Schwendener, Peter, "The Best Tuba Player in the World", THE READER, June 1, 1984

"What are you going to play for me today?"

Arnold Jacobs's student opens his exercise book to an etude by "E. Paudert," as I read the unfamiliar composer's name through the coils of his tuba. E. Paudert's unmemorable etude, marked "adagio," is a study in the production of smooth, rich tones, which Augie's, as he surprises the silence of the room with its opening seven-note phrase, are not.

"Is that your best sound?"

"No. "

"Do you know what your worst sound is?"

"Yes."

"Make it."

The heedless blat is more pleasant to listen to than the careful, constipated first attempt.

"Now just make it better."

Augie plays again and Jacobs cuts him off after three better but still uncertain-sounding notes.

"Just mentalize the phrase, take a minute to get its sound in your mind. Then interpret this etude as if it were Strauss or Wagner or Berlioz or a message to your girl friend or your audition piece for Zubin Mehta. He's standing outside the door, ready to offer you a \$90,000-a-year job."

Augie, a portly local college musician in a tight-fitting suit, frowns in the act of "mentalization," hoists his tuba into playing position, and the invisible Zubin Mehta gives someone else the job.

He's ten minutes into his hour-long lesson, which began at three o'clock this Friday afternoon in room 428 of Michigan Avenue's Fine Arts Building. Shabby, high-ceilinged, full of tubas and other wind instruments, tape recorders, microphones, oscilloscopes, medical books, anatomy charts, and various spirometers, or breath-measuring devices, this is a famous room. As a teacher, Arnold Jacobs, the Chicago Symphony's 69-year-old tuba player, has never been particularly identified with his own instrument. His other students this afternoon were two French hornists, one of them a member of the Chicago Symphony, a professional flutist, and a college trombonist from another state who had come here to spend an hour with him, then leave. Trumpeters, clarinetists, cornetists, oboists, and piccolo players have also studied with him. Among the world's wind musicians, he is regarded as an earthly Aeolus, or god of wind. He knows more about their common denominator, musical breathing, or the moving column of air that gives a wind instrument its sound, than anyone alive, and is famous for what has been called a miraculous ability to help any wind player with any musical problem. Most of the Chicago Symphony's wind players have studied with him, also the likes of trumpeter Vincent Penzarella of the Baltimore Symphony, jazz trumpeter Law Soloff, tubist Floyd Cooley of the San Francisco Symphony, and dozens of members of European orchestras; also the likes of Augie, who, now some 20 minutes into his \$60-an-hour lesson, still seems unequal to E. Paudert's etude.

"You're concentrating very hard on correct fingering and blowing, but I sense a vagueness in you about how you want to sound. Play it again and let me feel." Augie plays with Jacobs's hand under his

diaphragm. "Your muscles are going into a contraction state. You're trying to force air through the horn by changing the shape of your body." Jacobs goes to a small sink against the wall and rinses out a red air hose, which he then hooks up to one of his homemade spirometers. He's built most of them himself in the basement of his house on the south side, which used to be his teaching studio. There he pioneered, in the late 50s, their use as musical learning tools. Their components are mercury meters, draft gauges, and other borrowed readout devices, all-purpose funnels, industrial flow valves. The readout device of the one he wheels over to Augie consists, like those of conventional spirometers used in respiratory medicine and athletic testing, of a hollow ball in a marked glass cylinder that rises to register lung capacity, or the maximum amount of air, measured in liters, a person can move in or out of his lungs in a single breath. Augie, the hose now in his mouth, lifts the ball. Shown to be around five liters, ordinary for a person his age, his lung capacity isn't responsible for the dull, feeble quality of his sound.

Jacobs tells him to "aim" and sustain the ball at specific liter levels: 2, 3, 3 1/2. He does this, after a couple tries, with no apparent difficulty. "It didn't take any straining to do that, did it? If you give your wind a specific duty to perform outside your body, it will automatically carry it out. In your playing, you're confusing your stomach muscles with your bellows system, which responded automatically to your mental command that it make the ball do something definite, as it would to the 'command' that it blow out a match or perform some other task you do without consciously directing the physical processes involved. You're watching your body while you play to make sure you're doing everything correctly. The natural functions of the stomach muscles you're trying to play with are childbirth defecation, or survival on a battlefield. Nature doesn't know anything about playing music, only about survival. Don't measure the quality of your playing by the energy level of your body, the only way to judge it is by the excellence of your sound. To sound great you have to have a beautiful sound in the mind, a musical message, a definite statement. Play that first phrase again. "A little better-sounding, though still no product of a beautiful sound in the mind." I don't hear you making a statement, I hear you asking a question - 'Am I playing this correctly?' The acts of blowing and fingering your horn, like walking and talking, are directed by the seventh cranial or motor nerve, and their excellence depends on the message in the brain that initiates them. This doesn't mean having vague happy or 'positive' thoughts about music. I'm your audience right now - what, exactly, do you want me to hear? I need to be entertained. Your only product, as a musician, is excellent sound, and your teacher at school may care how you get it but I don't and audiences don't.

Jacobs, still a full-time musician, teaches only two or three afternoons a week, and has only a few regular students. Most of the professional and college musicians who "make the pilgrimage" to his studio, as an interview in a musician's magazine once put it; come with highly specific problems, often psycolgical ones for no more than a few lessons.

"Wherever the orchestra tours," says Chicago Symphony bass trombonist Edward Kleinhammer, "there's always a gang of all kinds of horn players waiting for him. " Ray Still, the CSO's principal oboist, says, "I send most of my students to him for at least a few lessons. His world-class reputation among musicians is based on what he knows about breathing, as well as about the psychology of making music. He's on my official resume as my most influential teacher, and no two instruments, in terms of the amount of air needed to make them sound, are farther apart than the tuba and oboe. They use, respectively, five liters per second and three to five liters per minute, yet the principles of efficient breathing that determine the

excellent playing of both are the same, and of these principles he's the most effective teacher in the world, the guru, the mentor. I've never formally

studied with him, just scrounged lessons over the years without paying for them. He's a master communicator, and loves to talk, and I corner him at parties or rehearsals and get him talking about music." Still and others say that the technical and psychological problems of many of the musicians who come to Jacobs are results of ways they've been taught to play or practice: Augie's teacher had been telling him to contort his stomach muscles to widen his chest cavity, thereby increasing his air supply for such things as the sustaining of long phrases.

Jacobs makes himself an example. "How your body feels when you're playing isn't important. I'm getting old and my lip hasn't felt good in years. I'm on medication for severe lung problems, and the physical comfort I had in playing when I was your age is gone. I'm an old cripple, but I still love to play, and I fool my body and my audiences. If you provide your seventh cranial nerve with an excellent musical message, your body and your instrument; which I know you know how to play, will respond. Am I confusing you?"

"No. "

"Look at that phrase again, think about it, put words to it if it helps. I'm not telling you what your musical message should be, I'm only saying that you have to have one. Give me the horn." Augie removes the mouthpiece of his tuba and hands it to Jacobs, who fits the mouthpiece in his pocket to its stem and plays a hair-raising series of high bugle calls that vibrate the machinery in the room, an Olympian barrage of clear, elastic sound that wouldn't be so startling if not heard so soon after Augie's timid assaults on the etude. "Those are my first notes of the day," Jacobs tells him, "and they sound pretty good to me. Warming up is fine, but if you're always thinking musically you should be able to pick- up your horn at any time and get your best sound. The first sound after silence should always be your best." He "interprets" the first few measures of the etude, which turns out to be, in his rendition, a piece one might pay to hear performed. The tuba goes back to Augie who, as he slowly works his way through the piece during the remaining half-hour of the lesson, sounds mysteriously better and better. Jacobs keeps interrupting his playing to suggest various fingerings or valve rotations, as well as to further explain lips, lungs, muscles, cranial nerves. Rather than his apparently boundless and at times confusing specialized knowledge, it appears to be his honest longing to be entertained that by the end of the lesson has exorcised Augie's nervousness, gratuitous muscular contraction states, and general "paralysis by analysis," as Jacobs at one point called the symptoms of his thwarting concern about playing "correctly." When Jacobs, glancing at his watch, finally tells him to "forget about your lips and body and the horn and just sing, be the instrument's vocal cords," Augie's final rendition of the etude has an almost comical panache: he tosses it off and, smiling, slouches back in his chair.

Arnold Jacobs is the best tuba player in the world. Though this is the common testimony of a large number of leading brass and woodwind musicians (more than a few of whom, among them Ray Still, trumpeter Adolph Herseth, and French hornist Dale Clevenger, happen to be members of the Chicago Symphony, whose tubist Jacobs has been since 1944), it is most decisively that of another classical tubist, Harvey G. Phillips. A professional recitalist (rare, for a tubist) who has commissioned 127 works for the tuba, Phillips holds the title of distinguished professor of music at Indiana University in Bloomington, and is one of the founders of an international organization called T.U.B.A., the Tubists' International Brotherhood Association, which represents "instrumentalists of the entire tuba family."

The tuba family has supplied the world with no stars on the order of Pablo Casals, Arthur Rubinstein, Jascha Heifetz, or the French hornist Barry Tuckwell, yet it has its luminaries, whose reputations are mostly among classical musicians. They include Roger Bobo of the Los Angeles Philharmonic, John Fletcher of the London Symphony, Floyd Cooley of the San Francisco Symphony, and Phillips himself, a former orchestral player who is currently the only American tubist represented as a soloist by a major record company, Columbia, which also represents Barry Tuckwell and the trumpeter Maurice Andre.

Described by The Instrumentalist, a magazine for musicians whose February 1973 issue was devoted to the tuba, as "a player, teacher, organizer, and champion of the tuba," Phillips is the organizer of Chicago's annual "Tuba Christmas," the concert by no fewer than 100 otherwise unaccompanied tubas that is given each December at the Daley Center Plaza. Last December's Tuba Christmas, which he says featured mostly professional players from 87 American and European cities, was dedicated to Arnold Jacobs. The dedication was to acknowledge, as Phillips told me, "the incalculable debt owed him not only by modern tubists, but also trombonists, trumpeters, flutists, oboists, wind musicians everywhere, whatever their instrument.

"Insofar as many of those who have studied with him over the years are now themselves teachers, his ideas and pedagogical approach have influenced many who have never heard of him, which, if they haven't met him personally, is their loss. Though I've never formally studied with him, I've been his friend and drinking companion for a long time, and consider him the main influence on my career. I'm always telling my students that even if they can't afford his lessons they should at least travel to Chicago to meet him. Any musician would benefit just from being in his presence: he walks, talks, and breathes music, lives music, like no other player I've ever known.

"The sheer number and variety of wind players who have studied with him, and I also know of string players and singers [Jacobs has been, in his time, both a professional singer and string bassist, might seem amazing in light of the fact that, as he says, he likes to keep his playing and teaching separate, and has never written any books or formally promoted himself as a teacher. His teaching reputation is a function of his having been with one orchestra so long, that is, in one place where people can find him, and also of the fact that orchestral wind players, especially brass players, are more fraternal than other musicians. The brasses are, at least physically, the hardest things in the orchestra to play, and brass playing today is very competitive. Jacobs has a very keen appreciation of the fact that a professional musician is paid for his sound, and he's helped countless older players who've come to him with reduced lung capacities, nervousness, or any number of problems they might be having from feeling their conductors don't like them, someone's after their job, or whatever. He can make a player forget all his demons and concentrate on the product, his sound. Despite the competition, we're always trying to help each other, holding symposia, trading and recommending students, meeting on otherwise professional occasions to play and eat and imbibe and worry about our playing. In his ability to solve technical or physical problems he has no equal as a teacher, yet his practical knowledge of the relationship of human anatomy to playing and of virtually every large and minute aspect of blowing and fingering a horn is not what makes him a genius. He's a great artist who naturally and effectively shares the quality of his art with other artists, an ability it's hard to comment on other than to say it's very rare among great artists. He knows how to create, in a player, a musical mind. He knows the way to a student's mind and how to make it more musical, how to effectively teach the truth that technique, or playing well, is always and only the function of a beautiful sound in the mind. [Most of the musicians I asked about Jacobs used in our conversations, without bothering to explain them, the exact words and

phrases- "paralysis by analysis," "control center of the brain," "minimal motor functions" - I heard Jacobs, who coined most of them, use in his studio: they seem to have escaped from there into their common musical vocabulary.] He is a master of motivating artists and making them self-reliant. He is, simply, God's gift to wind musicians everywhere, and I hope he lives forever. "

God's gift to wind musicians everywhere, who fortunately seems not to regard himself as such, is an agreeable man to meet and talk to: he has a relaxed quality about him that drives away caution and makes you want to talk, as to a guileless and good listener.

A handsome man with a full head of white hair, long sideburns, and a thin mustache, he is known to his friends and students as "Jake." The slanting sharpness of his features, along with the mustache and his deep voice, gives the impression of someone born to wear an orchestral coat and tails.

His robust appearance belies the state of his health, which is, for a wind musician, miraculously bad. He had a heart attack last fall, and only recently returned to playing and teaching from several months in a hospital. In 1982 he had a cancer operation, and he currently undergoes radiation therapy. His most significant physical problem is a multiple disaster of the lungs called COPD, for chronic obstructive pulmonary disease. It involves asthma, bronchitis, and other disorders whose names he doesn't know, despite his own life-long pursuit of anatomy as a "hobby" (his favorite book, as a boy, was Gray 's Anatomy). Medical friends of his at the University of Chicago Medical Center have over the years let him use their more sensitive spirometers, laboratories and other facilities for his research into musical somatotypes, or how various players' bodies affect the quality of their playing. Much of his teaching is based on giving musicians a visual sense of their wind as "having a duty to perform outside the body." Once they get this they are prepared to receive his advice, which fits itself to any number of individual somatotypes, on how to use their wind most efficiently, or artificially enhance it by various physical or instrumental techniques (holding no medical degree, he doesn't treat anyone or prescribe drugs). Seven liters, he says, is around the largest lung capacity he has ever measured in a musician. Though there is no such thing as an ideal lung capacity, three and a half, around which his fluctuates today, is considered small. There is no comment on this other than his own, that "I can still fool audiences with my playing, and even Solti seems to like it. "

The harp and the tuba are a symphony orchestra's only solo instruments, or one-man sections. Speaking generally of the tuba's orchestral role, Harvey Phillips says, "Unaccompanied by others he might fall back on, as are all the other wind and string players, the tubist has to be a very resourceful and refined musician. Insofar as tutti playing [that in which all members of an orchestra take part] is infrequent other than in finales, the tuba is the only instrument of its kind in a constantly changing chamber ensemble. In the course of a symphony the tubist might be called on, first, to play in unison with the contrabasses as, in effect, a ninth member of their section. Later he adds himself to the French horns in a solo passage- many composers, Prokofiev particularly, use this combination. Then there might be a passage as in the second movement of Mahler's First Symphony, when he makes up part of a literal chamber ensemble, in this case consisting of himself, the principal flutist, the bass clarinetist, and the violin concertmaster. In a chamber recital these four players would be seated together, while here they're scattered around the stage: their abilities to blend their pitches have to be excellent. The tubist, who is called on to do this more than any other member of the orchestra-adapt his sound to an infinite number of large and small instrumental combinations - has to be highly flexible and universally musical."

The orchestra's "low brass choir," as it is called, consists of the four-man trombone and the one-man tuba sections. In 1971 the CSO's low brass choir recorded, for the Educational Brass Recordings Company of Wilmette, an album of excerpts from the works of Mahler, Bruckner, Berlioz, Wagner and other brass-intensive composers. Titled, simply, The Chicago Symphony Trombone and Tuba Sections, it exposes what goes on down there. Other than in unison playing, the unaccompanied sound of the five instruments is most like that of an organ's bass pedals, as on a hymn like excerpt from the fifth movement of Mahler's Second Symphony (Resurrection). Jacobs plays the euphonium, or tenor tuba, on the "Mars" segment of Holst's The Planets, which is not "choral" but broken and swirling, a soft, spreading pool of sound; also notable as demonstrations of the emotional and dynamic range of horns vulgarly associated with volume and buffoonery are whispered dissonances from Wagner's Wotan's Farewell and Die Walkure, and a piece written for partial low brass choir by the French composer Henri Tomasi called Etre ou ne pas etie, in which the tuba, as Hamlet, sings a recitative against a three-trombone accompaniment.

Born in Philadelphia in 1915, Jacobs grew up in California, where his parents moved six months after he was born. The family moved around, living in Long Beach, where his father was a shipyard paymaster, also in the nearby towns of Santa Monica and Willowbrook. His mother was a vaudeville pianist. He started playing the piano at four, and quit a year later. His first brass instrument was a bugle given him by the Willowbrook boy scout troop. He learned to play it without a teacher, as he remembers. "Less than 500 people lived in Willowbrook, which was on the edge of a desert. There were no brass teachers. I learned bugle calls from hearing my mother play them on the piano, reading them out of a boy scout music booklet. I learned by the training of the brain, sort of like the Suzuki method, I suppose: just by listening to the notes and then trying to imitate them. I wasn't involved with embouchure or mechanics or procedure, only in getting a good sound, which I found I could get. I was 11 years old, too young to be a boy scout, but the local troop needed a bugler, so they put me in a uniform, and a couple years later I won a silver-plated bugle in a scout music competition."

In junior high and high school he successively learned the trumpet, trombone, and tuba. He experimented on his own with various ways of practicing. Though hardly alone as a teacher, he has always advocated "mouthpiece practice," or rehearsing the actual playing of a brass instrument by buzzing melodies through its detached mouthpiece. Separated from his horn, the. student can hear, and develop, the sound he says should be in his mind before he picks it up. Many brass teachers, he says, regard mouthpiece practice as a waste of time. "Shortly after I started playing trumpet, when I was 13, I kissed a girl for the first time. We were playing spin the bottle at a party. She had scarlet fever and I caught it from her. She didn't have a bad case, but I developed nephritis, an inflammation of the kidneys that threatened to become a deadly complication. I was in the hospital for a winter. At first I was too sick to think about music, but when I started feeling better I had my mother bring me my trumpet mouthpiece. I loved music, and just buzzed it in my bed. When I finally got home and picked up my horn I was playing better than when I went in, and I've kept up mouthpiece practice ever since. The objection to it I've heard is that practicing without an acoustical output may alter your physical perceptions of playing, but this is what I like about it as a learning tool. I like to subject myself and my students to what I call strangeness, the sudden withdrawal of familiar ways of doing things. I take away their instruments and make them sing a piece they're working on, or have them do things like play while jogging around the studio or doing deep knee bends to demonstrate the irrelevance of crude strength to playing: they find they can play well with diverted strength, because they have to concentrate. Or I have them

hyperventilate or do some exercise to get out of breath and then have them play, to show how a reduced lung capacity, if used efficiently and with concentration, can still supply the amount of air needed to play well. Familiar patterns of playing often perpetuate familiar problems, whether with embouchure, breathing, or fingering, dogmas about which are unfortunately taught in many university music departments. Play strangely, wrongly if necessary, do anything to get an excellent sound. Though I'm familiar with them all and glad to go into them if a student wants me to, I don't teach methods, because an excellent sound in the mind, what I go for, 'contains' in itself everything necessary to its expression."

The trumpet shares the fingering of the E-flat tuba (used in marching bands, as opposed to the double-C or symphonic tuba), with which he had "instant success" in high school, from which he never graduated. The trombone, not the tuba, had become his favorite instrument, yet his trombone somehow quietly fell off the running board of the family car during a vacation and was never recovered. When his high school trombone teacher, a graduate of the Curtis Institute of Music in Philadelphia, advised him during his sophomore year to apply to that school, he did so as a tubist, thus deciding his eventual fate. He mightily impressed the professors who gave him his entrance audition by playing an excerpt from The Carnival of Venice and a transcription of the trumpet virtuoso Herbert R. Clark's "Stars in a Velvety Sky."

On arriving at Curtis, he was distracted from his studies by his first professional engagements, with local dance bands. "Commercial bands then

used the tuba as their bottom instrument because of difficulties in amplifying the guitar or the string bass. When good microphones were developed later in the early 30s one of the groups I was working with told me to switch to bass. I got one and taped a chart on its fretboard to locate the notes, which, fortunately, I didn't have many of to play. From keeping at it and later studying with a teacher at Curtis I eventually improved. "He also studied singing there, and worked as a vocalist on local radio shows.

At 18, still in school, he was asked by Serge Koussevitsky to join the Boston Symphony, but vagaries in the offered contract plus the money he was by that time making as a bassist, obliged him to turn it down. Following his graduation from Curtis in 1937 he played for two years with the Indianapolis Symphony, then five with the Pittsburgh Symphony, before settling in Chicago. He accounts for the amount of work he was able to get as a young player by the fact that, though his were good if as yet incomplete, "academic credentials were not, as they are today, much of a factor in hiring, only how well you played. Nobody cared much about schools."

It was the Belgian conductor Desire Defauw, the Chicago Symphony's music director in the early and middle 40s who hired him in 1944. After the later tenures of Arthur Rodzinski and Rafael Kubelik, the man he had played under in Pittsburgh arrived here, in 1954, for his celebrated ten-year stay. "I grew up as a musician under Fritz Reiner," he says. "I started playing under him when I was 15, when he was conducting and teaching at Curtis. He conducted me there for seven years, then I had him for five years in Pittsburgh, then he came to Chicago. I think he just kept following me around. I saw more of him, while I was growing up, than I did of my own father.

"Versatility and flexibility, or the ability to play any piece of music any number of ways, is of course necessary to the survival of any professional musician. However an individual conductor wants it played is how you're paid to play it. I was a willful young man, and Reiner, who always forced you to do things his way, loosened me up, made me conductible." His early exposure to Reiner spared him the fate of

other Chicago musicians who couldn't withstand the conductor's Darwinian professional tactics. "He was a wonderful, wonderful conductor but a brutal person. He didn't want any nervous players in his orchestra because he felt they would jeopardize his concerts, and had ways of finding out who was unsure of himself. In rehearsals he'd challenge individuals or sections to play something a certain way, or play a passage over and over while he listened for mistakes. He had our brass section play, on one occasion, a short passage from the Meistersinger, just a few brass chords. We played them, just the way we knew he wanted them to sound, yet he kept making us play them over and over to see who would miss a note. Nobody did. Our brass section, in my opinion, is the best in the world. Adolph Herseth in particular, who I think is

the greatest living trumpeter, misses a note about once every three or four years, if that, and has an incredible sense of music. We were still at it a few minutes later when Herseth said, 'Dr. Reiner, we're not going to miss it, we might as well go on. Reiner just laughed, and kept making us play it.

"He helped form my ideas, which I try to share with my students, about how the professional musician should deal with nervousness or stage fright. Playing well when you're upset about something is not a matter of just sweating it out or trying, by introspection, to calm yourself down, but rather one of mentalizing the music at hand, applying for help to the control center of the brain and then getting your body and instrument out of the way, treating them as if they didn't exist. Whether written notes or a conductor's instructions, you have to learn, and it's not a trick, it takes a lifetime, to translate music into a controlling mental image. Reiner, who fired you if you couldn't read his mind, never got to me personally - other than getting angry over how much he upset some of my friends, I didn't concern myself with his bullying - because I knew how to make his conception my own."

When Jacobs had been the Pittsburgh Symphony's tuba section, Reiner had tried to keep him from leaving for Chicago by offering him an additional position as part-time bassist. It was summer commercial work as a bassist that, during the latter part of his first five years with Reiner, had originally brought him to Chicago. His wife Gizella, a native Chicagoan, was a professional dancer when he married her around this time. In his early years with the CSO he became staff bassist of Chicago's CBS Orchestra and held the position 16 years. He quit playing bass in 1959, since which year he has devoted himself to playing the tuba and teaching.

As his account of his relationship with Fritz Reiner particularly suggests, his approach to playing and teaching is essentially negative: not "willfulness," but the ability to make another's conception one's own, even if the other person is a bastard; nervousness as a form of egotism (how am I doing?) to be canceled by concentration; not tormenting oneself over correctness, which leads to "paralysis by analysis"; putting a "controlling mental image" before the instrument and the body, neither of which exists; and the use of "strangeness" to startle a student out of the rigid, that is brittle, sense of himself as a musician that keeps him from making music.

"All good teaching," he says, "is a simplifying process, a weeding out of what's unnecessary or distracting. The ideal of playing an instrument is expressed by the physiological phrase 'minimal motor activity,'which I use to mean a quiet body and a dynamic, focused mind, the mind of a narrator intent on his story, or an actor absorbed in his role. I don't tell students to 'do it my way' or any other way, I try to help them form a clear sense of what they want to say, how they want to sound as individual artists. Once they're aware of where their playing comes from, then the necessary work - the teacher's, but

most importantly, their own- can be done to improve it from its source." Down Augie went that afternoon to the foul rag and bone shop of the horn, where he raised an artist's ladder.