

Morton Feldman: Twelve Tone Technique in Varèse's Déserts

Lecture given at California Institute of the Arts (CalArts), February 1981

Transcribed by Sebastian Claren and Chris Villars (Last revision date: 16/3/2015)

The following lecture was given by Feldman at the CalArts Contemporary Music Festival on Thursday February 26th 1981. The lecture was given at around 2pm in room A-300 (a small rehearsal room next to the Main Gallery). A rehearsal of Varèse's Déserts was going on at the same time in the Main Gallery itself, and could be heard in the background during Feldman's talk. The concert performance of Déserts, played by the CalArts Chamber Orchestra conducted by Daniel Shulman, took place at 8pm in the Main Gallery. After this, at 9pm in Theatre II (a dance theatre space, also near the Main Gallery), Feldman's first String Quartet (nicknamed "100 minutes" after its first performances the previous year) was performed by the Kronos Quartet. The original tape recording of this lecture is held by CalArts Library.

Note: Three dots in square brackets indicate words or short phrases unintelligible on the tape. Words in square brackets have been added in a few places to clarify the meaning. In this lecture, Feldman always uses the English word "Deserts" when referring to Varèse's piece. Thanks to Douglas Cohen for providing information about the lecture.

It's not really gonna be a lecture. There's gonna be some remarks about Varèse's Deserts, only because we're gonna hear it, it's being played now. Let's just think of it as classroom gossip!

[Unintelligible audience question]

Pardon me? No, I'm just saying that I'm not gonna talk at length about the Varèse. It's classroom gossip. You're gonna hear it, and you should know about it.

[Long pause]

A minute is a long time.

Audience member: How about a hundred minutes? [Laughter]

A minute is a long time... I always like to tell my students, think - I would never say a minute, I would say - think a few seconds before you start to do something. I once read an obituary, you know the subject? The subject was how long a minute is. I once read in the New York Times an obituary where Mr Gillette, who I didn't know invented the shaving cream, died. And they really had nothing to say about the man. But they did quote from him. Evidently it was very novel when shaving cream first came out how to really use it yourself. They recorded Mr Gillette telling you how to use the shaving cream. And most of it you know: wash your face with warm water, and how to brush in the shaving cream, but then he said, "Wait one minute, and then shave and you get a perfect shave." I tried it out. I did exactly... and I, I shave in the shower [Laughter] and I was standing in the shower and I started to count a minute. After thirty seconds I said, "To Hell with this!" [Laughter]

Audience member: Maybe you shouldn't have been using shaving cream in the shower?

Well, there's a moral there. Very upfront.

[Long pause]

We're waiting for Mel Powell.

Audience member: He's right there.

Oh, Mel! Actually you're very important to this because you noticed on the dedication of Varèse Deserts is dedicated to a woman by the name of Red Heller, who a month ago, when I told her I was coming out here and I was telling her the subject, which she was intimately involved with, and she said immediately, give all my best to Mel. Well, she's a marvelous woman and you never know if you have her attention or not. I think she's in her eighties now. And she was sitting having a drink, speaking to other people and I whispered in her ear as this conversation was going on amongst this group of people around the cocktail party. I said, "You might be interested to know I'm going out to CalArts and I'm gonna talk about the use of twelve tone in Deserts." And she kinda looked at me and she said, "Twelve tone! Now you know he was never very friendly with the twelve tone." OK. And that was the end of it. It was held in the home of a marvelous woman composer by the name of Netty Simons. Some of you know Netty. A few days later when I was home in Buffalo I get a call from Netty and she said "Guess what?" I said, "What?" She said, "I just got a call from Red Heller who then that evening when she went home called Mrs Varèse" - who is beautiful and spritely and alive at ninety, she just had a ninetieth birthday party - "that Feldman is going to talk about, or is talking about, or said to me, that Varèse used twelve tone in Deserts." Mrs. Varèse then called Chou Wen-chung who is the executor of the Varèse papers, the guardian. And she said, "Is it true that Deserts is twelve tone?" A little silence. Chou Wen-chung didn't know really what to say, but did say, "Well, I mentioned to Varèse that there were twelve tone aspects in Deserts and he got very annoyed with me and he said: Impossible!"

I spent hours on this piece. It's all in array. Let us not call it twelve tone. What the intervallic things had to do I can't even find harmonically. I just find it interesting how he uses it. And I'll tell you how I got the idea. Not on the way to the classroom, but away from the classroom. "A marvelous thing happened to me away from the classroom!" [Laughter] We were talking about Varèse and the next week gonna talk about Deserts. And I said to myself, How come there are no tunes in Deserts? [Feldman sings a little tune jokingly] No tunes in Deserts. And with that I got a hold of my copy with Deserts and its unlikely starts with those elegant seventh chords. And I was gonna... Soon as I saw the trip on a seventh chord, I thought, Well, minor seventh, beautiful! [Laughter] Twelve, twelve, what the hell's going on here! So I pursued! And what he does, he introduces two tones, then he goes to another two tones, of sevenths, and what he does is that he introduces the few notes of the chromatic scale - unfortunately called twelve tones! [Laughter] And he trips with them, little kind of permutations, times over, he uses them. And then he starts adding another note or two, and then he trips on that, with the whole, Boulez would call, constellation of the piece, that it aggregates. Usually he doesn't really wanna get involved say with the eight, nine, ten and then the eleventh and the twelfth tones. And what usually happens, they start grouping up in a pyramid. They start grouping up in a pyramid, nine, ten, eleven, twelve, actually, you know. And then a new kind of music begins after the pyramid, kind of cadential thing, and then he starts again. It is foolproof, there is no question about it. The only time that he gets a little conceptual is that - I couldn't find what the row was actually - the only time he gets a little

conceptual is that if he would have, say, a series of notes in one register, that the next series of those particular notes come in in another octave. He does it once, never does it again. Even that was too interesting for him! Once I only found eleven notes. I said, eleven notes! [Laughter] Eleven notes! I write here in red. The reason I wrote in red is because it's not black. In other words I'm not out of the woods, there's a little intellectual deficit here. And I like, the only explanation I can think of - oh there are two, there are two intervals - the only explanation I can think of for the two left out intervals, G sharp and A, is its dramatic use in the timpani in measures 29. That's my lecture on the use of twelve tone in Varèse! [Laughter and applause!]

I usually like six hour seminars. I once went to a seminar Stockhausen, when he first came in the early sixties, gave at Barnard College, which was the girls' branch, to some degree, of Columbia, across the street. And - Oh, Barnard was very interesting. They had a very interesting Dean. The composition [department] of Columbia never invited Stockhausen, she invited Stockhausen. The composition department never invited Xenakis, she invited Xenakis - And I got lost. I got lost, I don't know what happened. And I came late to begin with. I was an hour and a half late. And I said, Well, he's talking, in New York he asked me to come. And he was just beginning! I think an hour and a half it was, like how Wagner took from him! [Laughter] OK! It's called an exposition.

I'd like to tell you a little bit about how I think - not too much - and then we're gonna go right into a new piece of mine for flute and orchestra, that was written about two years ago. How I think in the past ten years, fortunately or unfortunately, was not how Boulez thinks or I think or how John Cage thinks, but the way my students seem to be thinking. And at one point, it's not, I wouldn't say, the same thing that Boulez said about Cage, that "I like John's mind, but I don't like what he thinks." I wouldn't say that. It's not that I don't like what they think, but I wondered, why are they thinking that which they are thinking? And it had nothing to do with the fact or the tendency towards over conceptualization that existed the minute anybody drew something on a cave.

I'm a rug nut, and I'm becoming a very good rug historian. And the earliest rugs existing, sophisticated rugs, say, from the thirteenth century discovered in a mosque in Konya, Central Turkey. There was a very interesting rug and which is in two departments, and let's say: dragon and phoenix. And the first department is very naturalistic and the other department becomes a little more conceptual, a little more mannered, a little more abstract, a little more obvious. Soon as she had an original, she learned how to improve on it, you know. And I think this whole... Especially as musicians chained to the prisons of bar lines! When I was a kid I jumped to graph paper which was another prison, you still got the... You're still looking in this, you know, chained to this train that we follow. Music staves subdivided with bar lines. A kind of horrendous unsounding cantus firmus. [Laughter] Moving like a cantus firmus, saying nothing, from register to register. We are conceptual. It was to the meeting born that we are conceptual. So the fact that the students are overly conceptual is not disturbing.

What is disturbing, is that I have caught the end of my own dynasty. And when I mean my own dynasty, I mean Takemitsu's dynasty, Mel Powell's, [Robert] Erickson's, Roger Reynold's, all professionals more or less around the same age. I think Toru is the youngest. And what that dynasty has to do with in relation to another dynasty that is evolving, is that we grew up saturated with a personal history of performance. And now I'm not gonna go in and characterize about what I really mean by performance, what I mean by instruments, what I mean that instruments are idiomatic, that's a lot of baloney. I don't know what idiomatic

instrument is. I do know the fact that a violin, especially if it's a hundred and fifty thousand dollars, is like Belgium linen to a painter that can afford it. And that it is a medium in itself, it's not a resource that we can put on a, a loop. It's gonna exist, doesn't care whether we write for it or not.

Which reminds me of a Jewish story taking place in Russia many many years ago in a little community, a kind of ghetto of Jews. And the boy, the whole bunch of boys, is starting for their Bar Mitzvah. It's a little eleven and a half year old kid, says to the rabbi, "Rabbi, I don't wanna be Bar Mitzvah'd. I don't believe in God. I believe, like my father, in Socialism." The Rabbi pats his head and he says, "Sonny, do you think God cares?" [Laughter] That's the way I feel about a piano. [More laughter] I wrote a big piece for piano, stunning piece! I was too late! The piano's finished!

OK. The reason maybe instruments are finished are questions that you wouldn't ask yourself to begin with. I asked a terrific sophisticated Korean student of mine, graduate student. I said, "Would you write a piece, twenty five minute piece, for two bassoons?" She says, "No." I said, "If you did, I'd throw you out of here!" Why are you looking for combinations all the time? Do you ask yourself the question that maybe instruments really don't sound good together? You see, they didn't all sound good together. Why should they sound good together?

Which reminds me of another story - which is not Jewish! [Laughter] Some years ago, David Oppenheim was a marvelous clarinet player and a [...] musician amongst various other things. And he was running Columbia Records and I had a button for lunch with David. And I went in there and his secretary said, "Oh, David's having a lot of problems. They're putting together a recording they made with Casals at the UN." So, a lot of problems. I go into the studio there. David's sitting in the middle, consummate musician, trying to balance the cello - the Beethoven sonata, a Beethoven sonata - and the piano. The piano is on [at] 7:30, the cello is on [at] 8:30! [Laughter] I'm hungry! And right across the street from the [sound] stage there's a delicatessen out there. I'm hungry! I wanna get out of there! Finally I go over and whisper and say, "David, I'm not gonna help you: it's the combination. The combination, not gonna, not gonna get it, gonna have troubles." David looked at me and said, "The combination? Let's have some lunch!" [Laughter]

Alright! So, my time, which makes me synonymous. There is no difference between me and Boulez, no difference! He made a million dollars with Peugeots, he became a Peugeot tycoon, and I make safety pins, but I also made a million dollars. So there is absolutely no difference. We're the same. We're in the same world, just the way Onassis... which a marvelous story: Onassis was being prosecuted for some fantastic tax dodge, and they said to him, "Mr Onassis, what flag," - you see, he's flying around - "what flag do you fly on?" And Onassis said, "The flag?" he said, "The flag is called Capitalism!" And in that sense, the flag that Boulez and I fly under is essentially the same flag: acoustical music and how it sounds. Forget about that other stuff. And it's acoustical music that I'm talking about. And the position being brought up with all kinds of playing. Whether it's Bronislaw Huberman sliding in the Tchaikovsky concerto. Whether it's the way Rachmaninov spaced his inner voices, or it was the way perhaps - it had nothing to do with the introverted playing of Fournier - but just the way he would sit on the stage in relation to the piano. It's the world of how this stuff sounds, you see. The intimacy with the idiom. Let us not define the idiom. The idiom might not necessarily mean that kind of role playing or that kind of total Darmstadt flute power, that is not what I mean by the idiom. I'm just saying, that flute, what is it? OK.

So that was my time. And it's gonna be over. It's gonna be over. It might be appearing in popular music, but it appears in popular music also with focuses, which have nothing to do with focuses, but a kind of, really, kind of, what's gonna save this mess? Which is not the same thing as a focus. Throughout our history, pitch is gonna save us. Then it went to Germany, had a sex change, came back an interval. [Laughter] And the interval is gonna save us. Total Darmstadt and after Darmstadt the instrument is gonna save us. Harmony is gonna save us. Polyphony is gonna save us. That's not focus. Nothing's gonna save us! [Laughter] Now what saves us - and whoever you want to include in the OPEC [Laughter] - is essentially our ear, which comes focused. Or let me put it in another way: The other day in Buffalo I gave a seminar. Believe it or not, I decided to spend the whole semester on Boulez, from his earliest pieces to his most recent. Because Boulez, though he is not Cézanne, still reenacts what painters - and not just smart painters - understood about Cézanne: the ambiguity of concept. Can you reduce nature to a solid in a circle? Can you kind of conceptualize it? What kind of adjustments you have to do. And the light comes in, like our old-timers, the instruments, come in. And this continual adjustment, this anxiety, a master with anxiety is Cézanne. And it is with Boulez, because I think Boulez is reenacting a lot of problems. I think he wants to be saved. He wants to be saved. There's enough formalists. He's evolving. He is living out the problems of twentieth century music, from fifty on. It's not packed stuff! Now what saves Boulez for me is his ear. And it shows from his earliest music. His Sonatina for flute and piano is a masterpiece. You would listen to that piece, the aggregates that he would get out of the row, what do you think, you know, he got the right four notes! And how he uses it, and where he does it and then where he puts it, that sense of registration and timing, capital! How he could just stay in one register, say, for four measures! Everything! And the balancing act! It is a tour de force of a consummate ear! Forget about the mind, the mind is given. If you don't have a mind... And with the mind there might be other things: Wisdom.

Once had a conversation about Stockhausen. We've all had conversations about Stockhausen! And the conversation was with Lukas Foss. I said, "Yes, he's smart. Yes," I said, "but he doesn't have wisdom. He groups his things in a, in his system." [Feldman imitates Lukas Foss asking:] "Do you think wisdom is necessary?" [Laughter] I said, "Yes, it's because it's correcting the mind, it's a question of judgement." Yes, so Boulez is fantastic to me, not because you're always thinking, because how he's on top of even the most, things that he himself doesn't believe in. He didn't believe in his Structures I, he didn't believe in it. It's very interesting some of the pieces that you can't get a hold of, like his String Quartet he took off. Yes, it's his ear, and what an ear!

But how do you teach an ear? "I stay in my classroom like an idiot": Do you hear that, you're on! Is there such a thing as an ear for the right movement, the right register? An ear to move at the right time with the right note, the right register, the right instrument? Don't you think it's ear? Why could Bach use registration doing the same goddamn old fugue in a way that no-one else could? Millions of fugues! Registration is not an ear? Which leads me to my more dramatic conclusions. Remember Beethoven didn't live as long as I did. I think I'm a year now older than Beethoven, or just a few months. It's that essentially I feel that there is only one parameter in music, only one, and that's notes. Now when I say notes, what do I mean? I don't mean note and timbre, just notes, being on top of them. Not having that, "Oh, those twelve notes are very heavy, what am I to do with them!" Being on top of them! Seeing when they're pitches, seeing when it's timbre. Seeing when you wanna kind of obscure the pitches, just the note telling you: it's cold outside, put on a coat; it's warm outside, turn on the air conditioning. I mean, they're notes, that is not given! The notes are not given. Everything else is another skill. You can't orchestrate? Tough luck! Tough luck to find a compositional parameter, because you had trouble, because of a parameter? [Laughter] And notes are the

only thing. If Schoenberg out in sunny California said, "Someday I can't handle the most simple counterpoint thing as well as my students that day," he's talking about notes. Sometimes for the composer the notes are there and the notes are not there. Registration to some degree is another skill. You see, we've got a lot of skills! Got a lot of skills. Well, one of the reasons most of us flop on our ass is because we're architects that have to be like a Mies van der Rohe, we have to make the furniture. Now I don't say that it should be a [...] like one of the first Bauhausian architects, that not only did the factory... I was reading the other day, he did the writing paper for the factory, he took over the whole factory, every aspect of the factory. But, in a sense, we have to do everything. But all everything are different skills. You have a compositional idea and then you go to that other room, just a little factory worker, the other room, the process is new... It's alright, but it needs a lot of adjustment, you see. And we're getting all this data information. I'm not telling you how good it is, and go ahead with your program. The composer's data, the data was essentially: "Hey, take it easy, here's problems!" And the thing is how to read this data and then how to adjust to it.

So I feel those other things are given the way what you can grow on a certain type of land is given. You go to areas of remote England and they got... All you could grow there was sugar beet. That's all, that's all they could grow there was sugar beet, and so, they grew sugar beet. Whilst the guy says, "I don't wanna grow sugar beet, I wanna grow cotton. I like cotton." He's a nut case! [Laughter] Which really leads me to that maybe music is not as interesting as you think. [More laughter] It might not be as interesting as you think. Oh, we're not talking like a Malraux, or a philistine, or the good old days of the Renaissance. The Renaissance didn't have any problems and they were no better and no worse than the modern painter working today. They're perfectly fine. And if we look to our own musical history, let's see if we have a kind of theory of origin of species, those early guys in the monasteries, crawling around, singing chants. They had no problems with their chants. And this notion of problems is, of course to some degree, we cannot live without it. Well, if we really investigate it, it makes us comfortable. But is music, is it supposed to be comfortable? In other words is technology supposed for us to have a good life intellectually, working? The Japanese have produced a car now that if you get in the car, it says to you, "Please fasten your seat belts. You're low on gas." [Laughter] I said to a friend, "Boy, would I love the computer: Hey shmuck, don't put the bassoon there!" [Laughter and applause]

Mel Powell used the word at his talk the other day, a term, which I feel is very important to me. The term is strategy. I don't belong, for example, with any kind of fancy extensions of Wittgenstein. I'm not questioning language, but I'm not involved with it. I don't like to give things a name. This is my compositional strategy: I don't wanna give things a name. If I have repetition, I don't call it repetition. It looks like repetition, it doesn't sound like repetition, it looks like repetition. I would never put... I would never let a student of mine put a repeat sign. I would say, "Something's happening, what if you wanna change your mind?" Never use a... I copy like an idiot, until finally I just put double bar line, and I just write fifteen times, seven times, nine times... But even that became a great concession. It was really a concession to my eyes. Because I wanna copy my own music. Very important. It's a very important strategy. Very important strategy.

Where was I? So I don't call things a name. Because I repeat things for different reasons. I repeat things many times. For example, if we ask the question, Is it a certain type of material that you can repeat and you can't repeat? What's repeatable material? You can't just repeat! And I'm very interested... I don't think of it as repetition. What I think of it now - And you're not gonna hear it in the flute and orchestra work, you're gonna hear it in the String Quartet - What I think of it now is that I'm watching some bugs on a slide. I'm just watching how I feel

it, you see.

So the String Quartet is, has a lot to do with that kind of watching and letting it go. And the reason the piece is so long is that I got into dangerous territory. I let things go. In terms of its possible, and I don't say potential, there is no potential, there is no potential in a work of art! If its germinal or if its involved with the form, there is no potential! It is, it's gonna be great, marvelous! I've got a great house, come and look at it. Everything is gonna be fine. There's no complaints. I'm not gonna walk in and say, "It's perfect." I wouldn't say anything. I wouldn't buy the house! But it has no potential for an extension of the language, that's what I'm interested in. Well, ideas, in a sense, can produce possibility of language. Ideas don't mean anything. I grew up with a generation where the young painter comes to New York in 1952, hangs out with us, with all the great painters walking in and out. Just out of graduate school. He's good, he's so terrific, he's a very smart guy. He was once Dean here, in the Art Department: Paul Brach. Paul Brach is a young guy, says to me, "Hey you know, Jesus I gotta get out of here!" Couldn't take it! All these guys that never went to school, that say something glib.

So it's the potential, the possible [...]. But geez, you're not making ashtrays! You're not industrial designers! You're not worried about three acts in Hollywood, or three acts in New York, and you might have third act programs... third act problems! What is this? It's a third act problem, right? I saw a terrific play the other day in Buffalo. The third act was great, the first fine, forget the second act. I never had a second act problem! In other words you have a formula. And most formulas, you know, have to do with success.

Again rugs. The great rugs. You go into a museum, you look at this great rug. What was that great rug? It was the most successful commercial rug that lasted and they made it by the thousands. That's why it survived. But there are great designs that didn't survive. They wore it on the Silk Route too much. Just because they're on the camels doesn't mean they're on business. They're on business, like on business today. There's something called the Silk Route, and it was just ways to get from China to Istanbul. And if you would look at the rug cultures, they're all living around the Silk Route, for easy access. And with the remote places, in a sense, they're a little more isolated. They were involved with everything else, they're involved with, just like we are, with borrowing, the whole borrowing syndrome is very important. That's one of the most interesting [things about] buying in a rug, because it looks like something on top, if you look at the foundation you know that it's coming from someplace else, you see.

OK. So I don't like to give things a name. That's extremely important. And Mel Powell mentioned the word strategy. I would say in one sentence exactly, after all this talk, what my strategy is: I am not at all interested in how to get into something. I don't have any problem with ideas. In fact I purposefully don't even think about music until I sit down to work. Then it's on. I can't walk around thinking about ideas like... What would somebody, you know, people that hear voices? You put them away! [Laughter] You put them away! Anybody walking around thinking about ideas should be put away! [Laughter] Hallucinations! It doesn't have anything to do. They're talking about recipes, let's eat the food! [More laughter] Let's eat the food. Which is an aspect of my performance background. I'm not interested in the hoo-ha of the kitchen. I wanna see it on the table. I wanna see it in a beautiful setting. I want the candle light. I want that lovely girl. I wanna, you know, I wanna see it in real life. That's not real life, making it in the kitchen. That's making a living, but the real life is what happens when it's in the world. Is it a good restaurant? Is it a good piece? How does it project itself? And that is another skill! How your music might project.

Ah, I, I, I, what I, how I think about these other parameters. There's no difficulty in it. Rhythm, what you might feel. Rhythm to me is no different than a, the way a photographer crops a picture. Well, I hear things no different than anybody else in this room. I also hear the same dreary stuff. I crop it. I frame it. Let's take Arnold Newman's great photography, photograph of Stravinsky. He took that famous picture of Stravinsky sitting like this... You know that picture? Like this... cut off here... He took a commercial picture. Stravinsky was sitting like this... you saw his feet and the chair. And he crops it, he frames it, just the way Stravinsky crops. All has to do with cropping and framing and placement. Forget about rhythm. You find a natural rhythm. Instruments create the rhythm. A lot of things create the rhythm for you. It's another parameter, another skill.

The developing of a photographer, the visibility of the picture, that's all instrumentation, that's orchestration, and orchestration is something... I hear it, I don't hear it. I make it a little bit like this. I make it a little bit like that. It's another skill. But the notes, the notes are not given. That's what you have to struggle for the rest of your life, finding those notes. You might get the place, and you might have a sense of the instrument, where it's great. For example, some of the music that I love very much is music about 1880/1890. Music that most of you don't know: the Arensky Piano Trio,

Audience member: In D minor.

the Rubenstein Piano Trio. Great stuff, lousy music! But they knew where their violin sounded, they knew where to put things, you know. They're involved. They weren't putting things very important, but they knew what it was about. I would compare them to a young person today that's not involved with the notes, and says all I want is some texture. That guy's name is Arensky, whether he comes from the State University at Buffalo or CalArts. He's doing what Arensky did, same thing. Think metaphorically like me, and you'll get out on the street. [Laughter] Because it's all metaphors, it's all... To me, history is an extension of metaphors. That's all it is. Nothing else... Nothing else.

Close friend of mine, very promising composer, had problems on a piece she's writing now, and mezzoforte-piano mezzoforte-piano. She brought it to a violinist, just what to, you know, whether to put an accent on the p. That didn't help. Soon as the performers saw the acc... Nothing helped. The last night at rehearsal, I have it in my score too. Also I have the same complaint: Mezzoforte was gesture... gesturized if they did this-this-this. I wanted it. I saw it very abstract. It didn't happen that way... I had an idea. Actually the idea was suggested by the cellist. Well, he would say to the fellows, "Why don't we just vibrate the first note and then do the other?" So just the whole idea of the vibrating gave it to him. So I spoke to my friend this morning on the phone and I said, "I think you should find a way to notate that vibrating and then not vibrating." I said, "It might look as an affectation to other people," I said, "but find a way to write it down. I think that's exactly what you want, because I'm gonna change my score. It's the only thing I'm gonna change in my score. The how to notate this, and I'm gonna use it now until the last days of my life." I like that, and that was the problem. It wasn't some kind of idea I had of mezzoforte-piano. It was a performance problem that I wasn't in tune with. So Boulez, myself, whoever - Morton Subotnik - so much of our musical background and thinking came from various backgrounds and attitudes about performing. OK.

Which we're getting in a convoluted way... But if this lecture was six hours my remarks would not be considered convoluted, but say, truths like Proust. [Laughter] Yeah, like Proust

goes and talks a little bit. And that's in a sense what happened to my String Quartet. I never have a plan in my idea, on my mind. I don't like commissioned pieces. I don't like to even know - never mind do I wanna call things something - I don't want even know that I'm writing for something. I kid myself I'm writing for something. And so for the past thirty years, even though I'm writing a piano piece, I start the same goddamn way, the same goddamn way. I start on the same paper. And when you look through - any future historians of my music - it's gonna be, every page written since 1958 looks exactly the same. It's the same paper, everything's the same. [Laughter] A lot of... Even when the styles change, on paper you didn't see any change. It's the same damn thing. It's fourteen lines at the best. Sixteen is too small. I use ledger lines. Sixteen is a little too small. Sixteen is for my eyes is lousy. Twelve is Kinder [Laughter], but fourteen... And what I do is I start in the first system with the possibility that if something happens I don't have to. But I know, all reality tells me it's a string quartet! I'm not bringing in even the flute for the last measure - Who was it? It was [...]! -. It's a string quartet! But still I refuse to accept the fact that I'm locked into the whole idea of writing a piano piece or a string quartet. And the orchestration is never given. The orchestration of a piece doesn't materialize usually to about three minutes into the piece. I don't know exactly...

[Gap in the recording]

... which is important drama, because if you could define the history of twentieth century music in terms of instruments, it's essentially of inventive instrumentation. It was no accident that the Symphony of Psalms had no parallel. What's the string section in the Symphony of Psalms? How many violins are there?

Audience member: I couldn't tell you.

Why not? Are there any violins in it?

Audience member: No.

No. That's the twentieth century. They managed to make a masterpiece without the violins! [Laughter] Yes, that's twentieth century, inventive. And of course if you get something that really works... the orchestration of Pierrot Lunaire I mean. How many pieces were written with that combination? OK. So it takes me a little time before I get to the forces that I want. There are two points of view - and I went back now actually to the old nineteenth century point of view - you're either a puter inner or you're a taker outer! The twentieth century is a taker outer. The nineteenth century you have that basic balance and you work within it. And what I do now is that I've found my basic balance and I don't really now - only in my orchestra music - invent, reinvent the orchestra in terms of forces. I already know that I'm not in business with the union. Or I'm not in business with the entrepreneurs. And if I'm not gonna give much to that third bassoon player I want him around. In recent years I wrote a piece for the Venice Biennale. They brought in a big orchestra and I needed another tuba player, only to play in a few times with the other tuba player. They didn't even ask me if I wanted to use another instrument, they hired another tuba player! They brought him to Venice to play about five notes in this piece. So the musician used to sit around the Fenice. Every time - even though I didn't know this guy - every time I passed by, this tuba player started "Hey, maestro!" [Laughter] So, as I said, I'm not in business with the programmers. I use, not everything, but I do use 3 3 3 3 3 3 3 3 3. And percussion is a... They don't seem to mind paying money to hire extra percussion players, so that's I believe no problem. I now add in another harp, only because when I wrote that Beckett thing and Rome opera gave me the

instrumentation I didn't realize at that time, I forgot or whatever, that opera orchestras have two harps. And I took advantage of that, and some of the most successful moments in the piece is when I did very simple things with two harps, that were just knockouts. So even if I know that the harp is not gonna do much, it's in now in my things. So I'm not a taker outer, I'm a puter inner in this whole arena, that's my arena, you see. And I really don't even see the orchestra, I don't even see the orchestra in a sense in that sense. I do see it in a sense as a very graphic acoustical arena. The percussion are here, and unless it's a small orchestra - or unless you're Stockhausen - you're not gonna put it over here, you're not gonna put it over here. It's over here! And the brass is over here and the woodwinds are over here and the basses are over here - you have to be reminded! The cellos are over here, the first is over here, the second's over here, the violas over here, and that's your acoustical arena.

Saw a Danish kid of mine the other day. He gives a little gloop over here and he has a timpani here - four p's later going p. I would say, "Well, on paper everything is very rational, but, I don't know, do you think... You know? I mean I don't know, so I can't ask you to double it, you'll never double it, that's like cosmetic surgery. It's a..." OK. I'm saving the last statement because it's the most important and I'm gonna play my piece. And I didn't enlarge on the last statement, which I already mentioned. The whole idea is that I'm not concerned on how to go into something. I'm concerned in how to get out of it, that my invention is the cul de sac, and I create situations which is a cul de sac. I look for it, I love it. I mean, I thrive on it. To tell you the truth I can't work without it. But I don't wanna make a virtue of it. I like the material that gets me in the corner, but I like that material that seems to have a lot of potential and I don't wanna get involved with the potential. And then, how I get out of it becomes to me very exciting. I don't wanna kind of let you hear me getting out of it.

If you ever want a very interesting afternoon listen to the complete Beethoven Bagatelles. There are a lot of them, and they're fascinating. Because the whole idea, it's a, it's a, it's a fantastic treatise on how not to make a mess. How not to get involved in a piece of music. And you see him do little things like this... you see. I think in a very obvious way the Bagatelles demonstrate a little bit what I'm thinking about. Don't get into a mess!

Even if I'm involved with a conception, I'm paranoid, very paranoid, very paranoid about instruments. Do they really sound well together? Not convinced, to this day I'm not convinced. I don't trust anything after first species counterpoint. [Laughter] Note against note I trust. Anything else... I don't trust anything?... The first position in the strings! After that, I'll study [...]. I'm writing music! First position in the strings that's scale, that's like piano. I don't really go for scale. Of course the other positions give you a range of the scale, but in a sense, I'm thinking of... very suspicious. Most of us act as if all this stuff is our friend [Laughter], that it's Jimmy Carter. But in music too we have our Ronald Reagans [Laughter], that tells you the honeymoon is over. I don't consider it my friend, I consider it, I consider it, that it exists. My attitude is very much like Koestler's wonderful remark that, once that knowledge exists we cannot subtract from it. And I believe it. But I wonder to what degree knowledge, in a sense, has absolutely contributed to the possibilities of musical language. And if I would ask Mel Powell a question later when he's talking about language, I would like to ask, in a sense, what would be the discrepancy between language and vocabulary? That many things that we mistake for language are essentially vocabulary. And very good vocabulary. I feel that language is something else. And the reason that I can't define it is because it's what I'm in search for every minute I sit down. I'm in search with, What is language? And if you ask, What is language, you're asking yourself, What is material? And if you ask yourself, What is material, you're asking yourself, What are the notes? Because the material isn't the texture, the material isn't architecture, the material isn't design, the material

is the notes. And what we have today is an unbelievable amount of music where everything sounds terrific but the notes! [Laughter]

So you see, they, a lot of people have those other skills, they got those skills. And they're not Mancini, they're very good. They're the best we could have. But they don't have the notes, because they feel that other things are gonna save them. But the notes are the ear that corrects.

Now we gonna go full circle, and I'll mention what I mentioned very earlier about the big difference between my generation and what is happening, and about a lecture I gave the other day in Buffalo. I brought in two books in another field. I learned from Meyer Schapiro, the art historian, that when you're talking to artists, young artists, they feel they know everything. He says even if you talk to housewives about Cézanne they all have opinions about Cézanne. He says, "The first thing," he said, "I always like to talk about things that they don't know about. I get their attention. I get their respect, and they listen, and then from there we would go on." He would like to talk about the Book of Kells, things like that. And I thought I'll try that too. Because if I say something in my classroom, remember it is only my opinion.

I brought in two very important books. One book - Boulez by the way has been living [with it] by his bedside for the past twenty five years, has stolen from it, has used it - and it's called Pedagogical Textbook by Paul Klee. Small book. A series of lectures in the Bauhaus. Gestalt problems, form problems, this kind of problems. OK. Now the background for this book, which is totally conceptual, has to do with his experience with the art, right now. So all the stuff he's giving you is how he has reduced nature, how he sees... Plus it has to do to some degree with his notion of the history of painting. That has a lot to do with his ideas of how to interpret other things. He was very into Bach, as you know. A lot of his paintings were like what he would feel would be a demonstration of the polyphony of Bach. And that was one book. Unfortunately, I have to say that that book corresponds to my position, though I don't like the book at all. I don't like Klee's painting. But it's my position, my position also. If the eye is that particular tradition of the painter, then my ear is my particular tradition, at my decisions finally, my final judgements. Even though I might not... doesn't mean by the ear I wanna write what I like. Your using your ear is to write perhaps what you might not like. It's not a question of just tripping on a ninth chord. But just using your ears, helping the conception, correcting it or leaving it alone perhaps.

The other book has been perhaps one of the most influential books with the most talented young people today working. It's called The Green Box, and The Green Box is Marcel Duchamp. Marcel Duchamp, I would say that, that's what his work was all about. The Green Box is a certain jottings - 1911 or whatever, in those years - some of them quite annoying, but it's the first conceptual linguistic idea in visual art in making something. There's even some kind of baby geometry examples. Everything is in it, even the found object is in there. How to divide the canvas, not the canvas, it's called the, it's called the Broken Glass. It's a very famous picture. It's in the Philadelphia Museum of Art. It's essentially his only work. Everything was in that work, it was the... But what did he have to put in? He had to have new kind of ideas of material for this conception. Ideas that would fit into a kind of linguistic... Ideas that would fit into games, you see. So his success is not so much The Green Book and his diary of how he's gonna kill off his Parisian contemporaries, who were by the way were more gifted than him. He wasn't a good painter, and when he got involved with Cubism it was just slick, lousy Cubism. Very important thought, because, not because so much that he wanted to kill off the eye as the guiding force and let the more conceptual come in, but he found an inventive material that never really exists before that was absolutely appropriate for

this. That was the success, you see. Just like Boulez's success was his ear. And what's John Cage's success? I would say that John Cage really belongs to my time. It was his sense of good judgement, of asking himself the right question, what he wants to unleash in this kind of state park, this menagerie. OK, that good judgement, you see. More, much more, of a minimalist thing than you think, in terms of that never, never really indulgent.

So I get my ideas by not looking for trouble. Now I also decided to play this piece because I thought it would be appropriate. It's dedicated to Varèse, for no apparent reason. Maybe because it's flute, I don't know. Maybe because there's a big, maybe because there's a big percussion battery, whatever. Maybe because of the physicality of it, that kind of right under your nose kind of writing. For whatever, it's dedicated to Varèse. It's called Flute and Orchestra, and I wrote it in 1977. And I have two scores. I'm very score oriented, very score oriented, so if anybody wants to look at the score, it's right over here. Otherwise you wouldn't hear those glockenspiels in the beginning. If you look at the score you'll hear the glockenspiels. [Laughter]

See if it's going.

Voice of technician: It's not heads or tails.

Pardon me?

Technician: It's not heads or tails.

Oh I hope it's on heads. Heads or tails?

Technician: I don't hear anything.

Which wins?

[Unintelligible remarks by technician.]

It's not the right speed, is it? Maybe it is. It's the right speed. You're in the middle. Let's get it from the beginning.

Oh!... Years ago when I wrote my free, free durational material - I'll never do this again! Never play a tape you never heard! - I was in London and I sorta had this little tape and I put it on and it was at the wrong speed. But not really devastating. [Laughter] Not that devastating. But it was the wrong speed. And I kinda realized it, because you see, it was a new tape, it was free durational, I feel that maybe people, you know, maybe they just, they just don't get it, you see, and that's the way they're playing it. But then I realized it was the wrong speed. I was about four or five minutes into the piece and I had to say, I said to myself, If I get up and change it, I lose all credibility! [Laughter] So I let it run. They loved it, they didn't know the difference! [Laughter] What was that piece of Webern in Tanglewood, they played the wrong notes. Those pieces. It was a piece of Webern, in Tanglewood, and nobody caught it.

[Long pause]

Marvelous young girl, the flute player [Roswitha Staeger], in her twenties... What's the problem?

Technician: Well, there's no music on the first few minutes of the tape, so that's why I thought it might be tails.

Could have been erased?

Technician: I don't think so... It might be on backwards, I was wondering...

Well, maybe, maybe, you know, you could turn it on to a kind of loop player, a kind of ostinato I suppose, hearing it backwards...

Technician: Yeah, that's what I was wondering...

Oh, we'll turn it into a history lesson: words without music! [Laughter] I don't see any catastrophe out in a way. Why it should happen... In other words, it was wound up right? Tails on?

Technician: Yes... or no, I think it was... I'll try it the other way.

I'm also very interested in the big piece, rather than the big form. We have a lot of ideas that orchestras are contagious, it's finished, it's past. You get a few, you get opportunities for orchestral performances, you don't have those ideas! There's nothing wrong with them. You read a novel, you know, the whole idea of the whole heroic novel. You read, you read in a noncritical way Dr Zhivago, and you see this lyric thing, which is an epic. Maybe it's either, but it's very beautiful. That it doesn't have to role play, orchestra, epics, I don't know. I don't use four horns. Three is enough. Don't use four horns! You're not, you're not gonna know what do with the, with the third one. [Laughter] OK.

[Long pause]

The orchestra is a very good orchestra in Saarbrücken in Southern Germany, very special. And a very devoted conductor, he's a, also a composer. Marvelous guy. His name is Zender, Hans Zender. Now let's hope for the best.

[Very long pause]

[Loud burst of feedback noise!]

Flute and Orchestra! [Laughter]

[Long pause... then the music starts!]