The implication behind György Kurtag's dotted curve notation in Jatekok in relation to compositional concept and performance

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Abstract

The objective of this research is to determine the implication behind Kurtág’s notation in *Játékok* based on his compositional concept and its relation to the act of performance. In order to achieve this objective, the argument focuses on the dotted curve notation used in Kurtag’s *Játékok* to discover its hidden meaning.

Kurtág’s dotted curve notation and its relation to similar notation signs including “dotted phrasing slur” and “broken ties” are elaborated in chapter one. This leads to the finding that Kurtág’s dotted curve notation derived from an existing notation sign which he extended its function in order to adapt his original musical intentions (physicality).

Furthermore, Kurtag’s statements with regard to *Játékok* and selected pieces from the series are examined, and leading to the suggestion that the implication behind the dotted curve notation is strongly connected to physicality in chapter two. Here, they are described as physiological and abstract physicality. Essentially, physiological physicality (the act of performing) refers to a performer’s body and movement, whereas abstract physicality (the act of composing) refers to the sound quality created by the composer with his imagination including imagining the physiological physicality that is required to realise the intended sound quality.

In chapters three and four, details in dotted curve notation are addressed. These details include the different functions of pause when applied to “within” and “between” the dotted curve notations. As a result, the dotted curve notation implies a phrasing that is constructed by the “transition of energy”. The “energy” described in this research refers to the individual quality of every single object (sound or silence) intended by the composer based on abstract physicality shown through the notation, direct or hidden.

In conclusion, Kurtag’s notation of *Játékok* is unique in the sense that he required performers to find and understand the physiological physicality individually to realise the abstract physicality based on existing notation signs of which he extended the meaning. As a result, his notation functions more than just a map of a composer's sound imagination to performers, but also as a puzzle with much freedom (in the sense of physicality) for performers to find themselves as musicians.
クルターグ・ジェルジュの《遊び》における点線による曲線の記譜が意味するもの

―作曲のコンセプトと演奏実践との関わりから―

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要旨

本研究の目的は、作曲のコンセプトと演奏実践との関わりという観点から、クルターグ・ジェルジュ《遊び》の記譜が意味するものを探究することである。記譜のうち「点線による曲線の記譜」に対象を絞り、そこに隠された意味に議論を集中する。

第1章では、クルターグの「点線による曲線の記譜」と、それ以前から使われていた類似の記譜、すなわち「点線によるスラー」、「破線によるタイ」との関わりが考察される。その結果、クルターグによる「点線による曲線の記譜」は、既存の記譜法の意味を、クルターグ自身の意図（身体性）に合うように、延長したものであることが示される。

第2章では、《遊び》、および、その中の数曲についてのクルターグ自身の言説を検討し、「点線による曲線の記譜」が意味するものは身体性と強く関わるものであることを示唆した。この身体性は、ここでは、「生理的な身体性」と「抽象的な身体性」という2つの観点から記述される。「生理的な身体性」とは、演奏者の身体と動き（すなわち、演奏行為）に関わるものであり、「抽象的な身体性」とは、作曲者によって創造された音の質（すなわち、作曲行為）に関わるものである。後者には、作曲者の意図した音の質を実現するために、いかなる「生理的な身体性」が必要となるかを想像することも含まれる。

第3章と第4章では、「点線による曲線の記譜」が楽曲にもとづいて具体的に検討される。ここには、単独の「点線による曲線の記譜」の中にある休符、ならびに、2つの「点線による曲線の記譜」の間にある休符の問題も含まれる。その結果、「点線による曲線の記譜」が意味するものは「エネルギーの移行」によって作り出されるフレージングであると見定められた。本研究における「エネルギー」は、作曲者が「抽象的な身体性」にもとづいて意図した、個々の音楽的事象（音あるいは沈黙）の特性を表現するものである。

以上により、クルターグの《遊び》における記譜は、演奏者に、個々の「生理的な身体性」を見出し、理解させたうえで、作曲者が既存の記譜を拡大して楽譜上に記した「抽象的な身体性」を実現するよう導くという意味で、独特のものであると結論された。結果、クルターグの記譜は、作曲者が演奏へのイマジネーションを示すマップという役割を超え、演奏者自身が、身体をより自由に駆使して、音楽家としての自分自身を見出すためのパズルとなるのである。
The implication behind György Kurtág's dotted curve notation in *Játékok* — in relation to compositional concept and performance —

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Introduction and Aim

The aim of this article is to determine the implication behind Kurtág’s notation in *Játékok*, based on his compositional concept and its relation to the act of performance.

In order to examine the original meaning of Kurtág’s notation, it is necessary to study the dotted curve notation (refer to Score Example 1) in *Játékok*, based on Kurtág’s statement, according to which the dotted curve notation “does not indicate touch but holds together units belonging together (phrasing).” (Kurtág, 1979a: 9)

Below is an excerpt from “Hommage à Verdi” in which the dotted curve notation is well represented:

Score Example 1: Excerpt from “Hommage à Verdi” (Kurtág, 1979b: 4)

This dotted curve notation deserves special attention because of its hidden meaning. The above mentioned Kurtág’s statement suggests that the phrasing implied by the dotted curve notation is to be different from “touch”. Therefore, it is important to determine what kind of phrasing is implied by the dotted curve notation. Prior to determining this implication, one must first consider the meaning of dotted curve notation before *Játékok* whose first volume was published in 1979. This is because there is a possible connection between Kurtág’s compositional concept and his usage of
an existing notation sign (dotted curve notation) instead of creating an entirely new notation sign for his musical intentions.

Chapter I: The Meaning of Dotted Curve Notation in pre-1980s and its Relation to Kurtág's Notation

It remains a difficult task for researchers to bring unity and standardisation to new music notations in twentieth century and later, although a number of notable efforts were documented(2). Despite the difficulty, a unique publication that did not represent an individual's opinion but harvested through a four year project of the Index of New Musical Notation was realised in 1980. It is known as the “Music Notation in the Twentieth Century: a practical guidebook” and was published under the name of Kurt Stone. Stone's book is also unique because he integrated new notations into the total notational vocabulary of all serious music written in twentieth century. He treated new notations as a continuation from traditional notations, not as a separate phenomenon.

The term “dotted curve” was not coined in Stone's book. However, similar notation signs were found in the book, which were “dotted phrasing slurs” and “broken ties”. According to Stone, “If it is found desirable to indicate phrasing in music for winds, bowed strings, or voice, an additional set of slurs must be superimposed upon those fulfilling other functions. This can lead to certain ambiguities. To avoid them, dotted slurs are often used for phrasing.” (Stone, 1980: 35-36) The author goes on to say that “Dotted phrasing slurs may also be used in non-legato music which nevertheless requires some unambiguous phrasing indication.” (ibid: 36) Meanwhile, in the case of “broken ties”, Stone stated that “if a tremolo continues without break from note to note within a measure or across a barline, broken ties should be used.” (ibid: 149) From the above explanations quoted from Stone, we could identify two keywords that act as the fundamental meaning of notation signs in the form of dotted curve: “phrasing” and “continuity” (paraphrased from “continues without break”). These keywords also constructed the basis of Kurtág's dotted curve notation.

However, it is important to note that the dotted curve in Kurtág's notation implies neither “dotted phrasing slur” nor “broken ties”. Also, it is clear that Kurtág’s dotted curve notation does not imply the function of a “tie”. To further determine the implication behind Kurtág's dotted curve notation in conjunction with “phrasing” and “continuity”, his compositional concept (including musical intentions) and its relation to the act of performance will be discussed in following chapters.

A similar perspective about Kurtág’s notation in Játékok could be found in Johnson’s article. Johnson did not specify the meaning of the dotted curve notation but
gave a general idea about the connection between Kurtág’s notation in *Játékok* and the conventional Western notation.

Clearly we must look beyond standard Western analytical techniques, which rely on systematising aspects of pitch and/or rhythm. None of them apply here, even though paradoxically the subject matter of the piece is deeply involved with the Western canon: it borrows its models, quotes from it and deconstructs it to something which — although recognisably itself — contains none of the traditionally quantifiable elements of itself. (Johnson, 2002: 284)

Johnson also argues that Kurtág’s indeterminate notation is set apart from that of more experimental composers, “for Kurtág the notation is still a conduit for a very specific musical expression, just as conventional notation is.” (ibid: 283)

As an extension to Johnson’s argument, I would like to further propose that Kurtág’s dotted curve notation was derived from an existing notation sign, whose function he extended in order to adapt his original musical intentions.

Chapter II: Compositional Concept in *Játékok* and its Relation to the Dotted Curve Notation

According to Kurtág:

The idea of composing "Games (*Játékok*)" was suggested by children playing spontaneously, children for whom the piano still means a toy. They experiment with it, caress it, attack it and run their fingers over it. They pile up seemingly disconnected sounds, and if this happens to arouse their musical instinct they look consciously for some of the harmonies found by chance and keep repeating them.

Thus this series does not provide a tutor, nor does it simply stand as a collection of pieces. It is a possibility for experimenting and not for learning "to play the piano".

Pleasure in playing, the joy of movement · daring and if need be fast movement over the entire keyboard right from the first lessons instead of clumsy groping for keys and the counting of rhythms · all these rather vague ideas lay at the outset of the creation of this collection.

Playing · is just playing. It requires a great deal of freedom and initiative from the performer. On no account should the written image be taken seriously but the written image must be taken extremely seriously as regards the musical process, the quality of sound and silence. We should trust the picture of
the printed notes and let it exert its influence upon us. The graphic picture conveys an idea about the arrangement in time of even the most free pieces.

We should make use of all that we know and remember of free declamation, folk music parlando-rubato, of Gregorian chant and of all that improvisational musical practice has ever brought forth.

Let us tackle bravely even the most difficult task without being afraid of making mistakes: we should try to create valid proportions, unity and continuity out of the long and short values - just for our own pleasure! (Kurtág, 1979a: 9)

Examining the above mentioned discourses leads to identifying four points in Kurtág's compositional concept and intentions.

a. When the performer's musical instinct is aroused, he or she will try to repeat what they found by chance.

b. This educational series is intended without an external tutor, with intention for the performer to take initiatives to discover music (not piano playing technique) through experiment and understanding of their own physical movements.

c. The quality of sound and silence shown through notation (written image) are taken extremely seriously as musical process. In other words, the notation (graphic included) used here has very clear instruction and is not of complete freedom.

d. Creation of valid proportions, unity and continuity are intended and shown in notation.

Furthermore, according to Johnson, "through examining the content of Játékok as a whole, it is clear the importance Kurtág attaches to the communication of music as a physical experience." (Johnson, 2002: 284) However, in his article, he did not further describe what kind of physical experience was intended by Kurtág. Corresponding to Johnson's (2002) viewpoint and basing on the four points listed above, I would further propose that the compositional concept and intentions of Kurtág in Játékok are made up of two essential acts or physicality in music creation.

1. physiological physicality (in relation to the act of performing), and
2. abstract physicality (in relation to the act of composing).

Physiological physicality relates to the act of performing where performers literally have to understand and figure out the movement, posture, muscles, and weight of their body parts including wrist, arm, and finger in relation to the sound quality they intend to produce. This has been commonly discussed under the topic of physical tension like muscle injuries; and psychological tension like stage fright during performance.

In the discussed Kurtág's case, physiological physicality is related to point a and b (refer to above). Repeating what they found by their musical instinct, performers are required to pay more attention to their physiological physicality including their movements and posture. This is because the reproduction of the same sound quality...
involves performers observing themselves. These observations include hearing the sound quality they produce, the way their own body, movement and physical breathing relate to their musical instruments.

On the other hand, the abstract physicality during composing is related to imagine the physiological physicality of the performer. This act of imagining someone producing the intended sound quality constitutes the experience of abstract physicality. However, the experience is different from the actual performance.

Another example of abstract physicality is composing the sound quality in one’s mind. This includes imagining details that cannot be summarised into a single notation sign but a combination of notation signs. Similar to Kurtág’s intentions in point c and d (refer to page 9), these details include the musical process in creating the quality of sound and silence, valid proportions, unity, and continuity. Therefore, to recreate the intended sound quality of the composer, performers are required to read and experience the abstract physicality of the composer from the notation of the composer in addition to knowing their own physiological physicality.

During the working process of Játékok, Kurtág collaborated with renowned Hungarian piano educator, TEÔKE Mariane[4]. He learnt that the first thing a child would do with piano is to play the entire range of keyboard within their physical (physiological) capacity. As a result, the first piece “Örökmozgó (talált tárgy)” (refer to Score Example 2) featured in Volume I was composed for the entire range of keyboard. The idea of physicality in Kurtág’s music could also be identified by comparing the first and last pieces in Játékok’s first volume.

Score Example 2: Excerpt from “Örökmozgó (talált tárgy)” (Kurtág, 1979b: 1)

The first piece and the last piece are the same piece of music notated in different manners. Both are given the title “Örökmozgó (talált tárgy)”. In the first piece (Score Example 2) only the starting point of the glissando-wave at the very beginning was notated with c¹, whereas the last piece (Score Example 3) was indicated with starting and arriving points of each glissando-waves in details. The first piece is for young pianist who has yet to grow their arms to full length, while the last piece is for pianist
who already has a sufficient physicality in reaching the entire range of keyboard
without needing to stand up and move about.

Score Example 3: Excerpt from “Örökmozgó (talált tárgy)” (Kurtág,1979b: 25)

In summer 2014, I conducted the field work during which some interviews were
programmed. All of them who had taken direct lessons from Kurtág claimed that
Kurtág had very clear ideas in mind like precise rhythm and duration of each object
(sound or silence) notated in Játékok.(5) These information demonstrated that Kurtág is
highly aware of “physicality” in music. Furthermore, he is aware of the fact that every
individual possesses a unique form of body, and he intended to provide performers a
platform to experiment and experience in musical process. Therefore, precise rhythm
and timing are not notated in some pieces in Játékok.

Consequently, Kurtág’s notation in Játékok requires performer to discover his or
her physiological physicality by realising the abstract physicality created by the
composer within a timeframe. This leads us to the assumption: the implication behind
the dotted curve notation used in Játékok is strongly connected to the realisation of
physiological and abstract physicality.

Chapter III : The Kind of Phrasing Implied through the Dotted Curve Notation

To determine what kind of phrasing is implied by Kurtág’s dotted curve notation in
Játékok, the combination of notation signs ”within” and ”between” (refer to Score
Example 4 & 5) the dotted curve notations must be examined.
Score Example 4 : “Virág az ember...(1a)” (Kurtág, 1979b: 3)

Score Example 5 : “Virág az ember...(1a)” (Kurtág, 1979b: 3)

The observation of the notation signs “within” and “between” dotted curve notations in Játékok is observed and leads to the finding of seven details as below:
1. type of units (cluster, notes, or single note)
2. distance from one unit to another, clearly or approximately defined (for example, clear interval between two single notes; approximate interval between two clusters.)
3. sound value and duration of a unit, by itself and in relation to the unit before and after. Refer to the chart below:
Chart 1: Excerpt from “Key to the Signs Used” (Kurtág, 1979a: 9)

4. touch and articulation
5. the function of pause (prolongation or fracture)
6. duration of pause
7. dynamic

In this article, “object” is described as the combination of details that are notated at the same vertical time, and will move simultaneously towards the same direction in horizontal time.
In Score Example 6, there are nine objects, labelled from I to IX. Every object has a position, for examples object I is pitch g², object II is pitch a which is lower in position than object I and etc. The combined notation signs of object I is constituted by its position and duration (sound value “short” with “long prolongation”). It is of importance to note that eliminating any one of the notation signs of an object will make it different because every notation sign contributes “energy” to the object. Here, the “energy” refers to the individual quality of every single object (sound or silence) intended by the composer based on abstract physicality shown through the notation, direct or hidden.

Furthermore, the transition of energy from one object to another (in the case of "within" dotted curve), also from the ending of one phrase to the beginning of another (in the case of "between" dotted curves), occurs in horizontal time. That connects objects into a phrase shown by dotted curve notation for example, thirty five objects (labelled from 1 to 35) and four phrasings (the four dotted curve notations) are observed in Score Example 7:

The first phrase begins with object 2, transits to object 3, followed by object 4, and finally arriving at object 5 which is the ending of this phrase. Energy of an object is realised during performance by a three-step cycle (PRR-cycle):
Step One: (P)reparation - before the object is produced  
Step Two: (R)ealisation - when the object is produced  
Step Three: (R)elease - after the object is produced

In Score Example 7, step one “Preparation” includes hearing object 2 inside oneself, prepare the finger and body movements required to produce the energy of object 2 on piano. Step two “Realisation” is the moment when object 2 sounds. Finally, step three “Release” includes controlling the timing to release object 2 by finger and body movements, also listening to the resonance. Object 3 begins after the release of object 2 by repeating the PRR-cycle. The PRR-cycle is thus realised through both abstract and physiological physicality.

The transition of energy from one object to another occurs between the release of an object and the preparation of the following object. The process of which in Score Example 7, “tension” between object 2 and 3 is referring to the transition of energy from a single pitch unit to a pause along with _decrescendo_ from _mezzo forte_.

**Chapter IV: The Different Functions of Pause**

In addition to defining pause in detailed approach (refer to Chart 2), Kurtág went as far as notating pause “within” and “between” dotted curve notation. This suggested that the quality of silence and its functions are very important in his music.

**Chart 2: Excerpt from “Key to the Signs Used” (Kurtág, 1979a: 10)**

The different functions of pause in two different situations are described here as below:

1. pause “within” a dotted curve : prolongation in transition
2. pause “between” two dotted curves : fracture in transition

In Score Example 7 (refer to page 14), a pause labelled as object 3 is “within” a phrase. Here, it functions as an object prolonging transition of energy from object 2 to object 4. The energy of object 3 is a variation of object 2 where the energy alters through “tension”. If the “tension” does not exist, every object is independent without any relation, which is clearly against Kurtág who considered the dotted curve notation as “phrasing”.

Finally, two basic patterns are observed in the situation where the transition of energy happens between two phrases, from the ending of one phrase to the beginning.
of another. In the first pattern, the later phrase begins directly after the ending of previous phrase, like the first and second phrases of the “Virág az ember...(1b)” (refer to Score Example 6, page 14). In the second pattern a pause exists between two phrases, like the second and third phrases of the same example. In contrast to the “tension” described above through Score Example 7 (where it occurs “within” a phrase), the “tension” happens in the above mentioned two basic patterns involves a fracture during the transition of energy from one phrase to the next. That is to say, during the step of “Release” (PRR-cycle) of the last object “within” a phrase, the connection between “energies” is fractured in order to generate a new energy.

The different functions of pause observed in Kurtág’s Játékok suggests that the dotted curve notation implies phrasing that is constructed by the transition of energy. In order to realise these intended “energy” and its transitioned “tension” through performance, the fundamental concept is that performers are required to combine two aspects:

a. to know their own physiological physicality (body and movement), and
b. to find the abstract physicality (energy and tension) indicated through Kurtág’s notation.

**Conclusion**

This research demonstrated that the uniqueness of Kurtág’s notation in Játékok is attributed to his musical concept which rooted firmly in physicality. He extended the function of dotted curve notation in order to adapt his original musical intentions. As suggested in chapter one, this leads to the assumption that his original musical intentions are derived from the act of performance (physicality).

The physicality in Kurtág’s music are described here as abstract and physiological physicality. In chapter two, these two physicality are observed through comparing the notations of first and last pieces featured in Játékok’s first volume. Consequently, it is suggested that, the implication of dotted curve notation is connected to the realisation of abstract and physiological physicality.

In chapter three, the energy and its realisation is observed through PRR-cycle, whereas the different functions of pause when applied to “within” or “between” phrases is discussed in chapter four. As a result, “transition of energy” in “tension” region is discovered. This leads to the conclusion that the phrasing implied by dotted curve notation in Kurtág’s Játékok is constructed by the “transition of energy”.

Kurtág’s notation of Játékok is unique in the sense that he required performers to find and understand the physiological physicality individually (the act of performing) to realise the abstract physicality (the act of composing) based on existing notation signs, of which he extended the meaning. As a result, his notation functions more than just a map of a composer's sound imagination to performers, but also as a puzzle with
much freedom (in the sense of physicality) for performers to find themselves as musicians.

Notes

(1) Here, “touch” is referred to, for example, “legato”. The term “touch” is coined directly from Kurtág’s “Key to the Signs Used” (Kurtág, 1979a).

(2) Including Erhard Karkoschka’s Notation in New Music: A Critical Guide to Interpretation and Realisation (German, 1966/ English, 1972), Howard Risatti’s New Music Vocabulary: A Guide to Notational Signs for Contemporary Music (1975), and Gardner Read’s 20th Century Notation (Unpublished).

(3) Some notable publications include Percy C. Buck’s Psychology for Musicians (1944), Carola Grindea’s Tensions in the Performance of Music: A Symposium (1978), Barry Green and W T. Gallwey’s The Inner Game of Music (1986), and Thomas Mark, Roberta Gary, Thom Miles, and Barbara Conable’s What Every Pianist Needs to Know about their Body (2003).

(4) Printed on English Version Score (Kurtág, 1979b) : Pedagogical Collaborator, TEÖKE Mariane.

(5) One of them even suggested directly to Kurtág that he should notate the exact rhythm and duration he had in mind. However, Kurtág disagreed with the suggestion. Another student who attended master class at a summer festival, where she played a chamber music piece by Kurtág, was told directly by Kurtág himself that she played it wrong even before she could produce a sound on the piano. According to the student, Kurtág could tell that the sound she was going to produce was wrong based on her movement.

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