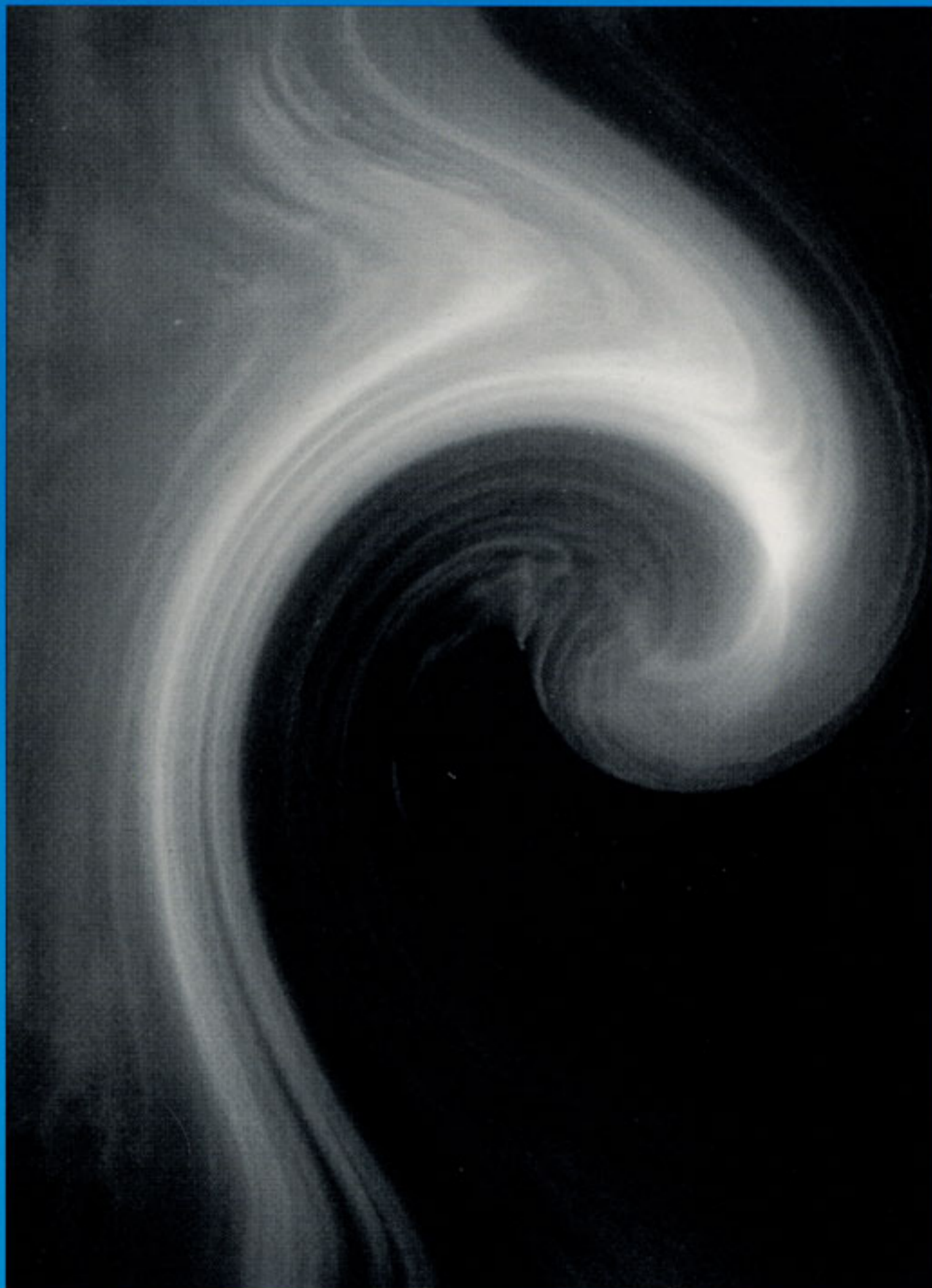

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Physical Modeling of Musical Instruments



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Luc Ferrari stands out as one of the most original and unclassifiable composers of his generation in France. Affiliated with the French radio's Groupe de Musique Concrète in 1958, he was to break away after only six years to pave his own eclectic compositional paths, including highly personalized expressions of minimalist music, anecdotal music, soundscape composition, aleatoric/improvised scores, radiophonic music, sound installations, and musical theater. In 1982 he founded the Paris electroacoustic studio La Muse en Circuit, with which he was closely involved until 1994. In 1987 and 1991 he was awarded the Prix Italia for his compositions *Et si toute entière maintenant* (And if Altogether Right Now) and *L'Escalier des aveugles* (Stairway of the Blind).

The *Musique Concrète* Solar System

Robindoré: What originally attracted you to Schaeffer's studio and to *musique concrète*?

Ferrari: I must first specify that I came from the tradition of the written score. Before working within Pierre Schaeffer's entourage, I had already composed instrumental and orchestral pieces. Parallel to this, I was following the various avant-garde movements of the day. So I was aware of the *musique concrète* experiments at that time. I attended one of the first Schaeffer and Henry concerts in the late 1940s. I remember well the performance space in the former Conservatory Hall on the Grands Boulevards, a beautiful old Italian theater lined with lush red velour. Quite a space for such a concert! I had also been to Darmstadt between 1954 and 1958, where I met some of the most important creative figures of the time: Stockhausen, Nono,

Luc Ferrari: Interview with an Intimate Iconoclast

Berio, and Pousseur. During this same period I met Schaeffer in Paris. I was giving concerts of contemporary piano music composed by myself and my friends. Some of it was quite poor, but I was an accomplished performer. Schaeffer happened to attend one of my concerts and told me afterwards that I should join his Groupe de Musique Concrète (GMC). I told him I needed first to explore orchestral music before launching myself into this field.

Robindoré: You mean to say that Schaeffer was able to discern your potential artistic sensibility in the field of electroacoustics by hearing you play piano music?

Ferrari: It really is quite astonishing. He also heard that I was a good musician.

Robindoré: Did your playing or the pieces performed introduce more sound-oriented musical elements, which perhaps could have evoked for him the *objet sonore* (sound object)?

Ferrari: I think that what may have interested him was the contrast it offered to most pieces of that time that were so completely and systematically serial. In my scores, one could hear the serial elements but also that I was already deviating from this system. Schaeffer heard that. On top of this, I played piano like a wild man, extremely wildly, and this was perhaps even closer to the Bruitistes or Futurists. Instead of being on Boulez's side, I was already on the side of John Cage and of Edgard Varèse. The pianistic gesture was for me an adventure. I took absolutely no precautions. I was playing as a composer and not as a pianist, so the concern was with music and not with notes. This naturally entailed some risks which I wanted to take, and the result was a certain savagery.

Robindoré: When did you finally decide to collaborate with Schaeffer?

Ferrari: I entered the GMC in 1958, at the time when Schaeffer and Pierre Henry's historic breakup occurred, which I witnessed. Henry took all his friends and assistants—his "little universe"—along with him, and by a strange set of circumstances I

Translation by Brigitte Robindoré.

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Figure 1. Historically eclipsed by the world premieres of Edgard Varèse's *Poème Electronique* and Xenakis' *Concret PH*, the *International Days of Experimental Music*, which took place during the Brussels Universal Exposition, were the occasion of the newly formed GRM's

first concert, given on 5 October 1958. Other concerts included ballets choreographed by Maurice Béjart with musique concrète by Pierre Henry and Pierre Schaeffer; a concert presented by the Audio-Visual Research Foundation of San Francisco with works by

Vladimir Ussachevsky, Gordon Longfellow, and David Talcott; an electronic music concert with works by Herbert Eimert, Ton de Leeuw, Bruno Maderna, and Louis de Meester; a lecture entitled "Indetermination" by John Cage and David Tudor; and the projection of

films with electronic sound, such as *Liège, Cité ardente* (*Liège, blazing city*) by E. Degelin with music by Henri Pousseur, and *Symphonie mécanique* (*Mechanical symphony*) by M. Mitry with music by Pierre Boulez.

EXPOSITION UNIVERSELLE ET INTERNATIONALE
DE BRUXELLES 1958

Commissariat général du Gouvernement

Journées internationales de musique expérimentale

BRUXELLES — 5-10 OCTOBRE 1958

Le Commissaire général du Gouvernement près l'Exposition universelle et internationale de Bruxelles 1958 a confié l'organisation des Journées internationales de musique expérimentale à l'Institut national belge de radiodiffusion.

DIMANCHE 5 OCTOBRE

15 h.

Petit Auditorium

CONCERT DE MUSIQUE CONCRÈTE

ŒUVRES RÉALISÉES DANS LES STUDIOS
de la
RADIODIFFUSION-TELEVISION FRANÇAISE

PREMIERE PARTIE : RETROSPECTIVE

1. Etude pathétique (1948) . . . Pierre SCHAEFFER
2. Variations sur une flûte mexicaine (1949) . . . Pierre SCHAEFFER
3. Vocalise (1952) . . . Pierre HENRY
4. La Boîte à musique (1955) . . Philippe ARTHUYS
5. Etude 1 (1953) . . . Michel PHILIPPOT
6. Orphée 53 (extraits) . . .
Prologue - Dialogue - Les Monstres - Le voile d'Orphée . . . Pierre HENRY et Pierre SCHAEFFER

DEUXIEME PARTIE : ŒUVRES RECENTES

7. Déserts (1954) (Extraits) . . . Edgard VARÈSE
8. Deux études (1958) . . . Luc FERRARI
Etude aux accidents . . .
Etude floue . (Première audition)
9. Trois aspects sentimentaux (1957) . . . Henri SAUGUET
10. Etude aux allures (1958)
(Première audition) Pierre SCHAEFFER
11. Etude aux sons tendus (1958)
(Première audition) Luc FERRARI
12. Diamorphoses (1958) . . . Yanis XENAKIS
13. Continuo (1958)
(Première audition) Luc FERRARI et Pierre SCHAEFFER
14. Etude aux sons animés (1958)
(Première audition) Pierre SCHAEFFER

6

found myself face to face with Schaeffer alone. He said we were to begin a new thing; we had the opportunity to start a new era. So much had transpired up to that time in the GMC. Many composers had passed through the studio: Philippot, Xenakis, Boulez, Stockhausen, Messiaen, and Sauguet. It was clear that Schaeffer's objective was closer to research than to composition, which ex-

plains his renaming the center the Groupe de Recherches Musicales (GRM) soon thereafter. The first concert given by the newly formed GRM was during the 1958 Brussels Universal Exposition. Three of my first tape pieces were premiered there: the *Etude aux accidents* (Study of accidents), the *Etude floue* (Blurred study), and the *Etude aux sons tendus* (Study of tense sounds).

Robindoré: What was the general perception of *musique concrète* by the establishment at that time? I was under the impression that it was looked down upon as a kind of ghetto for failed musicians.

Ferrari: As always, journalists and institutions accused us of not being musicians. Pierre Boulez was especially critical, particularly after he himself had gone through the studio. Also, *musique concrète* represented the avant-garde, but the bad boys of the avant-garde. The good boys were the electronic music composers from Cologne, the studio where all the sounds were clean and pure. This avant-garde was not rejected, because it could follow a theory; one could establish in an absolutely scientific manner the exact pitch, dynamic, and duration of a tone. It was marvelous. The first studies of Karlheinz Stockhausen demonstrate this. In comparison, *musique concrète* was a collection of dust: the sound objects were dirty, the source material was found in any old corner. It was literally made of dusty old bric-a-brac, like coils, sheet metal, and broken pianos. So vis-a-vis the slowly mounting institutionalization of contemporary music, Stockhausen was respectable, as well as Boulez and the Domaine Musical. To add to this, Schaeffer had a terrible personality and had already had arguments with practically everyone. So when I came into this situation everyone was already angry with the studio.

Robindoré: Eventually you deviated from *musique concrète*'s strict code, marked by the work *Hétérozygote* [1963–1964].

Ferrari: This was in fact the moment in which I left the studio itself. After my departure I started working in film, directing a series of made-for-television documentaries called *The Great Rehearsals* with my colleague Gérard Patris. During the years 1964–1966, we produced five programs: the dress rehearsal for the world premiere of Olivier Messiaen's *Et Expecto Resurrectionem Mortuorum* at the Chartres Cathedral in the presence of Charles de Gaulle; Stockhausen conducting the premiere of his work *Momente*; Hermann Scherchen conducting his own orchestration of Bach's *Art of the Fugue* in a portrait entitled *Quand un homme consacre sa vie à la musique*

(When a man consecrates his life to music); and Cecil Taylor's quartet, which was a discovery of free jazz. The fifth program was to be an encounter with Edgard Varèse, but he died just before we were to go to New York. So I put together the *Hommage à Varèse* (Homage to Varèse), which had interviews with Messiaen, Boulez, and Stockhausen. I also filmed Bruno Maderna rehearsing *Déserts* in Paris in 1965 for this program.

Varèse's Impact

Robindoré: Edgard Varèse was a controversial figure at that time, and one of the most important composers to have worked at the GMC. How did you come to be "on his side," as you mentioned earlier?

Ferrari: I heard the radio broadcast of the Paris world premiere of *Déserts* for orchestra and electronic tape in 1954, and it absolutely overwhelmed me. Unfortunately, due to an extreme fever, I was unable to attend the concert and had to content myself with listening to the radio. I had never heard anything like it. I had previously heard a few rare broadcast performances of his pieces, and now I simply had to meet this man.

Robindoré: That seems like quite an initiative for a young composer. How did this come about?

Ferrari: It is a wonderful story. I had earned a little money and immediately bought a ticket for the United States. This was in 1955. My sister lived in Miami at the time, so I planned to visit her first. I took a cargo ship, because it was cheaper than a passenger ship, from Le Havre to Miami. It took three weeks and was quite an extraordinary experience. The ship passed through New York and then Cuba before ending up in Miami. From there I wrote a letter to Varèse requesting to meet him. I went by train to his home in New York City. We spoke of his life, of everything except music. It was a time in which he was no longer composing. After the reception in Paris of *Déserts* he entered into one of those long periods of despair and inactivity. Yet he was still quite stimulating. We took a lot of walks together and ate at Italian restaurants.

Robindoré: What was it about Varèse's composi-

tions that so impressed you? Did he have a significant impact on your own work and on your way of perceiving music?

Ferrari: What struck me with Varèse was his use of sound as a thing in and of itself. In *Déserts* it was not so much the tape part that affected me, but the new conception of instrumental writing. The sounds of the instruments had a vitality that made them live from within. This really impressed me, and this is one of the things that I seem to remember writing in my letter to him. I felt that the sounds composed in his scores found just the right way to place themselves in time and space, in the listener's ears and psychological perceptions.

Robindoré: The premiere of *Déserts* was a historic event. If I remember correctly, it was the first stereophonic radio broadcast of a work where listeners were obliged to have two radios receiving the stereo transmitted on two different frequencies. But the originality of the operation was lost in the scandal, on a par with the premiere of Stravinsky's *Le Sacre du Printemps*, which elicited some furious debate about the work done at the GMC. What were Varèse's relations with Schaeffer, especially after the reception of *Déserts*?

Ferrari: To my understanding, at one point Schaeffer adored Varèse, though I am not sure that it was reciprocal. Varèse preferred the GMC to the Philips studio in Eindhoven where he had composed *Poème Electronique* for the Philips Pavilion at the Brussels World Fair. Yet the *Déserts* concert did cause considerable administrative problems. No one expected the work to create such a scandal. It was so powerful that it had a destabilizing effect on individuals and institutions.

John Cage and Incongruous Juxtapositions

Robindoré: You often cite the importance of John Cage in your work. When did you first come into contact with him?

Ferrari: I met John Cage in Darmstadt in 1956, at the time of the great conflict between him and Pierre Boulez. During this period, Boulez had a will to create only one path of composition. He was saying that outside of his way there was no salva-

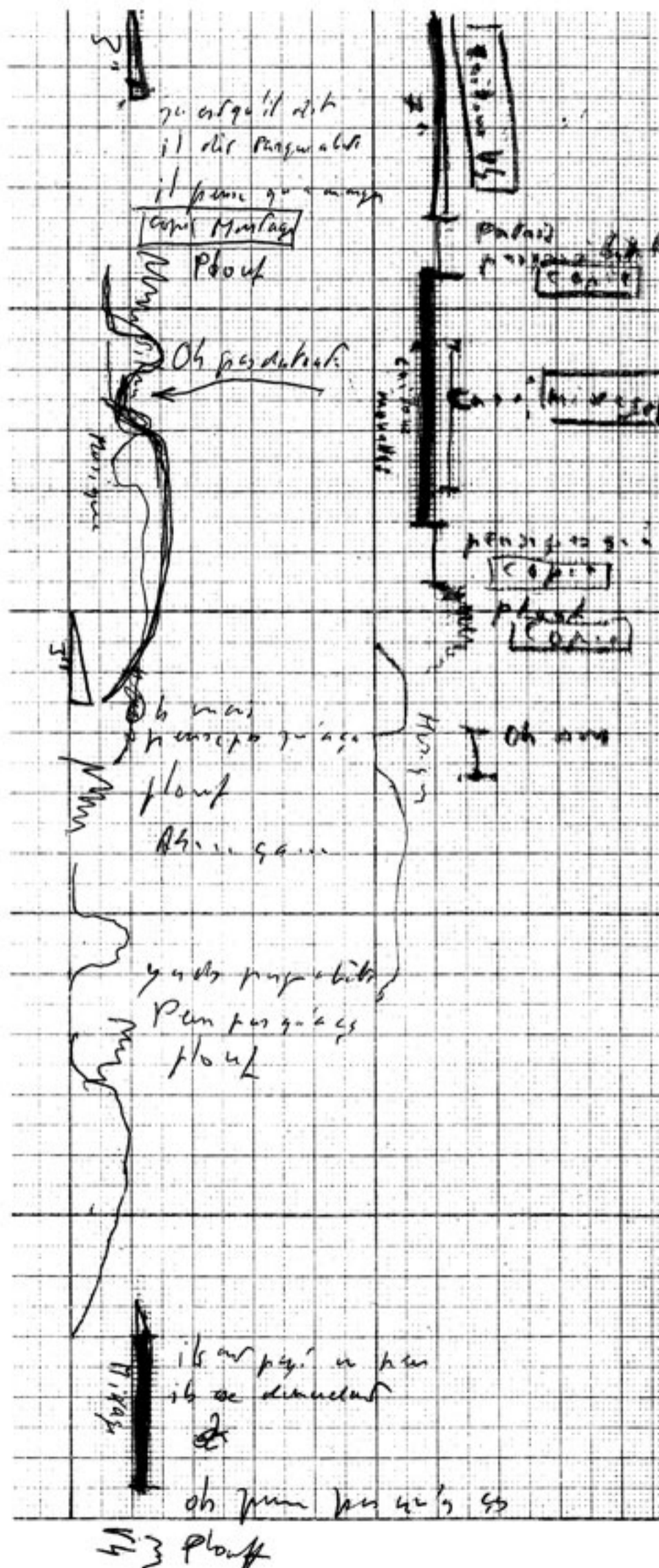
tion. His attitude was purist and intransigent. Naturally, someone like Cage was impure: he could compose scores that were totally serial, and at the same time write pieces based entirely on chance, and then perform works for piano without even touching the keys, and play music by blowing into bottles with water. This was absolutely scandalous for the time.

Robindoré: In January 1997, the GRM devoted a research seminar to your composition *Hétérozygote*. It was an opportunity for many of us to discover the historical importance of this work, especially in its departure from the *musique concrète* model of the time. We learned that you were the first GRM composer to have moved beyond the studio context to record ambient noises, conversations in the street, and environmental sonic events oftentimes characterized as "anecdotal," as opposed to sounds resulting from research and experimentation. I mention this because of your contact with John Cage. There seems to be a Cage-like attitude of openness to the unexpected and random, especially in the dialogues that you happened to pick up.

Ferrari: Naturally, I was influenced by Cage, but in a broader way: philosophically more than by his sound. Cage was not terribly concerned with sound, but rather with concepts. A concept is something that can exist outside of the unfolding of time, such as we are used to in a musical work. I probably felt a much stronger influence from surrealism—that is, from the juxtaposition of incongruous elements—which had nothing to do with music itself.

By this time the influence of the New Realist artists such as Armand (whose art was literally trash) and Yves Klein was much stronger on me than the influence of *musique concrète*. I was also concerned with the idea of the *objet trouvé*—the sound found by chance—an idea that did not exist beforehand. I was the first composer to use the Nagra portable tape recorder, which had just been invented, and to take it everywhere. During an entire year I was part of a film crew, for which I provided sound. I spent a year with a Nagra on my shoulder. This work allowed me to travel all over Europe and thus amass considerable recordings. I recorded sounds for my own compositions; I recorded everything I could. It is thus that I collected

Figure 2. Sketch from the four-channel tape work *Hétérozygote* (1964).



sounds which were not prefabricated, including conversations.

Robindoré: Certainly you must have been attracted to certain sounds and situations more than others, such that the recordings expressed your own affinities.

Ferrari: Yes, but I would never interpose my will on the sound, only on the manner in which I recorded it. This is the distinction. I asked myself, why transpose the ideas of traditional instrumental composition into the domain of electroacoustic music? Why cut, mix, and assemble electronic sounds into the same kinds of gestures one finds in instrumental music? This seemed absurd to me. It is in this way that I realized that the act of recording—that is, the way in which you capture a sound—was a creative gesture in and of itself.

Robindoré: Didn't this aspect of recording already exist? Composers were already concerned with the way microphones were placed for, say, a piano sound, whether inside or farther away. The creative use of microphones was a known subject of experimentation.

Ferrari: Yes, but in this case the sounds do not exist for you, they are not there waiting for you. An outdoor sound is fugitive. One wonders, will it return? Take, for example, a donkey that brays, and you miss making a recording of it because you were not ready. You then have to seek out a place where a new bray could sound even better than what you first heard. But will it bray again? And at that moment, while waiting for the donkey, you discover other things—the cicadas, the brushing of the wind against the grass—until three hours later the donkey decides to bray again. So during this time a massive amount of things have taken place and given you the opportunity to creatively record them.

Robindoré: Getting back to Cage, I remember that as a student he was accused by Arnold Schönberg of having no capacity whatsoever for harmonic development. His reply was that he would beat his head against this wall his whole life, implying that this wall would turn him toward his own capacities—that by virtue of his incapacity in one area he would discover what his real talents were. Have you ever felt this type of resistance or blockage to a certain aspect or perception of music, one which would lead you to develop the music that you compose?

Ferrari: No, not really. I think that at that time, I had to grasp the contradiction between the terrifying formalism of serialism and something that resembled aformalism. I had the extraordinary opportunity to take advantage of this contradiction, the vast expanse between the two, to forge my own musical world. Of course, young composers always hope to create a new universe. It seemed to me that this was a very interesting problem, though. Total serial control of all musical parameters did not interest me. Aformalism interested me a bit more because it was breaking away from something, but I could not really fit in with this. I wanted above all to compose works of music, and sound itself as a malleable substance interested me tremendously—and that was the Varèse influence. Four powerful phenomena needed to be resolved in me at that time: that of Varèse, *musique concrète*, serialism, and the total openness offered by Cage.

The Sound of Sunrise

Robindoré: We have spoken at length of those individuals and trends that have had an impact on you. Let us speak for a moment of those who may have been influenced by you. I was recently thinking of the similarities between your work and those who were later to be called the environmental or soundscape composers, notably from Canada. R. Murray Schafer's work in the 1970s seems to come on the heels of your most radical tape piece, *Presque Rien* (1967–1970). I cannot help but feel there must be some link between this movement and your revolutionary approach to the recording of natural environments and unrehearsed sounds and situations. Did you meet R. M. Schafer and discuss these concepts with him?

Ferrari: R. M. Schafer came to GRM around that time, but I never actually met him. Yet I have always been chagrined by the fact that he has never acknowledged me. Take *Presque rien, ou le lever du jour au bord de la mer* (Almost nothing, or sunrise by the sea). In this composition very little, almost nothing, takes place. It is a soundscape work, only I never gave it this name, nor did I need to create a theory about my approach. The work is a

series of sequences that represents a natural, given situation captured by a given manner of recording. This was the most radical composition I had ever composed. I was asking myself the question of how a composer can unfold this type of piece specifically without any musical sounds. My intuition allowed me to arrive at this solution. At that time, *Presque rien* was known throughout the world, as Deutsche Grammophon released it. Perhaps I have not been cited because my work was not scientific or expressive of a researcher's attitude. I have no pretensions of being the sole instigator of environmental recordings. I do not claim to be an inventor either, but I know that I am a pioneer.

Robindoré: Are there other aspects of this piece that you feel are important historically?

Ferrari: *Presque rien* was based on stereo recordings. I immediately used stereo when it was available. It was an extraordinary step of progress. I was one of the first composers to use stereo in a musical work. When we first worked in quadrphony it was with mono channels. With this wonderful discovery of stereo, sounds were present in the depth of space, not just within the left-right axis. The sound was not glued to the speaker. But *Presque rien* evoked an extremely negative reaction from the GRM. Everyone was scandalized by it without exception.

The 1960s Expansion

Robindoré: What are some of the other ideas that you have experimented with and developed in your compositions?

Ferrari: In the 1960s I was already preoccupied with my own conception of minimalism. I heard works such as Terry Riley's *In C* only much later, after 1970. It is a remarkable piece, as are the early compositions of Steve Reich. So their works corresponded to a dream I had had for a certain time. Yet I had already approached the problem from a different angle before encountering their music, with my *Tautologos* pieces, based on the word *tautology*. In these pieces I developed a manner of repeating by deviation. The deviation prevents the repetition from becoming a new rule. The most

permanent aspect of my work is that I deviate. The first *Tautologos* dates back to 1960, so the idea was already present in me, as well as in other people in a vague way. It was only later called minimalism. It was actually inevitable due to the accumulated constrictions of the compositional schools of the time, where perpetual variation was demanded. We could never repeat the same note twice—and unfortunately we had only 12—in the same register, the same color, the same instrument! Suddenly the only thing that could be a logical musical development was to use repetition. It was a way to break up maximalism. In my brand of minimalism, the sound is reduced to the least point of recognition with respect to the musical tradition. This is complete minimalism.

Robindoré: What about the interest in non-Western music at that time? Steve Reich and others were influenced by African rhythmic textures, also by Indonesian gamelan music.

Ferrari: It was a period of tremendous world upheaval, part of the worldwide thrust that allowed the 1960s revolution to happen. Many artists helped to prepare this explosion. And it was a time when we started becoming truly interested in the music of the world's cultures. Not just Indian and Indonesian music, but also Arab music, especially from countries that were former French colonies. We realized all of a sudden that Arab music had such nobility, a remarkable tradition, and manifested a high degree of refined knowledge. We had never observed such a thing before. We were faced with the immense expanse of the whole world. It was a fascinating time. It is a shame that today we are so afraid as a culture.

Isolation for the Nonconformist

Robindoré: I was wondering how you must have felt as an individual artist in France during this period and even today. The way you are describing events and your perceptions make me feel that you might have been isolated here. In France it seems to be important for the career of a composer to be linked to established lines or aesthetic schools.

Ferrari: In the 1960s and 1970s in France I was

marginalized, if not completely isolated. You cannot create echoes if you are not connected to the central line. An established aesthetic and political line functions as a kind of circular feedback loop. Results are guaranteed. You have concerts. But if you work in a nonexistent line, you are alone. You have no possibilities for participating in a circuit of communication. Fortunately, I received a DAAD grant in the 1960s from the city of Berlin, and my relationship with Germany has lasted throughout the years. While I was there I was able to renew many former contacts from Darmstadt and other places. I traveled also in Scandinavia and The Netherlands. They were much more open as cultures.

France forced you into a one-sided position. There was Pierre Schaeffer on one side and Pierre Boulez on the other. This was a very closed world. My work in Germany removed the isolation from my experience. Isolation is different in the American culture, in part today because of the burgeoning Internet. The Internet lets people find those with whom one is in harmony. But in the present-day Europe, if one is not aligned with an institution, a festival, or an established concert series, one is marginalized. I feel this still today. It is not that I have ignored the aesthetic lines, but I have followed too many of them for the critics to be able to understand the relationship between one path and another. No one has ever known in what category to put me.

Musical Snapshots of the Intimate

Robindoré: It would seem that the discussions of electroacoustic and contemporary music today focus solely on the sonic events, the structures, and the aesthetics of perception.

Ferrari: If you are in one of the cloisters, you can never really communicate with the outside world [laughs]. In contrast to this attitude, I have participated in sociopolitical life. For example, I was interested in journalism; I recorded interviews and made films. When I filmed Stockhausen, I had much preparatory work and research to do. He was not easy to face. Later I was no longer interested in the important figures, but in the people I would meet who did not have such a defined role in soci-

ety. I met them in Italy, Algeria, and Germany, on the street, at the market, in the factories.

Robindoré: Your attitude reminds me of a comment made by the Czech photographer Viktor Kolar, who said that he sought to photograph a person with a common face as though he were the very center of the universe at that moment. I like this nonhierarchical approach.

Ferrari: Well, my approach is linked to my discovery of the spoken word. To discover speaking through the medium of recording is a rather astonishing thing. When I heard this natural speaking, I discovered its intimacy and its musicality, its manner of communicating sensitivity. One even today generally thinks of speaking as either a very private thing (when you talk with your wife or friends) or else as the type of talking you hear in the media, but in this case it is generally the written word that is read.

These are texts but not talking. Even interviews in this context are prefabricated. I discovered the sonorous properties of the spoken word. In this sonority there is something close to improvisation. Take a woman encountered in a German market who plays with her voice when buying a kilogram of potatoes. Something absolutely extraordinary happens in the vocal sounds at that moment. How that woman buys the potatoes is a mysterious and profoundly human thing and a profoundly sensual thing, too. This observation opened up my preoccupation with sentiments. Naturally many find this approach to be so incongruous to music; they feel it is almost pornographic. Yet I discovered this. It is almost as if I were a musical psychoanalyst. How does the psychoanalyst hear his patient? Once I have recorded the woman buying the potatoes, I feel the same intimacy as the psychoanalyst in discussion with his patient.

Robindoré: The difference being that the woman in the German market may not know that you are recording her, while the patient is usually conscious of his relationship to the psychoanalyst.

Ferrari: There is another facet to the game here. Indeed, I preserve bits of intimacy, like stolen photographs. Naturally, she does not know, and it is just this aspect that makes it even more remarkable. I have captured something on tape, I bring it into my intimate world—my home studio—and I listen to her again. And here an extraordinary mys-

tery is revealed. As ordinary as it appears on the surface, I am discovering this act in the studio as a blind person, as there are no more images. There is only the sound. And what happens in the voice at this moment? Something extraordinary. I learned this primarily when working with foreign languages. When I heard Algerians speaking of their life—I do not understand Arabic—I came back to my workspace and was faced with a language that left me without reference points. So I listened to the emotion; it is not so much the melody that I heard. With time, you can begin to feel what is being said, thus it is not possible to cut just anywhere in the conversation. Speaking is so intimate. It comes from the deepest part of us: from both the head and the sexual organs, from the heart and from all that we can imagine. Speaking is a place where everything comes together.

The Adventure of Creation

Robindoré: Do you consider your compositional style today to be a crystallization of all of the musical trends we have discussed, or do you feel that you are still crossing new frontiers?

Ferrari: I am not sure about the new frontiers. Inside, though, I try to act as if I have no experience. Either I have none or, if I have some, then I forget it. And when I begin working I am completely perplexed: I am faced with a world that is sometimes hostile, sometimes full of energy, sometimes where it is very difficult to choose, as if I am a beginner. I let myself go in this way because I consider that creation is always an adventure.

Composing a new work is a new adventure that is a renewal, a rediscovery of certain things, but not necessarily of experience.

Tools and Creativity

Robindoré: What is your perspective on what is happening today musically as we approach the 21st century?

Ferrari: There is an enormous amount of questioning on the musical horizon due to computer sci-

Figure 3. Luc Ferrari
(photograph by
Arnaud Legrain,
EPPU).



ence. Computers offer solutions that can help our reflections to emerge. There can be such a rapidity of access to this, a preparation of the software in such a way as to touch several different domains of thought and to allow rapid movement between these domains. This will help the user access a kind of intuitive action. This is very interesting. However, all that can resemble mysticism surrounding the computer is not interesting. It is a tool. We are too preoccupied with tools today. When there is a pretension that tools can replace philosophy, we face a big danger, especially the confusion of the virtual with the real. They must remain distinct. If they are fused, there is a transformation that can lead to manipulation, such as biological manipulation. What is positive is the way to reorganize ideas and to re-perceive them.

Robindoré: Yet the computer will have an enormous impact on creativity and on our perceptions of creativity.

Ferrari: Not more than any other tool.

Robindoré: I am not so sure. Take even the tape machine. It absolutely revolutionized our concepts of sound, time, and music.

Ferrari: But thousands of wonderful pieces did not follow the use of the tape machine. It is true, though, that access to new means of production automatically changes our perceptions, but this

does not mean that we are more intelligent or creative as a result. On the contrary, there is a kind of leveling as a result of recording, computers, and information media. There is a tendency toward normalization rather than incongruous events. For example, it is much more difficult to produce interesting accidents within the digital domain than in the classical analog studio. I had analog electroacoustic adventures by pushing the limits of production into the danger zone. With computers there is no danger, since they give messages like, "Not enough memory." This limits the accidents. This means that we have to invent other types of accidents. But the proliferation of software does not ensure more works of genius than before.

The Challenge of Society

Robindoré: How do you feel about the larger trends of society today, and the way in which music fits into these trends?

Ferrari: It is difficult to see the overall picture well. Today we do not know where we are going. There are no more compositional methods. Minimalism is passé, post-modernism is passé, obviously serialism is passé. All has been done, though I know this is a trite remark. Of course, there are always new and interesting things emerging, but we are too close to them to discern their profile or the future. We do not really feel a movement. Perhaps because we are in a very troubled period. There is a mounting social fear. I am terrified with the way in which we are accustomed to what has become ordinary violence disseminated throughout the world. The future is troubled by the fact that society has a tremendous capacity and means to favor violence in every domain. Furthermore, the great ideologies—religious and political—have failed us. Now there is a danger that information will usher us into a new ideology. The only way to combat violence is through culture and intelligence. If we remove the context that nurtures these qualities, then we run the risk that civilization will turn to barbarity. One can only hope that the individual will at least be able to defend himself, that he will be able to survive. I think it is possible.