## Science on the Café Scene by Roald Hoffmann

One day in spring 2001, when I was in New York City for a few months, my friend K.C. Cole, who writes inspiringly about physics, came to me and said, "I want to set up a reading at the Cornelia Street Café in Greenwich Village to publicize my new book The Hole in the Universe. But when I went to the owner of the café, Robin Hirsch, he said, 'You're not famous enough.' Roald, would you like to read with me?" I agreed. So K.C. returned to Robin with a plan to have both of us read. This time Robin said. "You're both not famous enough!" We thought again, and came up with the idea of adding Oliver Sacks, whose work K.C. often cited, and whom I knew well. Oliver agreed, and, of course, now we were famous enough.

Thanks to a friend then at *The New Yorker*, Ren Weschler, and to the wonderful imagination of Angelo Verga, the poet who organizes readings at the Café, this item appeared in *The New Yorker*:

The author Oliver Sacks joins Roald Hoffmann, a Nobellaureate chemist, and K.C. Cole, a science writer whose latest book is "The Hole in the Universe," for an evening of readings and talks about "the concept of nothing, the void, the Buddhist idea of emptiness, in art, science, physics," according to the evening's organizer, the poet Angelo Verga. "It's a difficult thing to explain," he says. "It's such an intriguing idea that I'm just going to get out of their way and give them their space."

It was a magical evening. The theme "Nothing" (everyone has lots to say about nothing), and Oliver's name, had three hundred people clamoring to get into a small cave-like café in which Robin has been hosting music and the spoken word for twenty-five years.

K.C. read of the vacuum and its significance to physicists; Oliver spoke of the lack of sensation, a nothing of another order; and I found to my surprise that I had written some poems on the theme. Or something. The atmosphere of the evening was wonderful. When it was over, I asked Robin if he'd let me organize a monthly series. He agreed,



Robin Hirsch, one of the owners of the Cornelia Street Café, and Roald Hoffmann in front of the Café.

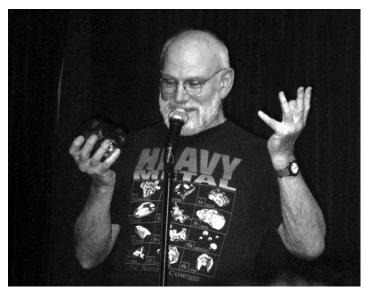
and so "Entertaining Science" began in January 2002.

The setting is a dark, narrow room. Not quite a Sacromonte cave, it certainly looks like you'd imagine a Bohemian café. There's a stage about eight feet square.

We have less than two hours. Inspired by our only model, that spring 2001 evening, I've tried to have a theme for each show and two to four people. Sometimes I let one lead person pick a theme, and together we talk about other participants and performers. For instance, Diane Ackerman wanted to talk about art and the brain, what eventually became her Alchemy of Mind. So she and I discussed neuroscientists in New York. The performers get paid nothing, nada, ni odnoi kopeiki -"so what's new," my young friends in music and the theatre say. We have to depend on local talent, or people traveling through New York. Diane mentioned that she had loved a book by Joseph LeDoux, of New York University, who studies emotions, especially fear. "Let's ask him," I said, and sure enough, he agreed. I then suggested adding an actor/storyteller friend of mine, Jack Klaff, who did a won-



The audience at a Cornelia Street Café cabaret. Can you recognize the Academy member in the crowd?



Oliver Sacks in his element.

derful monologue on what goes on in an actor's mind.

I try to get in music because it works so well in the café setting. So when the theme was "Blind Will and Selfish DNA," and tumor biologist and writer George Klein read his masterly essay on that theme, I thought of asking the electronic percussion player and composer Lukas Ligeti to join us. I wasn't sure if George would like Ligeti's music, but there was a Hungarian connection. And I detected an interest in science, a scientific thread in Ligeti's composition. It worked.

Another time the theme was "Heavy Metal." Now the music part was obvious - it was provided, on a steel guitar, by a wonderful instrumentalist and electronic composer, Elliott Sharp. Oliver Sacks read from his Uncle Tungsten and could not resist demonstrating the properties of metals. I talked about packing polyhedra, and gamma brass. In



Koji Nakanishi doing his magic.

a café! And Daniel Brush showed his sculptures in steel and gold.

Among Academy members who have performed have been Jerry Meinwald (in a program with the theme of "Metamorphoses"), Koji Nakanishi (in "Now You See It, Now You Don't"), Benoit Mandelbrot (in "The Smooth and the Wildly Rough"), Lynn Margulis (in "Thermodynamics and the Purpose of Life"), Joel Cohen (in "How Many People, Past and Future?"), and Paul Greengard (in "Right Brain, Left Brain").

My initial problem in organizing the evenings was that when I thought of interesting people (scientists and artists), I always came up with people my own age. This would not do. Fortunately I have pretty broad musical tastes, and New York City is brimming with young dancers, actors, and musicians eager to perform. I took and take risks, and now have a group of young people who will recommend talent. Or jump in themselves. I also love the hazard of connections. And mother-son teams.

After the two-hour set, the performers and friends move to the restaurant upstairs and enjoy their only pay - a good free meal. The discussion flows; it is a natural continuation, among friends, of what started in the cave.

What is my purpose in this series? To bring science to the café scene? Yes, perhaps to teach a little science. But ultimately we are not serious, except in the way that life is (and is not). The performers in the series juxtapose science with music, the written and spoken word, art and performance. The Cornelia Street Café audience is fantastic. The people who come - a smattering of scientists, some friends of the performers, Village denizens, artists, people off the street – are primed to make every connection the performers want. And then some.

When it works, science emerges as human, lively, and fun.

Perhaps the themes tell the story - aside from those I've mentioned, here's a selection: "What's So Funny About Science" (with Steve Mirsky, Marc Abrahams, Lynda Williams, and Jim Lyttle), "The Two-Fisted Singing Universe" (with Joel Primack, Nancy Abrams, and Richard Brandt), "Vox Humana" (with mezzo-soprano Stephanie McGuire and Johan Sundberg, expert on the acoustics of the human voice), "Coltrane, Einstein, and Cosmology" (with Stephon Alexander, Papa Smurf, and Sharon Glassman).

"Entertaining Science" is the name of the Cornelia Street Café cabaret, the first Sunday of every month. We've become the hottest cheap ticket in New York City, and have filled the house mano a mano on Superbowl Sunday and the Sunday preceding the 4th of July. It is fun. ■

Roald Hoffmann, Frank H. T. Rhodes Professor of Humane Letters at Cornell University, shared the Nobel Prize in Chemistry in 1981 for his theoretical work on the course of chemical reactions. A Fellow of the American Academy since 1971, Hoffmann is a playwright, poet, and essayist as well as a chemist.

Some of the Academy members who have performed at the Café:

Joel Cohen Paul Greengard Roald Hoffmann Benoit Mandelbrot Lynn Margulis Jerrold Meinwald Koji Nakanishi Oliver Sacks