#### MICHEL CHION

# GUIDE DES OBJETS SONORES

## Pierre Schaeffer et la recherche musicale

#### **GUIDE TO SOUND OBJECTS**

Pierre Schaeffer and musical research (English translation by John Dack and Christine North, 2009)

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© 1983 by INSTITUT NATIONAL DE L'AUDIOVISUEL & Éditions BUCHET/CHASTEL, PARIS It is almost ten years since Michel Chion thought of providing a guide for readers of the *Traité des Objets Musicaux*, which could form the basis of a dictionary. It was doubtless as a result of hearing me constantly returning to the same key words (value and characteristic, sonority and musicality, permanence and variation, which always sing in duet) when he was a Pupil-Teacher at the Conservatoire, that he was one of the first to understand the strange musical dualism that lies at the basis of all music (a fact which, alas, eludes most of our contemporaries). As a result his Guide is a sort of variation on the Traité or more precisely a reprise of the themes with a simplified itinerary. It is always good to hear another person restate what the first meant to say, and which is never altogether said, nor fully understood.

These few words of introduction give me the opportunity to repeat once again, and definitively, what will and what will not be found in the *Traité des Objets Musicaux* to which Michel Chion's Guide gives a method of approach which is personal and original, but kept within the strict limitations of his purpose.

I could not in any case make myself clear without mentioning the fundamental hypothesis which underlies both of these works. This is the hypothesis of a three-stage musical problematic, or, as linguists would say, in two articulations: the sonorous/the musical/meaning. We should explain that in this triad, acoustics is already considered as superseded, developed and filtered by the sense of hearing. The triad is therefore quite specific to music, and involves no other discipline, scientific or humanistic, except, of course in the frontier zones. In traditional music, these three stages are clearly evident: the notes that are heard (including *the sonority* of the piece, the instrument, the virtuoso), then *the musicality* of the whole, and finally, for the involved, informed and sensitive listener, what, for lack of any other word or any way of describing or clarifying it, we must call *the meaning*: this is precisely what makes music irreplaceable, and interchangeable with no other form of expression. My hypothesis was that no other music, primitive or new, could exist outside these three categories.

Now, the *Traité des Objets Musicaux*, as I am constantly repeating, concentrates its research right in the middle of the triad. It takes on the sonorous, all the sonorous, for the first time, and this is doubtless its merit; then it suggests ways of accessing the musical, particularly with the idea that not all sound is suitable for music, that choices of the "suitable"

music be made in the light of the "structures" to which all listening which is seeking meaning must refer. In traditional music [10] these structures are, of course, relationships of interval and the interplay of tonalities and/or modalities. Needless to say, we have found nothing that is equivalent to these.

It was on the brink of this defeat that the *Traité* ended, as the author admitted his uncertainty. So there are two hypotheses, which go beyond any biographical argument. Either *structures of reference* remain to be found, and only the future will tell (and these structures will only be found through the creative work, the tentative progress of composers, involving a great deal of wastage) or, alternatively and more plausibly, we shall have to agree that, even if the sound universe (the universe of sound forms) appears limitless, the musical universe (the universe of meaning to which we have become accustomed through the classical, and often exotic, repertoires) is limited. Thus music is not indefinitely extensible, and what we have discovered since the 50s would only be a generalization of "sound arts", analogous to the plastic arts, while during this period, music would have gone off in search of impossible meanings.

I am not trying to bring a premature end to this debate, which is so serious, so weighty that one feels like a skeleton at the feast even by articulating it. I must however say that, even if the *Traité* makes (or made) every effort to formulate "research programmes" which are summarized in the Guide, it has not undertaken or presented them as something that could lead to music, in the authentic and respectable sense that this term still has for me. Furthermore, these programmes are limited to enumerating theoretical structures, probable arrangements, and above all the dominance of certain criteria. Not only does the *Traité* never attempt to encourage composing, but, negatively rather, it warns against this prejudice, that confusion. Is it appropriate for me, in the present climate, to praise this negativity for its originality?

Should I mention here so much evidence denied? That a harmonic sound will always be "dominant" in a group of sounds? That a fixed sound will always be heard differently from a sliding sound (because of two different ways the ear has of functioning)? That *Klangfarbenmelodie* is a snare, a delusion at least as long as it hopes to outdo other more classical methods of calibration? Now, all these ideas, which are linked with universal tradition, are the opposite of the fashions which have held sway for more than half a century. Musical fashion has naïvely associated itself with politics, and with scientism; it adopts egalitarian, permutational ideas which come from simplistic inspiration. Musicians have to be very naïve to believe that science teaches the permutation of egalitarian elements, and that

chance determines its creations. You would think that a sub-culture had taken hold of Art (because this does not apply just to music) in order to slap the worn-out label of Chance and Necessity on to it.

Indeed, when cleverly manipulated, these two terms can sometimes be the short-term key to a number of things we don't know. Far from being the key to true knowledge, they are catch-alls for when theory fails or practice falters. Science is also and principally the will to power, prediction and challenging the possible. Art, by contrast, was also man's attempt to situate himself, to develop through self-expression, at the same time escaping from determinism. Oddly, fashion is blowing the other way, and has promised [11] machines, instruments, deus ex machina to help us undertake ridiculous journeys.

The researchers who have decided to follow me over the last thirty-five years or so are fully aware of the contradictory field into which I have led, and sometimes retained, them in relation to and against the current fashion. So it is not surprising to find in the Pupil-Teacher's guide, discreet but perceptible traces of these debates and warnings. Perhaps the limits of this research have not been indicated clearly enough. Its thesis remains open, its discoveries, certainly full of possibilities, are incomplete, and its conclusion, alas, desired by everyone, is totally lacking: i.e. a treatise, not on musical objects, but on the musical work! The future, gentlemen, belongs to you. Do not complain if I have left the most difficult part to you. All you will find is a way of proceeding: not one real rule of Art.

But perhaps, on the other hand, you will come across something unexplained, surprising. Indeed, is not musical meaning, to which I am constantly referring without being able to define it, like other questions in life to which we do not know the answer? After all, does life have a meaning? Who can define it? Is there consensus about it?

And even if we limit ourselves to music — to Music even — can these questions be answered? What is music? What is its function? (or functions). Is it universal, singular, plural? Are musical works objects, in the sense of a product, or means of communication amongst human beings, or more than that, a glimpse beyond, into that which we call, for example, the spiritual?

Now, without replying to such questions, since the sphinx itself gives up, we can accept or not accept that they are asked, that they prevail, somewhere, in the individual or collective unconscious. In short, in Music as well, we could distinguish, not atheists and believers, but those who believe in the here and now and those who believe in the beyond of music.

With the result that across this whole debate there is a subtext (or a misunderstanding) which it would be good to clarify once and for all. Yes, for my part, I believe that music is more than music, that it is not a run of the mill, utilitarian or aesthetic object, but a spiritual undertaking, or as an old Master used to say, a "beingful exercise", an activity of the whole being. So I cannot deny that, sometimes, in the course of the most trivial musical theory, the most apparently technical experiment, the thesis of the spiritual reappeared, the intention of a going beyond which is difficult to name, but even more impossible to deny.

That is why I advised Michel Chion to add to this preface a text which he wrote in former times (when, exactly?), half-way between mockery and tenderness, and in which I shall never cease to admire his story-telling talents and his attention to the essential. I hope you will read this text without frowning. It is indeed a "send-up", but also in this treasure chest can be found the savour of a precious wood, a scent of friendship and nostalgia for a Master in despair at the limitations of his knowledge.

Pierre SCHAEFFER

[12] At that time Peter was with his disciples, and one of them said unto him: "Master, which is the greatest commandment in the law?"

Peter answered and said unto him: "The greatest of all the commandments is this: thou shalt work at thine instrument. This is the commandment of my Father, and the second is like unto it: thou shalt work at thine ear as at thine instrument."

He spake to them again: "There is a time to hear (entendre) and a time to listen (écouter); those that have ears to perceive (ouïr), let them comprehend (comprendre)."

Another of his disciples said unto him: "Master, it hath been said: thou shalt structure thy music, and thou shalt speak only of the Object."

Peter answered and said unto him: "Dost thou not see that whoso understands the Object, he alone understands Structure? For Structure was made for man, and not man for Structure."

But the Chief Priests murmured amongst themselves and said: "He speaketh blasphemy against Structure."

And again he said unto them: "The hand is willing, but the ear is weak. Harken ye therefore unto to what ye make. For there is a time to prepare and a time to play. Let thy right ear know what thy left hand doeth."

"Harken unto to the sounds around you, they program not, neither do they calculate, and yet I say unto you that the Grand Computer in all his glory has never sung like one of these."

"Verily, verily I say unto you, unless ye reduce your hearing, ye will not find the Sound Object, and unless ye find the Sound Object, ye will not touch man with your music, for the Musical Object is but a suitable Sound Object."

And again he said unto them: "That which varies, is that which is constant. Whoso beholdeth the Object, beholdeth Structure." Yet still they understood not.

Peter spake unto them this parable: "A man went forth to plough a closed groove. At the tenth turn his neighbours and his friends mocked him. But at the thirtieth turn there was more music than in all the fields around. Verily, verily I say unto you, cultivate your Perceptual Field, and the Kingdom of Music shall be yours."

But the crowd reviled him saying: "Thou that sayest thou canst change the sonorous into the musical, change it!" And they stoned him with great words.

Peter said: "Father, for give them, for they hear not what they do."

### [13] Introduction, by Michel Chion

Our ambition, with this *Guide to Sound Objects*, has always been to give researchers, musicians, music-lovers and all who are directly or indirectly interested in the sound-universe an unbiased, clear and *dependable tool* (if this can be done) for a better knowledge and understanding of Pierre Schaeffer's considerable contribution to this field, by means of an inventory of the ideas and concepts developed in his most important work, the *Traité des Objets Musicaux*.

This imposing book, published in 1966 and twice re-edited (the first with very slight corrections, the second in 1977, with a new postscript by the author) has often been consulted, but the breadth and complexity of its architecture, the diffuseness of the style and presentation, and the lack of an index at the end of the book makes it difficult to use. We wanted to resolve this problem by means of this work, which is the result of a commission from the Groupe de Recherches Musicales in 1972! So, we have taken ten years to begin it, put it aside, take it up again and complete the definitive version.

For this undertaking presented numerous problems. Should we, for one, go through the theses in the *Traité des Objets Musicaux*, keeping only those which could be judged to be tried and tested or beyond doubt? We decided against this, considering that it was important to include everything and leave the reader to come to his own conclusion. Of course we have not forgotten to point out, in every case, where the author is venturing into rushed hypotheses, and where he is presenting results which he can guarantee. But a bold and on the spot concept such as *weight* or *impact* can open up new avenues almost as much as a slowly developed idea. Time will put all these new concepts "to work" and we cannot know in advance which will bear the most fruit.

Although wishing to be faithful, this book is not a "digest" of the *Traité des Objets Musicaux*. A quick comparison of the two works will show that it is the result of a long and far-reaching process of *reduction*, reclassification, interpretation and *reformulation* (aiming for a more synthetic, succinct style of writing), which makes it quite different from an abridged version.

This Guide to Sound Objects has been written with three complementary aims in mind:

- the modest but indispensable aim of providing the *Index* lacking in the *Traité des* [14] *Objets Musicaux* (with page references to the *Traité* at the end of each section; here we should point out that the pagination is the same in the three editions, and that the index can therefore be used for any version of the *Traité*):
- the aim, right from the start, of providing a *Dictionary* of the main key-concepts (often presented in pairs) in the *Traité des Objets Musicaux*, bringing together all the approaches to them which that work puts forward. We have chosen 100 of these concepts and these pairs , designated by terms in common usage to which the author gives his own particular meaning: Grain, Facture, Sustainment, Mass... They can be found in alphabetical order in the *Alphabetical Index* at the beginning of this work, which gives the number of each section;
- finally, the more recent aim of providing a *Reader's Guide* going from the first to the last page, and summarizing the main themes of the *Traité* in a logical order.

As a result of these three aims, the *Guide to Sound Objects* has two parallel superimposed structures:

- *a logical progressive structure* in five parts, which only very minimally reflects the structure of the *Traité des Objets Musicaux*, and which is in essence completely new;
- a numbered "list" of 100 sections within the sections of the above structure, but which can be read independently and separately, as each section has its own *Index*.

To make the independent reading of each section possible, without requiring too many back-references, we have had to repeat ourselves from time to time, but the few repetitions when the book is read through systematically are, we believe, a minor inconvenience when compared to the usefulness of being able to read the book in two ways.

To sum up our project, let us say that the *Traité des Objets Musicaux* is a work largely written from a *diachronic* viewpoint, like an itinerary, an almost initiatory journey whose meanders, regressions, difficult gestations should be followed through (no important concept is presented without an *account* of the intuitions, the trials and errors which gave rise to it), and that we have cut out much of the *synchronic* material even though this means compacting and flattening out the text. Otherwise our work could have been of hardly any interest if it had simply been a digest of the *Traité*. Our wager is that this reduced vision will allow a more thorough, better guided, more "informed" new reading of the *Traité*, because of the *other viewpoint* it gives.

Similarly, we have selected *five* of the most important diagrams in the *Traité* (which contains very many), and have appended them so that the reader can find linked together most

of the key concepts dealt with separately in the Guide. For greater convenience, these diagrams are referred to by short "code-names": BIFINTEC (Final Summary of Listening Intentions), PROGREMU (Programme of Musical Research), TARTYP (Summary Diagram of the Typology of Musical Objects), TARSOM (Summary Diagram [15] of the Theory of Musical Objects), together with the introductory table of the *Four Listening Modes*.

Finally, our grateful acknowledgments to all who have enabled this work to be completed: first to Pierre Schaeffer, who showed us the very great confidence of allowing us to write it in our own way (it is unnecessary to mention here all that we owe to him: the *Guide to Sound Objects*, which we dedicate to him, should bear witness to this); also, to François Bayle and the INA/GRM, patient commissioners of this *Guide*; and to Geneviève Mâche and Suzanne Bordenave, who typed most of it with great accuracy; Jack Vidal, who contributed extensively to reducing the *Traité\**; to the Department of Music and Dance of the Ministry of Culture, whose financial support will make the price of this work more accessible to the wider public to whom it is addressed, and finally, to all those many people who have encouraged us to complete it by expressing their most friendly impatience for it to be finished!

M.C., 10-11-82

<sup>\*</sup> Éditions du Seuil who have kindly allowed us to reproduce quotations and diagrams from the *Traité des Objets Musicaux* in this work.

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