

Recollections

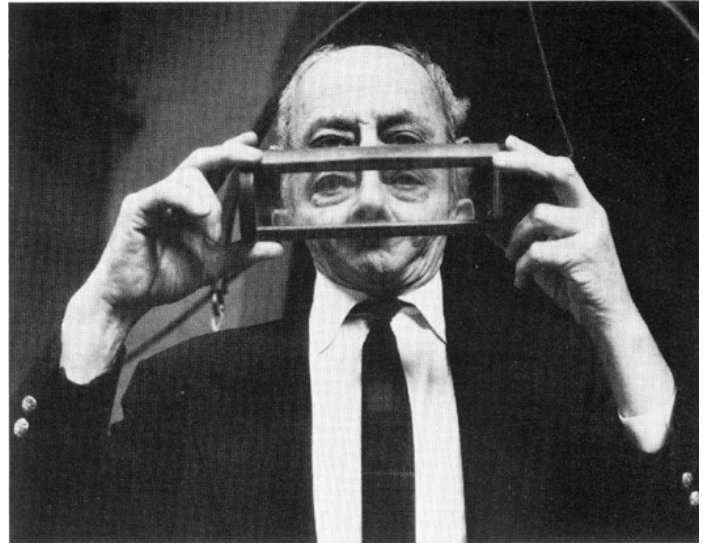
Exploratorium Staff and Friends

The Exploratorium staff and others who knew Frank remember him for more than his ideas. Frank could be gentle, argumentative, stubborn, courtly, sometimes irascible, sometimes poetic. But above all he was an honest and unpretentious man. Here are some Exploratorium staff recollections of their times with Frank.

During the months before Frank's death, the museum roof was being reconstructed. Exhibits were moved so that they would not be damaged by falling pieces of roof. One person remembers walking through the museum with Frank during roof reconstruction. "They were working on the roof and they had opened up the center section quite a ways up from where they should have. Stuff was falling and you could see some guy up there working. And Frank takes his cane and shouts, 'Stop! Stop work!' The guy just keeps on working and Frank yells again, 'Stop! Stop work!' The guy keeps on, and Frank lifts up his cane and says, 'Stop or I'll shoot you!' At that distance the guy couldn't tell the difference between a cane and a rifle. He stopped working."

In "Everyone is You ... Or Me," an article written by Frank, he explains that he builds exhibit that he likes; he designs things for himself – or for people like him. One staffer remembers that sometimes Frank carried this belief to an extreme. People were worried that visitors might hurt themselves on the Water Spinner, an exhibit in which a water tank spins rapidly to demonstrate how water in a tank can form a parabolic curve. "Frank got the tank spinning really fast. Then he stuck his head right into its path, and it whacked him – really hard – on the side of the head. I was shocked, but he just straightened up and smiled and said, 'That wasn't bad.'"

As anyone who has gone for a drive with Frank can testify, Frank was a lousy driver. One person claims, "Anyone who'd ridden with Frank knew that he had a guardian angel. You'd be driving with him and he'd be talking and you'd want him to keep talking because he was saying such fascinating things, but it was terrifying because he was looking at you the



whole time he was driving down the street." Another recalls, "There were a lot of times that we had special funders and the idea would be to go to lunch. We'd head out to the parking lot and try to head the party off away from Frank's car. But it would never work and we'd end up stuffing everybody in the back of the car and go careening up to Upton's, a local restaurant. I wondered if they gave us money because they didn't want to have to go out to lunch with us again."

Frank never seemed to worry about how people might react to his eagerness to explore natural phenomena. One person recalls, "Two summers ago, we went out to Original Joe's after a performance at the museum, and Frank bought us all beers. We had to drink the beers exactly the right amount so that he could do triple harmonic series on each of the beers at the table' and play a tune. Of course we had to drink a couple of beers apiece before we could get it exactly right. And he played incredibly high screeching third harmonics that had the entire restaurant rushing in there to see what was happening."



Frank was concerned with the precise use of the English language. One person recalls, "I had written in a letter, 'It is impossible to describe in such a small space all that this grant has meant to us.' Frank got very mad, and he said, 'Always use words to say exactly what you mean. It's not impossible to describe; say it's very very difficult to describe.' But then I caught him. Later on in the text, he had written, 'an unbelievably competent staff,' and I said 'No, you can believe how competent the staff is.' And he laughed. 'Can I change it to incredibly?'"

Distracted by a big idea, Frank would occasionally forget about little unimportant things. One staff member remembers, "One afternoon, Jimmy walked into the shop carrying this big wad of keys, and he said, 'Have you seen Frank?' and I said, 'Yeah, he's in the office, he's been there about an hour.' And Jimmy says, 'Well, his car was at the curb and

the motor was running and door was wide open."

Frank was often stubborn and difficult to convince. What made it even more difficult, one staff member says, is that Frank was usually right. "He didn't make a career out of arguing to win the argument," one person points out. "He liked to win – but that wasn't his main purpose. He argued to try to arrive at a solution." The layout of the Exploratorium offices is a case in point, a good example of argument to arrive at a solution. "When we were building the offices here, we had a lot of go-rounds with the architects about how to fit so many people into such a small space. Being modern architects, they were trying to convince us to use modular offices – you know, with low partitions to make little cubbyholes. And they were having a hard time convincing us, so they said, 'You just have to see it.' So we went to the headquarters of PG&E, which is apparently sort of a model office. And there's this gigantic room, partitioned off into little cubbyholes with all these partitions about five feet high. And the architect was talking about how this was the office of the future, and about how this makes people learn to talk softly. Frank was standing there and he said suddenly, really loudly, 'I notice that everyone's being very quiet in here!' All of a sudden these heads start popping up over all the partitions to find out who's shouting. And Frank said, 'See what would happen? I wouldn't he able to yell.'"

Even in sickness, Frank showed an unquenchable love of learning. One person explains, "A few weeks before he died, Frank's leg was giving him a lot of trouble. The doctor prescribed a bone scan. In a bone scan, a radioactive element, in this case technetium, is injected into the blood stream. Technetium acts chemically like the calcium of bones and tends to be absorbed in the same locations. The injection is given in the morning and, later in the afternoon, after the technetium has had a chance to be absorbed, the body is scanned with a gamma-ray detector to see where the technetium has been absorbed. After his injection, Frank wheeled into the office – his leg wouldn't allow him to walk – and got a

group of people together to go up on the mezzanine to the Radioactivity exhibit. He wanted to see how radioactive he was! So we all went up the elevator and as Frank approached the exhibit the geiger counter started clicking faster and louder until it was obvious that Frank was indeed quite radioactive. In my physics teaching course at State I would be required to sign out a source as hot as Frank. We went back down the elevator to see if Frank was radioactive enough to discharge the Giant Electroscope exhibit, but he wasn't quite that radioactive."

Frank's unique view of the world changed the way that many of us looked at things. One person says, "I remember that we were coming back from lunch in his car – and as we rounded the corner of the building here, we noticed that the roofer's trailers and trucks had been removed and there was only one thing left behind, and that was that cart-like machine that heats up the tar. It's dirty, and it's smelly. Suddenly, in this voice that made me think we had just come across a wounded deer in a meadow or an injured bird, Frank said, 'Ah, the poor thing,' And I looked and what he was talking about was this smelly dirty thing."

Frank did not believe in arbitrary rules. If kids wanted to run at top speed across the museum floor, why not let them run? They hardly ever hurt themselves. Besides, Frank liked watching them run. He extended his dislike of rules into every area. One person says, "I remember one meeting where someone was trying to convince Frank to agree to a practical solution by saying 'But Frank, we live in the real world.' 'No we don't,' Frank said. 'We live in a world we made up.'"

