

Messiaen: Rhythm and Birdsong in *Quartet for the End of Time*

CAMELIA BROWN



WRITER'S COMMENT: I originally wrote this paper as part of my MUS 195 Senior Project. We had the freedom to choose any aspect of music to write a report on as well as give a presentation to a panel of peers and professors. Throughout my time as a music major, I had come across Olivier Messiaen's work in various classes, seminars, and performances, which led me to seize this opportunity to examine some of the ins and outs of Messiaen's most well-known piece, Quartet for the End of Time, for myself. There is so much that can be said about Quartet, but for the sake of time I decided to pick two main aspects of the piece that appealed to me the most: rhythm and birdsong. As a percussionist, it was refreshing to learn about Messiaen's unique approach to rhythm, and his use of birdsong is anything but ordinary, as I hope this paper will convey. I would like to thank my Senior Project Advisor, Professor Mika Pelo, for helping me throughout this project.

INSTRUCTOR'S COMMENT: Olivier Messiaen's Quatuor pour la fin du temps (Quartet for the End of Time) is undoubtedly one of the great musical masterpieces of the twentieth century. Written by the French master in a German prison camp, the background history of the creation of the piece is certainly compelling in itself, but equally fascinating are the inner workings of the piece, and in her essay about Messiaen's piece, Camelia Brown focuses on two particular features of Messiaen's music: the many instances of transcribed bird song, and his way of working with rhythm.

Influenced by ancient Greek meters and Hindu rhythms, Messiaen's rhythmical writing is multilayered and often opaque, but Camelia manages to analyze the various layers, and explain the rather complex intricacies of the rhythmic aspects of the piece in a clear and illuminating way.

Although one of Messiaen's best known musical elements, the precise role of birdsong in Messiaen's music is still something that has not been fully explored, and Camelia lays out a very plausible explanation for its occurrences throughout the multi-movement work in her paper.

*Messiaen: Rhythm and Birdsong in
Quartet for the End of Time*

I was very impressed with Camelia's essay, and with her presentation of it at the end of the spring quarter, which was a culmination of the individual study she took with me, and I am very pleased by the recognition she is given by the inclusion of her paper in this collection.

—Mika Pelo, Department of Music

Olivier Messiaen's *Quartet for the End of Time* is widely regarded as one of Messiaen's most influential works as well as the piece from which many of his later pieces drew. It is remarkable to consider the fact that such a significant piece was written during Messiaen's time as a prisoner of war in Stalag VIII A located in Silesia, Poland during World War II. The *Quartet* was heavily influenced by Messiaen's devout Catholic way of life, and the title itself is a representation of the apocalyptic theme of the Book of Revelation, chapter 10: 1-7:

And I saw another mighty angel coming down from heaven, wrapped in a cloud, with a rainbow on his head; his face was like the sun, and his legs like pillars of fire.... Setting his right foot on the sea and his left foot on the land...and, standing on the sea and on the land, he raised his right hand toward Heaven and swore by He who lives forever and ever... saying: "There will be no more Time; but in the days when the seventh angel is to blow his trumpet, the most of God will be fulfilled" (qtd./trans. in Rischin 129).

While the religious inspirations of the piece create the backdrop of its message, Messiaen's passions of transcribing birdsong and creating new rhythmic ideas are arguably the two most important aspects of the piece. In movements one and three of *Quartet for the End of Time*, Messiaen uses unique rhythmic devices to create a feeling of endlessness, which serves as his representation of Time, while his use of birdsong is meant as a juxtaposition to Time, creating a sense of freedom and elation.

The origin of the *Quartet* paints a spectacular picture that provides a clear understanding of the frame of mind in which Messiaen wrote the piece. During the outbreak of the Second World War, Messiaen was called upon for duty but because of his poor eyesight was deemed unfit for active service. He was instead stationed at Verdun, a medical auxiliary, in May 1940 when the German invasion occurred. While fleeing to Nancy, he and his colleagues were caught and taken to a prison camp in Silesia,

Stalag VIII A (Rischin 9-12). In his book, *Olivier Messiaen and the Music of Time*, music novelist Paul Griffiths writes, “With him in the camp he found a violinist, a clarinetist, and a cellist, for whom he wrote a short trio that they performed in the washrooms. Then, out of this humble beginning, came a full-scale chamber work with the addition of him as pianist” (90). There are eight movements; the number of movements is in itself seen as a symbol of eternity. As Messiaen wrote, “This *Quartet* comprises eight movements. Why? Seven is the perfect number, the Creation in six days sanctified by the divine Sabbath, the seventh day of this repose extends into eternity and becomes the eighth day of eternal light, of unalterable peace” (qtd./trans. in Rischin 54). After months of writing and practicing, Messiaen’s quartet premiered at the Stalag in January of 1941, given before an audience of 5,000 prisoners who were captivated by the performance despite many of those in attendance having no formal knowledge of music.

Going forward, it is important to examine the deep relationship that Messiaen held concerning the topic of rhythm and how it influenced the way in which he wrote *Quartet*. Messiaen desired to be free of traditional Western views of rhythm in compositions and “eliminate conventional notions of musical time and of ‘past and future’” (Rischin 52). During a lecture Messiaen gave at the Conference de Bruxelles in 1958, he said:

Let us not forget that the first, essential element in music is Rhythm, and that Rhythm is first and foremost the change in music and duration. Suppose that there were a single beat in all the universe. One beat; with eternity before it and eternity after it. A before and an after. That is the birth of time. Imagine then, almost immediately, a second beat. Since any beat is prolonged by the silence which follows it, the second beat will be longer than the first. Another number, another duration. That is the birth of Rhythm. (qtd./trans. in Johnson 32)

In his book *Messiaen*, Robert Sherlaw Johnson, composer and music scholar, states, “Messiaen regards rhythm as arising from an extension of durations in time rather than from a division of time” (32). Messiaen’s differing definition of rhythm is what allows rhythm to serve as an expression of the endlessness of time within *Quartet*.

Throughout his career, Messiaen was not satisfied with the traditional norms of rhythmic interpretation, so he invented a new

Messiaen: *Rhythm and Birdsong in Quartet for the End of Time*

rhythmic language that drew from a variety of sources: ancient Greek meters, Hindu rhythms, and western developments (Rischin 52). The origins of Messiaen's interest in rhythm date back to his youth. Two of his instructors from the Paris conservatory, Marcel Dupre and Maurice Emmanuel, were the catalyst for Messiaen's interest in Greek rhythms (Johnson 32). Messiaen's primary source for Hindu rhythms was the thirteenth-century treatise *Sangita Ratnakara* by Carnagadeva, which lists 120 *deci-talas* (rhythms from the different provinces of India). In the first movement of the *Quartet*, "Liturgie de cristal," the rhythmic ostinato in the piano part is based upon three of these *talas*: *ragavardhana*, *candrakala*, and *lakshmica* (Rischin 52-53).

The *Quartet* weaves many of Messiaen's unique rhythmic devices together to achieve the idea of "banishing the temporal," a phrase that in this case means both to break out of traditional time constraints and to express the eternal (Rischin 129). Representations of time are usually found in instances of ostinato. Recurring cycles of music played in one or more instruments give certain movements a feeling of continuity. In "Liturgie de cristal," pitch and rhythmic cycles operate independently within the cello and piano lines. The piano part consists of seventeen rhythmic values and a sequence of twenty-nine chords that overlap throughout the movement. Figure 1 illustrates an example of the *talas* Messiaen uses to create the rhythmic variations in the piano from bars 1-8. Messiaen allows this rotation to proceed without change until the end of the movement, in which it abruptly stops. These repeated cycles are greatly successful in producing an image of eternity because they appear to be moving along without the guidance of human agency (Griffiths 94). The abrupt ending alludes to an existence of a longer, prodigious piece of music.

The image shows a musical score for the piano part of the first movement of Messiaen's *Quartet for the End of Time*, "Liturgie de cristal." The score is presented in two systems. The first system covers bars 1 through 17, and the second system covers bars 18 through 27, with a final measure labeled "etc." and "(re-barred)". Above the first system, the chords are numbered 1 through 17. Below the first system, the rhythmic values are numbered 1 through 17. The chords are labeled as follows: Chords 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17. The rhythmic values are labeled as follows: Values: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17. The chords are labeled as follows: Tala 1: ragavardhana, candrakala, lakshmica. The rhythmic values are labeled as follows: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17. The score is written in treble and bass clefs, with a key signature of one flat (B-flat). The piano part consists of a sequence of chords and rhythmic values that overlap throughout the movement.

Fig. 1 (Johnson 62)

Representation of time is also seen in the use of non-retrogradable rhythms. The reading of identical rhythms forward and backwards has a similar effect as that of the ostinato parts in creating a sense of continuity outside the rigidity of traditional rhythmic systems. Rebecca Rischin, a Messiaen scholar, discusses the meaning of Messiaen's rhythmic language in her book, *For the End of Time: The Story of the Messiaen Quartet*. Rischin writes, "The rhythmic language employed in the Quartet, particularly the use of non-retrogradable rhythms, is one of the technical means by which Messiaen realized the musical 'cessation of time,' a metaphor for the religious and philosophical idea of eternity" (54). The rhythm of the cello part in "Liturgie de cristal" is non-retrogradable; it forms a continuous rhythmic chain, which creates a palindrome "from center to center, as well as from end to end" (Johnson 62). Figure 2 below provides an example of this multiple non-retrogradable cello rhythm, which can be found in bars 2-10. Because of its non-retrogradable nature, there ceases to be a true beginning or end to this rhythm, contributing to the overall feeling of timelessness.

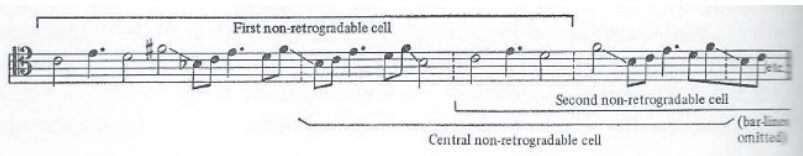


Fig. 2 (Johnson 62)

Messiaen used other means to create the sensation of endlessness in the *Quartet*, including the length of the piece itself, the reliance on rhythmic duration rather than meter in movements three, five, and six, and the use of extremely slow tempi heard in movements three, five, and eight (Rischin 54). Another aspect of the *Quartet* that creates a sense of endlessness is the use of two finale movements. Movement five, "Louange a l'Eternite de Jesus," and movement eight, "Louange a l'Immortalite de Jesus," are both slow solos for string instrument with piano accompaniment, in the key of E major, formally in two parts (ABA and ABAB), and have origins in earlier pieces (Griffiths 100). The cello part in movement five originates in Messiaen's prior piece, *Fete des belles eaux*, and the violin part in movement eight from his *Diptyque*. Movement five feels so much like a finale that the movements that

come after seem to occur once the work is over. Griffiths states that by making a second moment of finality, “there remains a potential for more movements and more finales, since the work has demonstrated that an apparent conclusion need not in fact be the end” (101). This statement relates directly back to the ending of movement one, in which the end could potentially not be the end. In providing multiple endings or an unfinished cycle of rhythms and pitches, Messiaen has created a piece that feels deliberately incomplete at times, reinforcing the notion of timelessness and the potential of more.

Although arguably not his most important piece including birdsong, it is important to recognize the *Quartet* as Messiaen’s first piece to include discernible birdsong, which paved the way for his later works and research on the topic. Rischin writes, “From the age of fifteen, when he began notating birdsong in the Aube countryside, Messiaen’s love of birds had a profound effect upon his musical compositions” (57). The *Quartet* contains the composer’s first attempts at depicting particular species of birds, namely the blackbird and the nightingale. Birdsong would reappear in his later works “and function as the principal generating material for the series of compositions written in the 1950s” (Rischin 57). In the score itself, the composer did not identify which bird is depicted by which instrument, but indicated simply “*comme un oiseau*” (like a bird) in the clarinet and violin parts of movements one and three. Johnson points out, however, that the qualities of these melodies are sufficiently distinct as to make it obvious that, throughout the movement, the violin plays the song of the nightingale and the clarinet the song of the blackbird (118).

In the preface to the third movement of the *Quartet*, Messiaen writes, “The abyss is Time, with its sadnesses and tediums. The birds are the opposite of Time; they are our desire for light, for stars, for rainbows and for jubilant outpourings of song!” (qtd./trans. in Rischin 129). This movement, along with the first, expresses stark juxtapositions between the idea of “Time,” which we now understand as rhythmic continuity and cyclical episodes as an interpretation of endlessness and birdsong. Rischin writes, “Musicologist Trevor Hold sees birds as representative of Messiaen’s desire to free his self of self-imposed restrictions” (60). Given the symbolic importance of birds to Messiaen, it also makes sense that the *Quartet for the End of Time* was one of the first works in which birdsong was prominently featured, “for it was written in a setting in which the thought of freedom must have been the constant and overwhelming obsession” (Rischin 60).

Birdsong in the clarinet and violin, as the “opposite of Time,” serves to contrast the cyclic feeling of the ostinatos and recurring non-retrogradable rhythms of the piano and cello. In his book, *Messiaen*, music analyst Anthony Pople examines the clarinet part of the first movement. He writes, “Its freedom from the musical constraints of barlines and easily assimilable organization makes it likely to be heard not so much as a melody that merely suggests birdsong, however, but more as a literal attempt to transcribe elements of the blackbird’s characteristic song within the limitations of the instrument chosen” (18). In this case, it is actually the lack of strict restraints on time and meter that allow for accurate and believable birdsong from the cello and violin. Figure 3 provides an example of the first four bars of the clarinet part in movement one, which establishes the fleeting bursts of blackbird song.



Fig. 3 (Pople 18)

In the first movement, the systematic repetitions of the piano and cello music are not found in the two bird parts; however, there are unsystematic repetitions (Griffiths 95). The clarinet has a typical figure of a triplet followed by a large interval leap on to a staccato bounce, while the violin has a number of tics that typically end as a cadence in a C sharp - G - E motif. There does not seem to be any apparent framework of rotation; the clarinet, in particular, is free to unloose long and varied phrases against the quietly revolving ostinatos and the violin’s imitation of a more distant bird. The only thing that grounds the clarinet part to the rest is the key of B flat. The cello continuously drops to B flat as its lowest note, the clarinet often ends its phrases on notes of the B flat minor triad, the violin’s cadential figure needs B flat to make a diminished-seventh chord, and the piano continues to play the B flat below middle C while changing chords. There is thus a loose harmonic relationship between each instrument that serves as a pronounced contrast to all of the various differences among the four voices.

The third movement of the *Quartet*, entitled “Abime des oiseaux,”

*Messiaen: Rhythm and Birdsong in
Quartet for the End of Time*

is a clarinet solo in an ABA form, the slow A sections clearly suggestive of the “abyss of Time, its sadness and its weariness,” while the lively B section expresses birdsong, which displays the desire for light, the stars, and heaven’s riches (Kraft 78). The dramatic changes in tempo mark this difference and give the birdsong more of a sense of rhythmic freedom. In his dissertation titled *Birdsong in the Music of Olivier Messiaen*, scholar David Kraft writes, “It is important to note that the trills and the motive of the three semiquavers (followed by two high pitched staccato semiquavers) are often found in Messiaen’s scores, even when they are not credited as ‘style oiseau’” (77). Contained within the birdsong are durations that are adjusted by adding and subtracting a semiquaver and a few occurrences of non-retrogradable rhythms.

Messiaen gives the performer no clue as to which bird he should attempt to mimic: the clarinet part seems to be an amalgamation of several features of “style oiseau,” and the movement incorporates many birdsong characteristics that express Messiaen’s rhythmic, melodic, and ornamental preferences (Kraft 77). The first measure creates an opening motive of F#, Bb, A, C, and back to F#. The next bar adds the notes G and A as “neighbour notes” and again resolves to the first F#. The rhythm is a typical example of Messiaen’s use of added note values, seen in figure 4 (Kraft 78). The opening motive in measures 1-5 resurfaces again transposed down an octave in measures 30-34, marking the return to the A section. Measure 11 in figure 4 provides an example of a non-retrogradable rhythm, further establishing the A section as a reflection of Time.

Fig. 4 (Messiaen 15)

The image shows a musical score for Clarinet in B-flat, measures 1 through 11. The tempo is marked "Lent, expressif et triste" with a tempo indication of a quarter note equal to 44 (♩ = 44 env.). The first measure is marked with a piano dynamic (*p*) and the word "désolé". The score consists of three staves of music. The first staff contains measures 1-5, the second staff contains measures 6-10, and the third staff contains measure 11. The music features a mix of eighth and sixteenth notes, often beamed together, and includes some rests. The key signature has one flat (B-flat).

In conclusion, for Messiaen, time was “the starting point of all

creation” (Rischin 54). Certainly, it was the starting point for the creation of the *Quartet*. Griffiths writes, “Symmetry is one means at music’s disposal of creating images of the end of time, since symmetry makes the last moment identical with the first; it denies the sort of progress by which most Western music proclaims itself at one with a notion of events changing through time” (100). Messiaen desired the end of traditional notions of time, and by using unique rhythmic devices such as non-retrogradable rhythms, added values, and rhythmic ostinatos, he was able to achieve this goal for himself throughout his career. Following the *Quartet*, birdsong also became a central figure in Messiaen’s career, leading him to write such works as *Reveil des Oiseaux* and *Catalogue d’Oiseaux*, which are composed entirely from birdsong. These two musical elements together create the driving force behind *Quartet for the End of Time*, expressing endlessness through rhythmic continuation and freedom through use of birdsong, paving the way and setting the bar for Messiaen’s later works.

Works Cited

- Griffiths, Paul. *Olivier Messiaen and the Music of Time*. London: Faber, 1985.
- Johnson, Robert Sherlaw. *Messiaen*. Berkeley and Los Angeles: University of California Press, 1975.
- Kraft, David. *Birdsong in the Music of Olivier Messiaen*. London: Diss. Middlesex University, 2000.
- Messiaen, Olivier. *Quartet pour la fin du Temps*. 1941. Durand Editions Musicales. Hal Leonard, 2009.
- Pople, Anthony. *Messiaen: Quatuor pour la fin du Temps*. Cambridge: Cambridge University Press, 1998.
- Rischin, Rebecca. *For the End of Time: The Story of the Messiaen Quartet*. Ithaca, NY: Cornell University Press, 2003.