

Subject: Music

Aquatic Imitations in the Music of Maurice Ravel

In what ways does Maurice Ravel use musical techniques to emulate water in his compositions? (*Jeux d'eau* by Maurice Ravel and *Une Barque sur l'Océan* by Maurice Ravel)

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I. Introduction

Research Question: In what ways does Maurice Ravel use musical techniques to emulate water in his compositions?

“Impressionism” was an art movement catalyzed by Claude Monet’s 19th-century painting *Impression: Sunrise*. In regards to visual art, the term itself is used to describe the way impressionist painters utilized techniques such as blurring the composition, juxtaposing contrasting hues, unique lighting arrangements, etc. in order to give the observer a general impression.¹ Composers of Western classical music whose pieces conveyed an aesthetic analogous to impressionist painters—i.e. music that was indicative of an atmosphere characterized by the moods and emotions evoked by a subject as opposed to an elaborate “tone-picture”²—were labeled impressionists. Maurice Ravel (1875-1937) was a French composer known for his well-crafted compositions that helped define the era of musical Impressionism during the 20th Century. Several of Ravel’s pieces focus on the emulation of water, and two of these pieces will serve as the focus of this study.

I elected to investigate this topic primarily because I am a classical pianist with experience performing and studying pieces by Maurice Ravel, especially those that emulate water. I have personally studied the two pieces that I have chosen for this study, *Jeux d'eau* and *Une Barque sur l’Océan*, and I am particularly interested in Ravel’s compositional techniques. I will begin the study with an independent musical analysis of both *Jeux d'eau* and *Une Barque sur l’Océan* with references to specific techniques that help convey the idea

¹ James Peter Burkholder, Donald Jay Grout, and Claude V. Palisca. *A history of western music*. WW Norton & Company, Inc., 2010.

² Michael Kennedy and Joyce Bourne. *The concise Oxford dictionary of music*. OUP Oxford, 2004.

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of water in both of these pieces. This musical analysis will be followed by a literature review to further establish the ways in which these pieces imitate water.

II. Musical Analysis

Musical Techniques in *Jeux d'eau*

In this portion of the discussion, Gustav Schirmer's 1907 edition of Ravel's *Jeux d'eau* edited by Rafael Joseffy (1852-1915) will be used.³ "Jeux d'eau" in French literally translates to "water sports" in English. With this in mind, it is quite clear that Maurice Ravel wished to figuratively "paint" the image of water throughout the composition. Ravel's use of dynamics, rhythm, tempo, runs, pitch, and key signature in order to portray "water sports" will be examined.

Dynamics

The dynamics found within *Jeux d'eau* are key to the evocation of water. The piece begins with a dynamic marking of *pianissimo* followed by Joseffy's suggestion of "*dolcissimo, una corda*" (Fig. 1), which indicates that the pianist should play "very sweet and soft" while using the soft pedal.



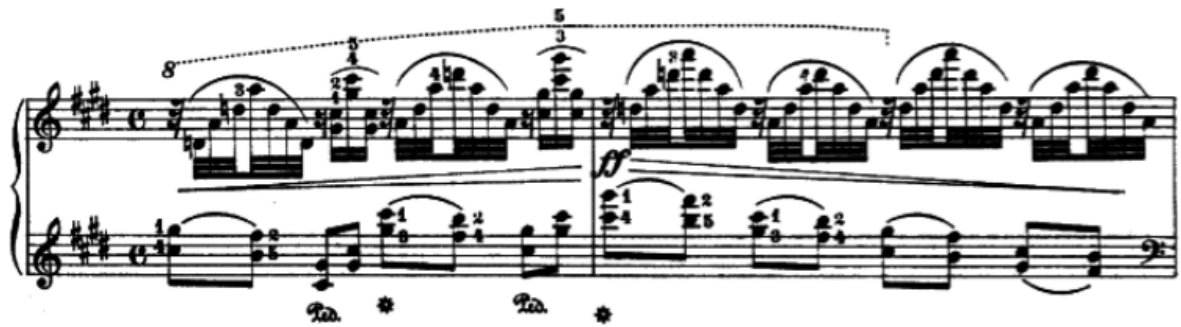
Fig 1. (mm. 1)

³ Ravel, Maurice. *Jeux d'eau*. 1901. Edited and Revised by Rafael Joseffy. New York: Gustav Schirmer, 1907. Print.

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The soft touch to the initial notes of this piece is undoubtedly meant to give a trickle effect much like drizzling rain or a slow moving water bank. This dynamic marking continues throughout the piece with decrescendos littered intermittently implicating the fall of raindrops until a climax is reached at the top of a series of *arpeggios* in mm. 14. This point in the introductory portion of the piece should be regarded as the climax mainly due to the *crescendo* and *decrescendo* surrounding mm. 13 - 14 with a dynamic marking of *fortissimo* (*ff*) in mm. 14 (Fig. 2). The climax in mm. 14 marks the end of the introduction of water droplets and the beginning of a new melodic pattern.

Fig 2. (mm. 13 - 14)



Soon after the loudest point in mm. 14, the dynamics began to soften with a gradual and driving pattern to the onset of the main melody in mm. 19. This driving pattern in mm. 15 - 18 is most analogous to the surge of waves in the ocean or the current in a tumultuous river. Eventually, *decrescendos* return the piece to a soft dynamic signified by *pianissimo* (*pp*) and mark the beginning of a new melodic trope that is repeated throughout the piece in mm. 19. The pattern of having a soft dynamic indicative of the pitter patter of rain followed by a climax and *decrescendo* back into the melody is repeated throughout the entirety of the piece.

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In relation to the image of water, this pattern can be viewed as a cycle similar to the water cycle. Much like the water cycle in which water evaporates, condenses into clouds, and returns to the earth in the form of rain, *Jeux d'eau* progresses with rises and falls in dynamics characterized by a climax that could be compared to a cloud that is filled to capacity with water molecules. Another analogy that can be drawn between the dynamic pattern in this piece and water is the swells of waves in the ocean. As a wave begins out at sea and progresses to shore, it gains momentum and powerful force before finally crashing just like the climax in the dynamic pattern.

Rhythm & Tempo

The rhythm and tempo are significant to the portrayal of “water sports” in *Jeux d'eau*. The piece is primarily comprised of a continuous onslaught of sixteenth or thirty-second notes in one clef balanced by eighth notes in the the other clef. This concept is beautifully demonstrated in Figure 3 in which the left hand accompaniment is challenged with repeated thirty-second notes in combination with eighth notes in the treble clef. The distinction between the two clefs is important to the comparison to water here. The melody in the treble clef signifies the pronounced and clear “drip drops” of water that transcend the continuous rush of a stream; a stream of notes in mm. 23.

Fig. 3 (mm. 23)

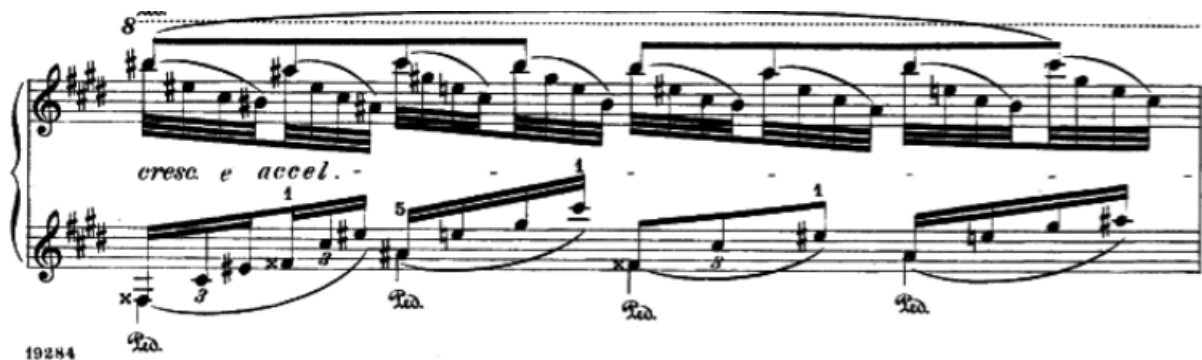


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Additionally, there is a consistent back and forth exchange of musical dominance between the left and right hand accompaniments. This contributes to the continuity of the sound throughout the piece; a characteristic that is often used in impressionist piece like this. Going back to the definition of Impressionism, the flow of sound in *Jeux d'eau* is meant to remove the listeners inclination to establish a solid beat. The flow of sound is also comparable to the flow of water. It takes a skilled musician to accurately and successfully achieve a smooth influx of sound while also maintaining an internal sense of the downbeat when performing this piece.

In terms of tempo, the piece is predominantly quick. This makes sense when the swiftness of water droplets is considered. The beginning of the piece is marked with *Allegretto*, which indicates that the pianist should adopt a fairly brisk tempo. This tempo creates a lively and invigorated tone that is key to the piece's portrayal of "water sports," and it is maintained for most of the piece except in moments when Gustav Schirmer suggests a *crescendo* and *accelerando* (Fig. 4) in mm. 44 in preparation for perhaps the largest climax of the piece.

Fig. 4 (mm. 44)



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This profound climax in mm. 48 is followed by a *glissando* into a smooth arpeggiation much like the cascades of a waterfall into an active brook. The only point where the tempo deviates from the standard “a tempo” *allegretto* is in mm. 77 which is marked by *Lento*. *Lento* indicates a very slow, possibly somber, tempo towards the end. The *rallentando* leading up to mm. 77 prompts the pianist to slow down, eliminating the possibility of the ending being somber. As opposed to conveying a somber atmosphere, the slow tempo prompted by *rallentando* and *Lento* prepares the listener for the end of the piece. *Jeux d'eau* is filled with exciting and fantastic runs with power and speed, so the only indication of an end is to slow down via a *rallentando*. In comparison to water, this *rallentando* can be interpreted as a boat's passage through a rushing river until it meets the ocean and is finally out at sea in slow, rolling waves.

Pitch & Key Signature

The majority of the piece is written in the upper register in terms of note placement. The melody is almost entirely present in the treble clef, which is not necessarily a unique feature, but it is significant to the “water sports” analogy. Firstly, the small size of water droplets demand that the pitch that sounds when they hit a hard surface be relatively high. *Jeux d'eau* features a lot of individual notes and very detailed *ostinatos* above the staff that corresponds with the right hand accompaniment. The individualized note sequences require a meticulous touch from the pianist and evoke the individual drops of water in a rainfall. The points where the sixteenth notes extend down into the bass clef and below the staff, such as in mm. 49 indicate the rumbling of a thunderstorm or the crashing of waves. A large group of notes is

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aggregated in these instances, and it is used in conjunction with the damper pedal in mm. 50 - 51 to create a tumultuous rush of sound that is key to the evocation of water.

At first glance, the key signature of this piece looks to be in E-major. This conclusion is corroborated by the first sequence of chords in the left hand. The notes progress between an E/B (major fifth) and G-sharp/E (major third) to an A/E (major fifth), which is the four chord in E major. This harmonic structure is inherently stable because it lacks the instability of dissonance, which imparts the impression that the water conveyed in the first few measures begins in a secure place before toppling down into mayhem in subsequent passages. In consideration of whether this piece could be in the relative minor to E major, C-sharp minor, the notion can quickly be dismissed after hearing the elated sound of the melody which indicates a major key. In regards to water, the major key provides indication that there will not be a “storm” later in the piece.

Musical Techniques in *Une Barque sur l’Océan*

In this portion of the discussion, the edition of *Une Barque sur l’Océan* found in the *Piano Masterpieces of Maurice Ravel* by Maurice Ravel will be used.⁴ “Une barque sur l’océan” in French literally translates to “a boat on the ocean” in English. This translation explicitly relates Ravel’s intentions for this piece. He intends to convey the mood and create an atmosphere much like that of a boat traveling in the open ocean. A connection will be drawn between Ravel’s compositional techniques in creating this image of “a boat on the

⁴ Maurice Ravel. “Miroirs” In *Piano Masterpieces of Maurice Ravel*, 40-87. Mineola, NY: Dover Publications, 1986.

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ocean” in the mind of the listener via the use of a consistent musical theme, dynamics, rhythm, and tempo.

Musical Theme

The piece begins with a repeated theme meant to be played by the right hand in the upper register, while the left hand repeatedly runs through a series of *arpeggios*. This phenomenon is displayed in Figure 5. The *arpeggios* extend all the way from the bass clef into the treble clef. In creating an analogy to the ocean, the repeated *arpeggios* represent the rolling of the waves. A boat in the midst of the rolls of waves in the ocean can rapidly change in altitude from one moment to another because the ocean is a seemingly endless body of energy that is perpetually in motion. Ravel wrote the beginning of the piece in this way to convey the rolls of waves at sea through a continuous flush of notes. The melodic theme played by the right hand in mm. 1 - 4 is soft yet beautifully quaint in nature. In creating the atmosphere of an oceanic environment, one can draw parallels between the soft melodic theme and the fantastical voices of sirens meant to draw in sailor or the soft chirping of birds.

Fig. 5 (mm. 1 - 4)

D'un rythme souple – Très enveloppé de pédales

The image shows a musical score for the first four measures of a piece. The score is written for piano and consists of two systems. The first system is marked 'pp' and the second system is marked 'en dehors'. The music is in 3/4 time and D major. The right hand plays a soft melodic theme, and the left hand plays arpeggiated accompaniment. The score is titled 'D'un rythme souple – Très enveloppé de pédales'.

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After the first two lines of *Une Barque sur l'Océan*, the initial melody that was indicated by the right hand is overtaken by an inner melodic voice interwoven within the swell of the arpeggios in the left hand (mm. 4). The new melody is interwoven so seamlessly that one would not be able to pick it out from a brief glance at the score. Maurice Ravel's use of "surface ornamentation that obscures . . . melody" highlights his strength in utilizing the characteristics of the impressionist movement in his pieces.⁵

Dynamics

Unlike *Jeux d'eau*, *Une Barque sur l'Océan* is a title that is very clear in conveying the way in which Ravel meant to portray water. That is, while "water sports" is very subjective and broad in its scope, "a boat in the ocean" is very specific and focused. In this way, a more cogent connection can be made between Ravel's compositional techniques in this piece and the ocean.

The dynamics at the beginning of the piece is marked by *pianissimo* (*pp*) which indicates for the pianist to play very softly, and throughout the beginning section of the piece (mm. 1 - 28), the dynamics fluctuate between a limited region surrounding *piano* (*p*), or soft. This is a highly suitable introduction for this piece to convey the serene back and forth of a ship at sea. Once the initial repetitions of the musical theme referenced in the previous section subside, the dynamic fluctuations extend to a broader region with stretched out *crescendos* and *decrescendos*, reaching *fortissimo* (*ff*) and even *fortississimo* (*fff*) as shown in Figure 6.

⁵ Britannica, The Editors of Encyclopaedia. "Impressionism." Encyclopædia Britannica. September 02, 2013.

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Fig. 6a (mm. 34 -35)



Fig. 6b (mm. 44)



Since the soft dynamics, *piano* (*p*) and *pianissimo* (*pp*), throughout the piece are meant to indicate the serene sway of a ship at sea, the louder dynamics, *forte* (*f*) and *fortissimo* (*ff*), are naturally meant to relay the severe crash of waves the ship experiences during sea storms due to their boisterous manner. The piece ends with a very soft *pianissississimo* (*pppp*) dynamic marking (Fig. 7). If the Ravel meant for the piece to symbolize a boat's journey in the ocean, this last, barely-audible chord marks the tranquility of reaching one's destination.



Fig. 7 (mm. 151)

In what ways does Maurice Ravel use musical techniques to emulate water in his compositions?**Rhythm**

In discussing the rhythm of *Une Barque sur l'Océan* in relation to the emulation, the time signature selected by Ravel is significant. The piece initially features a 6/8 and 2/4 time signature (Fig. 8), which suggests that Ravel wanted this portion of the piece to be rhythmically embodied in both a steady, dichotomous rhythm (2/4) and a more fluid and successive rhythm (6/8). In regards to the emulation of water, the dichotomous 2/4 time signature reflects the constant back and forth movement of a ship in the midst of gentle waves at sea. The fluid 6/8 time signature reflects the continuous flow of water passing by the hull of a ship at sea. Essentially, the pianist must decide which aspect of a ship at sea they wish to underscore and elect to follow the corresponding time signature; however, the most skilled pianists will be able to convey both time signatures equally when performing the piece.



Fig. 8 (m. 1)

After the initial 6/8 and 2/4 time signature is established, the piece begins to alternate primarily between 3/4, 2/4, and 6/8 time signatures. This frequent alternation between negligibly distinct time signatures allows Ravel to effortlessly transition between different passages of *Une Barque sur l'Océan*. These transitions are analogous to the journey of a ship in the ocean because waves are rarely rough or serene for an extended period of time.

In what ways does Maurice Ravel use musical techniques to emulate water in his compositions?**Tempo**

Maurice Ravel interestingly decided to omit a metronome marking for *Une Barque sur l'Océan*. This omission leaves the tempo at which the piece is performed up to the pianist much like when the pianist must decide between a 2/4 and 6/8 time signature at the beginning of the piece. Clearly, Ravel valued the artist's interpretation of this piece in regards to tempo, which can lead to drastic differences in performance. For example, Håkon Austbø's interpretation in regard to tempo led to a performance close to 8 minutes, while Stewart Goodyear's interpretation led to a performance just under 7 minutes.⁶⁷ Maurice Ravel's refusal to explicitly indicate a tempo in *Une Barque sur l'Océan* relates back to the emulation of water in that a sailor never knows what conditions he may face at sea; Ravel permits the performance of the piece to be just as variable as the conditions of the ocean.

III. Literature Review

Academics in the field of music have similarly approached examining Maurice Ravel's portrayal of water in his pieces in regards to his compositional techniques. Ravel's compositional techniques such as "arpeggios, glissando, tremolo, and staccatos" are echoed throughout much of the academic literature in the music field related to the imitation of water in his pieces.⁸ Referring to *Jeux d'eau*, Sun Hye Park notes how Ravel presents pianists with the task of allowing extreme contrast in dynamics to become salient when performing the piece in order to

⁶ Maurice Ravel. *Schumann - Sonate OP11 / Ravel - Miroirs*. Håkon Austbø. Saravah SHL 1066, 1977, vinyl.

⁷ Maurice Ravel. *Ravel: Stewart Goodyear*. Stewart Goodyear. Orchid Classics, 2017, MP3.

⁸ Ji Hyun Kim. "A STUDY OF LUDWIG VAN BEETHOVEN'S PIANO SONATA OP. 111, ROBERT SCHUMANN'S OP. 6 AND MAURICE RAVEL'S JEUX D'EAU." (2011): 1.

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convey the erratic motion of water.⁹ He goes on to comment on Ravel's use of rhythm, specifically syncopated patterns and *ostinato*, that allows the image of dainty water droplets to be imparted in *Jeux d'eau*.¹⁰ As opposed to making broad analogies to bodies of water as seen in the musical analysis of this paper, Park maintains a focus on the imagery of singular passages. To demonstrate, he references the abrupt rush of notes in an *arpeggio* at the sixth measure of the piece, detailing the sweeping movement of water in a river.¹¹ Another attribute that Park discusses is Ravel's use of pedal points. That is, Ravel juxtaposes a low pedal-point in the eightieth measure of *Jeux d'eau* with upper-register *arpeggios* to emphasize the expansive characteristic of the sea.¹²

Rossella Marisi addresses the undulate property of water that demands a fluid representation in *Jeux d'eau* via the use of "specific intervals" such as "seconds and fourths," referencing measure 78.¹³ She poses the intriguing argument that the "unstable tone combinations" evoked by using second and fourth intervals intensifies the need for progression into "more stable tone combinations such as thirds and fifths."¹⁴ This progression parallels the need for water to conglomerate into a stable mass of molecules due to its cohesive properties. Both Park and Marisi bring attention to the irregular pattern of *arpeggios* within the first few measures of *Jeux d'eau*. To be specific, Ravel rapidly switches between sixteenth and

⁹ Sun Hye Park. "Elements of Impressionism evoked in Debussy and Ravel's *Reflets dans l'eau* and *Jeux d'eau*: The theme of water." PhD diss., (2012): 36.

¹⁰ Park, 36.

¹¹ Park, 43.

¹² Park, 48.

¹³ Rossella Marisi. "8. From Thales to Berio: Water as a Common Theme of Philosophy, Physics, and Music." *Review of Artistic Education* 11, no. 1 (2016): 67.

¹⁴ Marisi, 67.

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thirty-second note *arpeggios* in these measures 1 and 3.¹⁵ Although both Park and Marisi cite this irregular pattern, their interpretations of its role in emulating water are quite dissimilar. Park expresses that the irregular *arpeggios* “project the sensation of both relaxation and tension” in terms of the movement of water, while Marisi expresses that they enhance the image of fluidity in terms of the movement of water.¹⁶¹⁷

Rather than examine *Une Barque sur l’Océan* through the lens of a ship at sea, Oleksii Ivanchenko considers the piece almost strictly from the perspective of the waves in the ocean. He relates the integration of *arpeggios* in the left hand accompaniment of the piece and the “double melodic line” in the right hand accompaniment of the piece to the “image of the water’s ever-changing waves.”¹⁸ Ivanchenko relays how the passages of *Une Barque sur l’Océan* are spurred from “ascending and descending” cascades of sound.¹⁹ These cascades of sound inherently evoke the impression of rising and falling waves in the ocean. He also makes note of the “climactic episodes” that reflect storms at sea.²⁰ While the amalgamation of all these *arpeggiated* passages and high registered *glissandos* seem to evoke a particular image to Ivanchenko, others may disagree. For example, Gaston Carraud, a music critic, describes *Une Barque sur l’Océan* as being a “confusing kaleidoscope” and says he “can not even tell what kind of weather prevails on this ocean.”²¹ This unfavorable review, highlights the role of the listener in interpreting Ravel’s pieces as emulating water.

¹⁵ Park, 43.

¹⁶ Park, 43.

¹⁷ Marisi, 68.

¹⁸Oleksii Ivanchenko. "Characteristics of Maurice Ravel's Compositional Language as Seen Through the Texture of his Selected Piano Works and the Piano Suite" *Gaspard de la Nuit*." (2015): 39.

¹⁹ Ivanchenko, 40.

²⁰ Ivanchenko, 40.

²¹ Roger Nichols, *Ravel* (London: J. M. Dent & Sons Ltd, 1977), 44.

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Eunbyol Ko, approaches the imitation of water in *Une Barque sur l'Océan* by exploring the harmonic structure of the opening passage that emerges at the beginning of the piece. She reveals the “minor third, perfect fourth, and major second” sequence within the falling melodic line in measures 1-10.²² Ko then compares this dynamic, harmonic structure in the melody with the static, harmonic structure in the *arpeggiated* accompaniment, interpreting it as “a boat rocking gently on a rather calm ocean.”²³ Unlike Ivanchenko, Eunbyol Ko observes the imagery within *Une Barque sur l'Océan* primarily in regards to the boat at sea. She relates the emergence of a “G-sharp and C-sharp in the inner voice” to the appearance of a being separate from the singular boat at sea in measure 4.²⁴

As expressed in the musical analysis, Ravel pays close attention to the musical markings within his pieces—i.e. tempo and dynamics—and his choice to omit metronome markings and include a choice between two different key signatures (2/4 and 6/8) in *Une Barque sur l'Océan* are very much purposeful. Arbie Orenstein echoes this sentiment in his journal article, “Maurice Ravel's Creative Process.”²⁵ According to Orenstein, Ravel constantly enhanced his pieces by modifying them with “refinements of texture and deletions of extraneous material” before publication.²⁶ An example of this would be in *Jeux d'eau* where Ravel features “three staves” in the last few measures in order to promote clarity in the “part-writing,” but his prior “sketches” indicate that he initially only used “two staves.”²⁷ In regards to the compositional techniques

²² Eunbyol Ko. "Music and Image: a performer's guide to Maurice Ravel's Miroirs." PhD diss., University of Cincinnati, (2007): 46.

²³ Ko, 46.

²⁴ Ko, 48.

²⁵ Arbie Orenstein. "Maurice Ravel's creative process." *The Musical Quarterly* 53, no. 4 (1967).

²⁶ Orenstein, 473.

²⁷ Orenstein, 473.

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indicated by Kim—*arpeggios, glissando, tremolo, and staccatos*—he writes that it is fairly clear that *Une Barque sur l’Ocean* uses them “more boldly” in comparison to *Jeux d’eau*.²⁸

Regardless, both pieces evoke the impression of water.

IV. Conclusion**Research Question: In what ways does Maurice Ravel use musical techniques to emulate water in his compositions?**

In *Jeux d’eau*, Maurice Ravel utilizes several techniques to convey the image of “water sports.” Ravel employs the use of a wide range in dynamics, fluctuating tempos, rhythmic syncopation, *ostinatos, arpeggios, glissandos*, and a major key signature in his portrayal of water. These compositional techniques communicate the variable nature of water in its movement, reflect water’s fluid characteristic, project the feeling of cyclical tension and release, and embody the energy found in bodies of water. *Jeux d’eau* also displays Maurice Ravel’s explicit approach in composing pieces meant to emulate water because most of the musical components are clearly indicated.

In *Une Barque sur l’Océan*, Ravel uses much of the same musical techniques as he does in *Jeux d’eau*; however, several of these techniques are used to a larger extent with the addition of harmonic structure to portray “a boat in the ocean.” These techniques have the effect of conveying the rise and fall of waves, the weather at sea, and the sensation of being on a ship amidst an oceanic environment alternating between tumult and serenity. In contrast to *Jeux d’eau*, *Une Barque sur l’Océan* display Maurice Ravel’s ambiguous approach in composing

²⁸ Kim, 1.

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pieces meant for emulating water because the scores lack a clear metronome marking and feature a choice between a 2/4 or 6/8 time signature.

In conclusion, Maurice Ravel is highly successful in using these musical techniques to emulate water in his compositions, and the distinctions between *Une Barque sur l'Océan* and *Jeux d'eau* serve to convey his compositional versatility. On the other hand, a deeper exploration of the role of performers in interpreting the impression of water within Ravel's pieces along with an extended investigation of Ravel's repertoire might yield a more comprehensive conclusion. Notwithstanding, the connection between Ravel musical techniques and the emulation of water have been clearly discerned.

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