

IN DIALOGUE WITH IMPRESSIONISM: *JEUX D'EAU* BY MAURICE RAVEL

ATTILA FODOR¹

SUMMARY. *Jeux d'eau*, created in 1901, is Ravel's first piano masterpiece, that of a 26-year-old composer who has just left the Conservatoire. The work surprises with the charm of writing, the playfulness of expression, the maturity of creative thinking and the complexity of elaboration. Beyond the fact that it marks a turning point in Ravel's career, it is no exaggeration to say that it is both a milestone for piano literature in general and for the impressionist one. Our study focuses on the analysis of Ravel's writing style and construction in the mirror of musical Impressionism, pointing out, where appropriate, the innovations that foreshadow representative compositional solutions for the avant-garde of the first half of the 20th century and beyond.

Keywords: Ravel, *Jeux d'eau*, Impressionism, piano music, ludic, duplication

Introduction

Jeux d'eau (1901) is the first major work of a young composer who had just been expelled from the Conservatoire, dedicated to his master, Gabriel Fauré.² Compared to his other attempts during his study years, like the experiments in the field of solo piano, melodies or chamber music, not to mention the traditional cantatas, choral pieces and fugues accomplished for several editions of Prix de Rome³ it surprises with maturity, complexity, and significant innovations.

¹ Partium Christian University, Faculty of Letters and Arts, Department of Arts, RO-410209 Oradea, Primariei Str. 36, senior lecturer, PhD., E-mail: fodorattila@partium.ro

² Ravel studied at the Conservatoire in two stages (1889-1895 and 1897-1900) being expelled twice due to lack of competition results. From 1901 onwards, he attended Fauré's classes only as an „auditeur”. The final break with his alma mater came with his last failure at Prix de Rome in 1905.

³ Ravel competed five times (between 1900-1905) without winning the grand prize. Among the reasons for his repeated failures were the hostile attitude of some jury members (like Theodore Dubois and Charles Lenepveu) towards his eccentric personality, their interests in promoting their own disciples but also the composer's non-conformist attitude which

Though Ravel was particularly reserved about commenting on his own oeuvre aside from some technical remarks, towards the end of his compositional career, before the completion of *Boléro* (1928) he had dictated to his disciple and friend, the musicologist Roland-Manuel his brief *Esquisse autobiographique*⁴ that includes a revealing passage about the significance of this piano work in the ensemble of his output: “Jeux d’eau, which appeared in 1901, marks the beginning of all the pianistic innovations which have been noted in my works. This piece, inspired by the sound of water and the musical sounds made by fountains, cascades, and streams, is based on two themes, like the first movement of a sonata, without however submitting to the classical tonal scheme.”⁵

On the one hand, the work carries the most important elements of his later impressionist piano writing (rich sound surfaces based on the resonance technique and fine textures, duplication, instrumental pretentiousness), a flexible correlation between the program and expression, as well as an apparently spontaneous musical discourse based however on solid formal structures. On the other, it sets the preferred genre of his main innovations (along with orchestral music) and marks the beginning of a rich, diverse, and stylistically coherent creative period under the aegis of impressionist aesthetic that will end during the First World War.

Although Ravel, at least declaratively, did not consider himself an impressionist composer, his oeuvre shows a subtle affinity for the artistic impulses of his past and present, which vibrate in highly original *mélanges* of sensuous auditory and visual impressions. In our case they appear on the playful coordinates of a symbolist poem in dialog with the pre-impressionist textures of Liszt, gamelan music, mechanic toys and even Spanish ethos.

finally culminated in some deliberate violations of the rules of harmony. The suspicious circumstances of his premature elimination in the 1905 edition, as well as the interventions of his supporters, led to the so-called *L’affaire Ravel*, a media scandal followed by several resignations among members of the Conservatoire. Moreover, Arbie Orenstein argues that his works conceived during this period “as *Jeux d’Eau* (1901), *String Quartet* (1903), and the song cycle *Shéhérazade* (1903) were considered »dangerous« by the more conservative faculty members, and this undoubtedly played a role in his repeated failure to win the Grand Prix.” In *A Ravel Reader: correspondence, articles, interviews* [compiled and edited by Arbie Orenstein], Columbia University Press, New York · Oxford, 1990, p. 5.

⁴ *Une Esquisse autobiographique de Maurice Ravel* appeared after the composer’s death in the homage issue of *La revue musicale* (December 1938).

⁵ *A Ravel Reader: correspondence, articles, interviews* [compiled and edited by Arbie Orenstein], ed. cit., p. 30.

Unlike his previous piano works with paradoxical titles, carrying decadent, ironic or melancholic expressions mainly in the context of dance stylizations⁶ *Jeux d'eau* appears to be his first⁷ achievement based on a genuine impressionist *sujet*⁸. The motto-program comes from a sonnet by Henri de Régnier, *Fête d'eau*: “Dieu fluvial riant de l'eau qui le chatouille” (“A river god laughing at the water which titillates him”).)

Among its direct antecedents, Ravel scholars rightly invokes Liszt's work, in particular the piano piece *Les jeux d'eaux à la Villa d'Este* from the last volume of the *Années de pèlerinage*. This rather obvious connection with Liszt's reflections on the fountains of Rome may be both a kind of homage to the Hungarian composer, but also a more or less hidden allusion to the „eternal city” apart from the rules of fugues and cantatas of Prix de Rome in a period when Ravel was still struggling for a few years to win the grand prize.⁹

Since programmatic correspondence and similarities of the writing style are common elements, both combining technical virtuosity with the expressiveness of a “fluid” discourse in order to exploit the piano resonances, evocative of the aquatic message, their differences can be seen especially in the aesthetic contextualization of the message. According to Gerard Larner's pertinent observation, Ravel's composition does not follow the transcendental idealism of Liszt¹⁰, but denotes a pronounced hedonism, which is otherwise an important pillar of impressionist aesthetic, that focuses on the sensory

⁶ *Sérénade grotesque* (c. 1893), *Ménuet antique* (1895), *Sites auriculaires* for two pianos (1895-97), *Pavane pour une Infante défunte* (1899).

⁷ Excepting *Sites auriculaires* (1895-97) for two pianos, that bears the following epigraph from Baudelaire's *A une Dame Créole*: “Aux pays parfumé que le soleil caresse” (“In the perfumed country which the sun caresses”). Its first movement (*Habanera*) was later included in the magnificent orchestral work *Rapsodie espagnole* (1907-08).

⁸ The term symbolism, in a narrower sense, appears in musicology for the characterization of mainly scenic compositions based on a libretto-program based on the poetic-literary creation of the 19th century with the same name. As this repertoire does not meet the conditions of a relatively unitary musical style, we consider that Symbolism remains for the musical field especially a source of inspiration, or in the case of some composers the origin of a certain sociocultural attitude (e.g. Ravel's dandyism). It is certain, however, that among the musical orientations of the late 19th and early 20th centuries, Impressionism was the one that leaned most consistently on the symbolist message, including in the instrumental genres. For these reasons, by the term impressionism we also mean, as the case may be, the symbolist orientation of the message.

⁹ There is some consensus that the composer's primary goal in winning the competition was not so much the possibility of staying in Rome, far from Paris, the center of European music at the time, but especially the material benefits and perhaps the increase of his recognition level in a French cultural environment still strongly dominated by conservative institutions.

¹⁰ In measure 144 (D major section) he introduces the following passage into the manuscript: „*Sed aqua quam ego dabo ei, fiet in eo fons aquae salientis in vitam aeternam*” (“But the water that I shall give him shall become in him a well of water springing up into eternal life.”), John: 4:14.

pleasure. So, unlike the quasi-suspended arpeggio structures and quasi-meditative sections of *Les jeux d'eaux à la Villa d'Este*, *Jeux d'eau* evokes the aquatic playfulness in its gravitational aspects, nothing more than celebrating the enjoyment of sounds themselves, without any metaphysical implication.

Ravel almost entirely neglects the idea of “melody” (the “humanizing” element) in favor of rich textures and sound resonances. The only quasi-melodic oasis is rather a tetratonic substratum: a subtle reference to gamelan music. Larner opines that through this sound system “Ravel wanted to emphasize the pagan aspect of his inspiration and to distinguish it from Liszt’s specifically sentiment.”¹¹ Such a somewhat neutral aesthetic attitude – expressed even by the title’s visual metaphor bearing an indefinite objectuality – rather shows the lucid aspect of the composer’s character, with pronounced affinities for science, mechanical toys, formal strictness, creative refinement, and his predilection for experimentation. In this context, *Jeux d’Eau* can be seen equally as an *apropos* in order to display the aforementioned qualities, concretized by a substantial extension of the piano’s technical-expressive capabilities demonstrated in a wide variety: arpeggios that rise and fall naturally, splashes of drops as a result of rhythmic precipitations and short chromatic passages, the play of registers generating fine shades of light (e.g. high-low, thin and dense textures), clashing dissonances, refined figurations, tremolos and glissandi, *ostinato* elements, pedal technique that enhance the richness of sound resonances. Almost every register is exploited, especially the higher ones. All these appear against the background consisting of greatly nuanced and well-blended tone systems, rhythmic freedom, respectively dynamic and timbral subtleties.

Regarding its construction, *Jeux d’Eau* is based on a sonata form, used for structural rather than dramaturgical reasons, which nevertheless remains quite camouflaged in the abundance of sound impressions. In this “liquid poem”¹² the rigor of the construction is no longer a paradox, but on the contrary, a welcome necessity.

¹¹ Gerard Larner, *Maurice Ravel*, Phaidon Press Limited, London, 1996, 69.

¹² “Cette poésie liquide.” The characterization belongs to the pianist Alfred Cortot. In Alfred Cortot, *La Musique française de piano : sér. Maurice Ravel. Saint-Saëns. Vincent d’Indy. Florent Schmitt. Déodat de Séverac*, Tom. II, Rieder, Paris, 1932, p. 30.

Analysis

Exposition

Jeux d'eau begins with a tetratonic musical material framed in a series of major chords (acoustic formula) colored with major seventh and ninth:

E.g. 1

Ravel: *Jeux d'Eau*, m. 1-2. (Beginning of theme A.)

Ravel's predilection for the use of similar¹³ harmonic structures is also observed in other early moments of larger or smaller musical units, such as the introductory passage of *Le Jardin féérique* (*Ma mère L'Oye*, V.) or the last movement (*L'Indifférent*) of the song cycle *Shéhérazade*:

E.g. 2

Ravel: *L'Indifférent* (*Shéhérazade*, III.), m. 1-2.

¹³ Orenstein in his commentary on Romain Rolland's letter written to the under-secretary of the Académie de Beaux-Arts Paul Léon regarding the *L'affaire Ravel* (May 26, 1905), mentions about the fugue in C major composed for the 1905 edition of the Prix de Rome: "Moreover, in what appears to be a gesture of defiance, the fugue, like *Jeux d'eau*, ends on a chord of the major seventh (which was corrected by a member of the jury)." In *A Ravel Reader: correspondence, articles, interviews* [compiled and edited by Arbie Orenstein], ed. cit., p. 67.

In the example above, the formula E-B-F# is an axis of perfect fifths, E-G#-B-D# being a symmetrical vertical structure, and any fifth of the already mentioned axis can be associated with another combination of perfect fifths, in this case G#-D#. Thus, an acoustic sonority may acquire a particular color by joining another acoustic principle, that of densification by means of perfect fifths. This principle is like the internal organization of the anhemitonic pentatony or tetratony, which are reducible to the chain of perfect fifths. Therefore, the two sonorities are similar, being sometimes used together and mixed with great effect.

These sound entities are also used together in *Jeux d'eau* from the beginning. More precisely, the structure E-G#-B-D#-F# appears in alternation with its incomplete form in the lower fifth (A-C#-E-G# where the ninth is missing) superimposed with the tetratonic mode C#-D#-F#-G# (reducible to the circle of fifths F#-C#-G#-D#) with a *pien* note (E) that completes this structure to a minor pentachord (E.g. 1, m. 1). The musical process shows from the beginning the presence of duplications¹⁴. The inner rhythm contrast in this sound unit¹⁵ (motif) opens the possibility of a further accentuated dynamization, exploited starting right from m. 3. The reference material is resumed here by another duplication, where the ninth is omitted and an elliptical hexatonic system (with the missing note A#) is introduced:

¹⁴ "This technique is based on the immediate repetition of a short musical material, followed by the exposition and repetition of another one, etc. In the absence of a median section between the exposition and its duplication, the repetition cannot be interpreted as a reprise. The repeated material must be sufficiently short in order to create the impression of coherence. Structurally, the duplication may alternate between the total identity and fine variations, where the vertical parameter remains nearly always the same. The systematic use of this technique affects our perception of the musical flow. Thus, the repetition, in the lack of new linear information, leads our attention towards the vertical, spatial dimension of music, i.e. harmony, timbre, sonority surfaces. The quasi-systematic repetition of certain materials represents in its effect a considerable drawing-away from the traditional developing techniques and strategies of the musical discourse. The term was introduced in French musicology by Nicolas Ruwet (*Langage, musique, poésie*, Seuil, Paris, 1972) in connection with certain Debussy opuses analyzed from a structuralist point of view. Subsequently, it was taken over by the Romanian composer, Cornel Țăranu (Țăranu, Cornel, *Elements of musical stylistics*, Vol. I., „Gh. Dima” Conservatory, Cluj-Napoca, 1981) in his analyses referring to Debussy and Ravel. The same phenomenon is described by Boulez with the term *binom* (Pierre Boulez, *Penser la musique aujourd'hui*, Éd. Gouthier, 1964). In our view, the duplication is one of the basic style elements of the musical Impressionism." In Attila Fodor, „The osmosis of diversity in Maurice Ravel's work”, *Studia Musica*, 1/2010, p. 135 and n8.

¹⁵ We use this term to highlight this essential feature of duplications: they do not refer only to a quasi-linear repeated material, but near in every case set out a well-defined sound space almost simultaneously. Therefore, in such a context, verticality and horizontality cannot be rigorously separated, moreover their delimitation can lead to analytical errors.

E.g. 3



Ravel: *Jeux d'Eau*, m. 3.

The totalization used in the first two measures is not missing here either, being continued and prolonged by the already mentioned element of inner dynamization:

E.g. 4



Ravel: *Jeux d'Eau*, m. 4.

It is interesting that in this totalization (m. 4) the repetitions are not based on duplications, but on sequence, each of them displaying other tone systems. The sequential head uses two elliptical hexatonic modes, completed later with the addition of an acoustic root.

In a third phase of development (m. 5-6), the duplications of the m. 5 totalized in the following one use exclusively circumscribed hexatonic sonorities. Measure 6 introduces a gradual movement, which brings a difference compared to m. 4 in the use of summarized elements.

The bridge brings from m. 9 a first development of theme A by its almost free, but still perceptible inversion, also in a duplicated and totalized form in the following measure:

E.g. 5

Ravel: *Jeux d'Eau*, m. 9-10.

From m. 11 the duplication process turns into a series of more and more accentuated fragmentations:

E.g. 6

Ravel: *Jeux d'Eau*, m. 11-14.

The avoidance of a premature fragmentation is achieved by three elements:

1. The theme head on the third time of m. 11 shows a rhythmic variation,
2. No element in the second half of the mentioned measure is an evident resumption of the theme's head,
3. The harmonic content changes in every two beats.

This change presents an authentic secondary relationship (on the C#-D roots), after which during the fragmentation the harmonic content changes from beat to beat by secondary plagal harmonic relations (C#-B). In a third phase – as it results from the last quoted example (m. 14) – the fragmentation is fragmented.

The two-part counterpoint technique is not missing from this piece either, as it appears in many other impressionist works, for example in the piano composition by Debussy entitled *La cathédrale engloutie* (*Préludes*, Book 1, No. 10):

E.g. 7

Debussy: *La cathédrale engloutie*, m. 23-25.

In the example below it is almost hidden, but still perceptible (m. 15-16):

E.g. 8

Ravel: *Jeux d'Eau*, m. 15-16.

Since the first notes appear in a lower register, and the melodic line in the middle one, to the next extent (m. 16) the two planes are reversed, where the former bass takes the form of repeated notes in the middle register.

In terms of fragmentation, the units follow one another from division to division of the beat. At the same time, this musical material is no longer perceived as a set of short fragments, but like a unitary “melodic line” with a

plane of held notes and a counter-plane over them. In other words, in this phase a sum up is already achieved, in a first instance by duplication and double counterpoint, and in a second one by a register narrowing, which highlights the acoustic nature of the contrast material.

The second contrasting theme (B) is based on a tetratonic structure:

E.g. 9

Ravel: *Jeux d'Eau*, m. 19-23.

The tetratony appears in the main plan and does not include the background's sound surface. The latter completes the tetratonic system to an acoustic one (major chord with major seventh and ninth consisting of the notes B-D \sharp -F \sharp -A-C \sharp) with the addition of a *sixte ajoutée* (G \sharp) and a *quarte ajoutée* (E), which merges them into a typical ravelian *mélange*. From the fourth measure of the quoted example (m. 22), the tetratony C \sharp -D \sharp -F \sharp -G \sharp is transposed to a lower major second (B-C \sharp -E-F \sharp), the two systems completing thus to an anhemitonic pentatony. However, considering the parallel fifths that

appear in m. 3-4 of theme B (m. 21-22), the two materials of the foreground form in themselves anhemitonic pentatonic systems (C#-D#-F#-G#-B and B-C#-E-F#-A). The harmonic structures of the m. 22 oscillate between the F#-A-B-C#-E sonority with a G# *pien* note resulting in an anhemitonic pentatony and the already mentioned acoustic sonority enriched with the *quarte ajoutée* E and *sixte ajoutée* G#.

The simultaneous use and, in a kind of synthetic amalgam, of three sound systems (tetratony, anhemitonic pentatony and an acoustic formula) suggests the idea of sound area, in which not so much the stand-alone moments that matter, but their melting into a unitary whole. It can be said, therefore, that the detail serves the whole. Even if a kind of melodic line is outlined, it does not have a discursive function, but results from the ensemble of the voices' entrance. Such a procedure emphasizes that the foreground can be placed against the background in any register: above it (as in m. 21), interspersed (approximately in the same register) or below it (as it occurs in m. 20).

The resumption of the original material (m. 19) in the third measure of theme B (m. 21) by densification with parallel chords and located above the background creates the illusion of entering a new sound block. The background changes by a rhythmic precipitation and shows a considerable widening of the register compared to the first two measures, thus suggesting a subtle development. This typical orchestral phenomenon is not the only one in the work. The writing style *Jeux d'eau* often presents the specific features of a piano reduction. (By the way, both at Ravel and Debussy the piano-orchestra mediums are often interchangeable. The numerous transcriptions, especially in the orchestral direction bear witness to this fact).

In the first three measures of theme B (m. 19-21) there is a suggestion of some voice entries, hidden in the appearance of a continuous melodic line. The principle of duplication undergoes here a mutation towards a phrase-like structure (the material being repeated three times) totalized in its fourth measure (m. 22). Concerning the rhythm, Ravel also uses non-retrogradable elements¹⁶ (the rhythm axis consists of the two semiquavers), demonstrating his openness to the rhythm systems used by later 20th century composers:

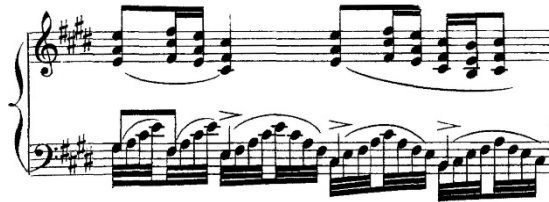
¹⁶ It was described and used in particular by Olivier Messiaen. In Olivier Messiaen: *Technique of My Musical Language* [transl. by John Satterfield], Alphonse Leduc, Paris, 1956.

E.g. 10

Ravel: *Jeux d'Eau*, m. 19-20 (left hand material)

Next, the dactyl and anapest formulas appear in the context of a non-retrograde rhythm:

E.g. 11

Ravel: *Jeux d'Eau*, m. 22

In the fourth and fifth measures of theme B (m. 22-23) emerges a register change, a densification with parallel chords, as well as a rhythmic variation of the same pitches.¹⁷ The totalization that occurs after three motivic statements in different registers that causes the rapid expansion of the range, seeks a necessary restriction of it. As a result, the operability of the “melodic line” decreases, contributing to highlighting the rhythm parameter and that of repetitive elements.

The synthesis between a seemingly phrase-type conception (this phrase is no longer followed by a consequent one, but another musical material) and a duplicative thinking, as well as the circumscription of some sonorities on a suddenly amplified linear frame generates a sound area, in which the details melt into the overall sonority, a phenomenon characteristic for the musical cultures of Bali and Java well known to Debussy and Ravel.

¹⁷ A specific feature of varied repetitions is the use of the same pitch with different rhythm values, a phenomenon that is widely present in gamelan music. This procedure applied to short fragments had a major influence on the shaping of sound areas in the work of Ravel and Debussy.

The nature of the musical materials used as well as the ways of generating sonorities suggests a hidden presence of the gamelan ethos, so preferred by the composer. This process corresponds aesthetically to the functioning of the *pars pro toto* trope.

In the case of using duplications without phrase-like suggestions, the details are lost even more in the whole. However, theme B has a partially and apparently phraseological configuration, which brings a principle of contrast with the A theme consisting entirely of duplicate materials.

Development

The middle section is a sonata development designed in 4 stages.

Stage I (m. 24-28) is a direct continuation of the B theme, more precisely of its head (C#-D# in quavers). There is a certain synthesis of the two themes: the basic rhythm formula of theme A in augmented mode and the permutation of the four shorter rhythm values from the fourth beat to the third one, as well as the acoustic sonority abundant in *ajoutées*, characteristic of theme B, are eloquent in this respect.

Two chords are used here (which ensures the perception of a sound area instead of highlighting the moment): D#-Fx-A#-C# and G-B-D-F-A with the *sixte ajoutée* E, that is, acoustic sonorities. This type of *sixte ajoutée*, a kind of unresolved suspension, which becomes an autonomous component of harmony is found, among others, in Liszt's music. In addition to the remarkable elements of piano virtuosity used in the background, like in certain pieces from *Années de pèlerinage*, these suspensions individualized as harmonies that often form 13th chords (characteristic of both Liszt and Ravel) create a direct link between their piano writing.

The idea of an immediate varied repetition of a short musical material is as obvious as possible at this stage of the development, which results in a typical duplication (m. 24-25). The totalization through a neutral material is meant to highlight a first culmination. The principles of quasi-repetitive musical cultures, integrated in a sound environment of a totally different substance and nature, are also characteristic for Impressionism. The same repetitive elements, contextualized in acoustic sonorities, tetratony, pentatony, hexatony and their chromatic aspects, melt into other repetitions, which in turn are also pulverized into the overall sonority. The principle of *pars pro toto* therefore works constantly.

In the development section of *Jeux d'eau*, this rhetorical figure (manifested by consistent duplications) is associated, interestingly, with the sequential developments so characteristic of Beethoven's and Liszt's sonata

forms (hyperbolized sequences). Otherwise, the *pars pro toto* accentuated to the extreme – as it happens in the present piece – brings, we could say, naturally the trope of hyperbole, one of the constitutive rhetorical figures of the romantic music and that of the 20th century.

The first stage of the development therefore achieves a culmination, prolonged in the two successive duplicate measures (m. 27-28), followed from m. 28 by the gradual rarefaction of the sonority and rhythm:

E.g. 12

Ravel: *Jeux d'Eau*, m. 27-28.

Taking advantage of this technique ingeniously, Ravel carries out because of these accentuated fragmentations (through duplications) an almost imperceptible summarization on the third and fourth beat of m. 28 (the last row in the example above), which leads to the next stage of development.

The second stage (m. 29-37) also includes a series of duplications. The first of them is based on the B-theme head, with the same rhythm but varied melodically. The resumption in a duplicate manner of this measure introduces elements of sequence and totalization (the second measure in the example below). The succession of parallel chords includes 12th chordal structures that come from unresolved suspensions, transformed into effective chords. Due to the minor seventh and major ninth, these show the features of acoustic structures with added 12th:

E.g. 13



Ravel: *Jeux d'Eau*, m. 29-30.

The above musical material is resumed in a simplified form at a lower perfect fourth (m. 31-32), thus achieving a duplication of the duplication. The cadence contrast introduced at the end of the duplications (m. 30 and 32) suggests quasi-periodic structures and compensate the simplification that occurs by resuming the duplication.

The second section of m. 32 brings a pole-antipole relationship between the last two harmonies, repeated by duplication in the following measure (m. 33) in a fragmented state:

E.g. 14



Ravel: *Jeux d'Eau*, m. 33.

In m. 34 the same harmonic structure of a major chord with minor seventh and major ninth (on the root E) is completed with a *sixte ajoutée* and the introduction of a new rhythm pattern, that is repeated in three different registers at an octave, totalized with the same antipole-chord on the last beat:

E.g. 15



Ravel: *Jeux d'Eau*, m. 34.

The duplication in m. 33-34 is resumed in the next two measures (m. 35-36) with a change in the harmony content, thus achieving a new duplication of the duplication.

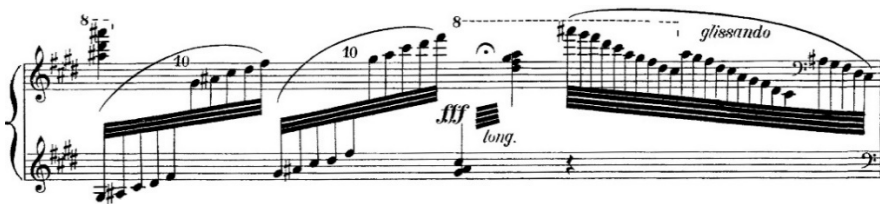
Along with the simultaneous use of minor and diminished seventh chords on the same root, the combination of the later with minor sevenths and the major ones is also of great significance for Ravel's writing, but also for Debussy's.¹⁸ In this respect, m. 35-36 show a diminished chord with minor seventh, first at the upper second, then at a lower semitone.

In a later stage (m. 37) the process of fragmentation is continued in the context of a duplicate section, where the relation between the diminished chord with minor seventh and the major is one of an upper perfect fourth. While in m. 37 and 38 the constant harmonic element consisted of the diminished chords with minor seventh (G#-B-D-F#) in the context of changing major chords, in m. 36 and 37 the harmonic persistence is ensured by the G-B-D major chord, the variable elements being the diminished chords with minor seventh that precede this harmonic structure.

The second stage of development ends with a totalization achieved by a rapid ascending passage of hemidemisemiquavers (end of m. 37) in a quasi-improvisational manner, based on symmetrical structures. All these solutions point on the one hand to a typical impressionist musical thinking, and on the other, they are the expression of intense developments based on the remarkable increases of the informational flow.

The third stage of development (m. 38-50) is articulated in three segments: s. 1 (m. 38-40), s. 2 (m. 41-42) and s. 3 (m. 43-50). In the latter, the musical material of m. 48-49 has a certain function of totalization in the context of a rhythm that tends towards the freedom of a rubato, where the duration of the sonorities begins to become free:

E.g. 16



Ravel: *Jeux d'Eau*, m. 48.

¹⁸ For example, Debussy: *Trois nocturnes*, p. I, *Nuages* (*Une peu animé*, from m. 64), where the solo flute is followed by the solo violin with the same chordal pattern; or at the beginning of Ravel's *Daphnis et Chloé*'s second suite there is also a similar combination (diminished chord with minor seventh and a major one with minor seventh = acoustic formula, where the two chords are in a pole-antipole relationship).

Even if m. 49-50 bring some musical materials related to interior fragmentation, they still continue this totalization of the quasi-free sound areas:

E.g. 17



Ravel: *Jeux d'Eau*, m. 49-50.

In s. 1 the symmetrical structures dominate the melodic line: D-C# - axis of symmetry, G#-Fx, G#-B-D. The segment begins with a duplication (m. 38 and 39), having as harmonic structure a combination of a major chord and a diminished one with minor seventh on the same root, followed by a measure of totalization, with internal fragmentations. From m. 41-42 the duplications continue on a larger scale. The first duplication from m. 38 and 39 is omitted, the material being resumed sequentially only once together with the musical material of m. 40 (on the upper perfect fourth). Thus, sequential developments and duplications merge further, which means a fusion between the constructive principles of Impressionism and that of a traditional sonata development.

S. 3 continues this fusion, by the duplicative resumption of s. 2, along with a rather abrupt sequential development, less characteristic of impressionist duplications. From m. 44 a bitonal element is introduced (C#-E-G-A#-B# = elliptical alpha chord in a pole-antipole relationship with the previous one: Fx-A#-C#-E#), which will be the basis of an intensified fragmentation, achieved through successive sequences. These take place first at the upper major second (m. 45) by a pendulum between two diminished sonorities of an upper-lower minor third relationship; then (in m. 46-47) to an upper augmented second, where it turns into an *ostinato* with four repetitions of the material consisting of four chords with their roots in ascending chromatic progression. The first of them is a diminished chord with minor seventh, which thus ensures the harmonic continuity already used, the following ones being included in two hexatonic systems:

Ravel: *Jeux d'Eau*, m. 46.

Stopping the sequences is compensated by doubling the speed of the harmonic change (from quaver to quaver, instead of changing on beats). The totalization already mentioned above (from m. 48-49) brings an extension of the sound area's ambitus and introduces an anhemitonic pentatonic system in opposition to the chromatic bass of the lower voice. It is therefore superimposed a diminished chord with minor seventh in inversion with a pentatonic system on the same root. This solution prepares the bitonality applied consistently in the next stage.

Like the second one, the fourth stage of development is based on the varied theme head of B consisting of three segments: s. 1 (m. 51-55), s. 2 (m. 56-60) and s. 3 (m. 60-61).

Segment 1 begins with a duplication (m. 51-52), where the material's repetition, like the exposition of theme B, is achieved by a register change and densification through parallel chords. In terms of harmonic structure, this material tends towards a bitonality circumscribed by a pole-antipole relationship, based on the following chords: $G\sharp-D\sharp-F\sharp-A\sharp-C\sharp$ an 11th chord, $D-F\sharp-A-B\sharp-E\sharp$ a double third-chord, and a $G\sharp-D-F\sharp-A-B\sharp$ sonority, where the antipole relationship and the acoustic structure are both present in a bitonality based on the harmonics series and the polarity of the circle of fifth alike.

The fragmentation in m. 53 and 54 is achieved through two duplications. We notice the persistence of the last structure (m. 54), which brings some permutations of the notes, followed by totalization (m. 55) also with a pole-antipole axis ($F\sharp-B\sharp$), based on a perfect fifth and an acoustic sonority on the two roots. This solution aims, therefore, also a special combination related to the axial system and a return to the $G\sharp-D-F\sharp-A$ sonority with bitonal antipolarity and with a mobile cluster between D and $G\sharp$ described chromatically:

E.g. 19

Ravel: *Jeux d'Eau*, m. 53-55.

This means a visionary musical thinking, manifested later in the so-called axial system of Bartók creation, respectively in the idea of sound space where moments gradually melt into a unitary whole, by applying temporal sound segments characteristic of the compositional methods of Ligeti and Lutosławski.¹⁹

S. 2 (m. 56-60) continues the circumscription of bitonal sonorities. We emphasize, however, that in both s. 1 and s. 2 the virtual existence of the G#2 by the cyclic return to it as a kind of pivotal sound, underlines this trend. Here, in addition to the acoustic structures (E-G#-B-D), there are also some others used for color nuance: E-G-B-D = symmetrical vertical structure and E#-G#-B#. Both are harmonic “scordaturas” of the aforementioned acoustic structure. This segment brings back almost entirely the s. 1, excepting for its first measure. The initial duplication is waived, and only half of the existing musical material in m. 53 is used for resumption. Therefore, the same material appears with two compressed segments, in a different bitonal ambiance. The duplication becomes very extensive here, losing its original

¹⁹ It is no coincidence that Lutosławski sometimes adopted impressionist-like solutions along with expressionist techniques. Such an example can be seen in the final section of *Jeux Vénitiens* (Venetian Games) last movement, where after a culmination by means of a vast sound field he makes a gradual rarefaction.

character of blurring the moment. This solution is, somewhere, a middle ground between a sequential development of a motif and the impressionist duplication.

E.g. 20

Ravel: *Jeux d'Eau*, m. 60-61.

The extended areas of the last development section present solutions like that of the final part of *La mer* by Debussy. The last segment of this stage (m. 60-61) synthesizes all the elements of the first two segments: acoustic structures with minor seventh and major ninth, and G-F#-A#-C#, the well-known acoustic structure with 11th from the beginning of s. 1. Unlike the first two, s. 3 brings an effective bitonality, without circumscription, but used prudently. Thus, the bitonal moments realized with the use of a G# pedal point is mixed with chords in which G# is a constituent element. The example above (E.g. 20) shows the simultaneous use of three sonority planes: a pedal point, a mix of six-four chords and ones in parallel motion circumscribed by root position chords. All of these have completely different rhythm patterns, which demarcates and emphasizes their independence within the sound area.

Recapitulation

From m. 62 follows a dynamized recapitulation, in which the transition to B is achieved through a quasi-improvised segment but with a solid harmonic and constructive foundation. It is divided into three sections:

The first section contains three measures (m. 67-69), the last two of which are noted in a free measure, that produces a feeling of dilution regarding the tempo and pulsation. In m. 67 two harmonic structures are used, repeated in different registers:

E.g. 21



Ravel: *Jeux d'Eau*, m. 67.

The oscillation between a tritonic system – alluding to anhemitonic tetratony – and a minor chord continues in the next measure, where it is intertwined by a hexatony-like structure (F#-A#-Cx) and continued with a major chord. Both are presented in four sequential hypostases at the lower major second:

E.g. 22



Ravel: *Jeux d'Eau*, m. 68.

To intensify the fragmentation process, the composer cuts the first half of the sequential head, which he also repeats through a series of sequences at distances of lower minor third. Through this harmony relation, the sonority of the section approaches that of the system of axes (m. 69):

E.g. 23



Ravel: *Jeux d'Eau*, m. 69.

The improvised segment is followed by a *giusto* “rhythm island” (m. 70-71), also fragmented. The chordal system is organized according to the harmonic series and the principle of axes, which results in an “acoustic bitonality” (pole-antipole F#-C):

E.g. 24



Ravel: *Jeux d'Eau*, m. 70.

M. 72 resumes the free rhythm process. The relationship of the F#-A#-C# and C-E-G chords emphasizes once again the pole-antipole relationship, through the exclusive use of two acoustic chords. Their combination results in 4 basic formulas:

1. The first is repeated five times:

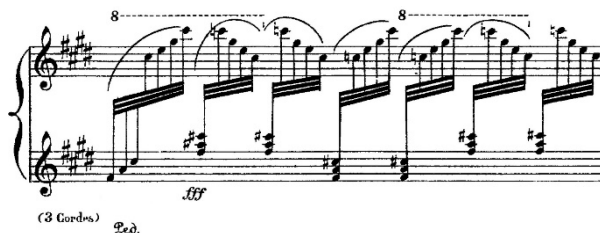
E.g. 25



Ravel: *Jeux d'Eau*, m. 72.

2. The second appears only once, but with various inner repetitions:

E.g. 26



Ravel: *Jeux d'Eau*, m. 72.

3. The third one is repeated three times:

E.g. 27



Ravel: *Jeux d'Eau*, m. 72.

4. The fourth formula, repeated 8 times, comes from no. 3, by overturning its structure (C-E-G-C) in a six-four position (G-C-E-G):

E.g. 28



Ravel: *Jeux d'Eau*, m. 72.

5. The last formula contains groups of four notes and is repeated twice, anticipating the duplication technique in the following segment:

E.g. 29



Ravel: *Jeux d'Eau*, m. 72.

Compared to symmetrical repetition patterns (2 or 8), the first formula is repeated 5 times, the third formula 3 times, which gives the musical discourse a pronounced asymmetry and emphasizes the freedom of improvisational evolution. Starting with the second formula, the first chords appear in the simultaneity of their components, i.e. the melody is transformed into chords (it generates chords) according to the principle of resonance harmony. The fact that in such a large area the composer uses *a single sonority* confirms the defining importance of sound areas in impressionist music.

In the followings, there are two segments of duplication (m. 73-74 and 75-76) duplicated between them, the second being enriched in sonority (densification by expanding the parallel chords and acoustic sonorities) and a prolonged chord on an acoustic formula. The latter comes from the second phase of development (m. 29-30) emphasizing that the recapitulation is its continuation and forms a common body with it.

The resumption of theme B is preceded by a quasi-free upbeat, that is almost imperceptibly transformed into the repetitive background over which the theme resumes (m. 79), thus ensuring the illusion of improvisational freedom in the context of fixed metric-rhythmic formulas. The background technique and the concomitant use of sound planes (especially from m. 81) denote a polyphonic thinking of a fundamentally new dimension, very characteristic of impressionist music:

E.g. 30

Ravel: *Jeux d'Eau*, m. 80.

The tetratony of the B theme already analysed, is combined with an acoustic sonority based on a circumscription of the B-D#-F-A#-C# structure:

Ravel: *Jeux d'Eau*, m. 78.

The last section of the theme brings a new acoustic chord (A-C#-E-G#), colored with the *sixte ajoutée* F#, which is in a secondary plagal relationship with the previous one. This combination of modal and acoustic principles produces a typically impressionist sonority, intensified both by the enrichment of the texture (see the E.g. 30).

Coda

The coda (m. 83-86) continues with the same harmonic background (major with major seventh and *sixte ajoutée*), but this time on the E root, over which is circumscribed a tetratony with a substructure of a minor chord (G# - B-C#-D#). Like the other segments of the work, *Coda* falls into the category of a sound area, the final cadence being in fact non-existent. *Jeux d'eau* ends on the central harmonic axis E-G#-B-D#, extended by means of piano resonance, a typical solution for impressionist music.

Final thoughts: *Jeux d'Eau* than and today

The piece was published in 1902, and it was performed in the first audition on 5 April of the same year by Ravel's friend Ricardo Viñes in Paris, Salle Pleyel. According to Benjamin Ivry, Saint-Saëns would have labelled *Jeux d'Eau* as a cacophony²⁰. (Before he became an acclaimed artist, Ravel went on a tortuous path, full of denials, scandals, and failures, almost constantly facing a relatively hostile critique.) A few years later his most eager opponent, the critic Pierre Lalo²¹ wrote an article about the premiere of the *Miroirs* piano

²⁰ Benjamin Ivry, *Maurice Ravel: A life*, Welcome Rain Publishers, New York, 2000, p. 31.

²¹ Pierre Lalo, son of the composer Edouard Lalo, was the main music critic of *Le Temps* magazine and a fervent supporter of Debussy's music.

cycle in 1906, in which he stated²², among other things, that his music, albeit involuntarily, has a striking resemblance to that of Debussy. Ravel replied in a letter (February 5, 1906), in which he claimed the primacy of the piano innovations exhibited since the *Jeux d'eau*: "I would [...] like to draw your impartial attention to the following point. You dwell upon the fact that Debussy invented a rather special kind of pianistic writing. Now, *Jeux d'eau* was published at the beginning of 1902, when nothing more than Debussy's three pieces, *Pour le piano*, were extant. I don't have to tell you of my deep admiration for these pieces (he orchestrated one of them, AN), but from a purely pianistic point of view, they contained nothing new."²³

Posterity confirmed the objectivity of this self-assessment. According to Burnett James "It is hardly too much to say that *Jeux d'eau* inaugurated a new era in pianism"²⁴, while Gerard Larner points out that the Impressionism of this work is different from that of Debussy.²⁵ Arbie Orenstein also appreciates: "In this work, the twenty-six-year-old composer opened up fresh paths in writing for the keyboard, combining sweeping virtuosity with the refined tinting of impressionism, and a personal blend of structural clarity with subtle chords of the seventh and ninth."²⁶

But the significance of the *Jeux d'eau* goes beyond even the modest self-esteem of the author, or the considerations presented above. For the charming writing and the playful expression hide a surprisingly fresh and complex view not only regarding the piano writing, but also the musical thinking, which foreshadows representative compositional solutions for the avant-garde of the first half of the 20th century and beyond. Ravel also demonstrates here, as in his later masterpieces, an impeccable balance of the two sides of his personality inherited from his parents' ethnical-cultural background: that of the Swiss watchmaker (according to Stravinsky's characterization) and the particular passion of the Basques.

Translated into English by Attila Fodor

²² "I have often spoken about this young musician, one of the most finely gifted of his generation, despite several very apparent and rather annoying faults. The most striking one is the strange resemblance of his music to that of M. Claude Debussy. It is a resemblance so extreme and so striking that often, when listening to a piece by M. Ravel, one thinks one is hearing a fragment of *Pelléas et Mélisande*..." In *A Ravel Reader: correspondence, articles, interviews* [compiled and edited by Arbie Orenstein], ed. cit., p. 79.

²³ Moreover, Ravel invokes in this regard even his first published work *Menuet antique* (1895), which in Orenstein's opinion "does not appear to contain any noteworthy pianistic innovations." Idem, p. 79-80.

²⁴ Burnett James, *Ravel, his life and times*, Hippocrene Books, New York, 1983, p. 30

²⁵ "*Jeux d'Eau* was a revelation to Ravel's friends because, as Fargue recalled, they were at that time »soaked body and soul in the impressionism of Debussy« and this impressionism was quite different. Ravel's was more precisely drawn and, as he himself pointed out, it was cast in a classical form." In Gerard Larner, *op. cit.*, p. 69.

²⁶ Arbie Orenstein, *Ravel: Man and musician*, Columbia University Press, New York and London, 1975, p. 36-37.

REFERENCES

- Cortot, Alfred, *La Musique française de piano: sér. Maurice Ravel. Saint-Saëns. Vincent d'Indy. Florent Schmitt. Déodat de Séverac*, Tom. II, Rieder, Paris, 1932.
- Fodor Attila, „The osmosis of diversity in Maurice Ravel's work”, In *Studia Universitatis Babeş-Bolyai, Musica*, LV, 1, 2010, p. 131-143.
- Ivry, Benjamin, *Maurice Ravel: A life*, Welcome Rain Publishers, New York, 2000.
- James, Burnett, *Ravel, his life and times*, Hippocrene Books, New York, 1983.
- Larner, Gerard, *Maurice Ravel*, Phaidon Press Limited, London, 1996.
- Messiaen, Olivier, *Technique of My Musical Language* [transl. by John Satterfield], Alphonse Leduc, Paris, 1956.
- Orenstein Arbie [ed.], *A Ravel Reader: correspondence, articles, interviews*, Columbia University Press, New York · Oxford, 1990.
- Orenstein, Arbie, *Ravel: Man and musician*, Columbia University Press, New York and London, 1975.

