it that has held your attention for 30 years plus?

MR. QÖYAWAYMA: Well, there are two parts, really, to that. Of course, you have your own cultural core, and like any culture around the world, they got familiar with ceramics to one degree or another, and from my own culture, my own perspective, it's a very earthy material. It's sort of our essence as human beings.

As a side note, now I actually have a number of papers that have some of the structure of DNA, so they think life could have formed —

MS. RIEDEL: Clay does?

MR. QÖYAWAYMA: Yes.

MS. RIEDEL: Hm. [Affirmative.]

MR. QÖYAWAYMA: Certain kinds. That's a side note. The point is that philosophically, emotionally, and on a cultural level, clay represents a lot of the things that we are as human beings, just in that sense.

And then the other sense is that clay, as just a material, is a very complex material. It's one of the most unusual materials. You go from something that looks like just something out of the earth, and you can refine it, and you can make any kind of object out of it. It goes through all these different — from almost — you can make it from liquid to a semi-solid to a solid, to something that's dry, something that can be fired and become a permanent — essentially like a permanent object that could last for millennia, if not longer.

So clay as a type of material is very important to, I would say, the — I hate to use the word "evolution," but the — "development" is a much better word - of human cultures around the world. They've all used clay to one degree or another, and now we have clay in its most advanced form, for ships and for computers and what-have-you, for heat shields. Okay, those are technological uses of clay. I think you were referring perhaps a little bit more to the artistic —

MS. RIEDEL: That's probably one aspect of the material that has held your interest over all this time. It can do all that.

MR. QÖYAWAYMA: Mine is partially, obviously, culturally oriented because of Sikyatki and the relatives and the fact that they produce such an incredible body of work, and they did it without the incentive to be, quote, artistic. They were expressing their emotions in these pieces, not only in shapes but in the refinement of the materials, and in the iconography, the designs, which obviously reflected a lot of what was happening to them at that time and their belief systems.

But that's really important, finding our roots. We all like to know our roots, at least — all things being equal, we like to know our roots. So clay does perform that. It assists us in that activity of finding our roots. And it's so basic that people are interested in not only watching demonstrations, but they're interested in seeing the objects, no matter what they are. And clay, they're highly diverse, and there's a lot of techniques. Some have been lost.

Each culture, you know, whether you're in Japan, whether you're in Europe or whatever, everybody's come up with different techniques and different processing and different objects, colors, and forms, which in and of themselves take — I'm thinking of Aztec culture and some of the objects that are, like, chalices or drinking vessels. Certainly the Maya had the drinking vessels. I mentioned they put their name on their drinking vessels, they would say something about cocoa, chocolate.

MS. RIEDEL: Right. The chocolate vessels, mm-hm. [Affirmative.]

MR. QÖYAWAYMA: So in that sense — well, I don't think Europeans, if they decided to inscribe something, were that much different, at least in the overall idea and objective. Quite different in terms of what you see, and as human beings — first we appreciate what we grew up with probably, and secondarily, as we begin to see the rest of the world, we get very interested. Then those who are avant-garde, who are out front trying to come up with ideas — because clay you can do anything with, and I still have my own core feeling that there's a lot of shapes and ways to exercise beauty and aesthetics in clay that I haven't even happened upon yet. I'd be fortunate to do that.

So all the way from the core of something that my own relatives had, and my aunt more specifically, at least Elizabeth, it's transferring a value system and an ethic. And my grandchildren now are showing interest; my own children are showing interest. It can be passed on.

It isn't a requirement that you have a tradition or pass it on. You can learn that and create something new, which is great. Clay provides you that vehicle. It's three-dimensional, and the qualities of the clay itself can have some real value in the sense of working with the clay. I don't know what it is about the human system of emotion, physiology, and what have you, but it can be relaxing. I have heard — I haven't really seen anybody throw objects or clay at the wall, but I certainly run into stories about that, and I can't think — I guess I feel more respectful to the clay, because I treat it more like a person.

And you know, in Native America you hear about "Clay Mother," or something. There can be little jokes about, you know, I'm violating this, and I'm doing that, and that's why whatever happened, happened.

MS. RIEDEL: At some point you said something about, "I imagine myself as a particle of clay."

MR. QÖYAWAYMA: Well, at some point — we didn't really have that discussion, but in trying to interpret what's happening as I learned about clay, I had to sometimes try to imagine myself as a particle and understand all the things that were affecting me, and that helped me understand clay mixtures intuitively, and beginning to understand my media, because I think any of the artistic pursuits, understanding the media was always

something that was emphasized, whether it be — well, particularly in Europe, I'd say. Understand your media, because it becomes intuitive.

MS. RIEDEL: Very important. How has your work been received over the past 30, 35 years?

MR. QÖYAWAYMA: Overall it's — I shouldn't even qualify it that way. It's just been received very well.

MS. RIEDEL: Sounds like it from fairly early on.

MR. QÖYAWAYMA: Mm-hm. [Affirmative.] It's always been a good experience, and maybe that's out of respect of the clay itself. People appreciate objects made out of clay, and I just happen to be able to make some objects that they appreciate. So we have a mutual admiration society going here.

MS. RIEDEL: What about your career, your art career in particular, is important to you?

MR. QÖYAWAYMA: Well, I expressed it just a moment ago, a little bit about there's so many, I guess, types of either objects or feelings or — that could be expressed three dimensionally in clay, some of them abstract and some of them realistically. I probably will never get to do all the things that I ever want to do. My relatives didn't either. But I'll go as far as I can. And if nothing else, it's a soothing media, one that just is so core and basic that it's really beyond verbal expression. It's just something that's part of you.

I could have easily worked in metals. I have a tremendous training in working metals —

MS. RIEDEL: Yes.

MR. QÖYAWAYMA: — and a lot of knowledge about, and why shouldn't I be a jeweler? I don't know, the clay calls me back. That's not an expression that is mine. It's my relatives' expression, too: "It calls me back." And I'm sure if we could interview the relatives before them, and perhaps if we interviewed relatives all over the world, we could hear that same expression, at the core, "It calls me back."

MS. RIEDEL: Interesting. Well, if you're still up for it, I think it would be lovely and appropriate to finish up with one of your poems, an excerpt from that book we've discussed a few times during our interview.

MR. QÖYAWAYMA: Santa Fe East, which we mentioned during the discussion, I decided to take my free verse — some people call it poetry — and put it into a booklet or book form. The English title of it is *This Clay Sings*. There's a Hopi title here too, but *This Clay Sings*, and it comes in four parts.

I suppose if I had to choose a part, it would be the part where I'm trying to relate to encouraging a young person, or perhaps an older person who feels that they don't have much hope because of things that have happened in their life. So I'll just read this. It's called "The Measure of Life." These also have been used in some conferences, ceramics, with Native Americans. I've even had individual young people come to me who've had this and said, you know, "You were writing what was in my mind."

So I have that confidence that I've helped other people just by writing this down in more of a poetic form. Life is what we're all about.

So, "The pottery, the clay is like life itself. The potter breathes life into a lump of clay, and the clay says, 'Make me beautiful. Make me what I am supposed to be.' And so, as the potter, I talk to the clay at every step. The clay becomes a living being when I put it in my hand. At birth the clay is without form and so flexible. As I build my pot, a child begins to form, and like a child, the pot is still pliable and not yet formed.

"I add more life-giving clay to my pot, and it grows. And as with the formative years of youth, I tug and I pull at the clay to provide the shaping that is so vital. As with life's path itself, some pots emerge with a struggle, and others emerge and with a smooth flow of energy. Then the final form emerges and begins to harden, still with rough spots. My pot has reached adolescence.

"Now my pot enters a more formative stage, as it hardens and as the final finish is added. Its shape has been determined. Its useful capacity as a vessel has become evident. Finally my pot is ready to face its greatest trial, the firing process. Just as in life it faces trial by fire, the capability of the pot to survive is a witness to every potter's skill.

"And again as in life, my pot is transformed by the fiery trial: it is hardened, changed in appearance, and becomes vibrant with color, obtaining harmonious beauty and life! And even if this trial should detect a flaw, this flaw most often is known only to the creator. So you see, the flaw should not take away from the overall form and beauty and essence of the vessel. In the same way a flaw in your own life, which often cannot be seen by others, should not keep you from reflecting your overall form and beauty. I hope that my pottery will have a long, useful life, giving enjoyment to many."

MS. RIEDEL: Thank you, Al.

MR. QÖYAWAYMA: You're certainly welcome. *Kwakwhá* [thank you].

[END OF INTERVIEW.]

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