## Jean-Louis Di Santo

# Six Japanese gardens by K. Saariaho: eastern and western temporalities

### SCRIME

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# Abstract

*Six Japanese Gardens*, before its existence, was fundamentally an intercultural work: its composer, Kaija Saariaho, is both from Finland and France, and this piece was commissioned by the Kinutachi College of Music of Tokyo. Does this work reflect this interculturality? To answer this question, I chose to look first for relations it is possible to find between sounds themselves and what can reflect a way of thinking or a symbolic part. Concerning the symbolic part, I will study the relation between formal analysis and philosophical analysis, using eastern and western philosophy. The method to analyse the first movement, titled *Tenju-an Garden of Nanzen-ji temple*, will be based on two steps.

### Formal analysis

On a first step, I will make a formal description through a transcription made with the acousmoscribe, a system of signs describing sounds from a phenomenological point of view, and that enables the analysis of the relationships between instruments and tape with the signs. Tape and instruments are considered using reduced listening. The description of shape and matter of sounds enables to see structures that present some isomorphisms with structures of time. But it also enables a comparison between the electronic part and the instrumental part.

This work is obviously a symbolic work and is speaking about time through different kinds of rhythm. A strong opposition exists between the instrumental part and the electronic part. Actually, this work opposes two temporalities radically different: pulsed and oriented time with the instruments, and smooth and static time at the tape.

### Symbolic analysis

If musicians can easily speak about rhythm from a formal point of view, philosophers are more indicated to analyse concepts and to speak about temporalities with words: how is this piece speaking about time, and what is time? Can music be a way of thinking the world and can it have an hermeneutic function? I will try to answer these questions using time analysis by western philosophers, and more particularly Martin Heidegger and Jacques Derrida, and a Japanese philosopher, Kitarô Nishida. *Tenju-an garden* exposes different kinds of time. These different kinds of time will be analysed through different points of view:

- the opposition between pure instant and duration;
- the co-existence of past, present and future;
- the opposition between individual temporality and historic and social temporality;
- what M. Heidegger called *repetition*;
- the link between time and human being;
- crossed temporalities between nature and human being.

*Tenju-an Garden of Nanzen-ji Temple* speaks about complex temporalities that can be analysed from an eastern or a western point of view. These points of view very often are converging, and one can think that interculturality can be universality. The divergences can be thought more as complementarity than as opposition. But music, with its own language, can reflect our perception of the world and reach certain universality.

# Introduction

*Six Japanese Gardens* (1994), before its existence, was fundamentally an intercultural work: its composer, Kaija Saariaho, is both from Finland and France, and this piece was commissioned by the Kinutachi College of Music of Tokyo. It also was written in memory of the Japanese composer Toru Takemitsu. East and West were meeting through music. Does this work reflect this interculturality? To answer this question, I chose to look first for relations it is possible to find between sounds themselves and what can reflect a way of thinking or a symbolic part. Then can these two aspects be intercultural? It is easy to hear that an intercultural dimension lies in the very choice of instruments: their timbre sounds both occidental and oriental, with similar functions. For example, taiko sounds like timbal, and they were both used by warriors in the past. Concerning the symbolic part, I will study the relation between formal analysis and philosophical analysis, using eastern and western philosophy. According to K. Saariaho herself, "*Six Japanese Gardens* is a collection of impressions of the gardens I saw in Kyoto during my stay in Japan in the summer of 1993 and my reflexion on rhythm at that time".<sup>1</sup>

Rhythm is a kind of perception of time, and this perception can be similar or different depending on culture.

The first movement of this work, titled *Tenju-an Garden of Nanzen-ji temple*, can be considered as an electroacoustic piece because it contains an electronic part and because its instrumental part only consists in the pulse of different percussions used one after the other, creating variations of timbre. Since it is the first movement, it can be considered as an introduction that contains and exposes the purpose of all the work.

At last, this paper is based on three hypothesis: 1) To write perceptive qualities of sounds facilitate the analysis of musical works; 2) This kind of musical writing can be compared to other kinds of writing. In this case, philosophical writings; 3) Music can have a hermeneutic function.

The method to analyse this movement will be based on two steps. The first step will be a formal analysis, and the second step will be a symbolic analysis.

# Formal analysis

On a first step, I will make a formal description through a transcription<sup>2</sup> (hand)made with the acousmoscribe, a system of signs describing sounds from a phenomenological point of view, and that enables the analysis of the relationships between instruments and tape with the signs. This system of signs describes both shape and matter of sounds, using the schaefferian

<sup>&</sup>lt;sup>1</sup> Kaija Saariaho, Le passage des frontières, Écrits sur la musique, Paris, MF éditions, collection "Répercussions", 2013, p. 299.

<sup>&</sup>lt;sup>2</sup> As it is a transcription made by reduced listening, I had to choose one interpretation among several interpretations. Even if the recording quality is bad, I chose this one:

https://www.youtube.com/watch?v=PMGDRVx5yiQ (last accessed 12/17).

criteria<sup>3</sup>. Tape and instruments are considered using reduced listening, and can be compared. More: the description of shape and matter of sounds enables to see structures that present some isomorphisms with structures of time. But it also enables a comparison between the electronic part and the instrumental part. Kaija Saariaho said she used CHANT program, elaborated in IRCAM, to compose the tape in order to create scales of sound. At last, there is both an opposition and a link between the tonic timbre of the instruments and the global inharmonic timbre of the tape (these link and opposition can be seen on the first column on the left of the score, called spectral key). This work is obviously a symbolic work and is speaking about time through different kinds of rhythm. A strong opposition exists between the instrumental part and the electronic part. Actually, this work opposes two temporalities radically different: pulsed and oriented time with the instruments, and smooth and static time at the tape. *Tenju-an Garden of Nanzen-ji temple* clearly exposes the opposition between instant and duration. This opposition is fundamental in music:

So that the duration is possible as music, it must be before all visited by the entrance in presence of the being, that is the musical instant. The preservation of pure appearing (instant) is made always against duration: the attacks, the ruptures, but also any variations, any beginning whatever it is...<sup>4</sup>

## **Instrumental part**

The instrumental part is very regular, always at the same tempo, and is built on the succession of different categories of timbres that obey to some alternation rules: alternation of spectral profile<sup>5</sup> (tonic / tonic noisy that becomes distonic at the end), of energy articulation (impulse / sustained), of calibre (smaller and larger one) and of granularity (smooth, that is without granularity, / granular)<sup>6</sup>. Globally, the tessitura goes from the higher to the lower pitch. But, in the detail, there is a pitch oscillation during the whole piece. It appears at the beginning, played by the first instrument, and looks like a ticking clock. This pitch oscillation is reproduced and amplified until the end of the piece with the changes of instruments. These different kinds of succession create different loops, larger and larger: one stroke after the other, one instrument after the other and couples of characteristics (spectral profile, energy articulation, granularity and pitch) one after the other. Each loop is amplified by the following. These alternations create a cyclic but not circular time: rather spiral-shaped because these alternations never drive us at the same place.

These cycles of alternations stop when the gong plays (1'46 on the score): it is logically resonating after the wood block but it has a tonic spectral profile like it and is smooth like it. This is a very important moment in the piece. This break of construction is followed by another break: the end of the monk song at the tape, when the gong becomes fortissimo (1'57), and when its spectral profile becomes granular and noisy distonic. The inharmonic

<sup>&</sup>lt;sup>3</sup> It is possible to download the score here: http://jean-louis.disanto.pagesperso-orange.fr/recherche.html (last accessed 12/17).

<sup>&</sup>lt;sup>4</sup> Régis Renouard Lariviere, "L'objet, le chant", in *Ouïr, entendre, écouter, comprendre après Schaeffer*, Paris, Buchet/Chastel, 1999, p. 118.

<sup>&</sup>lt;sup>5</sup> Jean-Louis Di Santo, "Harmonic profile: typology and notation", in *Proceedings of the Electroacoustic Music Studies Network Conference (EMS11)*, New York, 2011, http://www.ems-network.org/IMG/pdf\_EMS11\_di\_santo.pdf (last accessed 12/17). In this EMS paper, I was speaking of "harmonic profile". For different reasons that it is useless to expose here, spectral profile seems better.

<sup>&</sup>lt;sup>6</sup> The translation of schaefferian terms made by Lasse Thoresen is used here. Lasse Thoresen, "Spectromorphogical Analysis of Sound Objects, An adaptation of Pierre Schaeffer's Typomorphology", in *Proceedings of the Electroacoustic Music Studies Network Conference (EMS06)*, Beijing (China), 2006, http://www.ems-network.org/IMG/EMS06-LThoresen.pdf (last accessed 12/17).

part of this sound introduces violence and the inharmonicity of the timbals that follow, and brings the instrumental spectral profile closer to the spectral profile of the tape. The timbals end the piece with a melodic profile becoming lower, and by a decrescendo, inexorably until the death, one can say.

## Таре

On the contrary, the electronic part seems linear; it is made with long files merged one with the other, flowing gently. The sounds of the tape are inharmonic, except for the lower one, the monk song which is tonic. By this fact, the monk song belongs actually to the tape, but also has a strong relation with the instrumental part which seems very ritual. Even if the inharmonic sounds of the tape belong to another soundality<sup>7</sup> the tonic sounds of the instruments, there is a relation between these two kinds of sounds because they have both a recognisable pitch. The inharmonic sounds just seems more "wild" than the tonic ones.

At the beginning, the tape is made with three stratums of sound that make large loops in low, medium and high tessituras. Each stratum has a changing velocity; some of them also has a changing melodic profile. This creates a shimmer that avoids monotony. The global impression corresponds to the TSU "Stationnary"<sup>8</sup>.

The lower sound is a monk song. It introduces a slow and spiritual time, a larger time than human life, the Nature time, in relation with the Tenju-an garden. Its repetition creates a static aspect, in opposition with the instrumental part that goes on as we have seen above. It disappears in the fortissimo of the gong.

The medium stratum is made with a distonic sound (tonic inharmonic) whose timbre recalls a bell or a gong, two instruments linked to religions. From a symbolic point of view, it recalls the monk song. From a formal point of view, it contributes to the unity between the instruments and the tape, especially when the gong is played. This stratum has a melodic profile that doesn't change and that creates a great stability that reinforce the sensation of immobility. Its tessitura and its global envelope can call the wind to mind.

The higher stratum is in the same tessitura than the triangle at the beginning and, for this reason, has a link with it. Like the medium sound, it is inharmonic. Its variations of pitch are globally slow, but irregular and can evoke the song of a small river.

A last sound appears at 0'59, in the medium high tessitura, at the end of the cymbal, as if it was an extension of it. It is a tonic inharmonic sound, very granular like the cymbal. For these two reasons it creates a link with the instrumental part. The pitch of this sound changes quickly, in a circular way. This granular and circular time responds to the granular time of the instruments. But the granular instruments appear and stop, while this sound in the tape is always continuing until the end. Furthermore, this sound presents some isomorphisms with cicada's song. At 2'25, this sound becomes higher, when the timbals become lower. In this way, at the end of the piece, the tessitura of the instruments and the tessitura of the tape are reversed in comparison to the beginning of the piece. Moreover, at this moment, there is no more reflect of the instruments in the tape.

This piece plays on strong temporal and rhythmic oppositions, between the instrumental part and the tape, but its unity is built by correspondences between the spectral profiles, tessituras

<sup>&</sup>lt;sup>7</sup> "Soundality" means a sound or a set of sounds belongs to the same category of spectral profile (see Di Santo, *op. cit.*).

<sup>&</sup>lt;sup>8</sup> François Delalande et al., *Les Unités Sémiotiques Temporelles – Éléments nouveaux d'analyse musicale*, Marseille, Édition MIM, Documents Musurgia, book + CD audio, 1996.

and granularities. "The colours, so reduced, are amplified by the addition of an electronic part which suggests sounds of the nature, ritual songs and percussions recorded with Shinti Ueno at the Conservatory Kunitachi of Tokyo".<sup>9</sup>

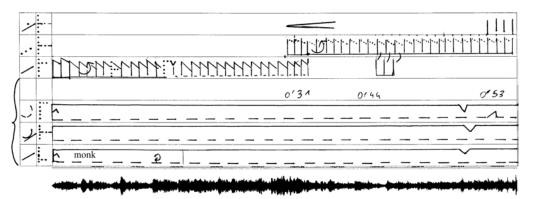
The analysis of this work with the acousmoscribe allows both a formal and a symbolic analysis, and so it allows to study the semiosis, the way the plan of contents works with the plane of expression. This is what we are going to study now.

# Symbolic analysis

If musicians can easily speak about rhythm from a formal point of view, philosophers are more indicated to analyse concepts and to speak about temporalities with words: how is this piece speaking about time, and what is time? Can music be a way of thinking the world and can it have an hermeneutic function? I will try to answer these questions using time analysis by western philosophers, and more particularly Martin Heidegger and Jacques Derrida, and a Japanese philosopher, Kitarô Nishida. The approach of K. Saariaho herself allows this comparison. She says: "Music is a pure art of time, and the musician – composer or not – builds and controls the experience of the flow of time. For music, time is material, and by this fact, to compose is to explore all the forms of time."<sup>10</sup> Tenju-an garden exposes different kinds of time.

### Instant/duration

In this piece, there is an opposition between pure instant and duration of time, which is a problem very deeply studied by these philosophers. Of course, on a basic level, this opposition is materialized par short percussive sounds and long files of sound flowing. But, on a more elaborated level, we can easily hear that percussive sounds are repeated and create duration, while long sounds maintain the listener in a perpetual instant, even if the monk song creates variations of pitch. But these variations are minimized, on one hand, by their repetition and by the other sounds merged to it, and on the other hand, by the fact that they are in the background.



**Figure 1:** the tape<sup>11</sup> (tracks below) is always flowing without strong onsets while the instruments (tracks above) are giving us a sensation of repetition of the pure moment

<sup>&</sup>lt;sup>9</sup> Kaija Saariaho, op. cit., p. 299.

<sup>&</sup>lt;sup>10</sup> *Ibid.*, p. 184.

<sup>&</sup>lt;sup>11</sup> Some explanations to read the score can be found there: Jean-Louis Di Santo, "A sign to write acousmatic scores", in *Proceedings of the First International Conference on Technologies for Music Notation and Representation – TENOR 2015*, Paris (France), http://tenor2015.tenor-conference.org/papers/14-DiSanto-AcousmaticScores.pdf (last accessed 12/17).

This opposition creates a dialectic studied by Nishida: "It [time] must be conceived as something that begins by disappearing in each of its instants, i.e. as something that lives by dying. In other words, it must be considered as continuity of discontinuity."<sup>12</sup>

From a western point of view, Derrida expressed the same idea in a different way: "The impossible co-maintenance of several present *maintenants* is possible as maintenance of several present *maintenants*. Time is one name of this impossible possibility."<sup>13</sup>

# **Oriented time**

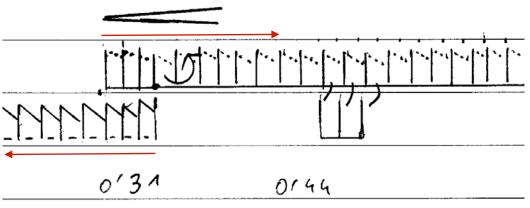


Figure 2: sounds coming from the past and sounds going toward the future are played at the same moment in the instant

The superposition of instruments that appends sometimes (0'31, 0'44, 0'53, 1'13...) and the interleaving and the recovering of sound files at the tape make each moment turned both to the past and to the future, what philosophers thought. This aspect is also amplified by the use of all sorts of loops that both recall the past and announce the future, as we have seen in the formal analysis. Nishida wrote: [...] on one side we are touching the infinite past at the extremity of this determination of the instant. [...] But at the same time [...], we are also confronted to what determine us from the infinite future [...].<sup>14</sup>

In a different way, Heidegger was speaking of "the ecstatic horizontality of time", that is meaning that in each moment past, present and future co-exist. But depending on the moment one of these three temporalities becomes the more important. What happens on 0'44 is very interesting to illustrate the concept of "ecstatic horizontality of time": sounds coming from the past rise again after having stop.

### Non individual time

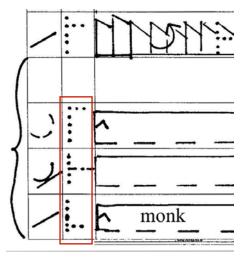
These oppositions co-exist with another opposition: individual temporality and historic and social temporality. This dimension equally exists in Saariaho's work: the aspect very ritual of the instrumental part responds to the Gregorian song we can hear in the electronic part. Rituals and religions imply the others, the others who were living before us and the others living with us. Even the sound correspondences between instruments and tape can be heard in this meaning. These two temporalities refer to time that exceed individual time, the time of

<sup>&</sup>lt;sup>12</sup> Kitarô Nishida, *L'éveil à soi*, translation from Japanese, introduction and notes by Jacinthe Tremblay, Paris, CNRS Éditions, 2003, p. 74.

 <sup>&</sup>lt;sup>13</sup> Jacques Derrida, *Marges de la philosophie*, Paris, Les Éditions de Minuit, collection "critiques", 1972, p. 63.
<sup>14</sup> *Ibid.*, p. 110.

the creation and the time with the others. These aspects are studied both by Nishida and Heidegger.

## from a historic point of view



**Figure 3:** Looking at the melodic key (second column from the left), we can see that all the tessituras exist from the beginning, while the instruments progressively go from the higher to the lower pitch. In other words, the tape determines the possibilities of existence of the instrumental part.

History, i.e. what existed before we were born and thus influences our existence, is an important aspect studied by philosophers. In Nishida's opinion, "If the absolute other who lies deep inside us is a 'you', what determines us objectively is neither a general self nor nature. It must be history."<sup>15</sup>

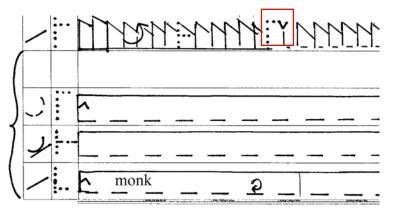
While Heidegger thought:

The resoluteness that, by a recurrence towards oneself, includes this possibility, then becomes *repetition* of a possibility of existence that has been transmitted to it. The repetition is the very tradition since it is a return to the possibilities of the Dasein which are those of its Gewesene ("being-been").<sup>16</sup>

<sup>&</sup>lt;sup>15</sup> Kitarô Nishida, op. cit., p. 137.

<sup>&</sup>lt;sup>16</sup> Martin Heidegger, *Être et Temps*, translated from German by François Vezin, Paris, Gallimard, collection "Bibliothèque de Philosophie", 1986, p. 451.

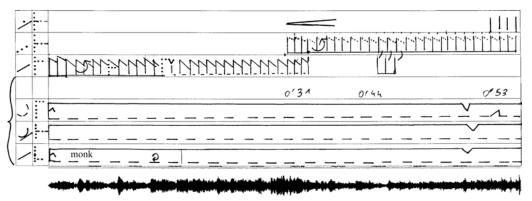
## from a social point of view



**Figure 4:** the monk song in the tape and the aspect very regular and ritual given by the instrumental part contribute to create a social time that exceeds individual time. The alternations of pitch at the first instrument looks like a ticking clock, the social time *par excellence* 

This aspect of time is studied by Nishida: "In other words, the world is conceived as a temporal determination of what exceeds and includes time. Thus there must always be, in the substance of the world, a social determination"<sup>17</sup> and by Heidegger: "To embrace, being-toward-death, the here of the instant as required by the resoluteness, that is what we call destiny. The common destiny by which we understand the Dasein adventure in the being-with the other is based in it".<sup>18</sup>

## The repetition



**Figure 5:** on this view of the first page of the score, we can see the different kinds of repetition looking at the spectral key (first column on the left), at the dynamic profile and at the granularity (at the top of the sign on the tracks). The little arrow drawn in the monk track means that the tape part makes loops

The repetition of patterns (the association of smooth and granular timbre, or the others alternations we have seen in the first part) can be linked to what Heidegger called individual repetition: "In the being-toward, Dasein *repeats* itself in the most proper for-being *by early*. The proper *Gewesene*, we call it *repetition*."<sup>19</sup>

<sup>&</sup>lt;sup>17</sup> Kitarô Nishida, op. cit., p. 59.

<sup>&</sup>lt;sup>18</sup> Martin Heidegger, op. cit., p. 451.

<sup>&</sup>lt;sup>19</sup> *Ibid.*, p. 400.

As seen previously, in the formal analysis, the repetition of patterns never drives us at the same place. When the music is going *toward*, the same aspects are repeated in different ways and are amplified, repeating their "most proper for-being *by early*".

## I and you

As seen just above, the repetition of patterns is the place of changes (spectral profile, pitch, caliber, energy articulation...) that come from the repetition itself and that is led by formal necessities, i.e. by the necessity to keep a unity of matter and of process. The differences paradoxically come from the necessity of unity. These changes imply time. At last, according to these philosophers, time structures are linked to being. Nishida says: "The 'you' as the absolute other that the 'I' sees deep inside himself must be a 'you' who, as an infinite past, determines the 'I' in an internal way from its deep inside, i.e. a 'you' who is past."<sup>20</sup>

This opinion is very near from what Derrida called "differance", the things that become different when they are differed in the time. This is what happen to percussions in the piece.

In other words, the consciousness of the other is directly linked to the perception of time. So *Six Japanese Gardens* can also be considered as a reflection on human being. This opinion is comforted by the isomorphisms we can find between the piece and the *Tenju-an garden*. This is what we are going to study now.

## **Crossed temporalities**

We have already seen that the score is divided in two parts: the instrumental part and the electronic part. We have seen that there was several links between these two parts: we can say that in a sense each part is facing the other, the instruments on one side and the tape on the other, because they are always playing together, without silence or alternations, and because of their differences and their similarities described in the first part.

Looking at the photographs below, the similarities and correspondences between the Tenju-an garden and the piece seem evident. The instrumental part can be compared to the temple and the electronic part to the nature (the garden have been drawn by monks; which is an important detail). In the same way that they are correspondences between the matter of sound of the tape and the one of the instruments, they are correspondences between the matter of the trees and the one of the temple: they all are made in wood. They are also correspondences of matter between the stones and the one of the roof of the temple: they are both mineral. They are also correspondences of rhythm. The long cycles of seasons recall the long loops at the tape; the wooden pieces in the steps of the temple and the columns are very regular, like the instruments onsets. The comparison does not stop here: the wooden pieces at the first step of the temple are two times more frequents then the one at the second step, themselves two times more frequent than the columns. If we look at the pavement, we can see a rhythm made by the alternation of two squares and two lozenges. This ratio of two is the same than the one we find to the instruments: couples of smooth/granular sound, narrow/large calibre, etc. that we have seen in the first part. At last, there is something that we cannot see on the photographs: I went to Tenju-an garden and there I heard the song of the wind, the song of water and the song of cicadas. In another moment, may be I could also have heard a monk song or the sound of a tsuri-daïko. These are kinds of sounds that we can find in the piece, as we have seen in the first part. In the piece, human is present both in the tape (monk song) and in the instruments, because they are played by him; what is human is both in nature and culture side. In the same way, the temple and the garden have been created by humans and, by this fact

<sup>&</sup>lt;sup>20</sup> Jacques Derrida, op. cit., p. 139.

humans are in both sides. As we have seen above, humans are at the junction of several temporalities.

Thus both for matter reasons and for structure reasons, the instrumental part reflects the tape like the temple reflects the nature. Here, music and architecture are speaking the same language. But, one more time, we can look toward philosophy with Nishida's words: "In real life, we are confronted with what is absolutely irrational, with matter. Here facts only auto-determine themselves as auto-determination of what is really without determiner. We only reflect them."<sup>21</sup>



# Conclusion

*Tenju-an Garden of Nanzen-ji Temple* speaks about complex temporalities that can analysed from an eastern or a western point of view. These points of view very often are converging, and one can think that interculturality can be universality. The divergences can be thought more as complementarity than as opposition. But music, with its own language, can reflect our perception of the world and reach certain universality.

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HEIDEGGER Martin, *Être et Temps*, translated from German by François Vezin, Paris, Gallimard, collection "Bibliothèque de Philosophie", 1986.

<sup>&</sup>lt;sup>21</sup> *Ibid.*, p. 106.

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