# Marta Castello Branco Between Representation and Projection: Music in Vilém Flusser's Work

# 1. 'Pure Music'

Although music is not a central theme for Flusser, it is commented upon in several sources throughout his work. Especially in two different phases in his career, early in Brazil during the sixties, and after his return to Europe, in the eighties, Flusser wrote articles and book chapters forming a bibliography in a myriad of languages, divided mostly into two phases: one in Portuguese and another in German.

In his first texts in Portuguese, the concept of 'pure music', which Flusser (1965a: 04)<sup>1</sup> presents as the very nucleus of our sense of reality, is addressed especially to the elucidation of a mathematical aspect of music. According to Flusser (ibidem: 03), 'pure music' expresses one logical-mathematical structure that corresponds to the 'thinking thing', and is independent of the representation. In his words: "music simply is, and represents nothing, [the] thought simply is, and represents nothing." (ibidem)

The relationship between music and the absence of representation is related to the presence of a mathematical structure, which means the possibility to articulate the 'thinking thing' understood not as a matter of figurative thought, but as a structure capable of thinking. "Mathematics and symbolic logic, articulate our thought through the abstraction of the figurative meaning of our thought. Music does the same." (ibidem). Music articulates the 'thinking thing' independently of representation. In this sense, Flusser defends music as being free from representation and figuration. In his work, the concept of 'pure music' points to the mathematical aspect of music, which means the absence of representation. In face of the relationship between music and the 'thinking thing', Flusser (1965a: 02) presents music as the greatest contribution of the Modern West to the treasure of humanity.

In describing the concept of 'pure music', Flusser (1965b: 05) points to Baroque music as the perfect articulation of pure music and the Renaissance Toccata (1965a: 02): "Let us consider, therefore, for one instant, what pure music means, the Toccata, to use a term of the Renaissance."

<sup>&</sup>lt;sup>1</sup> The texts Na Música (Flusser 1965a) and Na Música Moderna (Flusser 1965b) were translated by Rodrigo Maltez Novaes.

The appointment of a non-representative music suggests that Flusser was referring to instrumental music, which would be in harmony with Renaissance music, such as the development of a non-vocal musical genre. But what proves essential in using the concept of 'pure music' by Flusser is not a musicological or historical reference, but the accentuation of a structural mathematical aspect of music that is independent of representation, which is confirmed in his elucidation of Schopenhauer, often cited in his texts from the sixties. "A música é a manifestação mais imediata da vontade," explains Flusser (2005: 165) based on Schopenhauer. The use of concepts such as 'will' and 'objectified will' reinforces the absence of representation, which Flusser recognizes in 'pure music'. "A música não representa ideias, não é portanto uma representação da representação, mas a música representa diretamente a vontade objetivada." (Flusser, *Como Tapear Tapados*: 02)

# 2. Mathematical Structure

According to Flusser (1962: 04), music seems to become aware of its mathematical possibility to articulate the 'thinking thing', it seems to be seeking this formal structure. An example given by him is the rigorous and mathematical method of twelve-tone music. Concrete music also points to the recognition of a mathematical structure. It represents the attempt to concretize geometry, "to make geometry musically graspable, that is, to make pure geometry concrete." (Flusser, 1965b: 03)

Flusser reveals a correspondence between music and the human activity of thinking. The recognition by music of its mathematical structure represents for Flusser the recognition of the fundamental structure of human thought in general. It is understood as a process to overcome music itself, which would mean the musicalization of mathematics, logic and science, as well as the mathematization of music and the other arts: "A total confluence of music and mathematics, into a rigorous and beautiful symbolism in order to realize thought would be, according to this thesis, the aim of the existential project of the West. In other words, it would be the realization of the logos in the full meaning of the term." (Flusser 1965b: 01)

This mathematization of music expresses the recognition of the ability to articulate the 'thinking thing', while the musicalization of mathematics, logic and science would mean the possibility of expanding this knowledge to other subjects of human thought. In short, both directions represent an approximation to the same point, in which the recognition and articulation of the structure of thought itself become accessible to myriad expressions, either as language, music, art or science.

This musicalization of human knowledge represents a review in relation to Schopenhauer's

philosophy. Whilst these expressions create, instead of representing objects, they correspond to what is manifested through music: the 'objectified will'. In this sense, science and art are 'objectified will' as creators of objects. "Hoje, a pintura abstrata e a poesia concreta, assim como a música, criam e não copiam objetos. Também a ciência cria: A sua posição ontológica é idêntica à da arte. [...] Ciência e arte são 'vontade objetivada' e, quiçá, o '*principium individuationis* enquanto criadoras de objetos." (Flusser, *Como Tapear Tapados*: 03)

Beyond its ontological-structural significance, the relationship between mathematics and music presents another facet. In *Gesten*, Flusser reveals a confluence of mathematics and music in the junction of physiology and acoustics. Listening to music means being bathed by sound waves, it means to vibrate with them. "Der menschliche Körper ist für Schallwellen permeabel, und zwar so, dass ihn diese Wellen in Schwingung versetzen, dass sie ihn ergreifen." (Flusser 1991: 154). The sound waves touch the human body, so listening music is a gesture imbued by the mathematical aspect of sound. The mathematical vibration of sound waves touches the body in a physical sense: "Beim Musikhören wird der Körper Musik und die Musik wird Körper." (Flusser 1991: 155)

This physical basis, where the body becomes music and music becomes body, opens up the possibility of understanding the world not as the opposition between subject and object, but as a 'pure relationship'. "Beim Musikhören fällt die Trennung zwischen Mensch und Welt [...] Denn er [der Mensch] findet sich selbst und die Welt nicht als Widerspruch zwischen Subjekt und Objekt, sondern als 'reines Verhältnis', nämlich als akustische Schwingung." (Flusser 1991: 158)

This understanding of music perception as a process based on the mathematical fundament of vibration of sound waves, where the acoustic principle creates a 'pure relationship' between subject and object, leads Flusser to formulate a correlation between the human senses and the numerical and abstract structuring principle of the digital universe: "Man beginnt zu verstehen, wie die 'sinnliche', die durch die Körpersinne wahrgenommene Welt zustande kommt. Punktförmige Reize werden von Nervenfasern empfangen, und zwar nach einem 'digitalem' Prinzip: Jeder einzelne Reiz wird entweder aufgenommen oder abgewiesen (I - 0)." (Flusser 1994: 13) This correspondence brings forth again the meaning of the relationship between music and mathematics.

# 3. Calculation

Regardless of his elucidation about music, expressions of mathematical thinking are frequent in Flusser's work. The construction of apparatuses, for instance, is due to mathematical thinking, which also determines its concepts of 'technical images', 'post-history' and the advent of

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calculation. Like music, calculatüion expresses mathematical thinking. According to Flusser, the decoding of letters into numbers marks the Modern Age. The development of machinery, leading to the Industrial Revolution, represents a deepening into the abstraction of human thought. "As máquinas são gagas. Por quê? Porque tudo no mundo (e o mundo como um todo) gagueja.

Tudo é quantizável." (Flusser 2007b: 85). The act of decoding letters into numbers allows the glimpse of a world to be calculated. Logical-mathematical structures become manipulable not by representing representations of meanings and words, but through the very abstraction of numbers. Like music, calculation articulates the mathematical structure of the 'thinking thing'. It expresses the numerical, formal and structural thinking, and enable, in its binary coding system, the invention of computers, which in turn are capable of much more complex calculations than its creator. They realize a human calculating project at their potential.

With the decoding of letters into numbers the thinking has become more abstract: "Es ist aus der Unidimensionalität in die Nulldimensionalität zurückgetreten." (Flusser 1994: 15f.). The meaning of one-dimensionality in the world's representation is replaced by the zero dimension, which is again the aforementioned 'pure relationship' between subject and object. In this sense, calculation represents, like music, a transformation in the relationship between man and world. The man, who was a subject surrounded by objects, becomes a project to the world. Sub-ject becomes pro-ject. Due to calculation, borders between man and art lessen: "Der Mensch als Projekt, dieser formal denkende Systemanalytiker und -synthetiker, ist ein Künstler." (Flusser 1993: 285)

A relationship between aesthetics and mathematics is as well founded in Flusser's statement of calculation as possible to design worlds to the senses: "Desde que os números foram transcodificados em cores, formas e tons, graças aos computadores, a beleza e a profundidade dos cálculos se tornaram perceptíveis aos sentidos. Pode-se ouvi-la em forma de música." (Flusser 2007b: 85) An effective transformation represented by calculation is the possibility of creating, that Flusser synthesizes in the concept of projection as a real cultural revolution of contemporaneity, since it has creativity as a response to the universe of technology.

## 4. Projection

In contrast to most texts about music, the concept of projection is especially present in Flusser's German writings starting from the 1980s. It is presented parallel to the 'technical images' created by computer. While previous images were illustrations of the world, the ones produced by computers are understood by Flusser as projections, as models: "Die alten Bilder sind Ab-bilder

von etwas, die neuen sind Projektionen, Vor-bilder für etwas, das es nicht gibt, aber geben könnte." (1994: 25). That calculation would be able to project perceptible worlds to the senses out of itself, signifies an approach to aesthetics and an alternative to representation. Instead of representing the world or making graphics of your surroundings, man can design his own creative universe. While projection and representation are in opposition, music and projection are in close proximity.

While music would free us from any representation, calculation is in itself already independent of it. It allows the human act to focus on creating imaginary models to be made. According to Flusser, we can 'project alternative worlds': "Sie erzeugten nicht Abbilder von Gegebenem, sondern verfertigten Entwürfe für noch nicht verwirklichtes, sie 'projizieren alternative Welten'." (1993: 275). The acting of man is modified by the possibility of projection, which as in art, shall refer to a "game with symbols." This activity consists of making decisions and pushing buttons, which are devices that switch symbols and allow them to be perceptible. "As teclas são dispositivos que permutam símbolos e permitem torná-los perceptíveis." (Flusser 2007b: 63).

Even if formulated late, with regard to the elucidation of music, the concept of projection corresponds to the understanding of music Flusser had since his first writings. The concept of projection reveals the absence of representation and the mathematical-structural aspect, which he gives to music in the sixties, through his use of the concept of 'pure music'.

## 5. Telematic Society

The relationship between music and mathematical thinking shown here, which is also present by calculation, is confirmed by Flusser in his formulation of a telematic society. In chapter *Kammermusik* from *Ins Universum der technischen Bilder*, published in German in 1985, music serves as a model for the emergence of this new society. Considering the possibilities that calculation represents to human thought, Flusser formulates the concept of telematics, a word created from the terms telecommunication and informatics. Its essence is communication, the prefix 'tele-' indicates the approximation of what is far away, such as in the words telescope and television. Informatics means how this approximation is given, taken for its effectiveness the essential role of calculation. Abstraction and the absence of representation, which were previously described in relation to music, represent via telematics – due to calculation – the idea of a collective projection.

Telematics enables the dissemination of information and due to the closeness between men, as well as creativity in a shared way. The abstraction of calculation points to the freedom to

create. In its absence of representation, music could be understood as abstract. But for its ability to articulate the concreteness of the 'thinking thing', it is like calculation, whose abstraction provides accessibility to the common fellow and hence to the collective. According to Flusser (1985: 103), man in telematic society is for the first time actually being human, namely as a player with information and the telematic society, this 'information society' is, in the true sense of the word, the first society actually free.<sup>2</sup>

As in a fable, Flusser (1985: 177) proposes the metaphor of a society in which men would be connected through computers. The fingers would manipulate keyboards, each one would be facing a monitor and together they would form the structure of a super-brain. Men interconnected by computers would be able to design worlds from their imagination, discuss them with others, add their contributions and thus get creative and collective projects. This telematic society signifies the connection between human beings, whose goal is a projective creativity. In his description, the author presents chamber music as a model of a telematic society's structure: "Kurz: Die Kammermusik kann als ein Modell der telematischen Gesellschaftsstruktur dienen." (1985, p. 177). Flusser refers to chamber music not as the listeners perceive it, but as experienced by musicians as they gather to play. Each instrument plays as if being solo, and by being so it needs to coordinate with the other instruments without the presence of a conductor. The improvised character is essential in this model, which is the collective creativity facing the "rules of the game". He then points out jazz improvisation to portray this musical quality.

The practice of Renaissance musicians who, according to Flusser, gathered not to play a score but to improvise around it also portrays the same description of this improvised character of the telematic society. Here an inconsistency between musical practice and historical moment can be noticed. Musicians did not gather to improvise around scores in the Renaissance. What seems to be critical in the metaphor of chamber music is not exactly the aspects of a specific musical genre but, and once again, the ideas of representation, of 'pure music' and finally the elucidation of Schopenhauer's philosophy allowed by this musical metaphor.

Flusser proposes chamber music as a model for his telematic society to elucidate its character of collective project, which involves creativity starting from individuality towards the group through a phenomenological understanding of the work to be held and modified collectively, but also aiming to express himself on the topic of representation in technical images, which touches upon his considerations of Schopenhauer. Through music, he approaches the issue of

<sup>&</sup>lt;sup>2</sup> "[...] wird der Mensch zum erstenmal tatsächlich Mensch sein, nämlich ein Spieler mit Informationen; und die telematische Gesellschaft, diese 'Informationsgesellschaft' im wahren Sinne dieses Wortes, die erste tatsächlich freie Gesellschaft." In Flusser 1985, p. 103. [Translation MCB]

representation to present a possible counterpoint to it, namely, projection. Music expresses 'objectified will' to the extent it departs from representation. The same is done by technical images produced by computer. Calculation gives them this possibility, which is played out and expands on the telematic society in an unthinkable way to music itself, be it Baroque, Renaissance or jazz.

The fable of a telematic society reveals, through technical development, aspects of music that are independent of technology. This is possible in that music expresses mathematical thought, which also causes the technology. This new society represents the end of a cycle, in which mathematical thinking becomes expression, regardless of the material means (or even fantastic means, as in the fable). And this term "telematics" corresponds exactly to its "pre-technological" opposite: the music. Both point to creativity.

By enabling the construction of apparatuses like the computer, calculation allows the mathematical thinking to achieve an equivalent sphere to that of music: it becomes expression. Regardless of the discrimination of their means, music and calculation point to the same direction. First Flusser reveals mathematical thinking as its common origin, and later presents creativity and collectivity as a goal shared by both. The correspondence between music and telematic society brings forth the possibility to present it as an answer to the question of freedom in technological context. Music anticipates Flusser's discussion about technology.

## 6. Music in Flusser's work

The lack of representation in 'pure music' means to Flusser something that goes far beyond music as a matter of human knowledge. Music gives clues of the possibility to recognize the logical-mathematical structure of the very 'thinking thing'. Perhaps this has been his main interest to formulate his first lectures on music, as well as single chapters included on *Língua e Realidade* and *A História do Diabo*. The meaning of music in his works is to reveal this great goal of Western civilization on its borders, which resizes the concepts of representation and abstraction, and thus goes beyond the thought of Schopenhauer, increasing its dimension to various artistic expressions, to the science and, as theoretical elucidation, to the establishment of a telematic society.

In Vilém Flusser's writings, music occupies the place of serving his philosophical thought. In this case, also as a metaphor but in the overall context of his thought, the role of counteracting the effect *sensu stricto* is given to music in relation to plastics and to representation through its logical-mathematical structure. Consequently, it relates to what Flusser calls "existential project of the West", which is represented by the musicalization of other matters of human knowledge and signifies the recognition of the logical-mathematical structure of the 'thinking thing'.

The telematic society might be an illustration of this project, which corresponds to what music seemed to represent for Flusser. The telematic society is conceived as a fable to portray the development of a philosophical formulation, which does not intend to mean anything but the elucidation of this thought. The telematic society is not something to be concretised. Even realizing the technical images, which are and were already fully realizable when Flusser wrote about them, was not part of his focus. They were part of a purely theoretical framework.

The same can be observed in relation to music. Musical analysis was not part of his activities. When references to specific musical works appear in his texts, they illustrate his own philosophical themes. The non-correspondence of historic and musical references by Flusser, as well, reveals his distance from subjects that were purely musical. Consider as well the humorous way in which he describes in *Hörapparate* his hearing difficulty, he would be an unspecialized hard-of-hearing person: almost deaf.<sup>3</sup>

The relationship between music and mathematics in Flusser's work does not correspond to his listening, to his specific understanding about music or to a musical analysis, but rather to the expression of a distinct philosophical thought. Based on this observation, the existence of a philosophical place of music in his works can be affirmed. Music serves as a guide on the path towards the revelation of the structure of the 'thinking thing', it represents the abstraction of the greatest concreteness possible to human beings: thinking. Calculation is also based on this same abstraction. It attests that human thinking is independent of language in the strict sense. Music reveals a ground state of thinking. Hence, to listen well means to Flusser the possibility to enhance the act of theorizing: "Je besser man die Stimme des Daimonion hört, desto besser kann man theorisieren." (*Hörapparate*: 01)

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<sup>&</sup>lt;sup>3</sup> "[...] ein unspezialisierter Schwerhöriger (beinahe Tauber)." In Flusser Hörapparate, p. 1. [Translation MCB].

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