

Over thirty years ago, with one of the pioneering

Intersecting



A Reminiscence of Vladimir Ussachevsky in the 1960s

Andrés Lewin-Richter and Alcides Lanza
in conversation

*Vladimir Ussachevsky at Columbia-Princeton
Electronic Music Center, New York*

Vladimir Ussachevsky (1911–1990) composed more than forty-four works of electronic music, beginning in 1952. He was a prominent teacher, composer, and director of Columbia-Princeton Electronic Music Center (EMC) in New York City. Composers Andrés Lewin-Richter and Alcides Lanza worked with Vladimir Ussachevsky, first as students, then as his assistants.

In 1968 Andrés Lewin-Richter moved to Spain, where he was the driving force behind the creation of the Phonos Electronic Music Studio in Barcelona. Today this is integrated into the Phonos Foundation, an institution of which Lewin-Richter is vice-president and executive director. Alcides Lanza left New York in 1971 to teach electronic music at McGill University in Montreal, where he worked with instruments designed by Hugh LeCaine. He is the Director of the McGill Electronic Music Studio.

In the year 2000 the two composers met in Barcelona and in Montreal, and conversed about their experiences with three legendary figures in the early years of electronic music. Three articles resulted. The first, “Intersecting Planes: A Reminiscence of Edgard Varèse,” appeared in *Musicworks* 81. Their third article, about Hugh Le Caine, Canadian designer of electronic music instruments, will appear in *Musicworks* 83.

greats of electroacoustic composition . . .

Planes

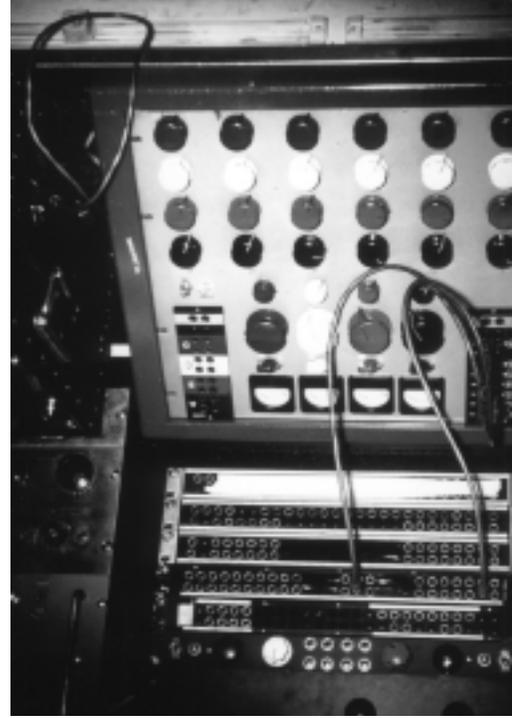
My first contact with Vladimir Ussachevsky was a rather fortuitous one. In October 1962, I had just arrived in New York as a Fullbright Fellow, intending to study engineering and acoustics. As soon as I got my room in John Jay Hall at Columbia University, I found out that the electronic music studio was part of Columbia University and that Ussachevsky was the head. So I just decided to call the music department and see if I could have an appointment. In less than half an hour I got a call from him telling me that he was willing to see me. I went to see him and I told him "I have this fellowship to study at the engineering department but I am interested, in electronic music." I had never composed electronic music, but I was interested, and was willing to work in the studio. He told me one very simple thing: "I only have dirty jobs." I told him, "I don't mind. I am used to making concert recordings; I do many things like building instruments or whatever. I am willing to cooperate, and I do not need any money because I have this fellowship for the engineering department."

A few days later he called and told me that the Audio Engineering Society was having a meeting in New York. The program was to include a big concert organized by the Columbia-Princeton Electronic Music Center, with stereo pieces played through the sixteen-channel distribution system at McMillin Theatre. Ussachevsky needed people to help to install a lot of loudspeakers in the McMillin Theatre, so I joined in and I did whatever I was told—mostly helping James Seawright, the synthesizer technician, to transport and install loudspeakers. And that was how I started working with Ussachevsky and his team, which also included Mario Davidovsky and Bülent Arel. From then on, since they needed someone to deal with the maintenance of Studio 106 [this was the teaching studio where Ussachevsky's classes took place], I was put in charge of maintaining it. In a way I never asked for it. When Bülent Arel had to go back to Turkey because of his student visa situation, I came in as an assistant with no pay. But I could use the facilities to compose. Now that I was maintaining the studio, I could see how the more advanced students worked, and that prompted me to start working the same way. So I started doing exercises on my own. I had many occasions for working with either Mario Davidovsky or with Ussachevsky.

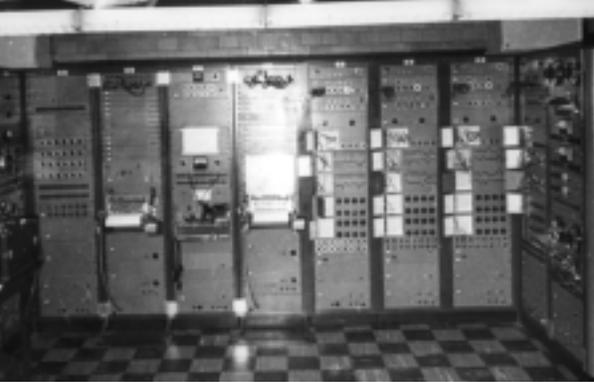
Ussachevsky's way of working was becoming more and more complex. He liked to make lots of recordings, which he didn't know if he'd use, and I remember working on the piece *Creation-Prologue* in about 1964–65. He had recorded many examples from wind instruments—just notes—and

they needed to be cleaned up. So I started by organizing it with splicing tape so he could do further work with it. So I did lots of preparatory work. It was not only me. Also there was Priscilla Smiley, a composer who was working in the same spirit. Smiley was assistant to Ussachevsky for many years, and was Co-Director of the Columbia-Princeton EMC until her retirement. Earlier we had worked on pieces like *No-Exit*—which was a film based on Sartres' text, which Ussachevsky made the music for. Viveca Lindfords was the main actress. In May 1963 in one of the concerts at McMillin, Ussachevsky made a semi-theatrical version of *No-Exit*—with Viveca Lindfords as actress and speaker in the play. It was quite an event. He used to do these kinds of very relevant concerts at the McMillin Theatre, for example, involving theatre people. So we had to prepare all the tapes for him and he was quite particular in the way he wanted them, but the final piece was always done by him. We helped with the preparatory work, cleaning up of tapes, all the tests, etc. There is no question that he liked to have assistants around him. Sometimes you had to wait; you had nothing to do until he made up his mind on what he wanted.

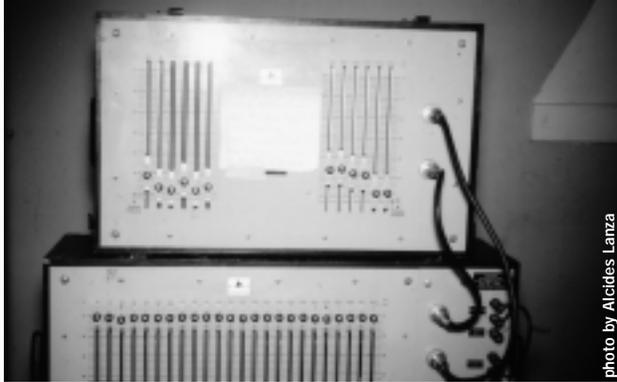
Now, the other nice aspect of Ussachevsky was that he used to travel quite a lot, because he was such a big promoter of electronic music in those years. He gave lectures in many universities, and for that he needed tapes with his examples, or pieces for concerts, and of course, we had to prepare those tapes. But, because he was such an enthusiastic evangelist of electronic music, he came in contact with many people who were building electronic music instruments. I do not know of his relationship with Hugh Le Caine, but I remember that Le Caine participated in the Audio Engineering Society event in New York. Related meetings and demonstrations were always held at McMillin Theatre, and Vladimir was a man who liked to have documents, so whatever was done or demonstrated, it was always documented by making a recording of it. I was involved in doing some of those recordings. I remember finding a recording of one of Le Caine's speeches in the studio. Later on—when that first Audio Engineering Society meeting took place, in the fall of '62—all the lectures were taped. There was, for



Studio Mixer



Mark II Computer Synthesizer



Albis Filter (3/8 filter)



Alcides Lanza in Columbia-Princeton

example, a very interesting one by Milton Babbitt on “Sound or Tonal Perception.” Babbitt is recognized for having advanced theories and techniques involving twelve-tone music and total serialization. He was the most active composer doing computer music with the Mark II RCA Digital Synthesizer. So, one job of mine was to realize all these recordings, and not only at the McMillin Theatre.

Ussachevsky was asked by other institutions—by the Composers Forum, for example—to make recordings of events, because Columbia University kept all the recordings in their Library. So somebody had to go and do those recordings, perhaps for the Composer’s Forum at the Donnell Library, or for the Hispanic Society. We also had concerts of electroacoustic music at other locations. Even if there was only one piece of electronic music, Columbia University had to do the technical support for it, and that became one of my missions. We did a concert with José Serebrier conducting, with the American Symphony Orchestra at Carnegie Hall, when this hall re-opened. Serebrier is an Uruguayan composer and conductor. He was assistant to Leopold Stokowski with the American Symphony. He conducted the *Concerted Piece* by Ussachevsky and Otto Luening, so we had to bring loudspeakers, amplifiers, tape recorders and what not. Those were the jobs I did. Ussachevsky kindly gave me these opportunities. And that was developed further during my second year, when my fellowship finished, and he was able to offer me a job. In this respect he was a very humane person, always thinking about the problems of the individual and how he could survive. He knew very well that as a student, you might have a fellowship, but that the fellowship was not enough to cover your expenses, so he always tried to find other jobs for us. Mario Davidovsky and I were working with the Laura Bolton Collection for a whole year. That was a sound recording legacy donated by Laura Bolton to the Music Department, a collection of recordings of ethnomusicology, particularly music by American Indians. The recordings were on aluminum records, or were recorded on strange types of tapes or discs. They all had to be re-recorded on regular tape, spliced and organized properly. Aside from the daily assignments of recording concerts or of doing a performance, we could also work on the collection. And that way we actually made some extra money and managed to survive.

ALCIDES LANZA: Did you take classes with Ussachevsky? Were you in his electronic music class?

ANDRÉS LEWIN-RICHTER: I would say yes, I was in his class, but perhaps it was more as an assistant than as a student. I learned indirectly, because what he did was most-

ly music appreciation classes. I never attended a real class of his in electronic music, because there was no such thing as systematized classes of electronic music. What we did at the time—and it is the thing I liked very much about Ussachevsky’s way of working—was, first of all, there was no credo or aesthetic principles to be taught to a student. What was taught was that there was a studio, that the studio had “sound possibilities,” and the only thing a composer was supposed to know was how to use the equipment properly. And that was my job, to show the students this or that piece of equipment and teach them to use it correctly. Eventually, each composer should be able to work by himself. No assistant should be required. The assistant was only a tutor, for a while, and not the person to actually do the composition. The principle was, it is a hands-on job and the composer was to do his own music. The assistant was there to answer questions, to solve problems. Now, this principle allowed that Studio 106—the one available to student composers—was open twenty-four hours a day, seven days a week. Students were assigned lab times, day or night. If someone needed help, they requested it from the department, and someone—like myself—would be there to help make the sound in a certain way, help the composer learn more about the use of equipment, or help solve synchronization problems. At times a ‘second’ hand was needed in order to be able to do a complex operation manually. So that was the way I learned it, always in an indirect way. Because Ussachevsky didn’t teach it.

AL: Do you think that there was some philosophical or technical reason for his insisting that the composer, or student composer, should be able to work by himself or herself? Because you would be surprised to see how much of that training under Ussachevsky’s guidance I ported to McGill. For example, the McGill studios are open seven days per week and twenty-four hours per day, if needed. Also, the students are encouraged from day one to work by themselves. There is no question that I got all that from my training at Columbia-Princeton. Was there some rationale in Vladimir’s mind for saying that is the way we do it here?

AL-R: Yes. First of all, the Electronic Music Studio was not highly regarded by the music department. It was considered like an accessory element that had the luck of having enough recognition in the City of New York and worldwide, I would say it was probably getting enough funds to subsist without the help of the music department. And I think that was the problem of later composers: for example, Mario Davidovsky, who got his position in the music department very, very late—in the mid ‘70s—when we know that he had



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Electronic Music Foundation,
Albany, New York

Princeton Electronic Music Center, 1967



Alcides Lanza



photo by Alcides Lanza

Speed Variation Panel

been in the EMC from the early '60s on. Actually he had to teach at the City University of New York because he could not get a real position at Columbia University at that time. The Music Department at Columbia was divorced from the EMC. The EMC had to survive by itself. There was a composition class offered on electronic music, but it was an elective course, not a compulsory course.

AL: But, will that explain why he was saying that the user had to work alone?

AL-R: He had no staff. He had assistants that were volunteers, because they had a fellowship and they were happy to work in the studio and assist the students, but they were not really instructors and they were not on the payroll.

AL: Well, I am interested in this subject because it made that studio diametrically different from the European studios.

AL-R: And that is one of the things I liked, because I knew that in almost all the European studios it was kind of an aesthetic dictatorship. You can take Paris, or Cologne, two diametrically opposed systems, and if you did not share the philosophical ideas of the people who ran the studios, you had no chance to get in—because they were fixed on some ideas and they wanted to put those ideas through.

AL: Yes. I agree. But my mind is stuck in a different groove here. In my understanding, during those years, if one got a commission to work in Cologne, for example, or in the studio in Warsaw, the composer had to dance, jump around, tap dance, write, whistle, sing, describe what he wanted, but never touched the machinery. Since most of the studios in Europe were connected with radio stations, and had unionized personnel, the sound engineers or technicians were the ones to touch the machines and to create the music for the composer.

AL-R: I was never aware of unions in Europe, in that sense. But there is no question that the leaders of the studios were adamant that the composers should not touch the machinery.

AL: Right. So, at Columbia-Princeton they were taking the opposite view. I accepted that viewpoint when I was a student there for a full year, in 1965. This was after you had left. By that time the electronic music composition class was well established. I was one among twenty students in the class, which met once or twice a week. And what you were saying is true; we were given theoretical classes. Ussachevsky would come to the class with his assistant, İlhan Mimaroglu, and talk about works from France or Germany. [Mimaroglu is a Turkish-American composer, and was, for many years, a visiting composer and technician at the EMC. As artistic director of Finnadar Records, he produced many albums of electronic music. —Ed.]

Ussachevsky would attempt an analysis of the examples played in class, and if it was connected with the technology available in Studio 106, where the classes were held—let us say, Ring Modulation—then Mimaroglu would have prepared examples beforehand and demonstrated them in class, with the students participating: “If you do this, this is what you get,” etc. In Ussachevsky’s class there were aesthetic discussions with examples from the repertoire, and corresponding technical demonstrations. Outside of the class time, the students were assigned lab times with a technician. Mimaroglu was my technician, so I can say that he was the one who taught me how to use the machinery.

After a few weeks, the students were able to start working alone. It is true what you are saying: we were pushed to work in that manner. For the rest of the year the production in the laboratory, works for the class, exercises that ended perhaps by being real compositions—those we did by ourselves. Progressively we were receiving less and less assistance from the technicians.

AL-R: One of the problems we had was that our pieces were not performed in public, let us say at the McMillin Theatre. We had to find our own ways for our compositions to be heard. How was that during your time? Were there by then regular concerts including student pieces?

AL: I think it was still the same situation. But we might have benefited from your earlier experiences. The regular concert series at the McMillin Theater for new music, electroacoustic or not, was organized by the Group for Contemporary Music, co-directed by Charles Wuorinen and Harvey Sollberger. The works by student composers were not given any place in their programs. We were not asked for our works; if anyone spontaneously offered a composition to the group, it was not accepted. But the class during my time was a significantly important class, it included Jakob Druckman, William Hellermann, Jon Appleton, Charles Dodge, George Flynn. Perhaps it was only a coincidence, but we all continued our careers in composition. We are all different types of composers. Dodge is more into digital music, I remain even today closer to *musique concrète*, etc. With those people there, there was pressure; their music had to be performed. We discovered that there was already another group, the

Columbia Composers Group. It had been started one or two years before, which is why I am saying that we may have benefited from your experience.

AL-R: I don't know if it was under the influence of Walter Carlos, or perhaps Mimaroglu, but somehow the pieces were performed somewhere at Columbia, but not in any way connected with the music department. At least two of my pieces were done at Barnard College.

AL: By 1966 we had some pieces completed. We were elbowing our way around, asking questions. We knew that the Wuorinen-Sollberger configuration was hopeless; they showed no interest whatsoever in what we were doing, and someone told us about the Columbia Composers Group. A name that comes to mind is Ran Blake.

AL-R: Yes, Ran Blake, was a performer, and a student of mine.

AL: So, that group welcomed our works with open arms. That way, several of my pieces were performed at the McMillin Theatre.

AL-R: Additionally, there were the music readings of Max Polliakoff, who had an ensemble to which anyone could submit scores. The pieces did not include electronic music at that time, only instrumental composition.

AL: I don't know if it was the same group, but at some later time Efrain Guigui was conducting readings. They did it in a single session, with a couple of rehearsals and then a recording of the performance. As a newcomer from Latin America—aware that the Wuorinen-Sollberger group had such good performers—I used to attend their concerts and the level of performance was sensational. So, I decided I wanted to write my next electronic music project for Ussachevsky's class for the instrumental configuration used by the Group for Contemporary Music. In late '66 I wrote a piece called *interferences I*, which is for two groups of wind instruments—woodwinds and brass—plus quadraphonic tape. True, no one had asked me to compose it, but I sent it to Wuorinen and Sollberger, and well ... I never got an answer, they never said yes, no, thank you, nothing; they remained silent. Eventually I submitted it to the reading sessions with Guigui, who conducted it, and I finally heard that piece.

Getting back to Vladimir, what I experienced with him outside of his very good teaching, was his friendliness. After my Guggenheim Fellowship ended, I had other fellowships whose stipends were getting smaller and smaller. First, the Guggenheim granted me an extension, then I got a grant from the Ford Foundation and then, one from the Organization of American States. At that point I was in need of earning extra money. I had done my training at Columbia, and Ussachevsky was very pleased with the compositions I had created, with my knowledge of the studio and with the progress of my English, which I had practically learnt from scratch in New York. So, I went to talk to him and that helping hand was already extended. He gave me an assistantship, so I became a technician in Studio 106. Perhaps it was also that I could speak and teach in Spanish—handy, since a succession of Latin American composers was arriving, with different fellowships and probably not speaking much

English. As a technician, I was now doing what you and Mimaroglu had done earlier. I had Sergio Cervetti from Uruguay, Manuel Enriquez from Mexico, Marlos Nobre from Brazil, Edgar Valcárcel from Perú and others. It became part of my training as a composer because I learned a lot by teaching other people. I did that for almost six years, so I was well prepared when I came to McGill. I came to teach electroacoustic music and eventually I directed the Electronic Music Studio.

One thing I recall is the multichannel sound system that was installed at the McMillin Theatre. You must have seen it before I arrived there.

AL-R: Yes, there was a big mixer, a very heavy one that was occasionally installed for concerts.

AL: Was it handmade? I recall that the commercial ones did not even exist at the time.

AL-R: You are correct. It was designed and built by Peter Mauzey under the guidance of Ussachevsky. It was stored in Studio 106. For concerts it was installed in the mezzanine of the concert hall. That meant that you always had to deal with many connectors and these connectors could easily be damaged because of the constant plugging and unplugging. It was a manual system. We always tried to play from four-track tapes, played on half inch tape recorders. That was the mastering format we were using at the time.

AL: Well, I was intrigued by what I found there and I counted somewhere between twenty-four to thirty loudspeakers. Some surrounded the audience, front, back, left, and right, at floor level, and those were installed for each performance. Others were permanently installed in the ceiling. There was a multitude of loudspeakers, and when looking at the large mixing console, handmade in the early '60s ...

Rosie: Insert photo of sound system near here. ??????

AL-R: ... it had colourful rotary controls, there were no reliable faders at that time.

AL: It was similar to the very famous mixer in 106—probably also made by Peter Mauzey—a very sophisticated mixer for its time. Of course, the one in the theatre was much larger. All the composers, as you said, were mastering quadraphonically, using half-inch tape. By sending each monophonic signal into two adjacent channels you could create an octophonic feeling, using that huge mixer as a distribution system.

The performer could send the information to chosen sets of loudspeakers, say to the back, to the front, to the ceiling, etc.

AL-R: It was used that way by the composers, for the diffusion of their pieces. Every composer used to diffuse his or her own piece. However, it was not easy to handle, because the controls were awkward.

AL: I think that the concept was the important thing. As we know, the French school favours orchestration with loudspeakers. In Bourges, France, they use a hand made mixer, which has only two channels of input, but these two channels are broadcast through channels with different equalization or filtering settings into about eighty loudspeakers which, by pairs, have different characteristics. [This is the Gmebephone. It will be discussed in an article by Christian Clozier in *Computer Music Journal* 25.4. —Ed.] So it could be said that the concerts done at the McMillin in those years, with multiple loudspeakers and a console-distributor of sound were pioneering efforts in the direction of acoustic presentation.

AL-R: There was no other place in town that could have that many loudspeakers installed for a concert. With the other performances we did at Carnegie Hall or at Philharmonic Hall, we installed only four loudspeakers, and usually played from a stereo tape recorder rather than from the four-track. This was because the quadraphonic tape recorder was very heavy and was permanently installed in Studio 106.

AL: Wasn't there a direct audio link between the McMillin Theatre and Studio 106? Were they pre-wired?

AL-R: Yes. Actually, all the recordings at the McMillin were done from 106. There was a complete wiring system, back and forth. The microphone system for recording was connected to Studio 106 through plugs in the wall, and the loudspeaker system and the big mixing console were also connected with Studio 106. We even had a patch panel in there so the sound could go directly into the theatre from a tape recorder in Studio 106. The sound could travel back and forth, because it was all pre-wired.

AL: So the concept was of a recording studio attached to a concert hall.

AL-R: Exactly. We really profited from having those facilities.

AL: Did Ussachevsky entice you to go and work in the other studios? Studio 106 was at 116th and Broadway. The others were at 125th and Broadway.

AL-R: I was one of the few privileged people who were allowed to go to what is now called Prentiss Hall, that was where the Mark II Synthesizer from RCA was housed, in the studio at 125th street. I worked there and also in Studio 317. This one was used mostly only by Ussachevsky, but since he was not there all the time, whenever there was a chance, I knew I was allowed to use it. I was able to test the Klangumwandler—a device developed by Harald Bode, similar to a ring modulator, but where a complete set of resultant frequencies was suppressed. And I also tested the first synthesizer units coming from Buchla and Moog, which were installed on trial at 317. As for the Mark II, which was installed around 1960, it was underused. The only person who knew it well at first was Milton Babbitt; and later on,

Charles Wuorinen used it.

I knew their schedules, so I knew there was time for other people to work there. Babbitt had everything connected his way, but anyone could go and also work on the Mark II Synthesizer if they used that configuration, because there was no other patching to be done. You had your filtering panel, and all your pre-sets on the oscillators. Each time you went to work in that studio, you simply had to re-confirm that all was as needed.

AL: You were a lucky man, because you were trained as an engineer.

AL-R: Yes, that probably was why I was able to fit so easily into that world.

AL: After my initial training for a couple of years, first as a student, then as a guest composer (I felt privileged that I was considered a guest composer) I told Ussachevsky that I wanted to work with The Mark II Synthesizer, and his answer was "Well. I do not see that as possible, Alcides. You will need two years of going back to school for certain studies in mathematics, theoretical classes, logic". Obviously, my preparation was too weak. But *you* were an engineer.

AL-R: Well, yes. I did some servicing in the acoustics lab and learned how to maintain tape recorders, to align them by myself. I could do soldering, repair connectors. So it was not only my training as an engineer. I also had hands-on experience.

AL: What were some of the musical influences you noticed at Columbia-Princeton?

AL-R: I was involved in helping Ussachevsky with his compositions *No Exit* and *Of Wood and Brass*, and that gave me some insight into his ways of working with the material. His approach was to thoroughly study the possibilities that recorded instrumental sounds could provide. This required a lot of time in experimentation, but provided abundant resources that he would work with on a long term basis. He used these sounds to create backgrounds for combinations of live instruments with tape, for instance. His masterful use of these with the studio equipment gave new dimensions to the textures. He used a ring modulator and the Klangumwandler, beginning with complex sounds and filtering them so that fine layers of very defined sounds emerged.

Another working method I noticed was his sense of improvisation, of true musicianship, which he had originally developed as a pianist and now applied to playing instruments in the studio. He liked to improvise, to record the

As a composer I was concerned that [the pieces called *Miniatures*] be imparted with that elusive quality known as musical value ... It has been my practice to pose certain technical problems in each new piece, and to proceed with finding the solution primarily for the benefit of a particular musical objective, but also with the aim of enriching the store of technical knowledge.
—Vladimir Ussachevsky, from "The Making of *Four Miniatures*, for tape"



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Alcidés Lanza

mental precision. The synthesizer was his only instrument, and for him it was a superinstrument, programmed to do what no human being could achieve.

Buhlent Arel was closer to Ussachevsky, using big sounds. He mastered the stereophonic aspects of sound: sound moving, sound exploding. It created a sensation of awe and power. He was a very fast worker, but had little interest in the interaction of live instruments with electronic sound.

Mario Davidovsky's first two studies were similar to Arel's approach, but then he decided to interact more with live instruments. There were no more big sounds, no improvisation either. Each sound was developed separately and then used compositionally as if it were an instrument. All his sounds were of electronic origin, with no recorded instrumental samples. The effects were similar to percussion sounds, or plucked strings. The results, as heard in his composition *Synchronisms*, are very attractive and the interplay is masterful. Many composers have tried to follow this method.

As a young student I was influenced unconsciously by all four of these tendencies, and I tried all of them. At that time I was more fascinated by Davidovsky's approach, so, I would always declare myself to be a follower of Davidovsky. But if I look back on my compositions since 1972, once I settled again in Barcelona, Spain, there is no doubt that the influence of Ussachevsky prevails over all other tendencies. I developed a style which uses Ussachevsky's philosophy and his ways of working, but I applied it to basic ideas developed by Davidovsky. My most significant pieces since then are the series of *Secuencias*. At present I am working on number 14. They are all pieces for solo instrument and tape, following structures similar to Davidovsky's *Synchronisms*, but the sounds are handled more in the manner of Ussachevsky. Recorded instrumental sounds are used as starting samples, but processed in such a way that they are difficult to recognize: when I do this I am using techniques that I learned



Alcidés Lanza

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while working with Ussachevsky.

AL: One thing I recall is his listening to instrumental sounds from a very close range, almost getting into the sound. To do this he developed early close-miking techniques. Also, in processing the sounds he studied them closely, making observations of interest, naming and documenting the characteristics of separate tape samples. He would pay very close attention to one detail, perhaps only the attack of a piano recording for example, or only the ending, the decay.

Ussachevsky also researched modulation both in class and in his compositions. Studio 106 had several ring modulators and at least one Klangumwandler, and he used them often. He also paid special attention to filters. In class, for example, Mimaroglu would have prepared a loop with a Ussachevsky instrumental sample, and would play it through a ring modulator or Klangumwandler. Ussachevsky would require the class to analyze and be able to speak about the different transformations of the original sound. The same loop was then processed via different sets of filters—third of an octave filters, band-pass filters, etc. The discussions would take the class into the areas of harmonic content, formats, subharmonics, and other esoteric notions.

AL-R: Were you influenced by the ideas he developed and his use of equipment?

AL: Yes. It's from Ussachevsky that I developed the idea of thinking of instrumental music as if it were electronic music, as when the composer thinks, My chamber ensemble goes through this imaginary filter which I am gradually closing, so I must "write" the result of the processing, by dropping, say, the higher sounds and higher harmonics, keeping only the lower instrumental sounds. This is analogous to processing sound through a low-pass filter, while lowering the frequency cut-off point.

AL-R: What other musical influences did you pick up from Ussachevsky?

AL: In 1965 or so, composers began to show more interest in the combination of instruments with tape. Ussachevsky encouraged me to finish a project I had initiated at the Di Tella, in Buenos Aires in 1964. It was for a percussion ensemble of six players with tape. So by 1967, only a few months after arriving in New York, I had composed three compositions with tape: *plectros II* for piano and tape, *interferences I* for two groups of wind instruments and tape, and *interferences II*, the percussion piece.

Another thing I learned from him was the importance of documenting the research stages and finalized compositions. All students and visiting composers were requested to deposit copies of their master tapes at Columbia University,



Alcides Lanza

and I did the same thing at McGill. Recently the McGill Electronic Music Studio and McGill Records presented a complete set of thirty-five CDs—the McGill EMS Archival Collection—to the McGill Music Library. Can you still see Vladimir's hand pushing me in this direction?

AL-R: Did you hear his pieces performed often?

AL: Yes, frequently, at the McMillin Theatre, of course, but also at Lincoln Center and other spaces in Greenwich Village. He also hired me as a sound man. I was inexperienced, but he said, "Yes, Alcides, you can do it." He followed this statement with a succinct demonstration: "Here are your wires—long ones. Take this small connecting box [handmade by Mauzey], the tape recorder, amplifier, loudspeakers. And here is the tape and score. Rehearsal is at two. Here is some money for the taxis. Keep all receipts." The piece was his *A Poem in Cycles and Bells* (1954), for orchestra and tape, performed in a town in New Jersey. It needed precise synchronization between the orchestra conductor and the tape part, so I provided cues, amplitude levels and everything. It was a learning experience.

AL-R: What do you remember about his music?

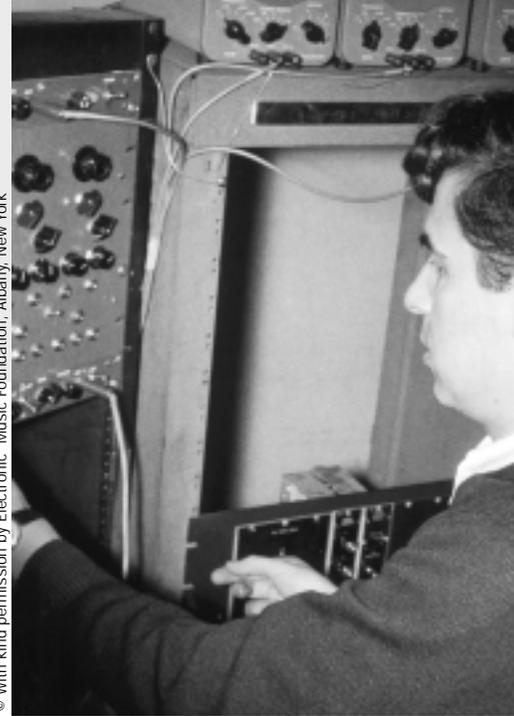
AL: In my thirty years of teaching at McGill, I have never failed to present his music in the electroacoustic composition classes. A favourite of mine is his *Of Wood and Brass*, of 1965. It is almost a *musique concrète* piece, but its strong point for me is the formal aspect of the work. Ussachevsky planned the four different sections very carefully, and placed the 'sound protagonists' at the right time and place. The listener cannot fail to recognize the instrumental colours and phrase linkages envisioned by the composer. He left good notes for it, sketches, and quite a bit of information on its realization. He did the same thing for his other pieces and the information is published.

AL-R: Were you concerned while you were his student that his music might influence yours?

AL: No, because I have never been concerned with influences. By 1965 I already knew quite well where I was going. Ussachevsky's approach fit quite well with my own interest in graphic notation, composing with textures, dynamics, colours, but not necessarily with notes or pitch-classes. He was my mentor—and probably everyone's mentor—and idol. Of course there were influences. Perhaps more than that, there were moments of realizing that we were thinking, musically, on the same wave-length—music to touch, to feel, music as colour, as form and texture. He was using microphones for his research and was receptive to my ideas about working with percussion, voice, and noise. This last was mortal sin for other Columbia composers at the time.

He was a mentor for you as well?

AL-R: Ussachevsky's humane approach, his willingness to help, taught me a lot about composing. I became a composer thanks to him.



Alcides Lanza

Alcides Lanza initiated

the idea of conducting this series of conversations; he also transcribed the interviews in preparation for publication. Lanza, in collaboration with actress-singer Meg Sheppard, has performed recently in the De Paul New Music series in Chicago, at the Milwaukee-Wisconsin Electronic Center, and at Florida International University in Miami. While touring Argentina, their principal concerts were held in the Espacio Experimental, Teatro Colon, Buenos Aires, and Teatro Universidad, Mendoza.

REFERENCES

Ussachevsky, Vladimir. 1968. "The Making of Four Miniatures, for tape," in *Electronic Music Magazine*, issued by the *Music Educators Journal*, November.

USSACHEVSKY SONOGRAPHY

A Poem in cycles and bells. Composers Recordings, CRI ACS6011.
Sonic Contours; Piece for Tape Recorder (1955); *Computer Piece No. 1; Two Sketches for a Computer Piece* (1971) on *Electronic Music Pioneers*, CRI CD 611.
No Exit (1962); *Apogee* (1967) on *Electronic Film Music*, New World Records, NWR 80389.
Of Wood and Brass (1965) on *Music of Vladimir Ussachevsky (1911–1990)*. Composers Recordings, CRI S-227.

RÉSUMÉ FRANÇAIS

Résumé de l'article : Cet article est le deuxième d'une série de trois entretiens entre les compositeurs Andrés Lewin-Richter et Alcides Lanza où ils discutent de leur expérience auprès de trois figures importantes des premières années de la musique électronique. La première partie portait sur leurs souvenirs d'Edgar Varèse, remontant aux années 1960, alors que le présent article porte sur leur expérience auprès de Vladimir Ussachevsky. Lewin-Richter a commencé à travailler avec Ussachevsky et son équipe alors qu'il étudiait en génie et en acoustique à l'Université Columbia. Ussachevsky y dirigeait le studio de musique électronique et Lewin-Richter l'assistait dans l'entretien du Studio 106 où Ussachevsky enseignait, en plus de réaliser des travaux préparatoires pour les pièces musicales et théâtrales d'Ussachevsky. Pour sa part, Lanza a suivi une classe de composition de musique électronique avec Ussachevsky en 1965 et fut engagé par la suite comme technicien au Studio 106. La troisième partie de leur entretien, à paraître dans le prochain numéro de *Musicworks*, portera sur leur expérience avec Hugh Le Caine.