Little Theory of my Rhythmic Language

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From the preface to 'Quartet for the End of Time.'

I use here, as in most of my works, a special rhythmic language. As well as a secret predilection for prime numbers (5, 7, 11, etc.), the notions of 'bar' and 'time' are replaced by the idea of a short value (the semiquaver, for example) and of free multiplications. Also, certain 'rhythmic forms' are used, specifically: added values; augmented or diminished rhythms; non-retrogradable rhythms; the rhythmic pedal.

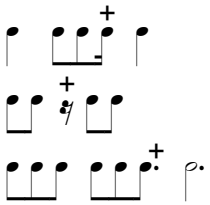
Added values

A short value, added to any other rhythm, be it by a note, a rest or a dot.

By a note :

By a rest :

By the dot :



Ordinarily, and as with the examples shown above, the rhythm is always given the added value immediately, without having been previously heard in its simple state.

Augmented or diminished rhythms

A rhythm can be immediately followed by its augmentation or diminution, following several forms: here are some examples (in each of them, the 1st bar contains the normal rhythm, the 2nd bar its augmentation or diminution):

[Examples give numeric value to semiquaver 𝅘𝅥𝅯 units]

Adding a third of the values

Subtracting a quarter of the values

Adding a dot

Subtracting a dot

Classic augmentation

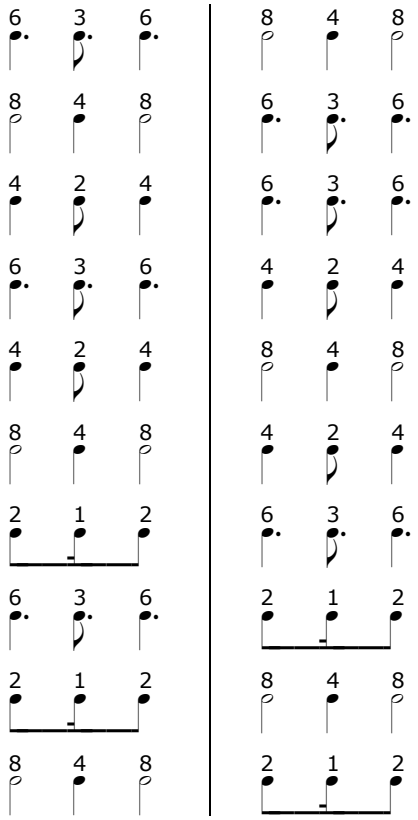
Classic diminution

Adding double the values

Subtracting 2/3 of the values

Adding triple the values

Subtracting 3/4 the values



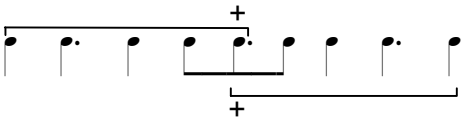
One can also use inexact augmentations and diminutions.

Example: 

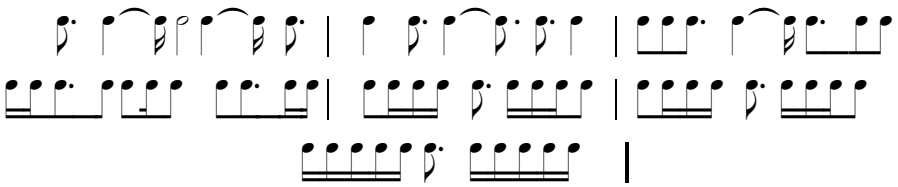
This rhythm contains 3 quavers (classic diminution of 3 crotchets), plus a dot (added value), that rends the diminution inexact.

Non-retrogradable rhythms

Whether one reads from right to left or from left to right, the order of their values remains the same. This property occurs in all rhythms which are divisible into 2 retrogradable groups, one in relation to the other, with a central 'shared' value.

Example: 

Succession of non-retrogradable rhythms (each bar one such rhythm) :

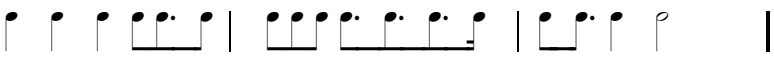


Used in the 6th movement of the 'quartet': 'Danse de la fureur, pour les sept trompettes' (see letter F).

The rhythmic pedal

An independent rhythm, which constantly repeats, without reference to the surrounding rhythms.

The piano part of the 1st movement of the 'quartet': 'Liturgie de cristal', is written using the following fragment :



Numerous repetitions of this fragment, independent of the rhythms of the violin, clarinet and cello, make a 'rhythmic pedal'.