Revelle, Roger Randall Dougan (1909-1991)

Roger Randall Dougan Revelle Oral History, 1991

PHYSICAL DESCRIPTION: 1 audiocassette tape, 1 folder,

Roger Revelle Transcription - Interviewed by Elaine R. Brooks, Student, School of Social Work, San Diego State University.

Note: The questions have not been completely transcribed, but most of the answers were transcribed.

Interview: 04/18/91. The interview took place at Scripps Institution of Oceanography in his office in the Director's Complex

Agree to name being used?

Yes.

Questions for me?

Revelle: What's the topic.

Brooks: Priorities set by local government for resources. (I sound nervous)

Brooks: How long lived in San Diego County?

Revelle: Since 1931 off and on. Not all the time but we moved down here in 1931. We were at Cambridge for 14 years. Washington for about 6 years. Fundamentally about 60 years.

Brooks: What part of county have you lived in?

Revelle: We've always lived in La Jolla. We have a house near Julian too. A cabin.

Brooks: Have you been involved in neighborhood or community groups.

Community planning groups.

Revelle: I was chairman of La Jolla Town Council at one time.

Brooks: Found that professional role makes it difficult to get involved in the community?

Revelle: Somewhat difficult, yes. As a faculty member of the University of California and therefore and Director of Scripps I tried to stay fairly clear of politics.

Brooks: Think there is a general reluctance of academics to get involved in local political issues?

Revelle: Yes I do. Not all of them but some of them.

Brooks: Can you characterize why that is?
Revelle: Well I think that the university tradition not to be active. I think that research is to be unbiased and not have an ax to grind.

Brooks: Do you see that holding at the federal level? Scientists seem to get involved fairly easily in panels such as National Academy?

Revelle: Yes, yes.

Brooks: Do you think that the City of San Diego has effectively used the academic talent of people in the area?

Revelle: No I don't.

Brooks: Sense of why that is.

Revelle: Because the City Council for the most part doesn't have any academic training. Not scientific training. I wouldn't say this in public, but they're a bunch of ignoramuses. Particularly the mayor, doesn't have any concept of what science is all about.

Brooks: Do you know of any cities in the country that take advantage of the academics that live in their midst better than San Diego does?

Revelle: At a local level you mean? (yes) Well I think that Cambridge Mass has a great deal of involvement in local affairs on the part of Harvard, MIT faculty. That's true of Berkeley too I think.

Brooks: Is that because those institutions have been there for a long time? Why is San Diego different?

Brooks: For one reason San Diego is very conservative politically and most academics are "liberal" politically. It's essentially a Navy town and naval officers are always conservative.

Brooks: Scripps itself has had a good relationship with the Navy over the years.

Revelle: Yes. On a scientific level yes. Walter Munk particularly is a darling of the Navy because he's done so much work on underwater sound. I was a commander in the Navy for five years. I was actually on duty for 7 years during WWII. I've had a lot to do with the Navy. Ed Frieman, present Director, formerly of SAIC Inc has had a lot to do with the Navy. Bill Nierenberg too.

Brooks: Where were you born and where spend childhood?

Revelle: Born in Seattle and raised in Pasadena. I went to Pomona College and took my PhD here at Scripps after a year of graduate work at Berkeley.

Brooks: In geology.
Revelle: Yes.

Brooks: Homelessness. When first become aware?

Revelle: Not very long ago. Three or four years ago here in San Diego. Five years ago.

Brooks: When you first became aware, how did you explain it to yourself?

Revelle: I thought one of the primary problems was closing of insane asylums. Fact that a lot of mentally ill people were turned out onto the street. I don't really understand the phenomenon very well, I don't understand, other than that, why it exists.

Brooks: Do you have a sense that it is different today than it was in the 30's during the Depression?

Revelle: Well I think everything was much worse during the Depression. It was terrible. There was 30% unemployment. We were saved only by the Works Progress Administration.

Brooks: Both Bush and Reagan have tried to appeal to charity. What role should private charity play?

Revelle: I don't think that's enough, obviously. They do the best they can but they don't get enough support.

Brooks: Federal government has divested itself of very many categorical programs, tried to get rid of means tested programs rather than entitlements. What do you think are the responsibilities of city and county government in attending to these kinds of problems?

Revelle: Well, it depends on the tax base. Who has the most access to public revenue. The federal government has greatest access to public revenue. For that reason they probably have the most responsibility in solving these social problems. On the other hand they are probably best solved at the local level. What you need to do is hand the federal tax revenue to the state and local governments.

Brooks: The Reagan administration cut off revenue sharing. There's a reluctance, once the feds don't want a program any more they don't want to fund it. The Tax Revolt which began dramatically with Prop 13. Most people still have concern about where the money is going. Grumbling for raising money. Perceive tax revolt today?

Revelle: I'm very discouraged about it. We've got to raise taxes and abolish or remove the state or federal deficits. We used to have much higher taxes than we have now and I guess the real problem with Prop 13 was that it was a property based tax and thus affected a lot of middle class citizens. Where the income tax
affected them much less. So really the emphasis of the state and local
governments trying to raise property taxes really brought about their downfall.
Income taxes would have been a much more equitable way to do it.

Brooks: In past three or four years the professional homeless people have
spent a lot of time dealing with the homeless and saying they are homeless
because they don't have homes. We've had the HUD scandals in the past three
or four years. Do you think local private housing market is capable of providing
housing for everyone?

Revelle: I don't really understand that. In principle it should be but in practice it
isn't.

Brooks: There seems to be little or no interest on the part of builders to get
involved in low income housing.

Revelle: I guess the reason is they don't make enough money in it. Somehow
we have to change the rules of the game in such a way that people who build
low income housing can make a good profit on it. Be quite different. It's the
same problem you have in automobiles. Automobile manufacturers don't make
any money out of small cars, so they claim. They make more money out of
Cadillacs, Lincolns and Oldsmobiles.

Brooks: You have a situation too where the automobile market and housing
market are the same. People with no money are supposed to drive old
automobiles and live in old housing in theory. In reality it doesn't work that way
because housing is torn down.

Revelle: Real problem is land scarcity, not building scarcity. Need to develop
land.

Brooks: Believe everyone has a right to a basic level of medical care?

Revelle: I do believe that.

Brooks: Have you followed CMS program in San Diego? Given problems of
state government, that program has gone bankrupt. There are 600,000 people
in SD County without medical coverage. State says counties have to have, but
the state doesn't provide enough money. Given the scale or resources needed
to supply housing and medical care, possible that there are not enough monies
available at the local level to solve these problems?

Revelle: I'm not sure I understand what the problem is.

Brooks: The federal government is saying we don't have national resources
and state and local level have to do it.

Revelle: The question is that who has access to revenues. The federal
government has most access to taxes through the income tax. The state has
sales tax and counties have property taxes. The income tax is the best resource. It's not a question of resources, it's a question of how you handle them?

Brooks: Do you feel that local politicians are responding effectively to these social demands.

Revelle: I think they're caught between the devil and the deep blue sea. They don't have an adequate tax base and the demands are overwhelming them. There's not much they can do. They're responding best they can under the circumstances. I know Susan Golding, for example. She's a very thoughtful person and a very forward looking person and that's true of some of the City Council.

Brooks: Do you feel there are effective intergovernmental mechanisms in place?

Revelle: I think that's probably true. I don't see the intergovernmental relations. They're essentially zero as far as I see. The only thing is they're all politicians. They all have the same life style, the same intellectual set.

Brooks: It was pointed out to me by a reporter that I interviewed is that most governments hire lobbyists. I read a paper done by Conservation Foundations. Need for mediation mechanisms between levels of government. You can see it in the sewage lawsuit.

Do you have a sense that San Diego is getting it's fair share of federal and state resources?

Revelle: I don't know for sure, but judging from the newspapers I have a feeling they're not. Certainly not for health care and for welfare for poor people. I don't really know whether that's so or not. That's what the politicians have claimed.

Brooks: Another thing that's emerging in these interviews is the free trade legislation. One analysis is that San Diego already has the financial and international law framework. I interviewed an EPA official in San Francisco. He said the Mexican government and the EPA had been in negotiations since 1983. I see a reluctance of local politicians to talk with Tijuana. What's your sense of the border issues?

Revelle: I'm quite radical about that. I think we ought to abolish the border. Building an obstacle or a fence down the middle is ridiculous. What we ought to have is an international enclave. If you want to have borders have them south of Tijuana or NOorth of San Diego. But nobody agrees with me about that.

Brooks: Well I'm not sure. Maybe not that far.

Revelle: How can we have a really great metropolis here without that.
Brooks: How do you perceive the regulation disparity between Mexico and the United States.

Revelle: I'm not sure what that is?

Brooks: Standards in Mexico are lower than they are here. Labor groups concerned about jobs.

Revelle: So what is your question then?

Brooks: I guess there isn't a question, more a comment. I'm trying to understand what's happening here. I remain somewhat mystified why there has been so little interaction between officials on each side of the border. It's almost as though Tijuana is 1000 miles away.

Revelle: It is. (Revelle) We're the only two countries in the world where you have a common border between a developed country and a developing country. It doesn't exist anywhere else. Well there isn't any analogous situation anywhere. All of the countries of Africa are less developed and all of the countries of Europe are highly developed and they're separated by the Mediterranean Sea. Here we have this 2000 mile border between us that has unique problems. You're not going to all of a sudden develop Mexico or undevelop the United States.

Brooks: Do you see the problem of Mexican migrants different from urban homeless?

Revelle: I guess I see them in somewhat different terms. The urban homeless are for the most part are not able bodied people. The Mexicans are able bodied and hard working and doing their damndest to get along. They're homeless because they're so poor not because they're not able to work. On the other hand there's another real difference. I have the impression that Latinos have no real intellectual tradition. They don't read very much. They're not really very much interested in education. There's an oral tradition, whatever that means. Unlike our blacks, our blacks are very much interested in these things, Mexicans or Latin Americans are not very much interested. One of the interesting things we had here at UCSD was merit scholarships for minorities, blacks and Latinos primarily. The interesting thing about this is that the Mexicans that apply for these scholarships are very highly educated they come from educated families. They don't come from what you would consider typical migrant families. Their parents are professors or artists of some kind. Quite a few people are Mexican. It's rather disappointing to find that your'e helping minority.

Brooks: Which daily newspapers do you read?

Revelle: *Times* and *Tribune*. I can't stand the *Union*. Also I read the La Jolla Light and the Transcript. We have to read that.
Brooks: In past two years, an explosion of environmental reporting. Do you read stories?

Revelle: Yes.

Brooks: Last story that you read?

Revelle: There was one in the LA Times about deforestation, as I remember. We have a lot of stories about the sewage problem.

Brooks: What do you think are the most important environmental issues in the San Diego area?

Revelle: Well the most important one here is air pollution. It's getting worse. Traffic, of course is another one. I guess, it's an environmental issue but not usually thought of as such, our water supply. An adequate water supply. It's perhaps our number one environmental issue.

Brooks: How do you see the water supply issue in San Diego? The drought has magnified the problems?

Revelle: Actually if you look into that and I've looked into that quite a bit. I have a paper on the subject. in the Changing Times, actually the water supply in California is enough for average usage. We produce about 78 million acre feet a year in California. And we use about 40 million acre feet. In a drought period the supply goes down. What you have to do is store water or bank water and the way you do that is having underground water or dams. Dams, of course, alot of environmentalists are against dams.

Brooks: Did you follow the Pamo Valley stuff?

Revelle: Yes. The other difficulty that we have is that the flow of the Colorado River has been overestimated. It's actually about 13 or 14 million acre feet. It's been estimated at 16. Because the estimates were made during a 30 year period of relatively high flows. But the actual estimates are much less than the Colorado River compact assumes that it will be. So the Western states are generally short of water, the ones that depend on the Colorado River, Utah, Arizona, Nevada. Not so much the upper basin states.

Brooks: Do you find the distribution between agriculture and urban uses a bone of contention?

Revelle: Obviously. You don't have enough water everyone's going to fight over it.

Brooks: Does it make sense to grow rice in Sacramento?

Revelle: I think it does. We can produced rice at about 8 tons per acre in Sacramento while in Bangladesh you get only about 2 tons per acre. The
difference is primarily much more sunshine up here. Rains a lot and it's cloudy. You have monsoon clouds no alot of sunshine. Here you have a lot of sunshine. That makes alot of difference in how the rice does?

Brooks: Have you followed the MWD and Imperial Valley?

Revelle: Yes, I think it's probably a win win situation for everybody. One of the things you have to keep in mind about the Imperial Valley is that they have to use more water than you might calculate because they have to keep the salt down. The salt in the Colorado River is high and getting higher. We have a big farm in Imperial Valley and what you have to have is tile drainage to keep the salt down. You have tiles buried about three feet deep about every 20 feet throughout the fields and they drain off the irrigation water. We actually maintain a negative salt balance. What the MWD and Imperial District are doing is lining the canals so that there's not a lot of seepage and waste water and the excess water they're getting from the conservation is going to the MWD. That I think is a win win situation for everybody. You're not going to solve very many problems that way because the total amount of water you're going to get that way is only about 200,000 acre feet.

Brooks: How do you feel about desalinization?

Revelle: I think it's all right if you can stand the cost. It's pretty expensive water.

Brooks: They're discussing putting that plant in Tijunana.

Revelle: What you're doing there is using the waste heat from power generation. That's a very useful combination of processes. You waste an awful lot of heat in a steam electric plant.

Brooks: Wasn't there a discussion when they were putting in nuclear power plants to put in desalinization plants too?

Revelle: That's right. I was science advisor to the Secretary of the Interior at that time and knew a lot about that.

Brooks: What happened to that idea?

Revelle: Well, nuclear power became very unpopular and very expensive.

Brooks: I haven't seen the National Academy of Science report on global warming but apparently a suggestion that nuclear power should be beefed up again.

Revelle: I'm certainly in favor of that. Absolutely. But we have to do it in such a way that people aren't scared of it. A lot of the fear in the United States is quite irrational, but some of it isn't. What we have to do is hire some French engineers over here. What they've done is have a single design plant. All their plants are
alike and they are all very safe. Japanese are doing pretty well too. Everybody is doing it except us and the Russians.

Brooks: There's an example here with the Navy and safe nuclear power.

Revelle: Yes, that's right. There's a lot of safe nuclear powered carriers right here in San Diego.

Brooks: Per capita expenditures on pollution abatement may be about $500. Much expenditure on enforcement of regulations. Sewage issue. How do you think the disparity between federal regulations that don't take individual habitat differences into account, how do you think the case by case approach and universal standard could be combined to give some rational regulations. Or do you think some level of minimum standards should exist.

(Tape ended) Revelle: Some things that are pretty much universal. The CFC productions. We just shouldn't have that anywhere either in developed or in developing countries.

Brooks: Aren't substitutes being talked about?

Revelle: Du Pont is very optimistic about that but I don't know whether they've come up with anything. They apparently welcome it as an opportunity to put out a new product. You can't ask that question in general terms you have to ask specific questions. The atmosphere is a habitat we all share in common.

Brooks: I've seen it in terms of mixing properties of various things. Mixing in the atmosphere takes place quickly and over wide areas.

Revelle: That's right.

Brooks: I raised the question about air quality standards with Richard Sommerville (S.D. County Sommerville, not SIO). He agreed that air quality standards coming along are going to require major changes but that there's nothing that can be done about Tijuana and it's kind of ridiculous. Why bother about air quality standards with a political border.

Revelle: So what. That's no reason not to try to do anything about air pollution in San Diego. We have to convince the Mexicans to do the same thing (Revelle)

Brooks: Do you see effective mass transportation as a component of doing something about air pollution.

Revelle: Yes I do, but the difficulty with mass transportation is that it's very convenient. So how do you make it more convenient? You have to have a new technology.

Brooks: You may have to replan cities.
Revelle: That's one way to do it. Even two blocks of walking is too much for some people.

Brooks: How do you feel about users fees to raise money for things like environmental protection?

Revelle: I'm not sure I know what users fees are. What do you mean?

Brooks: Well, putting a turnstile in a fence on public beaches.

Revelle: Seems to me that users fees can only be established or used where in fact the user is getting something for nothing now. If for example, he is fouling up the beach, there maybe should be a users fee. I don't see that you should put a users fee on things that are free to everybody the air, for example. That's silly. A good example is the air itself, do you want to put a users fee on the air? You have to make clean air for people who live here.

Brooks: Do you quantify that on how much you pollute you pay more?

Revelle: I would think so.

Brooks: Major impacts on coastal ecology with urbanization. Mechanism is Coastal Commission.

Revelle: Well the trouble with the Coastal Commission is that it's underfunded with the Deukmajian administration. If they had an adequate staff they could do a lot better job. I think it's a very good organization but it's getting starved to death.

Brooks: EPA official and someone at city commented that environmental problems are defined on the outside by environmental groups rather than within organizations. Role of environmental groups?

Revelle: I think they are mostly deliterious. I take a dim view of the Sierra Club for example and outfits like that. They're not on the side of the users for the most part. For example they're very much against Linda Bernhardts recall. She's a loser by the way but the Sierra Club supports her.

Brooks: The Sierra Club seems to have changed. Twenty or thirty years ago the Sierra Club sort of a recreation group.

Revelle: My mother in law was a charter member of it. She used to go on hikes in the Sierras. John Muir was a great protagonist of it, in fact started it.

Brooks: What is an EIR supposed to do?

Revelle: I've never really understood the purpose of an EIS. It was instituted by the Environment Quality Council in the White House. It was their principle
contribution to environmentalism in fact. And if it causes some legislative or administrative action, then it has a purpose, but I'm not sure that it does that.

Brooks: I think there's some question about ever they're really read.

Revelle: I'm thinking about some experiences we've had with our own property. We have some land in San Dieguito valley. A piece of that is an archaeological site and there is some legal enforcement of that site or those sites that are reported on in environmental impact. That's an easy thing to do. I assume that the designation of some lands a wetlands is a reasonable part of an environmental impact statement. Then again you get some action.

Brooks: Most EIS include an economic analysis. The closest to an social analysis is archaeology. Do you think a social analysis would be useful .

Revelle: I didn't think they had much of an economic analysis.

Brooks: There's always something done. It's not very sophisticated. In the sewage case, for instance.. Do you think it would be helpful to have an expanded sociological analysis.

Revelle: I don't really know. I don't know if I understand how you really do it. I'm not sure I understand an economic analysis either. Of course there is a kind of environmental impact reporting where you are describing a change of some sort. We're not talking about a sub division where you have an EIR. But you are saying that if you do have a subdivision, how do you mitigate that. I didn't know that was done.

Brooks: A lot of attention paid to community planning groups. Do you think city government really interested in city imput?

Revelle: I think they probably are, yeah. The local planning groups have a lot of impact on the City Council. Of course wherever you have controversy, the Council has to decide on whose right and whose wrong. One example is our cultural zone here in La Jolla.

Brooks: District elections changed things?

Revelle: Hard to say because they haven't settled on what the districts are yes. But I expect there will be some effects. There will be more representation of minority groups. like the blacks and the Mexicans. The other will be that maybe the City Council will be more responsive to the local electorate. I think it's an important change but I'm not sure what it will do exactly.

Brooks: Would you favor expanding the powers of the Mayors office?

Brooks: What are most important problems facing the city?
Revelle: There are so many problems, it's hard to say what's most important. One of the most serious problem is the water resources allocation. Another, of course, is attempts to increase the water supply.

Brooks: Do you think water reclamation is an effective mechanism?

Revelle: I don't think it's an effective mechanism, no. The reason I don't is that the salt content of the water is already so high that you have to desalinate it. Might as well start with fresh water if you have to do that.

Brooks: Do you think growth has been well planned for in the area?

Revelle: No, I don't.

Brooks: How do you feel about growth management? Navarro?

Revelle: My impression is that he is pretty destructive. My daughter is on the planning commission of Montgomery County. She does a lot of work on growth there. What you try to do it to equate growth to transportation, particularly to the metro system to minimize traffic. But we haven't done that here. Our county planning is purely helter skelter with traffic patterns and amenities patterns. One reason for that being perhaps because we felt we had a lot of land. But in North County that is being chewed up pretty fast.

Brooks: Well I get the sense that the whole area down along the border is going to fill in pretty fast.

Revelle: Not in any rational way that I can see. (Revelle)

Brooks: They're talking about a University of California at Chula Vista.

Revelle: Was that a serious proposal?

Brooks: Apparantly it is.

Brooks: Public private partnerships. Do you think leadership exists?

Revelle: I'm not sure that it does. I really don't know. What do you think?

Brooks: I'm quite honestly am disturbed and disappointed at the lack of political leadership I see in the area.

Brooks: Followed Redevelopment efforts downtown at all?

Revelle: I know there's a move to get the center of City government to the East of Center City. The reason I think it's a good thing, I would like to keep as many views as possible of the bay and the ocean. Not to canyonize it. For example when you're in Manhattan you're not aware that you are surrounded by water.
You are aware of it in San Diego. For that reason I'm favorable to developing the other end of Broadway.