

## **Pierre Schaeffer - Solfeggio of the Sound Object**

### **Prologue: The Four Elements of Solfeggio**

*Text from the 1st CD accompanying the Treatise on Musical Objects.*

(0:00 - 0:42)

"Sound lives everywhere. But sounds, I mean the melodies that speak the higher language of the realm of the spirits, rest only in the bosom of man." Thus spoke Hoffmann at the dawn of Romanticism.

(0:48 - 1:29)

Such was, it seems, a fashionable melody in the Neanderthal style of the time of the mouth bow, ancestor of all our instruments. Such is, at the dawn of a new electronic age, the melody of the Cologne studio, a strange return to the sources. However, does not the spirit of music, like the spirit of sound, embrace all of nature? The sounding body, touched mechanically, awakens to life, manifests its existence, or rather its organization, and then comes to our knowledge.

(1:40 - 2:30)

But what kind of knowledge is it? The series of harmonics, which appears like the series of whole numbers, does it belong to man or to nature? Do the musical and the sonic divide themselves between the spirit of subtlety and the spirit of geometry? Wearing this turban, Hoffmann concludes, would not the musician, with nature, be in the same spirit, in the same relationship as the mesmerist with the clairvoyant? Here is the enigma that we dare to confront in this work, a complement to the Treatise on Musical Objects, which concludes on musical dualism. If music forms an exceptional bridge between nature and culture, let us avoid the alternative trap of aestheticism and scientism, and rather trust our "yes," which is an inner view. This view is so vivid, this language is so clear, that we often forget the support that the sonic provides to the musical.

(2:31 - 2:58)

Only the writing is retained. Musical objects are reduced to signs that refer to reference structures. To measure the gap between these signs of writing and the real objects that carry them, it is enough to see the same musical ideas embodied in another flesh, something that the genius of the composer and that of an era sometimes make possible.

(3:22 - 3:39)

Thus, we notice that a dimension escapes the traditional score, that of timbre. We would then like to form Klangfarbenmelodie by finding again the reliable guide of a solfeggio. To the word "timbre," solfeggio, a bit simple-minded, responds that the flute is recognized by a flute-like sound...

(3:39 - 4:06)

Here we are, a bit disappointed! Does solfeggio conceal some serious gaps? Should we question these most banal maxims? A minim equals two crotchets. This rhythm is abstract.

(4:07 - 5:14)

It is made of spacing; this rhythm lacks being inhabited by duration, just as the schematic score of Bach lacked the incarnation of timbre. Durations will shape rhythm, just as timbre colored pitches. Thus, of the four elements of solfeggio, two seem ensured by a quasi-mathematical notation, the other two, timbre and sound intensity, are approximate, even empirical.

(5:15 - 5:38)

This notation fails in the face of sounds that are nevertheless very simple. Let us then remember the lesson of linguists. One cannot reduce a foreign language to the scheme of a mother tongue.

(5:39 - 6:50)

Let us not doubt that other civilizations have both other instruments and other ideas. A solfeggio that is proper to them may be more refined than ours. Here we are, hesitating between a return to the sources and an act of faith in science.

(6:51 - 7:13)

In exchange for our four musical values, acoustics indeed offers us three inexhaustible parameters, each with its unit of measurement: frequency in hertz, level in decibels, and time in seconds. Acoustics indeed offers us. The fundamental question is then this: are musical objects reducible to these parameters, yes or no? If yes, acoustics will account for music.

(7:14 - 7:28)

If not, it will bring to music only information about the physical properties of sound, for which the correlations with musical qualities will need to be established. Such is the objective of the first part of our work, correlation between music and acoustics.

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