

ERIK SATIE'S *VEXATIONS*: ANALYTICAL AND PERFORMING ASPECTS

Introduction

Vexations remained unpublished and unknown until John Cage organized the very first performance in 1963. Cage's interest, followed by many other 20th century artists, has made it a portrait of modernity even though after the first performance in New York only twenty-four have been documented. This is hardly surprising, since the execution of *Vexations* consists of 840 repetitions of a one-page piano piece lasting less than 2 minutes.

On the 150th anniversary of Satie's birth the version performed in Vigevano on 21-22 May 2016 was organized as a musical relay and represented a rare opportunity to appreciate not only the composition itself as much as its provocative potential.

The piece presents clearly atypical elements and highlights to relevant issues: (a) its conventional conclusion after 840 repetitions, which inhibits any attempt to perform a morphological analysis not limited to 1/840 of the whole piece, b) the traditional relationship among performer, composition and the audience so provocatively modified as to be disrupted.

To shed light on the sound characteristics of this performance of *Vexations*, a morphological analysis of the generative page was followed by a study of the secondary parameters in the 13 performances by 13 different pianists randomly selected, and 13 studio recordings of the single execution of the generative page.

Morphological Analysis

The morphological analysis examined the generative page, which is divided into 4 parts (strings):

- the exposition of a bass line with its thematic function in a single 13/4 rhythm string, built on 11 notes (only A flat is missing from the complete chromatic sequence), in which descending and ascending intervals alternate precisely with a single exception at the end of the string, where unison appears; the 18 notes necessary to the realisation (fulfilment) of this sequence, which are concentrated in the space between F-E astride middle C, have no logical cohesion leading us to consider that they are the consequence of compositional criteria centred on the generation of different pitches. The whole entity (body) tends to expand in a divergent direction as far as the opening C is concerned;
- the same thematic bass (in the left hand) supports a few chords in the right hand, consisting of six semitones always alternating their distance from the bass by major sixths

and minor thirds. The only exception is the second bichord which is a diminished fourth a major third away from the bass;

- repetition (reproposal) of the bass theme;
- repetition of the bass theme with inverted bichords in the right hand.

The metric and rhythmic distribution develops in symmetrically arranged modules:

Q OO - Q Q OO OO - Q Q OO OO - Q OO || (O O)

which can be analysed

- with numeric mathematical criteria:

12 – 24 – 24 – 12

in which number 2 clearly results in being the generative function of all the numbers in the sequence,

- with metric criteria:

L **BB** L L (dactyl-spondee)

BB **BB** L L (pyrrhic-pyrrhic-spondee)

BB **BB** L BB (pyrrhic-pyrrhic-dactyl)

which feature an invariable central part consisting of 2 short central syllables and a long one in the penultimate position, and an obvious frame consisting of two dactyl feet, the metric basis of the hexameter in Homer's poetry.

Satie's agogic indication reads "*Très lent*", and that the piece should be performed with the most "serious stillness" and "in the deepest silence".

Analysis of the Secondary Parameters

The examination of the secondary parameters highlighted the relationship between the piece and the listener in its temporal evolution, allowing us to trace where and if there are any differences between a typical performance context and the programmatically atypical one of *Vexations*. By "typical context" we mean the one in which an individual performer (invisaged as a person or a group) relates to a single audience at an agreed and shared time, using a musical language with well-known forms and structures, conventionally shared and/or culturally accepted. In whatever way *Vexations* is brought forth, whether by a single hydrated and catheterized performer or in the less vexing form of the relay, the missing aspect is that of the conceptual and perceptive uniqueness of the piece for absolutely obvious reasons: the physiological decline of the mental

and physical performance in the case of a single performer, the mutation of the conceptualising entity in the case of the relay, and the ethical and legal impossibility of relying on a single audience in both cases. This transformation of the audience as perceptual entity which modifies itself during the performance span and of the performer who either changes identity as such or undergoes a substantial alteration in his or her psychophysical conditions, make the *Vexations'* event into one of the most interesting cases in which the absence of cognition and formal perception contrasts with the organisation of the piece, and its identity is defined by the slow and imperceptible transformation of its 840 "cells" over time. Similarly to what happens to a cellular organism, each element is provided with its elementary form but has the capability to mutate slightly in the course of time, as well. The slow and unpredictable mutation through repetition is the essence of the multicellular organism, which is due to be more than the sum of all its parts. *Vexations'* aesthetic essence is not the sum of 840 repetitions, but their slow and unpredictable mutation. The question that arises and offers prospects of study of the greatest interpretative as well as educational interest is which signs there are of this destructuring relationship among performer-piece-audience, i.e. the auditory symptoms of this programmatic lack of formal orientation. Knowing how to recognise the methodological and performing problems of whoever is playing starting from the sound characteristics of a performance is the basis of every educational activity but of every conscious activity of the performer as well, whenever he or she is studying or playing. The following aspects of the execution were examined:

- Tension vectors
- Dynamic fluctuations
- Rhythmic (drive - pulsion) fluctuations
- Prominent parts
- Analytical resonance

We began our study by considering the tension vectors, despite the total absence of phrasing and dynamics indications, since the rhythmic structure, which consists of multiples of 4 bars with a closure, proves to be so significant and clear in its extreme simplicity, that it constitutes an important tension guidance for whoever is playing.

The presence of a larger number of climaxes (points of higher tension) compared to the number of closures (points of greater easing of tension) highlights a division of strings of notes into one, two or three phrases, and the pianists's different choice as far as the fragmentation of the string into significant nuclei is concerned. This quest is more obvious in the first and third string, the

unharmonised ones, and less in the second and fourth. It is interesting to observe that the closures are almost entirely arrayed in the final bits of the basic rhythmic nuclei, while the climaxes are arrayed into bit 3 and/or 4, put simply: the ones that identify the central and invariable rhythmic part of the string.

The analysis of the dynamic variations was carried out by detecting the numeric values reported by the audio editing programme at the points of climax, closure, and minimum and maximum value of each string. The line of the mean values of the dynamic perception highlights the 4-bar cyclic nature, proving once again the strong tendency of the pianists from both groups to refer to the basic rhythmic structures clearly identified beforehand.

The analysis of the pulsion fluctuations had to take into account the fact that the live performing group had some recommendations conceived by the relay organisers; according to them the pulsation of *Vexations* should be around 60 BPM to a quaver, while the group performing in the studio shows greater heterogeneity, especially regarding their basic pulsation choice.

The analysis of the prominent parts shows a substantial uniformity of both groups of pianists in the choice of bringing out the upper voice.

The analysis of the resonance highlights an easily predictable situation in both groups, where we can find a prevalent use of pedalling in the second and fourth string of notes almost completely absent in the first and third one. This use is certainly more diversified in the closure of the beats of the four strings, justifying the hypothesis of a lack of precise positioning.

The most relevant results undoubtedly are located by comparing this data related to the analysed parameters. We verified when and to what extent the pulsion fluctuations occurred in the bits with tension significance, and when and to what extent this coincided with any relevant dynamic variations. By comparing data gathered from the recordings of the two groups (live and in the studio performances), the results underlined significant atypicalness of the secondary sound parameters. In fact, they detected an extremely low level of concurrence of tension points with the pulsion fluctuations, underlining a kind of dissociation between the significant points of the musical line of thought defining the tension and the microvariations in the pulse in the live performance group.

Conclusion

In whoever is playing it, as in its listeners *Vexations*' dimension evokes a perceptual feeling of infinity whose every temporal fraction enjoyed, i.e. performed and listened to represents a synchronous window which can be seized and analysed.

Therefore, the work's completeness shatters into a perceptual kaleidoscopic variety determined by constant variation in the performing conditions over time: the performers and the audience change, but also the light, the time, the day, and the the listeners' state of mind: confused, hypnotised, bored or intrigued. The performer loses control over the form and his or her centrality in the event and must seek for a new identity in the microform, in a function relaying him or her to an event of which he or she is an infinitesimal part, like a cell in a vital organism. The answer to our initial question, namely, which traits are peculiar the dismantling of the formal and performative relationship with the event, may be at least partly satisfactory considering every pianist's execution as cell provided with his own function and defined by intrinsic bonds (the 4 generative strings) and extrinsic ones (the performing indications which guided and regulated the relay) with the event as a whole. As a matter of fact every pianist can account for his or her performing choices within this complex framework of functions and links: the event is created in time like a Futurist puzzle, where the consistency of every single part (of every pianist and every execution) is simultaneously the reason for its disintegrating power. However fascinating this response may be, it does not explain what happens specifically within the relationship between the performer and the piece which is being performed.

The comparative study of the two groups of pianists highlights the significant atypicalness of the secondary sound parameters. The extremely low level of concurrence between the tension vectors and the pulsion fluctuations draws a sort of dissociation between the significant points of the musical line of thought, i.e. the ones defining the tension, and the awareness of their distribution during the performance.

Despite the scarcity of the specimen, this study unfolds extensive and interesting considerations on the conceit of musicality itself, and on the relationship between our understanding of a piece of music and our emotional response.