

Pierre Schaeffer

Regardless of questions of form, the renewal of music can only come from a renewal of sound material. It is the art of shaping a sound, that is to say, excuse my jargon, transforming its form or transmuting its matter from sound, either musically or acoustically. Pierre Schaeffer, 1950.

Music, which the Danhauser of conservatories says is the art of combining sounds in a way that is pleasant to the ear, music in short, is it all music? First, what is pleasant to our ears? Is it the perfect chord, the hypodorian mode, the quarter tone, the twelve equal semitones? And what was pleasant to the ears of the contemporaries of Debussy, Wagner, Mozart? For Wagner's contemporaries, it was Mozart; for Debussy's, it was Wagner, etc. Like generals with war, concertgoers are always one music behind. For indeed, as Descartes said, after many others including Leibniz, we only like what we already know well.

Therefore, ladies and gentlemen, there is really no reason for you to take a liking to the concrete music I propose to introduce you to today. And this is because it is not only unknown to you but radically foreign to your musical habits. When you listen to new music, even bold, you immediately look for references.

What does it resemble? What does it oppose? Is it tonal, atonal, melodic, contrapuntal? But a music where there are no longer even notes, where solfeggio no longer applies, whose material escapes the list of known instruments since it is made up of everyday sounds, noises, voice fragments, more or less reworked by unknown electroacoustic methods. This music can only provoke an initial movement of apprehension, or more precisely, incomprehension.

Pierre Schaeffer, 1969

I believe that the term experimental music, unfortunately, is barely used by anyone but me; it is not widespread, and as I myself have abandoned the term concrete music, it is the term electronic music that is universally adopted.

For my part, I would call experimental music, not only throughout my life but I think this word should be applied for an indefinite period, to any approach to knowledge through the arts, and notably music. Experimental music, for me, is like how, a few centuries ago, experimental science was discovered. Improvisation is somewhat another form of chance, which is very fashionable because, in a sort of call to spontaneity, to participation, many contemporary musicians want to move away from the austere discipline of work and wait for the inspiration of the moment for the possibility of improvisation.

As for me, I think that improvisation is an old art that first consists of having very precise rules of the game. In all games—a football match, for example, rugby, tennis—you cannot say it is not improvised since it has never been written in advance. It is the chance of the game that, along with the players' merit, makes them win, and the twists are always new, thanks to what? To rules.

As long as an art has rules, one can improvise. When it has no rules, as is currently the case, one cannot improvise at all. On the contrary, one must make the opposite effort. Thus, I think one of the great contemporary mistakes is to want to find the rules of an art and already improvise at the same time. You cannot do both.

My goal was not to make music. My goal was to make radio. And I think it is very important to say, to begin with, that experimental music was not found because it was being sought. It was found in the course of another process that consisted of working on radio, that is, the text, the sound setting, pushing research on the level of the sound setting, and going as far as attempting a broadcast that would have almost done without text, that would have been nothing but noises. A sound setting, a mixture of noises. And it was at that moment that I crossed the line without

knowing it, and when you make an organized ensemble of noises, it is no longer theater, it is no longer a text, it is music.

Ordinary music would thus be, to concrete music, what classical mechanics is to relativity. Ordinary music would be a particular case of generalized music. The particular case is that of the note or sound of defined frequency. And it seems at this moment that discussions on notes, tonalities, modalities, which have experienced a sort of exhaustion in recent decades, are no longer as interesting.

Perhaps it is time, without neglecting the music of notes, to think in more general terms and to conceive of sound material in all its complexity. What would be the relationship between these two types of music in the future? Will they be mixable? Will they oppose each other? Will they enrich each other? We do not yet know. It is certain that the experience of concrete music can only have a significant influence on the composition of traditional music itself.

If we continue, with the help of machines, on the path of these discoveries that chance often brings to researchers, we manage to extract from the anecdotal event of noise an isolated sound material, like a crystal of sound. [...] Well, instead of saying "gong," these sound elements say, for example, "factory," "circular noise," "machine noise." We have thus escaped the word "gon" that the noise suggested to us, and we now have a family of words infinitely more general. It is not yet quite music, but they are already sound and rhythmic elements.

Conversely, I would like to demonstrate that from musical instruments, for example from orchestral sound material, one can reach, on the other hand, noises. Do you want an example? My purpose at the start was to demonstrate that not all music was confined to what we are used to hearing with instruments, but that an abyss, a sort of chasm that until now has separated noise from musical sound, can be bridged, and this by building a bridge over this chasm from both ends.

Luc Ferrari, 1999

The first question regarding Schaeffer, we were quite in a kind of distanced friendship, and we had a sort of friendly game between us which said there was a barrier, a moving barrier. He pushed towards research, towards solfeggio, and I pushed back.

That is to say, I was quite bored in conservatories with solfeggio, so I hated the idea of another solfeggio. And Schaeffer, who was not a conventional musician, had a fantasized attraction to solfeggio. So he wanted us to participate in his research, which was extremely important to him from a philosophical, psychological, and other points of view. And so we played on this barrier in a sometimes violent but most often friendly manner.

Pierre Schaeffer

I enter a studio, and, for example, I resonate whatever comes to hand.

[...]

It is still a disappointment.

These noises only say the same thing. These noises say "gon," they say "box," they say "tinplate." We could stay in this dead-end for a long time, and we stayed there longer than we wanted if chance had not come to our aid.

For many weeks, I accumulated all kinds of sound bodies in the studio. I borrowed pipes from Cavaillé-Coll from organs demolished by the war, and I realized that I was merely retracing the steps of ancient and primitive lutheries.

Iannis Xenakis - 1981

What is musique concrète? It is about taking sounds, shaping sounds, and then putting them together in a certain way, which is more difficult than with orchestral sounds, because in the orchestra, we do exactly the same thing. We take sounds that already exist or that we try to build, and we put them together according to certain rules of composition. That is the orchestral sounds.

In musique concrète, we take sounds and also try to put them together through editing, mixing, things like that. However, it is clear that in this case, if in the orchestra we already have a mental image of the sounds we are assembling, in the case of musique concrète or electroacoustic music, it is the sounds themselves, the objects we have collected, that must be put together.

So, we do not have a memorized image in advance. We must work on the spot. But that is not enough, because working on the spot means being led by the nose by what we have. However, it is necessary for the artist to create for himself a more general awareness of what he is doing, and I would even say, a philosophy of what he is doing.

That is, he must be relatively abstract, not remain only in front of his immediate object, but be able to step outside it in order to know where he is going, where he must go. Well, he has put three sounds together, and then what will he do? And gradually, we clearly realize that these basic problems are connected to problems of mental structure, ultimately to a cosmotheory of music.

Pierre Schaeffer

Chance came to my aid, and my endeavor became interesting, and here is how. [...]

I am now eliminating the word aesthetics. The word aesthetics is an old notion that gathered everything we tried to say about art when we did not know how to approach it. Aesthetics is something that is somewhat out of fashion, often replaced by a scientific approach to art, and of course, I also repudiate the scientific approach to art.

What interests me in experimental music is to discover, through the experience of music like with other arts, a path to knowledge. It is not an aesthetic approach, because it does not consist of doing philosophy in the mist. It is not a scientific approach, because it is not the search for causes, but for effects.

It is not about searching for the mechanisms that create phenomena, but for the meaning and significance that phenomena have for humans. And it is the discovery, the deciphering of this sibylline language, which for us is the work of art, which for us is the writing of sounds, that defines a path to knowledge based on an experimental approach.

Pierre Schaeffer - 1979

I think it was much more an attempt to explore the possibilities that were around us at that time.

At that time, I say "we" because Pierre Henry had joined me very quickly after a few months of my first experiments, and we had a way of playing the piano that became brilliant in Henry's hands, right when Cage himself was working with prepared piano, but Pierre Henry was both a percussionist and a future composer, extremely skilled at preparing the piano and extracting unheard sounds from it.

We also had these kinds of chosen fragments, sounds cut into pieces coming from everywhere, including the first scream that marks the start of the symphony, which is, imagine, a scream borrowed from an American record called On a Note of Victory. It was a record the Americans had made at the time of victory, and it was a call that, on that record, seemed to address the entire world.

Then there were accelerated children's voices, women's voices, and also men's voices, like a kind of human chicken coop suddenly clucking at full speed, so that it was not what was being said that was important, but this kind of density of human presence, and often there were poems too, including a poem by Victor Hugo, but played backwards, unrecognizable, but still holding within the folds of its syllables a kind of secret known only to us.

So much material, isn't it? Plus footsteps on the stairs, door knocks, and also very recent memories, the anxieties of the occupation, the boots of the Gestapo on the stairs of the resistance fighters.

Olivier Messiaen - 1952

Concrete music.

A process opposed to serial music, concrete music uses pure, isolated sound. Sung sound, spoken sound, noise, and their transformations through environment and successive layered recordings.

Many young people are now interested in this movement, whose initiator was Pierre Schaeffer. After Pierre Henry, Jean Barraqué and Boulez himself worked on *musique concrète*.

What will the music of the future be like? The future is dark as lacquer, say the Chinese. I will start by answering that I do not know. We can only say this:

Melody has always existed. Harmony and counterpoint, about eight centuries old, have probably run their course. Something else will emerge.

Slowly but inexorably, the new element of music is arriving. It does not yet have a name, it is the unknown god. But we are waiting for it, with the same anxiety that Adam de la Halle felt in the 13th century, and Guillaume de Machaut in the 14th century, without the devouring fire of harmony and counterpoint, which had not yet been named, collapsing upon them.

Paraphrasing Mallarmé's famous remark to Degas, "poetry is made with words," I would say that music is not made only with sounds, but also with durations, timbres, intensities, impulses, and rests, that is to say, with rhythm.

Michel Philippot - 1981

So, broadly speaking, at that time, there were two schools. There was what I would call the orthodox school, which was, if I may say so, strictly obedient to Pierre Schaeffer's ideas.

And then, since 1952, there was another school that also wanted to use concrete materials, that is, a priori non-musical sounds used musically, but which wanted to continue composing, that is, to foresee the work before making any attempt. Needless to say, I was one of them, and so was Xenakis, and I would add Pierre Boulez when he was studying, Jean Barraqué, André Ode, even when he came to realize his work *Jazz et Jazz*, meaning that the desire or foresight of the result preceded the work itself.

Let me say a few words about what I called strict obedience to Pierre Schaeffer, which was that, on the contrary, the work should be discovered, appear, emerge exactly at the moment it was being made, meaning that sound, in a way, the magic of sound, should precede the construction of a musical work, and that this construction should be the consequence of the sounds discovered, and not the sounds being merely the means.

At that time, this created certain friendly but sometimes quite strong disagreements, because, for example, I know that Pierre Schaeffer's opinions have changed since then, and I know that our positions, his and mine, have become very close, but at that time, Pierre Schaeffer said, "A beautiful sound is already music," while Xenakis and I were saying, "No, to make music, you need at least two sounds and to organize them in a certain way." That was the tendency.

Depending on each person's character, the discussions remained very polite and friendly, which was the case with Xenakis and me, and sometimes led to quite violent clashes, which was the case with Pierre Boulez and Jean Barraqué, for example.

Pierre Schaeffer, 1979.

As I said, I had a nostalgia for music, since my parents were musicians, my father was a violinist, my mother a singer. Well, I had an old nostalgia for not having made music, without regretting it, because I find that being simply a musician, composer, instrumentalist, is marvellous, but it is a rather limited horizon, whereas the entire horizon of thought opens up to the one who does physics, who does mathematics, and who also exercises their thinking. And when I encountered microphones, first turntables, then tape recorders, I asked myself why we did not edit sounds together, as we edit images.

Cinema, first silent, had shown what could be done by photographing things and people, and by editing and mixing them. This technique ranges from surrealism to realism. And quite naturally, I

did that with sounds. It started simply with a turntable technique, where sounds were isolated on what was called a closed groove. When you close a spiral of a recording disc, you isolate a small second of sound. I think that is where the starting point of my discoveries lies. It is an extremely crude starting point.

From the moment we stopped the musical discourse, which carries us along in the irresistible flow of time, which imposes itself on us like a phrase. We do indeed speak of musical phrases. We are not capable of devoting our attention to listening to an instant, to a moment. This closed groove, this recording that bites its own tail and repeats indefinitely, like in the famous Édith Piaf record, is an obligation to consider the sound, a slice of sound, for itself. It made me reflect and led me to question how all the sounds we hear, how our listening mechanisms work.

Edgar Varèse, 1955

Several years ago, an acoustic phenomenon I witnessed and will describe was for me the physical materialisation of the organisation of sounds and their projections, as I had mentally imagined it for many years. I was listening to the trio of the scherzo of Beethoven's Seventh Symphony at the Salle Pleyel, rich in acoustic surprises due to its poorly calculated construction.

When I became aware of an entirely new effect produced by this familiar music, it seemed to me that the music detached itself so much from itself in projecting into space that I became aware of a fourth dimension in music. This sensation may have been due to the place I occupied in the hall, a place exposed to over-resonance. This phenomenon was living proof of what I had conceived many years earlier and which I call the projection of organised sound.

By projection, I mean the sensation given to us by certain blocks of sound, or rather rays of sound, so close is this sensation to that produced by the rays of light emitted by a powerful projector sweeping the sky. For the ear as for the eye, this phenomenon gives a sense of extension, of travel through space.

Pierre Schaeffer, 1969.

I think that to speak about the future of music, we should not speak about music alone. I believe we must consider what is the future of the means of expression of modern man. And we must also note that there is not necessarily a cyclical repetition of history and that we may find ourselves at a singular point in history. That is to say, contrary to what everyone believes, that everything new is beautiful, that we must not miss appreciating the misunderstood genius of the time, but now there is no longer the misunderstood genius, everyone is well understood, and everyone understands everything, I think I personally have the opposite attitude.

I think we are at a point of mutation, that history does not repeat itself, that it is accelerating, that atomic discoveries and everything that follows and galloping demography are signs of a slice of history that may be unprecedented, and that the upheaval of the arts is significant.

So, what is the future of music and the other arts? Well, it can have two futures. Either the arts no longer exist and destroy themselves, and at that moment, we should no longer speak of arts, but they are symptoms of the crisis of civilisation, and we must analyse them as symptoms of a disease. Or, the future is not so dark, the mutation happens, the cataclysm is distant or controlled, and at that moment, the arts find a new function. And that is why, when I speak of experimental music, it is for me as important for the arts as the experimental principle was for the Middle Ages and obscurantism and empiricism, those uncertain approaches that did not know how to approach nature, and there was suddenly the very simple discovery of the experimental attitude.

Either humanity will destroy itself, and this not in so long, not only through atomic means, but it could be the pollution of the planet, it could be galloping demography, it could be famine, it could be drugs. There are many dangers that threaten us. So this time, humanity must save itself or perish. I do not at all believe that the generally euphoric atmosphere is true.

Therefore, whether it is a question of science or experimental art, an art of human knowledge and recognition, as I maintain, it is now a matter of going very quickly. It is also a matter of noting that contemporary man is beginning to realise, particularly through his anxiety, that he is like a will-o'-the-wisp on the surface or at the surface of two worlds, his inner world and the world of others.

In recent centuries, he has been so occupied with the discovery of things, of nature, that he has not taken care of himself. And the problems of man were not enormous, because there were still few men, there were small wars. But now, there are too many people. There may be too big wars. And sociological epidemics can be deadly diseases.

I think man discovers himself as a will-o'-the-wisp between two plural worlds, between two pluralities. Inside himself, man is manifold, he is divided. And outside himself, there are others, who are very numerous and very divided. I think the two most important things are therefore man's awareness of himself and the awareness of others through communication, through the means of communication, notably through mass media. I think that here, it is no longer a matter of science, it is a matter of morality, it is a matter of spiritual exercise.

The artist was once integrated into society, playing an important role in it. Moreover, art and science were probably mixed. We do indeed say the art of medicine, the art of architecture, houses were built, people were treated, these were arts.

In contemporary society, I think that to understand the role of the artist, we must see that he has nothing left, that science is on alert and that this is a historical phenomenon, a weak period for art. I think that contemporary art has never been in such a bad state because science is dominant and the successes of science are so dazzling that it is normal for art to experience its worst period.

On the contrary, I think that if anything remains for art and the artist, it is because we will realise, and we are only just beginning to realise through the symptoms of panic, anxiety, the stress present in the contemporary world, that science is not everything, that science is turned towards nature, outside of man. Man makes science, and in his dialogue with nature, science gives him power over nature. But what powers does man have over himself?

Even if we fully understood the cerebral mechanisms. Even if we had resolved the double helix of DNA, all the mental mechanisms. It would still be necessary that this man who knows himself scientifically, would still have to decide. Even if he wanted to ensure his mutation, he would have to decide it, his mutation.

I therefore think that what is not perceived in contemporary society is that there is the remainder. There is what is not scientific, but what is more important than science, it is human consciousness.

Édgar Varèse, 1955

I think one could also affirm as categorically, while remaining closer to historical truth, that there has never been a creator of lasting importance who was not an innovator.

The example of the great past should only serve as a springboard for the young to leap freely into their future. They must keep in mind that each link in the chain of tradition was forged by a revolutionary.

François Bell, 2017

It was not so simple to get composers to produce examples. Because it went both ways. The composers would bring sounds that we tried to write down. On the other hand, there were descriptions for which we would request the corresponding sound.

So there was a sort of alternation between the theme and the version, to be able to achieve something that would be an effective sorting process. We, the composers, were responsible for producing sound examples. A small team formed around the Treatise on Musical Objects would meet every week to discuss a descriptive linguistic apparatus.

Beatriz Ferreira, 2017

There was a sound bank, where all the composers who were making music and conducting research, making sounds and making recordings, would give certain sounds to these banks. So there were sounds from Malek, Ferrari, Carson, Bell, Parley, from everyone.

And it was in this bank, where I also contributed sounds, and for example Guy Rébel too, I don't know exactly, but I contributed too, it was in this bank of sounds from all kinds of origins that we found the examples for Schaeffer's book. If Schaeffer gave us these texts, the four of us would look over them, see what he was saying, and then we would look for sounds in the banks, and there it was.

Guy Rébel, 2017

The sounds in question were produced, gathered, to feed the didactic sound library, which was the place where we would collect the maximum number of sounds from all origins likely to illustrate the Treatise on Musical Objects, which was in the process of being designed and written. It took a very long time, and it was necessary to have sounds. The sounds allowed Schaeffer to formulate his vision, his thinking, and to classify things, and to have a whole series of references that eventually led to the anthology that is the Solfège of the Sound Object that we created.

Pierre Schaeffer

Solfège of the Sound Object. While many of my contemporaries began to compose, to make new music with new sounds and new techniques, both in the two main currents of what is called concrete music, that is, made with sounds, with noises recorded with a microphone, and what is called electronic music, that is, made with synthetic sounds, I completely reversed my curiosity. What mattered to me was not to create these compositions, which is why I deny being a composer. However, I am happy to be considered a researcher, I wanted, I accept to be a researcher, I wanted to turn my curiosity towards the ear of the human who listens, towards the internal and utterly strange mechanisms of attention, of perception, and what sounds manage to do to humans, and what humans discern in sounds.

Yes, of course it requires a new place to listen to music, like most contemporary arts, just as darkened rooms were created for cinema images, but that is not the most important thing. It mainly requires the absence of performers, a new attitude, a new world of musical relations. When attending a concert, we hear and we see, and we hear with our eyes much more than we believe, and we participate in a sort of ceremony. When there are no more performers, when there are only loudspeakers empty of presence, one must find another attitude, and this attitude may create boredom, but for people who truly wish to listen in a different way, it can create better listening, a more subtle listening, a more inward listening.

Moreover, we join a very ancient tradition that is, it seems, Pythagorean, since Pythagoras, when he wanted to teach his disciples, would apparently hide behind a curtain so that he would not be seen, and thus, not distracted by his gestures, and forced to concentrate on the words, the disciples would truly listen to the word, not distracted by the image. I think that in all our experimental approach, the deprivation of sight is one of the elements of austerity and asceticism that allowed us to approach sound and sound phenomena much more closely than if they were constantly linked to the gestures of the performer and the spectacle of causality. This time, we are within the effect, within the analysis of effects, and not in the anecdotal search for causes.