

Molecular Music

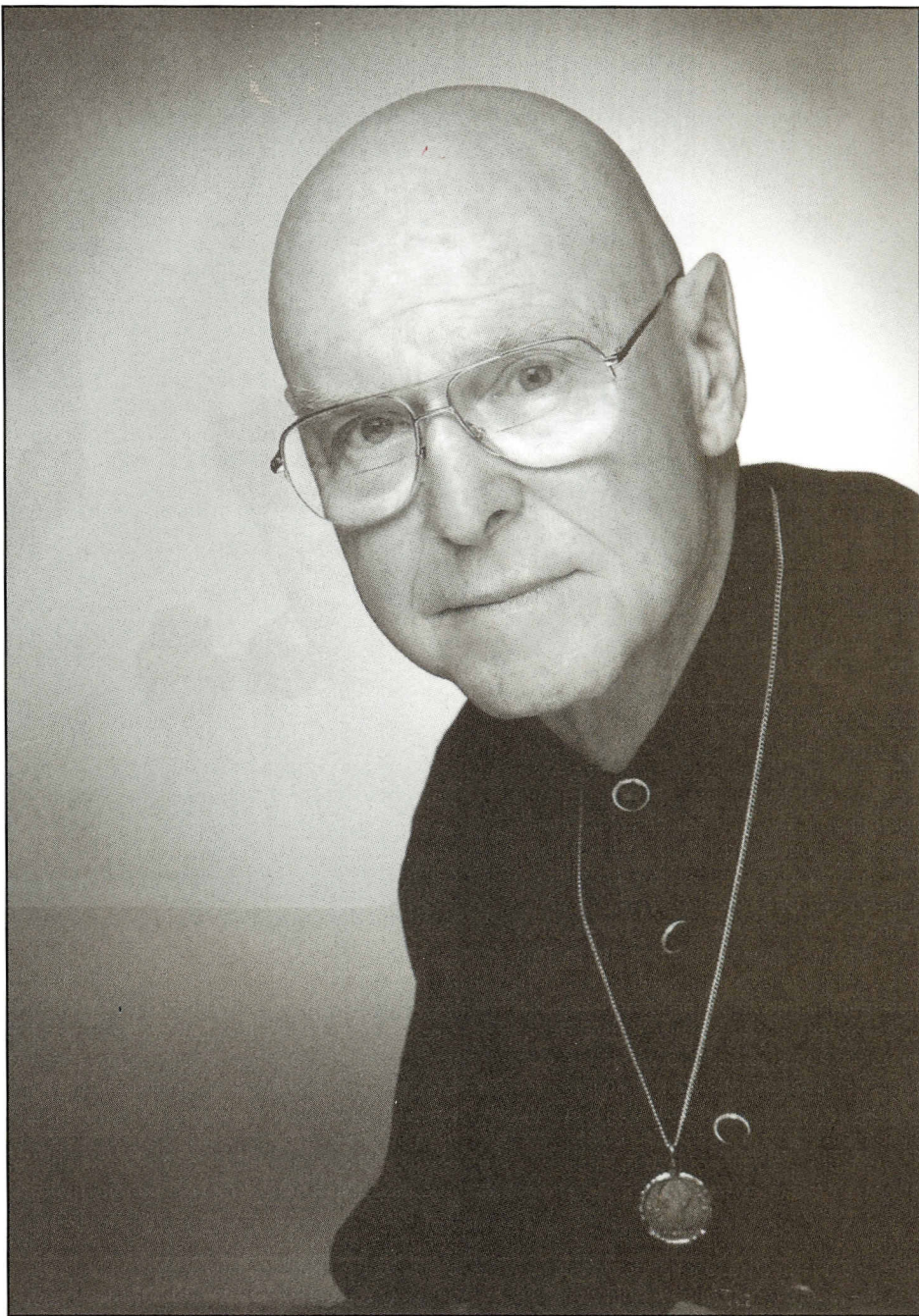
By Charles Fitts

I am a composer. Suppose you are in a concert hall listening to one of my string quartets or symphonic pieces. My job is to cause the musical instruments to move molecules of air around the room, creating tiny alternating pulses of pressure and vacuum that move your eardrum back and forth.

I love what I do. It's really fun to push little pulses of air into people's ears and watch how they react. Depending on the pattern of the pulses, responses can be happy, sad, or even heroic. Sometimes there is a reaction of sheer delight, and sometimes there is no response at all. I love surprises.

I'm not the only composer who moves air molecules around. When Igor Stravinsky premiered his *Le Sacre du Printemps* in 1913 at the Théâtre des Champs-Élysées in Paris, his air molecules really bothered people. There was a big riot with catcalls and fights breaking out in the audience. What a public relations bonanza! After that, Stravinsky never had to worry about name recognition.

Even the great classical masters did it. You probably don't like to think of Beethoven as someone who just pushes air molecules around. It's much more dramatic visualizing him sitting late at night, composing the *Fifth Symphony* by candlelight, in the white heat of emotion, grappling with fate, and creating his popular masterpiece.



Okay, I like that image too. And I experience the same emotional intensity as you when I hear that famous figure of fate knocking at my door. But the fact remains that Beethoven's wonderful creation is nothing more than a subtle pattern of alternating pressure and vacuum in your ear causing microscopic

excursions of your eardrum. These excursions generate a sequence of electrochemical neuronal firings across the synapses of your auditory nerve, and they travel at millisecond speeds to your auditory cortex. Then what happens?

WHAM! It's fate grabbing you by the throat! It's Napoleon and the

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French Revolution all rolled into one! Your cortex has turned those air molecules into music that is truly sublime. The unanswered question for both musicologists and consciousness researchers is how such a physical process can transform mere air molecules into such a real and intense emotional experience.

The realization that I communicate with you through this physical process has profoundly changed how I compose. I began to write just for the sheer enjoyment of creating sounds that never existed before. I stopped composing at the piano, because I found my fingers kept repeating the figures and patterns that were most comfortable for them. I eschewed musical clichés, those figures and gestures which are comfortable and catchy, but which add nothing new to your musical experience.

I realized that my brain is like a

digital recording of the sum total of my life experiences. It is a copy of my culture and all the music I have ever heard. It is a journal of all the emotions I have ever felt. I decided to reverse the normal process of hearing, by working backwards from these experiences toward the notes in my score which ultimately create the waves of energy I communicate to you. Such music originates in the molecules of my cortex, is translated into ink molecules on the score, which are finally transformed by the performers into the molecules of air, which *you* interpret in your own auditory cortex. It is, in fact, molecular music.

In order to access this source material, I found that I must temporarily suspend judgment as to the value of what I am composing. Through a process of deep meditation, the creative process becomes automatic and results in a score that I am able to evaluate only

after it is completed and played back to me in my mind or through my own ears in an actual performance.

I am always surprised at the result. I love surprises.

Houston composer Charles Fitts composes symphonic, choral, and chamber music which has been performed in the U.S., U.K., Korea, and Mexico. His latest work, the Concerto for Clarinet and Orchestra, will be premiered in February 2006 by the British Clarinetist David Campbell and the Houston Chamber Orchestra, directed by Michael Lowe. The venue for the performance is Houston's new Zilka Hall. The composer and his wife, Susan Love Fitts, divide their time between their home on Lake Conroe and their adobe house on the Rio Grande in the Big Bend region of Texas.