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Oral history interview with José de Rivera,  
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## Transcript

### Interview

**PC:** PAUL CUMMINGS

**JD:** JOSE DE RIVERA

**PC:** February 24, Paul Cummings talking to Jose de Rivera. Could you tell me something about family background, brothers and sisters, and West Baton Rouge where you were born?

**JD:** Yes. I'm what was known at one time as a Creole. My father was a Spaniard and my mother was Colonial French. I was born in West Baton Rouge, Louisiana, September 18, 1904.

**PC:** Right. And you have brothers and sisters younger? Or older?

**JD:** Well, I have two half-brothers, and a brother and a sister older by two years each.

**PC:** The step-brothers were younger? Or older?

**JD:** They were older. They were from a former marriage.

**PC:** And the other brother and sister were older?

**JD:** Yes, both brother and sister.

**PC:** What kind of house did you live in? Was it a house or apartment?

**JD:** Well, my father was a sugar mill engineer. We lived in the country naturally on a plantation. It wasn't an out-and-out plantation, which many people have silly notions of. We lived in a rather large rambling wooden house with a very large lawn with sheep to keep the grass down and one thing and the other in the country.

**PC:** How far from West Baton Rouge were you? Or is this a very . . . ?

**JD:** Well, West Baton Rouge is a kind of area. We have parishes there. It's West Baton Rouge Parish. I don't even recall what the nearest town would be.

**PC:** So it was living on a big plantation really in the country?

**JD:** That's right.

**PC:** What was the life there? Were there lots of people around?

**JD:** Well, not many people; there was no town actually. Of course I don't remember too much. We moved from West Baton Rouge, the Allendale Plantation, the family moved from there I guess when I was three. So this would be in 1907 roughly.

**PC:** You don't remember much . . . ?

**JD:** We went to the St. John Plantation which was on the Bayou Teche in the Evangeline country. We were there until 1912. We then moved to New Orleans.

**PC:** This was again living on a plantation in a rural area?

**JD:** Yes, at St. John's. The same kind of rambling stuff, you know. There was a commissary and a bookkeeper and the overseer of the horses and a few people. Of course we always had family from New Orleans over on weekends and for holidays, etc.

**PC:** Is there much difference in age between your brothers and sisters and yourself? Are they much older?

**JD:** My sister was two years older, and my brother was four years older. So we were roughly two years apart.

**PC:** And the step-brothers were . . . ?

**JD:** I would guess at this point that they were maybe seven or eight years apart from my oldest brother. Of course we aren't a very close-knit family of late.

**PC:** You mean now?

**JD:** Well, I mean for many years. No, we all took off at the age of 13 or 14. That was the nature of our family.

**PC:** Could you describe your early family life then?

**JD:** Well, I would say we were normal, you know, with elderly aunts and uncles and cousins and people whose names I don't even remember now.

**PC:** But there were lots of people around?

**JD:** There were people around, yes. And of course we used to go to New Orleans and on other trips.

**PC:** And see things. Well, you started grammar school then where?

**JD:** In New Orleans in a public school.

**PC:** And that went on . . . ?

**JD:** Yes, to various public schools and to half of high school. I was two years in high school.

**PC:** Why half of high school? What . . . ?

**JD:** Well, half of the four years.

**PC:** And what happened? Did you just quit? And went to work?

**JD:** Yes.

**PC:** and went to work.

**JD:** Dropped out.

**PC:** Aha! Did you have any books around the house when you were young and a student in high school? Or were you interested in music?

**JD:** Well, not particularly. Just general interest, you know. You read historical novels and things of that sort.

**PC:** But there wasn't any great interest in music or literature or in the arts?

**JD:** Not in the immediate family, no. Not any great interest. We went to the theatre. Most people didn't do that. But that was old hat. We ate out in restaurants when most people didn't.

**PC:** Well, but that's always, you know, little different things that happen.

**JD:** I was very close to my maternal grandfather when I was a kid so there was that kind of interest.

**PC:** What did he do? Or what was his . . . ?

**JD:** He was retired.

**PC:** The great profession. Well, what particularly interested you? Or how was he . . . ?

**JD:** Well, I would say just general interest. At school I had no strong feeling for competitive sports at all. Nothing in particular at all.

**PC:** You didn't get involved in anything in high school, extra-curricular things?

**JD:** No, no, I went to a large public high school. Forget about it. It was one of those things that you wanted to avoid, meeting the teachers, the instructors, and finally you avoid the whole business.

**PC:** So you didn't have any particular friends that you were interested in?

**JD:** No. By the time I was in high school we lived in the outskirts of New Orleans, in the suburbs more or less, Chateau Terrace. And my interest was in hunting and fishing -- this is where the interest was. My maternal grandfather had a large rambling place in Bay St. Louis on the Gulf. And this is where we would spend the summers. And we would go and everybody else would come.

**PC:** It sounds like a very relaxed kind of existence, you know.

**JD:** Yes. Well, it was.

**PC:** What kind of hunting and fishing was there down there?

**JD:** Oh, all kinds. Of course, at a young age you don't participate in everything. The fishing was more or less small fish, sometimes a large one, but not bull fishing in the sense it is done today.

**PC:** As you got older, did you ever go out into the Gulf and fish?

**JD:** Oh, we fished in the Gulf all the time. Sure.

**PC:** It sounds like fun. So, let's see, one goes through high school here. We're moving at a pretty good clip. Was there any reason why you dropped out of high school?

**JD:** Just lack of interest.

**PC:** You just got bored one day?

**JD:** Yes, one day just went on. You stop for two days and three days until finally Momma finds out you're not going to school and she faces you with the question and you answer it. You say no.

**PC:** And then what happened?

**JD:** So I had little odd jobs. Then finally I went to the plantation and worked with my father for one summer. And then in the fall I went back to high school. I went to a boarding school.

**PC:** Where was that?

**JD:** Well, it was just -- my mother and father were separated and I was the last child so I had to go someplace.

**PC:** Set out, eh? Had to set out.

**JD:** I went of my own volition. I paid my own way. I had the money which I worked for and money which I had. So I finished.

**PC:** What did you do that summer? You just worked on a plantation and . . . ?

**JD:** Yes. On a sugar plantation the mill operates generally three months out of the year and then you spend nine months repairing and preparing for the next season.

**PC:** So it was all mechanical work?

**JD:** All mechanical, yes. But I had an early affinity for the use of tools, both wood and metal tools.

**PC:** I've never been to a plantation so I don't know . . . ?

**JD:** Well, you have to repair, you have to make a lot of things, you know. It's not like going out to the hardware store and buying it.

**PC:** So what kind of things did you make? You'd have to make a gear if it was broken?

**JD:** Well, gears are a little complex. But all forms of pipe fittings that had to do with construction and erection and assembling of heavy machinery.

**PC:** A great variety of things.

**JD:** Yes. It wasn't a question of actually making production. It was a question of repairing and maybe making some parts for operating machinery.

**PC:** And then you went to boarding school and finished high school. Where was that? Do you remember?

**JD:** In New Orleans, yes.

**PC:** You came out of high school. And then what?

**JD:** Well, I had various and sundry jobs. Which is not important particularly. And a trip to sea.

**PC:** What did you do there?

**JD:** Well, I'd rather not talk about it. It was a question of not having proper papers and one thing and another. It's not romantic. I just went to sea. All right.

**PC:** But you didn't find you wanted to continue that?

**JD:** No, I had no particular desire to.

**PC:** Once was enough.

**JD:** Yes. It's one of the things you do. You do what friends generally do. You have friends and one fellow goes to sea and comes back and . . .

**PC:** And says, "I'll get you a job."

**JD:** Yes. It's a jaunt really.

**PC:** Right. Well, the next thing I have here is that you were in school studying with John Norton.

**JD:** Oh, well, that was later in Chicago. After high school I went back to the plantation and worked there for another year, the whole cycle of the mill operation, and the other 9 months of more or less repairing, etc. And I went from there to Chicago. I got bored with the . . . well, "bored" isn't the right word. I just decided I didn't want to continue on the plantation, that's all. With the aptitude I had for my age, my father wanted me to go to technical school. But I had no particular interest in it.

**PC:** How did you pick Chicago?

**JD:** Well, my eldest brother was there at the time and so there was some correspondence and there was an invitation to come. So I went to Chicago.

**PC:** It sounds like a very easy, free . . . .

**JD:** Well, there were other things that went on in between, but it doesn't make much difference. I could talk to you about some things off the record; but it's not important. It's like a six-hour taping and it's 20 years of living.

**PC:** Well, but there are things that, you know, are subtle . . . .

**JD:** Yes, it's all right. Well, you do things at 13 which kids don't do at 25 now.

**PC:** Right. That's true.

**JD:** I'm not recommending this or finding fault with the other, but it's . . . just seems so.

**PC:** You know, everybody's life has a great variety.

**JD:** Yes. And it's all interesting. Like Blake said, if you want to find a whole universe, it's in a grain of sand.

**PC:** Right. Are there any other things between, say, high school and Chicago that got you interested? What were you involved in?

**JD:** Well, you live in New Orleans, you know New Orleans, you know. I say one does, and one is familiar with jazz as it was, although the high point had already passed in New Orleans. But you go to dances, you smoke marijuana once in a while, you do all the things, you drink wine because there was then Prohibition. So you do these things that everyone else does.

**PC:** Were you interested in jazz then? Did you like music?

**JD:** Well, we were interested in it because we thought of it as going to a dance. We thought of it as dance music.

**PC:** Oh, really?

**JD:** Oh, sure.

**PC:** It wasn't really sitting and listening?

**JD:** It wasn't alligator music, no.

**PC:** What is alligator music?

**JD:** Well, it's the guy that stomps his foot at a jam session. That's as far as he goes.

**PC:** That's interesting.

**JD:** They didn't have jam sessions, you know. They played. You went to a dance and they played. They'd play until 12 o'clock and then they'd pass the hat and, if there was enough beer left on tap and the hat had enough money in it, they'd play till 1 o'clock. And then would continue until dawn. So by that time, you know, anybody who had interest would remain and those than had no interest would go home.

**PC:** Well, that's great.

**JD:** My particular interest in music has been jazz. Of course, later I became interested in Cuban music, because I had made a trip to Cuba in the early days.

**PC:** You never gave thought to being a musician or anything like that?

**JD:** No, no. I have no feeling for music. I can't even carry a tune.

**PC:** But you like it?

**JD:** But certain kinds of music I like.

**PC:** During high school and afterwards did you do much reading of any kind? Or was it really just fiction?

**JD:** Nothing particular. As I said before, I read the general things.

**PC:** Just anything that came along?

**JD:** Yes.

**PC:** Nothing stands out as a memory?

**JD:** Yes, a certain few things stand out. But they have to do with the corruption of anarchy which is not a very popular . . . .

**PC:** Well, popularity is not involved in this, you know.

**JD:** It may have other connotations to other people.

**PC:** Well, but . . . .

**JD:** Well, I became aware of what the action of philosophical anarchy was which basically has to do with the chief person being responsible for all these activities. There wasn't too much to read on that or that was available at the time.

**PC:** Did that make you interested in politics?

**JD:** No.

**JD:** Because philosophical anarchy doesn't have anything to do with politics.

**PC:** Yes. Well, you have to go into . . . did you happen to go into . . .

**JD:** No, I've never even registered. I've never voted. I've never exercised my rights as a citizen.

**PC:** You never had any interest in that at all?

**JD:** No.

**PC:** It sounds very nice. You're out of high school, living in the country, going to dances, living a great life.

**JD:** Yes.

**PC:** Anyway, let's see. What was the name of your brother that invited you to Chicago?

**JD:** Norbert (N-O-R-B-E-R-T)

**PC:** He's your full brother?

**JD:** Yes.

**PC:** And what was he doing there? Was he working or studying?

**JD:** Well, he was quite a fellow. He was an electrical engineer. But he was more interested in the mechanical application, that is, the generative aspect of it in the field instead of just being a desk engineer with a slide rule.

**PC:** He wanted to really go out and . . . ?

**JD:** Yes. And he was a great big handsome fellow. And he got around. He was very alive, very bright. He could read a book on a complicated electrical mechanism and take it apart the next day and put it back and it would work.

**PC:** Great. Terrific. Well, we have you in Chicago. How did you decide on the Studio School -- John Norton?

**JD:** Gee, it's hard to tell.

**PC:** You didn't know any artists at this point, did you?

**JD:** No. I was in the mechanical trades when I was in Chicago. I used to go around for experience up and down Lake Street working in the tool and die shops for three or four weeks. I wasn't an accomplished mechanic. I didn't serve any, you know, regular apprenticeship. But I was always able to get by more or less as a mechanic.

**PC:** Well, what do you think started this . . . ?

**JD:** You mean my interest in art?

**PC:** Yes. How did that start?

**JD:** Well, we used to go to the Field Museum in Chicago. I used to go to the Art Museum on Sundays. I saw some Egyptian sculpture which kind of fired my imagination. And I met people who had traveled around a bit. We had a friend, a Danish sea captain from the sailing ship days. He had been around the world many times and to many places and he was a cultured man and spoke about architecture and painting and sculpture. Which was very stimulating in a sense. The Studio School was just a little commercial school really where John Norton used to give a life class twice a week at night. so I finally got tired of the mechanical machinist, die-making, tool making, reproduction and experimental work. I always had an aptitude for calligraphy or so-called lettering. And I guess some friend somewhere mentioned this little school. And I went. A fellow by the name of Montgomery ran it. It was a very nice place and I studied there nights: calligraphy, lettering, layout. And after a year I freelanced. In the meantime, in the same school, not in the same room, they had two or three rooms, John Norton used to have these life classes. And I got interested in the life class so I stayed after taking the commercial work. So this is my interest in sculpture. He made me aware of what three-dimensional perception was as far as art is concerned.

**PC:** The life class was drawing, right?

**JD:** Yes. And he used to give interesting chalk lectures. He'd have some large sheets of rough gray paper on a large easel and he'd take great sticks of colored chalk and make statements and, at the same time, you know, make drawings of the figure in chalk, actually paintings. Terrific.

**PC:** Did you do any painting after or during the life class? Or was it just really a drawing class?

**JD:** It was just drawing from the model. He finally made me aware of certain things that existed in the model which you could make statements about. Which is really structure. Actually really structure, actually visual structure that you see. And we became friendly. And i had many things opened up for me, avenues.

**PC:** Were you interested in any of the other students there? Or was it mainly your interest was with Norton? Were there any other students at the school that you found interesting?

**JD:** Not particularly, no. Most of the ones that came were commercial fellows. Right? I used to see them on occasion. We lived on the near North Side of Chicago where most of the activity was at the time.

**PC:** And at the same time you were working during the day in machine shops and tool and die places?

**JD:** Well, there wasn't much contact except with Captain Polsen on the cultural level.

**PC:** You studied with Norton for -- what? -- two years during that time?

**JD:** Well, roughly, yes; several nights a week.

**PC:** Did you ever use any of the calligraphy or commercial designing afterward? You didn't do commercial art or anything?

**JD:** Oh, yes, I did for a living. When I finished one year of night study at the Studio School, I quit my job; I had charge of maintenance construction in a paint factory. And I freelanced. So I lived off it for three years more or less.

**PC:** You did all kinds of work -- ad layouts, packaging?

**JD:** Yes. To start out I had space in a little agency. They'd give you a little work. And finally you make friends with other people who have the interest. And also this was the time when the new type faces were coming out and there was a general interest in typography.

**PC:** You used a lot of typography in your design?

**JD:** Well, I used to sometimes set up ads.

**PC:** Do you remember any of those?

**JD:** No.

**PC:** All gone.

**JD:** And most of it was commercial and you freelanced. I had several lithograph houses where I used to go on occasion to lay out booklets. So it would mean maybe 3 or 4 days' work, sometimes 18 hours a day when they were in a hurry for them. I was well paid for it so I was able then to work 2 or 3 days a week and then have some time to investigate three-dimensional plastic forms. Right?

**PC:** Well, when did you start really making sculpture?

**JD:** Sculpture?

**PC:** Yes.

**JD:** In 1932. 1930 really.

**PC:** You did that Owl which was 1930, right?

**JD:** Yes. There were three forms that were done within 18 months.

**PC:** That was interesting because you were using real figurative motifs that used mechanical . . . they were machine-made, I remember.

**JD:** Well, they were seemingly machine-made. They were designed and executed so that they could be done in production. This is of the sculptor. In those days either you did figures or you were not an artist.

**PC:** Yes. Well, but they were very different figures from the kind of things that other people were doing at that time.

**JD:** Yes. And most of these things came from . . . . Oh, I guess I did have some access to some European publications.

**PC:** Well, someone said that you had an interest in Mondrian, Brancusi and Vontongerloo, and people like that.

**JD:** Yes.

**PC:** Was that at this time or did that come later?

**JD:** That came later. That came after I came to New York. Yes.

**PC:** You did the sculpture in 1930, so that was done after the school then?

**JD:** Oh, yes.

**PC:** Were there any sculptors around that you knew then? Or were you really working by yourself?



**JD:** Well, more or less. There was a young fellow, Tom Lee, who is from El Paso, Texas, who's a painter, also a mural painter. I haven't seen Tom in many years. I guess he wrote several books and made some movies. We became friendly and generally talked about art. So you begin to read books on art history and various things on art. Right? You see publications. You have a German book on typography and magazines. There was always some other particular interest.

**PC:** So there were lots of stimulating sources for . . . ?

**JD:** There were at the time, yes. Very much so.

**PC:** How did you . . . ? You said that The Owl, for example, was made -- or it looked as if it could be made in mass production?

**JD:** Yes.

**PC:** That's kind of an interesting idea for that time.

**JD:** well, you take a rod of solid material and, more or less in a Cubist fashion, you make cuts into it. Whether the form is cut by hand or by machine originally doesn't make any difference. But if it was something that could be reproduced and still maintain the quality of the design . . . .

**PC:** Were you interested then, you know, in the idea of design the way the Bauhaus was? Or did you know about the Bauhaus?

**JD:** Well, maybe, but very casually. I had no particular set notions about it.

**PC:** Was there any idea of, say, producing The Owl in an edition of 5 or 10?

**JD:** Oh, a thousand.

**PC:** Many. As many as possible?

**JD:** See, I had . . . . Well, I don't know whether it was good fortune or not, but when I began to do sculpture in metal I already knew about tools and what tools to use and what tools to make to use. So there was already an element of sophistication in the form.

**PC:** You knew it could be done with materials and tools before you even started at that point; and the tools and things.

**JD:** Yes.

**PC:** Well, had you interest in Cubism? Because I remember at the very . . . ?

**JD:** No, I had no knowledge of any of these things. Except maybe, as I say, vaguely. You might pick up some French magazine, a current magazine at the time, and you'd read. You'd see a couple of reproductions. You'd go to a bookstore and pick up one book. You read. You see photographs. This was the time of the late Twenties, right?

**PC:** Yes. So it was really a very casual development?

**JD:** Yes.

**PC:** But once you started making things, how many . . . ? Did you make a lot of things that were . . . ?

**JD:** No. There were a lot of things that were done in plaster which have disappeared.

**PC:** Were they along the same kind of stylistic . . . ?

**JD:** Yes. In a sense I guess they were selections made from a figure in a life class in which you selected certain visual geometry about it and you made a statement, a sketch, and then go home and make it in plaster -- right? So in the process of learning how to work plaster you go to a plaster shop. What's a plaster shop? It's a way to meet sculptors, or to see sculpture, you know. It's a generative process.

**PC:** Let's see, this is still around the early 1930's. You were in Chicago for how long? Till when?

**JD:** Well, roughly from 1924 to 1931.

**PC:** And then where did you go from there?

**JD:** I went to Europe.

**PC:** Oh, that's right. You had -- what? -- a year or two?

**JD:** Almost a year.

**PC:** Was there a particular reason why you went there?

**JD:** I actually went to go to Paris to become a professional artist. But other things interfered. So actually I spent the time traveling. To Spain, Egypt, North Africa, Greece, France.

**PC:** That was kind of an atypical tour at that point. Most people want to go to France or they want to go to Italy. But you went to North Africa.

**JD:** Yes. I made the tour, you know.

**PC:** All around the Mediterranean?

**JD:** Well, I got off the boat at Cadiz. I went through Spain. I was originally going to Barcelona and from there to Paris. I was free. I had no particular schedule.

**PC:** What changed the pattern and brought you down through . . . ?

**JD:** Well, it was very interesting. I met Dr. Meaves, who was former chief chemist for Eastman Kodak. He was an amateur Egyptologist. We were on a Spanish boat. It was in March and we had very rough weather. He and I were the only ones who ate in the dining room for eight days.

**PC:** Oh boy!

**JD:** So we became friendly. I had some photographs of the little sculptures I had done in plaster. And after knowing that I was making a tour to finally get some rough notion of what the art and sculpture was in Europe, immediately he said, "You'll have to go to Egypt." So when I got to Barcelona after making the tour through Spain, I went to Egypt. So from Egypt to Greece and Greece to Italy and Italy up through France.

**PC:** Well, how did you find Egypt? Because originally in Chicago you were interested in Egyptian sculpture and there you were in the country of origin?

**JD:** Yes. Terrific!

**PC:** Did you visit the museums there? And the Pyramids? And all the . . . ?

**JD:** Yes, I used to go . . . I spent a little more than three weeks there, I guess. I used to go to museums. I had a particular interest in the Pyramid Period, which I'm still interested in now, roughly. And I went up to Luxor to Aswan. And that's Egypt.

**PC:** Did you make drawings or photographs? Or anything of these?

**JD:** Just looking.

**PC:** Just looked and traveled around. You didn't keep notebooks?

**JD:** Nothing.

**PC:** No sketchbooks?

**JD:** No, just looking.

**PC:** Wandered around and looked. So then you went across the Mediterranean to Greece?

**JD:** Yes.

**PC:** And where were you there? Do you remember the cities?

**JD:** Well, we went to Piraeus naturally from the boat. You go by ship from Alexandria. And I made some bus trips. I was friendly with some people in a hotel that were Italian air personnel. They were running a little seaplane from Brindisi to Piraeus to Rhodes to Istanbul. So I made a little short trip with them through this route.

**PC:** Flying?

**JD:** Flying, yes. It was very interesting. They dress you all up . . . . It was in a seaplane and you sit out in the open. And they dressed you all up with the goggles and a big leather coat. And you . . . . The custom guard on . . . . They all go to jail. for no reason. Just as a jaunt, right? they were all friendly.

**PC:** Well, that was terrific. So you got a view of the landscape that was kind of rare at that time.

**JD:** Yes.

**PC:** Did you meet many people during your travels, you know?

**JD:** Yes, but very casually because I was on the move all the time. I was alone. I had two suitcases. I had my trunk sent from Barcelona to Naples and from Naples I had it sent to Paris. And I don't think I opened it more than three times.

**PC:** You really traveled light, and just . . . .

**JD:** Yes. Yes. It was very good, because I would get up in the middle of the night if there was a train or a bus going some place and I'd go.

**PC:** You didn't have any set pattern of travel at all?

**JD:** No. Well, I used to set up . . . . I had guidebooks which were very good at the time. You knew what was available and you could set your schedule where you wanted to go. You could take a Baedeker and go anywhere you wanted with a little intelligence. It told you where everything was and how long it took to walk there and so forth.

**PC:** Well, let's see, from . . . . Then you went to Italy.

**JD:** Yes.

**PC:** Did you cover much of Italy?

**JD:** Well, pretty good.

**PC:** What places did you go to?

**JD:** Well, I went in at Brindisi. You see, we came in on the airplane, the air service. From Brindisi I took a train to Naples. From Naples to Milano. I had some friends then, I had met some people in Naples, just friends. It was the time of Mussolini and there'd be holidays coming up about twice every week. So I used to take the train and go back to Naples and spend the day with friends. And I got interested in Sicily. So I went down and made a trip through Sicily. I went all through the island of Sicily.

**PC:** Still just wandering around looking at things?

**JD:** Just went around looking. There was architecture to see. There were little museums with terrific sculptures that nobody every talks about. It's buried in the Baedeker guidebook if you search for it. There's a Venus in Piraeus that's about three-quarter life size and marvelously beautiful. But you would have to know it was there and you would have to go and bribe the old guy to show it to you because he wouldn't show it to you in the afternoon because he couldn't open the window; the sun would be on the other side of the little cloister. So I finally got him to . . . . He said, "You come next morning at ten o'clock." So I came next morning. He opened the blinds. And there it was, beautiful.

**PC:** Great!

**JD:** So, you know, you go, you see architecture, Grecian architecture. Without actually studying it, you see it. In Spain the same way. The sculpture alone you . . . . When I went in Barcelona; in fact I stay in an apartment that was designed by Caudi who did the cathedral, you know, this very convoluting architecture. So without even knowing anything about Caudi as an architect at the time . . . .

**PC:** How did you like the apartment?

**JD:** Well, I... the structure . . . . I've seen photographs of it since. But I don't recall in a...the walls move. I don't know if you're familiar with Caudi?

**PC:** Yes. All those undulating . . . .

**JD:** Serpentine design. You're right. It's very, very baroque . Of course it's and building. There was a courtyard

inside. from the outside.

**PC:** Well, you saw a lot of Italy then?

**JD:** I saw a lot of Italy, a lot of Spain, and a lot of France.

**PC:** Did you go all the way up in France?

**JD:** Well, no. I traveled by train mostly. I went up the Rhone Valley, you know, Marseilles. I know the corniche. I speak a little French and I enjoyed the food and the people, and the wine.

**PC:** Then you finally got to Paris.

**JD:** Then I finally got to Paris. But my brother was very ill at the time and my sister suggested that I should come home and see him. So I did. That finished the Paris atelier. Maybe it's just as well. So what!

**PC:** It didn't make any difference?

**JD:** Evidently not.

**PC:** Did you ever have a desire to go back there after that?

**JD:** I've been back to Europe, yes. I have no desire to stay; two or three weeks is plenty.

**PC:** Go around and see things. So that trip to Europe was in 1932?

**JD:** Yes.

**PC:** Then you came back. And you lived where?

**JD:** Here in New York.

**PC:** And you've been here more or less ever since?

**JD:** Yes. Except for the Army.

**PC:** Well, what did you do in New York when you came back after the trip?

**JD:** I opened a studio and I became a sculptor!

**PC:** Just like that!

**JD:** Yes. Well, my sister had some resources that were available.

**PC:** So you sort of had a patron in a way?

**JD:** Yes.

**PC:** Well, you had lots of commissions over the years. They start a little bit later, don't they?

**JD:** Yes. Oh, I did some little odd jobs for decorators in plaster.

**PC:** Here and there. Well, how was your work developing at this point?

**JD:** Well, I was still interested in the figurative, but I was also interested in the abstracted.

**PC:** How did that start?

**JD:** That began with John Norton.

**PC:** That goes back to him?

**JD:** Yes. I don't have any photographs here.

**PC:** We couldn't see them on the tape anyway.

**JD:** No, no. But it might stimulate you to ask questions. But it's all right.

**PC:** Well, for example, were the things still as Cubist-like as . . . ?

**JD:** Yes. There was a whole series of things which I did of which there is no record. When I went into the Army I had to destroy them. A lot of stuff went with it. I had no place, no way to carry it.

**PC:** You didn't put it in storage? Or anything like that?

**JD:** Most of the stuff, no. It had to go. A lot of it was in process. A lot of stuff was done in clay and it was done direct in plaster and they weren't finished things, right? You would go from one to the other in the search.

**PC:** Right. Well, tell me something about the interest in, or the change, because there was a growing sense of abstraction all the way through. That's not a very good sentence or question. When did you make the change, do you think, from . . . ?

**JD:** Well, the change actually was made . . . . I accepted a commission to do a standing cavalry monument, a dismounted cavalryman. And I decided to do it in stone because I was investigating stone at the time. And I had friends here who were sculptors who were working in stone. I accepted the commission and I decided to do it more or less direct. It was a 9-foot figure. So, in the process of doing this figure direct, I approached it in the same manner that I approached the early sculptures that I did when I was studying with John Norton. Which means just that you would have a large slab of granite and you had to take slices off it. Right?

**PC:** Right.

**JD:** You don't slice granite but you have to work it down. So it was a process actually of making a granite sculpture without the usual stone cutting technique. It was done mostly mechanically.

**PC:** Well, what happened was you sort of made a large Cubist figure first and then . . . ?

**JD:** That's right. And then there was a question of reducing it. Right?

**PC:** Right. Developing the more settled plane.

**JD:** Yes. Of course I knew when I was half done with this that I would do no more figures -- the limitation of the figure was too much. And the lack of interest in what I was doing. So what? You make a figure. What does it represent? It represents a model who's George Washington or a cavalryman or a sergeant; who knows what?

**PC:** So that was the decisive end of the figure?

**JD:** That was the straw that broke the camel's back.

**PC:** When was that?

**JD:** That was after the Project, actually. That's 1938 really.

**PC:** Well, what happened on the Federal Art Project? How did you get involved with it?

**JD:** Well, I had a studio on East 39th Street. I never was interested in being in the Village where most of the artists lived at the time.

**PC:** Why was that?

**JD:** I don't know why.

**PC:** It didn't interest you at that time.

**JD:** In fact I found a little building on 39th Street that was very satisfactory for me. Evidently I didn't need the Village atmosphere. However you meet friends, you know, you go to galleries. You come to New York you meet people, you meet one. You go to a party; you meet three, five . . . . Already then, you know, there was a great stimulus going on. Right?

**PC:** Yes. Well, how did you get involved with the Federal Art Project?

**JD:** I had friends who were on the Project. Burgoyne Diller was very friendly for many years. He became interested in the administrative aspect of the Project. That's all there was to do, you know. You have to become an accomplished, self-sufficient professional sculptor.

**PC:** What kind of things did you do with them?

**JD:** On the Project?

**PC:** Yes.

**JD:** There were several little abstractions I was working on, more or less amorphous forms.

**PC:** Did you work on any particular, you know . . . ? They all had these community-oriented programs. Did you work on any of them?

**JD:** Well, Yes, I did a piece for the Newark Airport. It was a bird form, it was an abstracted form done in aluminum direct, in rod construction. And that's now in the Newark museum in the permanent collection. The Project gave it to them because. . . . I don't know, there was some lack of interest at the Airport at the time for the governmental project.

**PC:** Where there other things you did for the Project?

**JD:** No. Because the management came up before the Project was closed. Right? So I had to make the transition. So I finished the Federal Art Project commission and began the monumental one.

**JD:** The cavalryman without the horse.

**PC:** Well, that was for El Paso?

**JD:** Yes. We don't talk much about that.

**PC:** That's one of the things that's gone.

**JD:** Yes. Well, it's not gone but it would be nice if it could appear. So, it's a thing you do, so what? You try.

**PC:** Right. Well, being involved with the Federal Art Project you must have met all the artists.

**JD:** Most of them, yes. I don't have to name them.

**PC:** Were there any of them that you knew well?

**JD:** Well, more or less. I was not close friends but I knew of them. was one. I to

**PC:** But you were tending didn't interest you.

**JD:** No. PX: It meant nothing at all?

**JD:** No. No interest, no.

**JD:** You were really getting more involved in basic structural . . . ?

**JD:** Yes. I was interested in the structural aspects of plastic form. Of course, by this time you were aware of Brancusi. You see his Bird. You go to museums. You pick up a little booklet on Vontongerloo. You go to an exhibition of Leger, you know. So you begin. You meet people. You get stimulated. And you read more. You've gotten more available. Right?

**PC:** Well, you're getting more and more into the milieu.

**JD:** And then, once you start to discuss how bad you are and how good the other fellow is, then you're already stimulated.

**PC:** You really have to go and do something. Well, did you get interested in any of the theoretical aspects at this point? Or were you really involved with your own . . . ?

**JD:** It's been more or less empirical, mechanical approach.

**PC:** So this went on. And then you did something for the New York World's Fair in 1939?

**JD:** Yes. This was contemporaneous with the monument. It was for the Soviet pavilion. It was simple flag forms that they wanted done originally in glass. I was asked to investigate it. And I got involved.

**PC:** What was the result of that? I don't remember seeing a photograph of that ever.

**JD:** It was done in stainless. They were just simple flags, I think eleven flags on a bas relief; they were opposing mirror images. They originally wanted them done in red glass. But Corning said, "Sure, we'll cast all you want but you'll pay for every casting." And you'll still be casting.

**PC:** Right. Well, what was this then? Sort of a series of flags?

**JD:** Yes. It was a panel of flags, three rows of flags actually. So I had them done in stainless. I designed them and had them done in stainless. They had a kind of interest. The flags seemed to move when the people walked without seeing the people in them. That's one of the qualities of . . . .

**PC:** That was your first adventure into stainless steel?

**JD:** Yes, actually.

**PC:** Did you like the material?

**JD:** Well, I had worked with stainless in shops before. And also I'd done little things for myself in stainless, a little stand or whatever. I was familiar with the material.

**PC:** Well then comes 19452 and you went into the Army?

**JD:** Yes. Well, before I went into the Army actually I worked for Sikorsky up at Stratford in the experimental department . . . .

**PC:** Oh, aircraft.

**JD:** . . . from January till my induction.

**PC:** What kind of things did you do there?

**JD:** Well, I worked in the model shop, the wood shop. You know, strangely enough, you have metal experience but they put you in a wood shop. But it was all right.

**PC:** If you can cut steel you can cut wood. How did you like that as an experience?

**JD:** Well, it was pretty dull because there were two great model-makers up there and they did all the real fine work.

**PC:** Who were they?

**JD:** Oh, I don't recall. One was Russian. I don't even remember his name.

**PC:** They were real model-makers?

**JD:** Yes. He was a professional. They were elderly people, sixty or sixty-five at the time. But it was just that they'd give you a drawing and you made something. You never knew what it was or what it was for or where it went.

**PC:** What kind of models were they, do you remember?

**JD:** Well, we were working then on the Corsair, so-called.

**PC:** Oh, airplanes, yes.

**JD:** Yes. I didn't work on the original model. But it was done in the air tunnel down in Virginia. And we used to make parts, you know. If they wanted to study a blister, for instance, you have to make it in wood. You make the form in wood and somebody else stretches the plexiglass over it. And they'd send it down. But the wind tunnel model they put the shape on to see how the wind was going to react to it and so forth. And there were always various and sundry things we did. They also were developing a torpedo bomber. And we had to do all the forming blocks for it. Make a lot of maple and sheet metal guides, hammer the ribs and the ports out.

**PC:** You really didn't find this too exciting?

**JD:** Well, it wasn't. For one thing, they were all Nazis up there, I don't mind saying. And they thought I was a Spanish Catholic so we didn't get along very well.

**PC:** A little friction there, eh?

**JD:** Yes.

**PC:** Well, so that happened. Then you went into the Army Air Force? Right?

**JD:** Yes, I was inducted into the Army without a physical. This doesn't happen today.

**PC:** They just took you?

**JD:** Yes. I think United Aircraft sent me. They got rid of me all right.

**PC:** Oh, I see. Well, what happened in the Army? What did you think of that? How long were you in?

**JD:** I wasn't quite too sure what was really going on. I thought maybe we would stop Fascism. I was enthusiastic to a certain degree but it didn't take me long to get disillusioned.

**PC:** In what way?

**JD:** Oh, general attitude. Nobody knows anything about Pearl Harbor until after it's happened. No drop of blood will be spilled on American soil but there'll be hundreds of thousands of gallons of it elsewhere. I was inducted in the Army. I went in. They asked me what I wanted to do. I said, "It's all up to you people." You take aptitude tests like everyone else. Everybody present Air truck driver. So they had truckdrivers. I happened to go in with the truckdriver 9. Well, maybe they helped. Maybe I could have made only 105 although . . . Well, I had aptitude for mechanics, and background so they sent me to Lowry Field to school. You learn about electricity all in about five minutes. You learn about explosives in another five minutes. And then they send you out to the field.

**PC:** Where were you during the war?

**JD:** In North Africa.

**PC:** What did you do in North Africa?

**JD:** We were lost over there. We went over as replacements. And I got tired living in the mud with no hot food, nothing to do, confined in an area doing guard duty, everybody doing their own guard duty, one thing and the other. So I made a request to be transferred back to the States based on my ability and resume so that I could do something important I thought. For no other reason. This was in January, the latter part of January.

**PC:** What year was that?

**JD:** 1943. So I was finally in the war. I was assigned to an outfit doing ground work, loading bombs, taking care of the electrical equipment, cleaning machine guns, forming the bombs. Well, what the armorer has to do, the field armorer. So finally my request came through in July.

**PC:** Well, six months is pretty good. That's pretty speedy for the Army.

**JD:** Yes. So I came back to the States and was transferred to the Reserves. Diller was then working for the Training Aids Development Center, part of the Navy. And I went over there and went to work making models, operational, two, three-dimensional models. At least it made some sense. They could use someone with . . .

**PC:** These were a different kind of model than the . . . ?

**JD:** Yes. These models were for developing aptitude, or finding aptitude, for instance, for training aids. Well, for instance, to find out if someone could become a radar reader, we simulated a radar trainer in which he could go through all the processes of reading the blips and seeing where the direction was and so and so forth. And there were visual models, some two-dimensional, some three-dimensional operation, showing various and sundry applications of things that couldn't be shown on a schematic drawing. We had to make them. That was the problem.

**PC:** Were these in ships and airplanes?

**JD:** Yes. It all had to do with the Navy mostly.

**PC:** Right. Did you find that any more interesting than working on the other models?

**JD:** Well, here I was actually on my own. I had my bench and I would take on a project to do and I was responsible for the whole project. So it made some sense.

**PC:** That was a little easier than being . . . ?

**JD:** Yes.

**PC:** So that went on for what . . . ?



**JD:** Until the termination fo the war.

**PC:** Well, did you have any art activities going on? You didn't really have opportunity to . . . ?

**JD:** Sure, I used to paint. Make little sculptures. Make little brooches out of stainless. I was active all the time.

**PC:** You did painting too then?

**JD:** Yes.

**PC:** Did you paint, you know, before that, before the war?

**JD:** Yes. It was more or less various investigations in two-dimensional plastic form. This went on at the same time. Actually when I finished the monument in El Paso I became conscious of the fact that I didn't want to make figurative sculpture or Cubistic sculpture, if you will, or representational sculpture. I finally became aware of these shell shapes -- I don't know if you're familiar with them, my early sculptures.

**PC:** Yes. Yes.

**JD:** Well, that began already in 1940.

**PC:** But how long had you been painting? Because you didn't mention it.

**JD:** Well, this painting goes on at the same time. You know, you get some casein and you make a painting. You have friends that make paintings. You have ideas, too -- right?

**PC:** Right.

**JD:** Of course, the color sculptures, you know, these compound curvilinear sculptures, the shell forms, they had applications of color. Are we running out?

**PC:** Yes. I think we'd better flip it over. It's almost gone.

**PC:** Well, tell me some more about the sculpture shapes that you were just mentioning -- the shell things and the uses of color.

**JD:** Well, I became aware of the necessity for having an experience and the more primary experience the greater the interest and the greater the results. This is an attitude -- right? So there were many experimental ones. These things had to all be developed in the flat. Right?

**PC:** Right.

**JD:** They were developed from the flat. The profiles were cut in the flat and then they were developed by hammering. Again this is another mechanical area.

**PC:** Did these come from the paintings and drawings you were making?

**JD:** No, the paintings and drawings were the same thing. In other words, the drawings were of the forms that I was making. Right?

**PC:** Right. So could you make sketches then of an idea and then . . . ?

**JD:** Yes. I'd make an accurate rendering of a shape. Somewhere a shape begins to enter. Right?

**PC:** Right.

**JD:** If you go back you find out that the shape has been there all the time. You've been applying it to figurative or semi-figurative or abstract shapes. But the shape is there all the time. Sometimes you see a simple aspect of it and you think that's the whole thing. But it isn't. It's just one facet of it.

**PC:** How do you differentiate between "non-objective" and "abstract" then?

**JD:** Well, I think that the terminology, or the so-called nomenclature is kind of mixed up. "Abstract" can mean -- sometimes I use the word "abstract" and I mean completely abstract in area. And some people think of abstract as being abstracted from an existing form or an actual form. So it would be simplifications. Right? Or abstract. It's very complicated. Or you use the word "non-objective" when you're talking about one artist. You use the word "non-figurative" when you're talking about another artist. So, if you sit down and formulate your own words, nobody understands you. So they don't agree with you. They don't understand you.,.

**PC:** Well, did you use any mathematics or geometry and things like that?

**JD:** Just visual geometry, what I call plastic geometry. Which is a means.

**PC:** How would you describe that geometry?

**JD:** Well, if you go from two to three dimensions you have to have . . . . If you go from one to two dimensions there must be some geometry involved. By geometry I mean how do you make the configuration if it's in any way precise visually? And if you go from two dimensions if it has to be trans into three dimensions there must be some visual formal geometrical method of producing this. Right?

**PC:** Well, that's interesting. You can develop an idea then in a drawing or painting and then . . . ?

**JD:** Generally a drawing is just an idea. Because I found that the three-dimension can be so complex that a drawing only gives you one little aspect of it. So I'd now if I have an idea, or if I have a development of an idea. I like to think now that there is a process going on and in developing from the one to the two to three dimensions there is a whole visual world that is not if you go in directly

**PC:**

**JD:** No, it's just a sketch. When I was concerned with the simple compound curvilinear forms, the shell structures, I would make renderings of them. By rendering it means you make just regular renderings of various aspects of it. Right? Sometimes a little pen drawing of the same thing. A lot of times they were on the back of something that got lost.

**PC:** Right. Well, over the years have you developed any hobbies or interests in other things besides art?

**JD:** I now like to fish. I like to troll. I like deep sea fishing. I have a little boat down in the Bahamas which my captain uses when I'm not there. My wife and I both enjoy it.

**PC:** That's great. Well, let's see, we've gotten up into the mid-Forties here. You know, I'm having a hard time on one point here, and that is to find out where the shell shapes started. Because you'd been making figurative things which are gone, and then abstracted things. And then there was the Army experience. And it seems that after that . . . .

**JD:** Well, it's a little hard to say because these experiments have been going on a long time. At Sikorsky I saw things being developed from the planar to the development of . . . Right? From the plane to the development of it. And of course all my life there's been the seeing of things being made in three dimensions. Most mechanical things are in three dimensions, you know. Something happens, you turn something on a lathe so you're going from around the slot so you continue concentricity which still changes the contour of the form . You cut a thread of a helix. They're all forms that are applicable to sculpture.

**PC:** So in a way it's a logical outgrowth of . . . ?

**JD:** Yes. It's an awareness of how to develop forms. You repair a boiler. There's a part of a boiler that has to be made. And it could be a crown sheet which is a very complex thing and you're working in three eighths metal steel plate. You have to hammer it. You have to shape it, bend it, drill holes in it. You have to rivet it.

**PC:** Right. So all these things were . . . ?

**JD:** Yes. I worked in a shipyard. I put in time in a shipyard one summer during the First World War. I used to go to the lake swimming and fishing and we used to pass through a shipyard. So finally I found myself one day working there for nothing. I met two Portuguese fellows who were diving the big long rivets that went in to the keel. They were two little brown fellows and they had three-quarter hammers and they were going like mad. And I stopped and I looked. So finally we began to talk. You try it; he shows you; he shows you the hammer; he shows you how to use it, how to hold it, how to strike with it, and et cetera. I worked for a couple of weeks for nothing. I wasn't even on the payroll. Of course I only worked maybe afternoons. But it was all right. So you learn also. You're aware of these things. Actually the linear structures that I am doing now are not very much different from the profile that existed in the curvilinear ones, in the profile . . . .

**PC:** In the shell ones? Except they become a line.

**JD:** Right. The developed plane is removed with the material.

**PC:** It becomes space rather . . . .

**JD:** It becomes space. So now we have a plastic space that exists. Right: You remove one thing and you have

something else.

**PC:** Let me ask you a couple of other things here that I've sort of forgotten about. What languages do you speak? Do you speak French?

**JD:** Oh, I speak some French. I'm illiterate in both French and Spanish. I can read a little Spanish. I can talk a little Spanish and French. In fact I spoke French before I spoke English.

**PC:** I asked that because of Louisiana.

**JD:** But I've never had any formal education in either language. I don't hear very well, which has been going on for some time. I dove into some 35 feet of water once and both eardrums went. And that doesn't help me to hear at all. Anyhow, I have the desire but not the aptitude. The attitude is fine but I lack the ability to gain language vocabulary.

**PC:** Well, what do you think was the idea behind the desire to be an artist? Was that some that . . . ?

**JD:** Well, I don't know. I've had discussions with artist friends. It's a very peculiar thing. I feel it's just an area where an individual goes. Whether or not society has any responsibility for it I don't know. I have expressed myself by saying that I'm concerned with having a prime experience and if I can formulate it into what I think is a qualified one, the social function is the contribution, there's a giving of this form.

**PC:** You think it's then a way of communication?

**JD:** Yes. But you know sometimes the ego is so strong that it has wonderful communication but it has nothing to say.

**PC:** But you've got to have a little ego back there to . . . ?

**JD:** Yes, you've got to have the right amount; let's put it that way.

**PC:** Ah! But what's the right amount?

**JD:** Well, who knows! No, what I'm attempting to say is that an individual has a curiosity. Right? He has a curiosity and an awareness of what his reason for being is; what the hell does life mean? He's got to work all his life doing one thing, or the other thing, or the next thing. Then he's got to build a house. He's got to get married and have children. And why have children! They go through the same process over and over and over. So the artist becomes aware. He has a new experience. And having a new experience is I guess an innate desire of man to project his experiences, good or bad.

**PC:** Well, let's see. We've got you in the mid-Forties. You got married when?

**JD:** I was married in 1926 the first time.

**PC:** Did you have children from that marriage?

**JD:** Yes, I have a son.

**PC:** In 1926 you were young.

**JD:** 22. Not too young.

**PC:** Well, that goes back to the Studio School in Chicago and all that kind of thing.

**JD:** Yes, just after the Studio School. Well, I was already married when I began freelancing in calligraphy and doing layouts.

**PC:** What kind of background . . . ? You've mentioned before . . . I asked you before, why your name is the way it is?

**JD:** Oh, well.

**PC:** When did you change that? And how did that happen to come about?

**JD:** Well, it's very complex. I don't have any birth certificate. I have no registration. In fact, the little place where I was recorded in West Baton Rouge burned and there's really no record of it. My grandmother's name -- there were some papers -- when I first had to get passport papers, I had to rely on just some written papers about whether I was born here or whether I came in on a Sicilian boat or something. So my grandmother's name was

Rivera. Actually my name is Ruiz-Rivera. It actually is. I never used the Rivera. But when I came to New York and I was going to Europe I had to get a passport. And to get the passport the name Rivera comes up. Right? So actually it got too complicated. When I came back to live in New York some people used to call me Ruiz, some people used to call me Rivera; some people used to call me Louis Rivera. And finally one day I decided no more Ruiz; forget about it. So all during the Project all that stuff . . . the contracts were written Jose Louis de Rivera. Of course the Jose came lately. It's just Joseph. Who the hell . . . ? You go to Chicago and Jose -- you're Mexican and they throw tomatoes at you. So you go to school, you go to an American school. In New York it's easier. I mean for the Puerto Ricans. If his name is Jose, it's Jose; and if they don't call him Jose he doesn't answer.

**PC:** Right.

**JD:** But also it's French -- Joseph, Josef -- things I've been called also.

**PC:** So there's been great flexibility.

**JD:** Yes. And if there's any other good reason I'll change it again.

**PC:** It sounds as if it doesn't really mean that much to you.

**JD:** It doesn't really. Because you're always on your own. At least I'm always on my own.

**PC:** Anyway, let's go back to our chronology here for a bit. We've gotten into the mid-Forties. You came out of the Army and then you what? You set up a studio again?

**JD:** No. I went to work for the Navy.

**PC:** Well, but I mean after the military.

**JD:** Oh. After the Navy. Yes, I set up a studio.

**PC:** In Manhattan again?

**JD:** No, I had a little apartment which I got during the war. And I had a friend who had a place in Connecticut. He had a barn there which I started to do over to make a studio. But that didn't work out so well. So I moved hither and thither. And I finally came back to New York in 1949.

**PC:** So, well, you had one exhibition in 1946 at Mortimer Levitt?

**JD:** Yes. These were works that had been done more or less before the war.

**PC:** Oh, early.

**JD:** Yes. These were mostly the compound curvilinear forms in primary colors.

**PC:** Yes. How did you use the colors? I mean, was there a reason why you used blue or red? Or was it just to delineate . . . ?

**JD:** Well, sometimes, or most of the time, a form will suggest something in its process of development. And if you're working in color it suggests a color, or it suggests a combination of colors. And I guess if it didn't work in blue you'd try red in the process of search. Right?

**PC:** Right.

**JD:** So you make a thousand little sketches and little drawings and throw them all away on the floor in the process of doing it. Finally you say okay. So blue works. So you use blue. I don't know what all these things mean. I haven't the slightest notion what they mean. They must mean something because I've been at them for a long time and some people get interested in them.

**PC:** Right. But in your choice of colors . . . you didn't feel that blue had this property?

**JD:** No. No. No romantic sentimental notion about the color. The color had to work plastically. The form and the color had to work together.

**PC:** So what . . . ? The color would make the shape more obvious, or clarify it?

**JD:** Oh, yes. It would define it. It would define it in a plastic sense. And of course give you whatever excitement or whatever the perception of a work of art intends. Right? So you begin to find it in primary colors. You can take a compound surface and you can put a yellow on it and you can have a light, a medium, and a dark cadmium

yellow, which is an exciting thing to have in one object.

**PC:** Because of the light?

**JD:** Because of the transition between light and shade.

**PC:** Right.

**JD:** But of course already I'm interested in space. The moment I began these forms there was the notion of pure plastic space. Right? In which the space now is part of the structure of the form.

**PC:** Of shaped and pushed and pulled.

**JD:** Yes, that's right. So that you have formal relationships which have a tendency to move but are arrested by the form itself, which is the remaining structure.

**PC:** How did you like the experience of an exhibition?

**JD:** Well, I'll tell you. It's quite wearing.

**PC:** Well, sometimes I've had people say that when they see all their work in a gallery with all the lights on it looks quite different from seeing it in the studio.

**JD:** It's looks different all the time.

**PC:** Right. Yes, but the whole thing is . . . .

**JD:** Yes. All right. So I don't know. I haven't made many forms and many structures in my life. And I've discarded much of it. I haven't found any reason for retaining two similar things, two experiences that are so similar and still not complete as an experience. So I discard. So I don't have much. When I had the exhibition . . . naturally the first exhibition of a one-man show, you're excited. You want to find out about this, that, and the other thing. And, of course, you hope to sell some to make a living so you can make some more of these things.

**PC:** Right. Did you sell anything from the first show?

**JD:** Yes.

**PC:** How was the critical reception?

**JD:** Not bad. Not bad. I don't remember what the details were. Of course, I've been in group shows. I've always shown at the Whitney. I've shown at the Museum of Modern Art and various combination shows.

**PC:** Were you active in putting things in group shows? Or was it something that just happened and you continued?

**JD:** It just happened. It was more like a request that came from the outside. I'm not very gregarious. I don't move about too much.

**PC:** You didn't go out looking for exhibitions, and that sort of thing?

**JD:** No.

**PC:** Well, did you have any commissions then in the Forties? Were there any commissions for . . . ?

**JD:** In 1945 I did a bas relief for a reconditioned steamship for Moore-McCormick Lines. The Argentina.

**PC:** And then there are a number of them in the Fifties. Lots of them.

**JD:** Not too many. Enough, but not too many.

**PC:** Well, every couple of years there's one. In 1955 you did the one for Kaufman's which is in a building on Third Avenue.

**JD:** Yes.

**PC:** Was that one of the early architectural things? Because the other ones were not . . . .

**JD:** Well, I've had interest in the integration of contemporary sculpture and the architecture for as long as I've

been interested in sculpture really, and I have as many architect friends as I have painters and sculptors. Quite a few experimental projects in relationship to so-called integration of sculpture and painting and architecture.

**PC:** Well, how do you think architects are these days when they get involved with art?

**JD:** I don't know. That's a moot question. It varies with the architect. Most architects that are interested in art are either frustrated painters or frustrated sculptors.

**PC:** they're not well-rounded architects?

**JD:** Well, yes. but, you know, genius is all around today.

**PC:** Ah! That's something! But have you found these rewarding experiences for you?

**JD:** More or less. It's hard work. It doesn't always come at a very desirable time. And in some instances the deadline comes too soon for what you have to do; you don't have sufficient time. But I'm interested in doing so-called monumental work. I always have been.

**PC:** Let's see. What's the largest one you've made here on commission?

**JD:** Well, the one we finished last year for the Smithsonian Institution was for the Museum of History and Technology.

**PC:** That's the huge loop?

**JD:** Yes, the double loop.

**PC:** That's pretty big. I haven't seen it yet so I can't . . . .

**JD:** Yes, it's 8 x 16 x 13 feet six.

**PC:** Well, that's big. That's really big. I've seen the photograph. It's a great photograph.

**JD:** Everything is all wrong. (Stop it for a minute.) [MACHINE TURNED OFF.]

**PC:** Well, there's one thing here. In 1953 you started teaching. You taught at Brooklyn College.

**JD:** I had one day a week at Brooklyn College, one afternoon a week actually for one semester.

**PC:** Was this the first teaching that you did?

**JD:** No, I had been up at Yale. I opened a sculpture department at Yale that same year, as a visiting critic also.

**PC:** Everything at once. How did you like the teaching experience?

**JD:** I found it's a lot of hard work. And to a degree rewarding depending on the area of interest at the time.

**PC:** How about the work with the students and things? Did you find that interesting?

**JD:** Not particularly. Not at Brooklyn College. What you do is they want to work in metal. You've got 12 kids. And so where do you start? One fellow wants to make a lamp. You're trying to tell him and they're stealing the drills and the files. Well, it's all right. You know a shop has to be run well. You know if you're going to work metal you have to have a shop. You can't work on a kitchen table. No?

**PC:** Right. You've got to have machines and drills.

**JD:** set that doesn't work.

**PC:** Well, what did you have -- first-year sculpture students?

**JD:** Gee, I don't recall. It was just kind of a sculpture class.

**PC:** But it was all metal working?

**JD:** Well, yes. That's what they wanted. They wanted the students to have some experience in metal working, I guess. At Yale it was different. I actually opened the sculpture department up there.

**PC:** How was that?

**JD:** Well, that was very interesting because I developed a whole series of three-dimensional developments of interpenetrating planes. Or which there's a whole history over there.

**PC:** Oh, I see. All the models. Right. They were used in class? You used those in class?

**JD:** Oh, yes. I used them as explaining what three dimension was and the difference between a line and a plane and a form and a space. These were all means of having the ability or having the opportunity to discuss as these things with the object first-hand and then they have the choice of developing a better one within that same discipline. So you begin with three interpenetrating planes rectangular. You tell them why rectangular. They ask you. You say, well, if it's square it has no axis. It has two diagonals and that's it. But if you want to have a little more interesting plane you make it rectangular. Now it's a question of your ability to arrive at a proportion. So already you're dealing with a plastic form. So to take 3 different planes, that is different size and proportion, and construct them into a three-dimensional formal relationship, you already have a pure sculpture. It's limited of course. But if this is understood then it could be elaborated on. This is what I attempted to do at Yale.

**PC:** Well, how did you use the models? You used them then as a teaching aid?

**JD:** Yes.

**PC:** And you said, you know, this is where we start and you talk about it and then you say now you go out and build one.

**JD:** No. Again I say we're going to begin this class. We start the class now, we're going to investigate three-dimensional perception. Now I give a talk on three-dimensional perception on a conversational level really. And then they ask questions. You get questions . . . what they are . . . . So I say, okay, now we're going to begin. The project for next week is to take three planes and make your selection within certain dimensions that can be controlled. So each student makes one. I say now on the basis of this relationship and proportion, we're going to continue a whole series of developments. So keep a record of everything you make. Then the next session they bring in these forms which they've done. And they talk about it. You ask them to talk about it, if you can get them to talk. And then again on a conversational level, you are able to tell them everything you want to tell them about that formal relationship till you go from the rectangular to the elliptical to the linear to the shell, of all the same axis relationship. So at the end of the semester you give them a problem of making a piece of sculpture developed on the basis of what either one of these stages they can make a selection and make a free sculpture.

**PC:** Well, did you have people who were, you know, interested in making a figurative sculpture? Or were they all non-figurative?

**JD:** Well, I had told Albers that if I was going to do the class it would have to be done on the basis of my attitude and notion of what I'm doing contemporaneously; otherwise I'd not be interested. And he accepted that.

**PC:** How did the students find it, do you think?

**JD:** Well, some were stimulated. Some were active. I didn't have the opportunity to carry it far enough.

**PC:** How long were you there?

**JD:** Two years. The first year was lost. These models were done in the second year so it wasn't lost. but I mean there was not a sufficient number of students in the class, and one thing and the other.

**PC:** They still have a sculpture department though?

**JD:** I don't know. I'm not aware of what goes on up there. I was attempting actually to make a sculpture department that would have been self-sufficient and after four years I could have walked out and let the whole thing generate, you know.

**PC:** How would you have done that? That's kind of interesting.

**JD:** Well, just by developing these forms. Right? So it was all right in the second year. Already in the third year when I wasn't there I understand that there were applicants for the school some of whom didn't come because I wasn't there. Because this thing was already known; it was around. Right? They would have been selected. Right?

**PC:** Well, that's interesting.

**JD:** In four or five years I could have developed enough instructors and professors that I could have walked out.

**PC:** Well, you did some other teaching. You went to the North Carolina School of Design?

**JD:** Yes. I think for three or four years, I'm not sure now. I went down for a month. They were selected students, 13 or 14 from the first to the fourth year, maybe even fifth year, I'm not sure. In which these same three-dimensional perceptive forms were used actually as lectures and as demonstrations and also as a creative activity of the students themselves, making these forms and discussing them.

**PC:** How did you like that visiting professorship?

**JD:** I found it very stimulating, you know, for some time. And then I guess students began to say that's old hat. I haven't heard this directly but I think that's general procedure. If you stay too long in one place, forget about it. Everybody knows what you do; what you think; how you think; and so on. But it was interesting.

**PC:** Do you teach now? Or have you been teaching recently?

**PC:** No. I don't recall the last time I was in North Carolina. It's been some time.

**PC:** So it was really Brooklyn College, Yale and North Carolina, was the teaching?

**JD:** Well, not really teaching. A kind of seminar.

**PC:** At North Carolina, yes.

**JD:** But even up at Yale I had one year and forget about it. I had 5 classes as a visiting critic; and forget about it.

**PC:** What is that? What does a visiting critic do?

**JD:** A visiting critic was just supposed to come one afternoon or one day a week. But there was no sculpture class so I couldn't go on as a critic.

**PC:** Did you get involved with any of the art world organizations? You know, the American Abstract Artists or things like that?

**JD:** At one time I was kind of interested. I was interested in and was a charter member of the Sculptors' Guild but I gave that up after a while. It's just a waste of time activity.

**PC:** So you haven't gotten involved in any of the art world organizations?

**JD:** No. No big A activity.

**PC:** None of that sort of thing.

**JD:** It's all right for those who . . . . The American Abstract group did a very good job. At least they kept abstract art alive for a while.

**PC:** Yes. They kept bringing it up before the public and showing it to people and things. Well, you really have made sort of a livelihood from your sculpture then?

**JD:** Yes. I've been living off my sculpture since the Project days. A little help here and there. You sell a little. But it's been stable the last 5 years, or more; the last 10 years, I would say.

**PC:** And most of it is commissions and projects?

**JD:** No. Most of the activity has been the piece we did for the Smithsonian Institution. It required a lot of time and a lot of ingenuity and development; tooling, you know, and methods of creating sculpture.

**PC:** How long did that take you?

**JD:** Well, I had the good fortune of having Roy Gussow help me with the full-scale projection. It went over two-and-a-half years. Not constant work but some of it pretty applied timewise.

**PC:** How did that go? Roy mentioned you had made drawings or some thing, sort of full-scale drawings. Or maybe I'm getting it confused with something else.

**JD:** There were four sketches made. There was an original maquette that was a quarter scale. There was a half scale. And a full scale. And this was done so in a sense to justify the contract. Right? And also, it's advisable in a structure of this sort to have its scale developments so that you know how to get at making it.

**PC:** Speaking of the making of things, we go back after the shell pieces. When did you start developing the -- I don't know what you would call . . . ?



**JD:** Well, I call them linear structures. Compound linear structures.

**PC:** Right.

**JD:** Actually they began before the war. They were advance investigations of it. Some were done in plaster, in large scale direct in plaster. Which were destroyed when I had to give up my studio to go into the Army or give up Sikorsky or run away or whatever it was I did.

**PC:** So that, you know, you'd been working on that. Everything is sort of free like that now and uses a lot of space. There are no solid sculptures any more.

**JD:** Yes. Well, this is not final.

**PC:** Oh, no?

**JD:** It's just that at this point I'm still interested in the relationship of the material in the space. And I find that with the linear developments that I get more space. More space is allowed to participate; it becomes articulate in the structures. Of course, if you use a polished surface on a linear development and you put a sufficient amount of light on it, you already have a very complex form.

**PC:** Yes. When did you start polishing the shapes? Has that gone on for a long time?

**JD:** Well, my first sculptures were polished.

**PC:** And it's just continued?

**JD:** Yes. And I'm now interested in what happens to the light on the surface of the metal.

**PC:** The curved qualities and the kind of polish?

**JD:** Yes. So you get primary, secondary and tertiary light inclinations. Right?

**PC:** Then you have the open ones that are not the loops. What do you call those?

**JD:** Well, I call them an open form or a closed form.

**PC:** Open or closed forms? That's very simple.

**JD:** Yes. Or continuous or discontinuous. You see, these forms here actually are crescent-shaped in sections. The sections of the form are crescent-shaped.

**PC:** Right.

**JD:** And here, instead of using black or white and a primary color, I use a primary color and a polished surface.

**PC:** That's interesting. There still is an interest in color.

**JD:** The fact is a commission I did for the Statler-Hilton in Dallas was done with polished metal and a yellow inner surface.

**PC:** Is that large? I saw a black and white photograph of it.

**JD:** Yes, it is. It has 4 tennations and it's about 14 feet across and 10 feet high.

**PC:** It moves?

**JD:** Yes, it revolves slowly.

**PC:** When did you start revolving the structure?

**JD:** Well, actually, this comes out of studying the forms. I have a maquette and I put them on a turntable and turn it. So you sit there and look at it and get fascinated by your own mistakes. But the forms have a tendency to move.

**PC:** Did you early actually incorporate a turntable on the sculpture?

**JD:** Actually at an exhibition that was with my first show at Grace Borgenicht.

**PC:** And that's the first time you really had the turntable?

**JD:** Yes, actually. But they were done . . . they were in the studio. I've had them move, as I say, in studying for myself when I had the sculpture just for myself. I had them all move at one time. So you see the form and the space being developed. It allows you to concentrate. I had a letter from some fellow in Philadelphia one time. He said you destroy your sculptures by moving them. I don't have the letter but I remember the rest of it was just as wild.

**PC:** You obviously don't buy his theory.

**JD:** Well, it doesn't make any difference. He can buy it and take the motor out. Or not push the button.

**PC:** Right. In more recent years, do you ever give thought to the theories of the Constructivists -- Vontongerloo?

**JD:** I'm familiar with their notions. I met Vontongerloo when I went to Europe in 1955. And I'd read most of the things he had written and I'd seen both the paintings and the structures in exhibitions here and in Paris. And I became very friendly with him. I don't want to attempt to explain his theory but it's really non-art: It's beyond art -- not non-art. Excuse me. It's beyond art. He wasn't concerned with sculpture as a painting. He was concerned with it as an attitude. Which is very fine.

**PC:** How does that make it beyond art?

**JD:** Well, that was his notion about it.

**PC:** Oh, I see. Well, it was sort of architectural, some of his things.

**JD:** Yes. Well, his notion of space was very good, to my liking. I met Mondrian several times, when he was here, before the war. I was familiar with his work and I had read most of the things that he had written and I had seen exhibitions of his work. I agree that the right angle is the strongest form you can have for reference. That's it.

**PC:** Yes.

**JD:** And if you put this in three dimensions it still functions.

**PC:** Are there other people that you . . . whose work you've really been interested in, or whose theories you've agreed with?

**JD:** Well, I was interested in Brancusi. Actually when I first saw Brancusi's Bird here in the Museum of Modern Art I was very happy. And this again wasn't pure form. As far as I know, he never said that he did completely abstract work.

**PC:** They all had relation . . . ?

**JD:** Yes. They're simplifications or whatever you may want to call them. I met Leger when he was here on the Project. All mature artists are stimulating. You may or may not like their work or the degree in which you're moved by it, but . . .

**PC:** It gives you something to play against.

**JD:** Sure. These people all have something.

**PC:** Have you had to use a lot of new materials or things like that in building your recent sculptures?

**JD:** No, I'm not concerned with new materials per se. So Fiberglas is fine. You can make a boat out of it and it's excellent. But to make a sculpture construction out of Fiberglas is a very meaningless thing just because it's Fiberglas.

**PC:** But you like working in stainless steel?

**JD:** I like stainless steel because it gives me the quality of surface, the reflecting quality of the surface with light that I'm interested in.

**PC:** Have you used copper or bronze?

**JD:** Yes, I make little structures out of bronze. I forge the rods out and polish them. It has a beautiful color. But the maintenance is . . . It requires cleaning.

**PC:** It's oxidizing, right?

**JD:** Yes.

**PC:** You haven't cast anything ever, have you?

**JD:** Not since 1930, 1931. I did a little head, a bust really, an abstracted form.

**PC:** The one with the nut. You didn't really . . . ?

**JD:** Well, no, the experience wasn't too much.

**PC:** Well, your large pieces now, how are they built? I mean you have to cut and weld and they have a core and things like that.

**JD:** They're very complex to talk about. They're not so complex visually but they're complex to discuss.

**PC:** Because I mean, you know, when you have something that's shaped and curves and in two or three different ways.

**JD:** Well, this is the awareness of what I call plastic geometry where you have to . . . it's done in industry all the time, you know. In industry they develop from the flat -- for a ship all the stuff comes flat and it has to be lofted, it has to be developed, it has to be shaped. An airplane the same way. A boat.

**PC:** Well, how do you see the space in relationship to one of the . . . ?

**JD:** Well, you begin with the right angle and on the basis of that you develop it. Of course, the structures that I've been concerned with since 1953 actually, which are these linear ones we've been talking about, it's a process. You draw out a form and it has irregular contours. In other words, it's tapered. Right? And you shape this into a three-dimensional structure. You have the experience of going from the straight line to the compound three-dimensional. So it's possible to see another sculpture when you're halfway through the development of an idea.

**PC:** Do you make many things by making small models?

**JD:** Most of the things I do now are done from very small models. Yes, very simple.

**PC:** And then you develop them?

**JD:** Then I develop them. I might begin . . . they might be 2 inches, 3 inches in volume more or less. Right? A cube. And they develop up -- oh -- maybe 10 inches, 12 inches, 14 inches, and then sometimes they go up to 3 feet and finally one of them will become a monumental one.

**PC:** And you work with the same materials all the way through pretty much?

**JD:** Yes.

**PC:** I wonder what we can do here chronologically to sort of finish that. Well, we really have brought it kind of up to date, haven't we? You didn't ever have any teachers really except for Norton. That was . . . ?

**JD:** That's all, I'm self-taught so-called otherwise.

**PC:** He was the only one who got things going?

**JD:** Yes. He opened the door and I fell in.

**PC:** Let's see, you married a second time some years ago, didn't you?

**JD:** Yes. don't ask me when.

**PC:** You don't remember those dates, do you?

**JD:** I'm very happily married now. I have been since 1952 I guess.

**PC:** When did you go to the Borgenicht Gallery?

**JD:** It must have been around 1950.

**JD:** And she's handled your work ever since?

**JD:** Yes. She's my dealer or agent or whatever.

**PC:** Do you find that a good situation, having someone like that rather than . . . ?

**JD:** Yes. I find that I have a very happy relationship. It's informal but workable.

**PC:** It keeps all the business people out of your hair.

**JD:** Yes. The Gallery takes care of what has to be taken care of. They can make appointments or see people and make arrangements for this, that, or the other thing, or they can quote prices without having to give somebody a wheel chair, and without any acrimony. Right?

**PC:** Right. I notice that some artists I've talked to absolutely won't have any business dealings themselves.

**JD:** Well, I avoid it all the time. I have people who insist that they come over. So I say Okay, you look around. "Well, how about this? How much is this?" I say, "Sorry, you go up to the Gallery and whatever is available will be quoted."

**PC:** That's good.

**JD:** And there's no advantage . . . . And if you have a dealer, there's no advantage in not using him, the person.

**PC:** No, that's what they're there for.

**JD:** If you have a good relationship. If you have a bad relationship, you change the dealer. Then it's up to the artist whatever he wants to do. It's almost impossible for an artist to operate in New York without a dealer.

**PC:** Yes. It takes up so much time.

**JD:** Yes. In Europe it's okay, because there weren't many dealers. Most of the artists -- well, they did sell a lot.

**PC:** Have you exhibited in Europe?

**JD:** I've been in group shows there, yes. At Denis Rene. But I've avoided mostly going out for exhibitions. I find that the work is too delicate to ship around and be handled by people who don't seem to have the feeling for it. So I try to discourage it.

**PC:** You do? That's interesting. Well, are there any other things here that you think I should know about here? We seem to have gone through a terrific amount of time in very little tape here. You're a good editor. This is hard to do on tape, but what is this one sort of solid form up there?

**JD:** Well, this is again a progression from the linear back to the planar, if you will.

**PC:** Is that a recent . . . ?

**JD:** That's been in that shape for about 5 years now. I don't seem to be able to get at it.

**PC:** I notice that some of them have little colored tapes or something. What are those?

**JD:** Yes. Those are lines for developing a larger scale. They are points of reference.

**PC:** You mean that if you decide to enlarge it . . . ?

**JD:** That's right. Okay, if you have a 10-inch height you have 30 inches, right? It's 30 inches in length. You divide that by 3. So you have 10 equal spaces.

**PC:** It's a scaling device?

**JD:** That's all. For reference. So you do a larger one. And if I do it in color, it's fine. I know from red to yellow is so many inches.

**PC:** I see.

**JD:** You can see where it comes in the passing of one form to the other. So if I do this twice this scale, these two colors will come together then or more or less there. And then when you have the general structure these forms are all shaped with a hammer, the curves are all shaped with a hammer finally.

**PC:** So these are solid rods, the small ones?

**JD:** Yes.

**PC:** When did you stop using solid rods?

**JD:** Well, I still use solid rods.

**PC:** No, but I mean for the large ones. Obviously they didn't twist.

**JD:** No. Those circular section large forms are developed from the flat the same as the triangular forms. It's hard to describe it verbally.

**PC:** Yes. But these come, what? At the same distance along there?

**JD:** It's divided in equal areas. Right? So if this is 30 inches long and I want to make it twice the size I'll make it 60 inches long. Right. So instead of these being 3 inches, I'll make them 6 inches. So whether I start from a point -- this is black -- from black to white is 6 inches. So I actually put this on a straight rod before it's shaped. It's just a point of reference.

**PC:** Right. It allows you to see it in pieces in a way.

**JD:** Yes. Well, it tells you where these things come. Because you're doing them in space. There's no other reference to get started.

**PC:** Do you see these things as space going all the way through?

**JD:** Yes. I see them as space contained within the structure which is not necessarily inside out but within the area of the structure, and then I see the space which is an environmental space. If I move the sculpture the internal space or the plastic space goes with the sculpture no matter where I put it.

**PC:** Right.

**JD:** But it goes into a different environmental space if you change it about.

**PC:** I see.

**JD:** It's complex but it's . . . .

**PC:** It changes its relationship, you know, to bring it over to the machine.

**JD:** Yes. That's right. Sure.

**PC:** It stops there. But it still maintains that space. I see how that goes. It won't mean anything on the tape though.

**JD:** No. This is what I told you it was going to be today.

**PC:** Okay. Well, what else have we got here? I guess we've more or less covered very quickly all of these points. You haven't developed any particular theory about your work or anything, have you?

**JD:** Yes. Well, it's not necessarily a theory. It's really an attitude. I assume that if I am going to make pure form in which the space is allowed to participate as well as the material that I have to conceive of them both together; that I can't think up the material to make the space, or the space to make the material. I'm personally convinced that I have to conceive of them both together existentially. They exist simultaneously. And I've found that I have more satisfaction if I think so. And of course I've been thinking so for so many years that that's it. And you do it subconsciously. Right?

**PC:** Simultaneously.

**JD:** Or subconsciously.

**PC:** Okay. Well, is there anything else you think I could ask you about?

**JD:** I don't know. You're going to run out of tape.

**PC:** I've got another reel.

**JD:** No, I can't think of anything.

**PC:** It would be nice if we could describe the models here.

**JD:** Yes, but that -- boy, I'm telling you to describe them even with them in front of you is a problem. For a recording . . . .

**PC:** Yes. Do most of your pieces . . . ? Do you conceive of most of your pieces as moving?

**JD:** Generally architecturally I think so. But this isn't definite. I've just submitted a maquette for a mall project. It has two elements. Like there are development elements. As you see there, there are two elements. I don't intend for it to move. If the shape is simple and it moves, it describes a whole area that you don't see. If it doesn't move . . . . But this again doesn't mean a whole lot one way of the other. If you get used to it moving, it moves. Right?

**PC:** Right.

**JD:** I see more when it moves. I see more when I move my head than when I keep it still. Maybe not better, but I see more.

**PC:** So it really depends on how the piece develops whether it's going to move or not?

**JD:** Yes. And if you study your form moving and its process, it's going to move whether it moves or not. But most people like to see -- I like to see the lights creeping up along the surface, moving along, and then all of a sudden disappearing. Right?

**PC:** It changes and it's gone. Well, that moves with the thickness, the diameter changes, and the . . . .

**JD:** Yes. And the lights creep along. Right?

**PC:** It's interesting, it's involved with -- besides the space and the line of the thing, it's got the . . . .

**JD:** Yes. You have reflectivity. Instead of getting a delineation of light and shade, you get reflected light. Of course the environment also comes in. It's minute, but it's there.

**PC:** Well, if somebody in a bright red dress stands in front you see it.

**JD:** You see it. That's right.

**PC:** Well, I think that's about the end of the tape.

[END OF SIDE 2]

[END OF INTERVIEW]