

**American Meteorological Society
University Corporation for Atmospheric Research**

TAPE RECORDED INTERVIEW PROJECT

**Interview with Frank Haurwitz
22 October 1993**

Interviewer: Julius London

London: This is an interview with Frank Haurwitz, and it's taking place in my office on October 22, 1993.

Haurwitz: I was born on February 3, 1938, in Toronto, Canada.

London: You stayed in Canada for how long, when did you move to Boston?

Haurwitz: My passport was issued June 3, 1941, so I was a little over three years of age.

London: That was when Bernhard came back to MIT.

Haurwitz: He was teaching at the University of Toronto. A colleague of his was Wendell Hewson, who I subsequently studied under when I was at the University of Michigan. It wasn't a department when I originally got there, but he was the chair of whatever the degree program was.

One other anecdote, if this is helpful: I'm told that I was born at about somewhere in mid-morning and that my father was in fact at the moment I was born, teaching a class.

London: In dynamic meteorology, probably.

Haurwitz: That I'm not privy to.

London: We will come back to the Michigan years, but let me get on now. So you were about three years old when you moved to MIT--the Boston area.

Haurwitz: That's how I think of it, to MIT, actually.

London: How long did you live in the Boston area?

Haurwitz: I lived in the Boston area until I went to college and in fact, I went to undergraduate school at Brandeis, which is in Waltham and is another commuter community. I

went to Brandeis in September, 1955, and I had a normal four-year program.

London: During that time, your mother and father were divorced in 1946?

Haurwitz: I'm not entirely sure, but I think it was while I was in the fourth grade, which would make me about eight, and my father then shortly thereafter, I think, appeared at NYU.

London: While you were in the Boston area, you lived with your mother.

Haurwitz: After the divorce, I lived entirely with my mother, although each summer, I would spend most if not all of the summer with my dad down in Woods Hole, when he was doing his summer stint down at the Oceanographic Institute.

London: As I remember, you occasionally came up to NYU to visit during that time.

Haurwitz: My maternal grandparents were living in Manhattan and Bernhard, of course, lived in the Bronx. I think I visited rather frequently with my father and he would also on occasion come and visit us--I have some vivid memories of playing with him when he would come to Boston.

London: When you were in Woods Hole during the summers, you had a good deal of contact also with some of your father's colleagues.

Haurwitz: There were some people from NYU: Dick Shotland was there, a fellow named Andy Bunker who was permanently on the staff at the Oceanographic Institute. There were other names I would remember if they were mentioned.

London: While you were there, did you have contact with Rossby?

Haurwitz: Oh, yes, yes.

London: Did you have contact with Dick Craig?

Haurwitz: I know the name, but I'm not sure.

London: How about any of the other people from MIT?

Haurwitz: My parents and the Willetts were close friends. That wasn't during Woods Hole, but I remember we would go to the Willetts on weekends often--they lived a little further outside of Boston than we did. And I'm sure I knew other people...

London: Brooks, the man who was head of Blue Hill Observatory. Charles Brooks.

Haurwitz: This may be a little disjointed, but I remember going to the Blue Hill Observatory with my dad, hiking (we probably didn't hike very far because I was pretty young),

going up to the Observatory--we would drive down there on occasion.

London: What was your impression of the Blue Hill Observatory? Was the work being done there of any interest to you?

Haurwitz: No, this was before I was eight years of age probably.

London: After high school, you went to Brandeis. You majored there in--

Haurwitz: I began there in mathematics and eventually graduated with an undergraduate degree in physics.

London: Why did you start in mathematics and end up in physics, that is, why mathematics and physics?

Haurwitz: Well, it wasn't a conscious choice. I don't have the sense that my parents pressured me to go into the sciences, but first of all, there was never any question of whether I would go to college, that's just what one did. And I think for me, I had done relatively well in high school in the sciences. It was just the natural thing to do, akin to breathing. I just went along initially in mathematics, and then I ran into some problems when we got into courses in what was then called "pure mathematics." I don't think my mind did that very well and I had already, of course, been taking physics, so I decided, well, I bumped into my limit in math and moved over to physics.

London: Of course, in many ways, this was the type of background your father had. He studied mathematics and physics before he went into geophysics. Did he have any kind of influence in your pursuing the degree in mathematics and physics?

Haurwitz: I think only in the sense, on a subtle level, it was the environment I lived in. I remember distinctly going down to MIT and being around those people, and subsequently NYU and being around those people. So again it was a very subtle influence.

London: So the environment had sort of a spillover effect on you.

Haurwitz: Yes. My mother, of course, began to be trained, was in graduate school, I believe, in Germany in physics and worked for some time at MIT in GRD.

London: Cambridge Research Directorate.

Haurwitz: So I was very much in that milieu of the sciences.

London: After Brandeis, you went to the University of Michigan. That was in 1959.

Haurwitz: I went directly on.

London: So that the time between about 1954 and 1959, you were at Brandeis and still spent some summers at Woods Hole.

Haurwitz: The timing was interesting because--I spent the summers at Woods Hole and perhaps the last summer my father was already out here. I know at least one summer in Woods Hole I didn't live with him, and I don't think he was in Woods Hole. He may have already started coming out here, but as luck would have had it, in my freshman year at Brandeis, I met another freshman who happened to be from Denver, so there was a sort of coming together of various plans--my father's moving out here, I fell in love with a woman who lived in Denver, so then I started coming out here either between my freshman and sophomore [years] or sophomore and junior [years].

London: If I remember correctly, this was 1956.

Haurwitz: That's certainly plus one year at the most. At least one year my father wasn't out here. The second year, I think, he was either out here for the summer or already out here permanently. You're probably clearer on that.

London: He came out here permanently in 1959. He came first for about six weeks in 1956, and that may have been the time that you came here.

Haurwitz: The initial motivation was for me was not so much my father's presence here, but that I was in love with a woman whose parents lived here and she returned from Brandeis each summer.

London: What sort of contact did you maintain--?

Haurwitz: With my dad? I think, pretty regular contact. Well, that's interesting: as I try to think whether Bernhard and I lived here together, summers that would be, I really can't--I have somewhat of a visual memory and I cannot remember any of the places we lived, so I may have been--. When we were out here together, we saw a lot of each other because I worked at HAO. He obviously got me the job, and I worked summers at HAO with Walt Roberts, Gordon Newkirk and Hal Zirin.

London: Now let's get back to your graduate work at Michigan. Were your contacts with your father of a scientific nature at any time during any of this?

Haurwitz: Not really. It was difficult, I think, for Bernhard--he lacked a degree of patience

with his own son, and he had a much greater investment in me, I'm sure. So I think we learned relatively quickly that my going to him for help with the sciences wasn't the best thing in the world. So he wasn't directly involved in any of my studying activities.

London: He played no role at all in your graduate work?

Haurwitz: No, other than occasionally [asking], "How are things going? What's happening?" I think it was a time when I distanced myself somewhat from my parents. It may have been sort of delayed adolescence. I still had contact with them, but I had a need around my own psychological issues to be a little distant.

London: How about social interactions? Did you go hiking when you were there?

Haurwitz: I have some very clear memories of the two of us hiking. I remember that by the way from NYU also. We would go up to the area on the Hudson River near West Point and hike--Bear Mountain. We did quite a bit of that. I can remember that he didn't drive a car very much in New York, but he had one in the parking garage and he would go down and get it and drive up there. And I do remember hiking many times up to Lake Isabel, Long's Lake, there's another lake--there were some other hikes, but that one in particular we would do. Clearly a way we joined together.

London: So that your social activities were in hiking. Were there any other social activities that you enjoyed together?

Haurwitz: Well, we would go out for dinner, and this may be actually more recently, but I remember many times going to Louisville. We liked Colacci's--I think it was Colacci's and not the Blue Parrot--and we would do quite a bit of that. And often during Christmas vacations, I would come out to Boulder; I'm not sure when that was, but obviously while he was still in Boulder. I [would] spend Christmas with him. We didn't celebrate Christmas very much, but just spent time together. I also had other friends out here in Boulder by that time, some good friends.

London: Why did you, when you were at the University of Michigan, go into meteorology?

Haurwitz: Initially, I entered as a physics graduate student and I survived that for a year, and it was clear there was something missing between me and physics. I don't think I got it. I mean, I was clear there was something in my understanding that was lacking in a basic way. And I think as I had gotten to Michigan, I went over and sort of re-introduced myself to Wendell Hewson and I think I even, in that very first year, took a meteorology course because I wanted to see what it was that my father fiddled with. So when it became clear to me that I would not be successful pursuing a degree in physics, I switched over to meteorology and that in fact fit. I did much

better, felt much more at home, understood it better, did quite well, enjoyed it, of course. It was a sort of a gradual progression and I slid into it.

London: Just a side comment here about the fact that you hesitated to ask your father questions, scientific, professional-type questions. Yet he on the other hand, he may not have told you this, was always very proud when you did ask him incisive questions. Especially since he had been exposed to, in many cases, in teaching general courses, run-of-the-mill students, he always would comment to me (and this was not to be passed on to you necessarily, but just a comment) about how really you were anxious to get to the bottom of things. He was very proud, incidentally. He may not have told you, but he was very proud.

This is just a side comment.

Haurwitz: No, it's an important side [comment], and it's very nice to hear.

London: Except for dynamic meteorology or fluid dynamics, what other interests did he have, except for professional interests? What other interests do you know that he had?

Haurwitz: You know, in some ways it's sad because I feel like I know my father on a subjective basis--I have a very clear experience of him, clear memories, the way that we would interact, but in terms of interests, I am not so clear. He had mild interests in politics, although I don't think he was very active. He obviously enjoyed walking tremendously, taking hikes--they usually weren't tremendously strenuous things. We did some cross-country skiing together in which he nearly killed me.

London: He enjoyed that.

Haurwitz: The process of watching me drop by--what happened was I didn't know about cross-country skiing, I had a pair of downhill skis, and (this is a bit of anger here) he let me try and do cross-country skiing on downhill skis. You can't. It's exhausting. To this day, I have no idea what he was trying to do to me. So I just had to stop finally because--it was again in that area of Lake Isabel and Long's Lake. So we did that. He was not interested in American athletics. I remember he once came to a softball game of mine, I was a very active softball player, watched me slide into second base, utterly take the skin off my leg. I think he left shortly thereafter and never re-appeared.

So I don't have a good answer and it disturbs me I don't know more about what he was interested in. He was a pretty quiet person. He and I would kid a lot. I think my father communicated affection by teasing and kidding. I don't have a great answer to your question.

London: Right.

Haurwitz: You probably know more than I do. Having said that, in Woods Hole he and I would go to productions of Gilbert and Sullivan very regularly. There was a summer theater (there were many summer theaters in that area). I remember seeing a number of Gilbert and Sullivan and going to other summer theater with him. That was a pretty regular event. We would also (this was in Woods Hole) do a lot of walking on the beach, looking at horseshoe crabs and other stuff and nonsense on the beach. I remember those fondly, just walking with him. It was an easy way to be with him.

London: He kept his appreciation for Gilbert and Sullivan just about all through his life. He was not particularly close to classical [music]...

Haurwitz: My mother was. I have no recollections, other than when I would visit him in New York, I remember we listened to the New York Times classical music station. It was a very clear memory...

London: WQXR.

Haurwitz: Perhaps. There was very impressive announcer's voice, the voice being very impressive, and the chimes that they used. So to that extent, he had the radio dialed to classical music.

We didn't go to movies very much. He wasn't interested in a lot of popular culture.

London: At least for now, is there anything else you'd like to comment about?

Haurwitz: Sure. Whoever needs to can certainly pare this down (I tend to be wordy). I know there was a period while my parents were still married that my father left, probably for half a year, and went to Puerto Rico. And I think that was probably pretty upsetting to me.

London: That was in 1946.

Haurwitz: So that was preliminary to their--probably in part related to their ultimate divorce. As I indicated earlier, I don't have consistent memories of that whole time. I remember the house we lived in Belmont. We lived in Belmont until the divorce and then Bernhard went off to NYU.

For what it's worth, I always called my father "Bernhard." And my mother, "Mother." Not that they were formal, that is not the implication. First of all, I

mispronounced his name. I called him "Bernard." The "h" got lost. I mispronounced his name. He adapted to that. But of course, as I remember, my legal name originally was "Francis." It's in my passport. I don't think any of us liked the name "Francis," but somehow they indicated that "Frank" was not a legal name in Canada. So it wasn't until I got citizenship in this country that I changed my name to "Frank." But I was always addressed as "Frank."

London: Talking about your father's first name, I do know that one name he did not like at all was "Bernie," the diminutive.

Haurwitz: Yes. I know that to be the case also--I certainly never addressed him as that.

I remember trips with him to Toronto, I think, after my parents were divorced. For a week or so we would drive up there to visit his mother. His father was deceased by that point, and I don't remember his father at all.

London: That reminds me of another question that I have about your fraternal grandparents. As I remember the story, your grandfather, Bernhard's father, died in Canada. Do you remember when?

Haurwitz: I have no memories of that, except that I don't remember--he was not alive by the time that my parents divorced and he started driving up there to visit.

London: You would have been too young, I think, when he died. As a matter of fact, I'm not even sure he was alive when you were born.

Haurwitz: I'm sure he was.

London: Now you mentioned the fact that your fraternal grandmother was in Canada also, but as I remember, she died in South America. Was she visiting with your aunt?

Haurwitz: Probably. Or perhaps had moved there. I'm a little unclear about that.

London: Or had moved to be or stay with your aunt. Would that be in Chile?

Haurwitz: It must have been because that's where my aunt lived. She subsequently left South America.

London: While you're thinking, is there anything else that comes to mind?

Haurwitz: I have individual anecdotes. We were once, my mother, father and I, eating dessert and I was apparently getting too enthused about the ice cream, sticking my face too close to it and shoveling it in too quickly, and my father threatened to push my face

into the ice cream if I continued to do this. Of course, this was a challenge, we both met the challenge and I don't think--I mean, I think it was all regarded as pretty funny because I came up with a face full of ice cream. I don't remember him particularly punishing me--I mean, I don't think I got physically punished very often, if at all. My father would get impatient. If things went too far, he would get a sort of cold, somewhat petulant impatience, which I suspect was quite enough for me to back off, leave him alone, retreat.

END OF INTERVIEW