BOOK IV OF MESSIAEN'S CATALOGUE D'OISEAUX:
'LA ROUSSEROLLE EFFARVATTE'

by

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CHAPTER 1

THE LIFE AND AESTHETIC
OF OLIVIER MESSIAEN

When asked for whom he wrote, Messiaen replied:

Only for myself. I am as indifferent to applause as to boos. But if someone cries in the hall, I too am moved to tears. One thing alone is important to me; to rejoin the eternal durations and the resonances of the above and beyond, to apprehend that inaudible which is above actual music. Naturally I shall never achieve this.¹

Olivier Messiaen was born on December 10, 1908. His father, Pierre Messiaen, was an English scholar and translator best known for his excellent translation of the complete works of Shakespeare and the boy, at eight, read aloud all of Shakespeare's works. His mother, the poetess Cécile Sauvage, wrote a book of poems dedicated to the child she was carrying. These verses, called L'Âme en bourgeon ("The Soul in Bud"), are claimed, by Messiaen, to have had an influence on his character and his whole destiny. Surely, the child of such poets was destined to be no ordinary talent.

From the age of five to ten, his home was in Grenoble near the mountains of Dauphiny. Messiaen called

¹ Bernard Gavoty, "Who are you, Olivier Messiaen?", Tempo, 58, Summer 1961, p. 35.
himself "a Frenchman of the mountains, like Berlioz." He has often returned to these mountains which have remained for him a primary source of inspiration. At Grenoble, he taught himself the piano and played and sang operas by Gluck, Mozart and Berlioz. At the age of nine he wrote his first composition, *The Lady of Shalott*, for piano, based on a poem by Tennyson.

After the war, the family moved to Nantes where he received his first formal training in piano and harmony. His teacher, Jehan de Gibon, gave the ten-year-old pupil the score of Debussy's *Pelléas et Mélisande* as a gift. "This present had such an influence on me that even now, nearly forty years later, I can analyze the whole score from memory for my pupils."2

In 1919, at the age of eleven, Messiaen entered the Paris Conservatory where he studied until 1930. His career there was distinguished with first prizes in harmony, counterpoint and fugue (1926), piano accompaniment (1928), organ and improvisation (1929) and composition (1930). He studied organ with Marcel Dupré, music history with Maurice Emmanuel and composition with Paul Dukas. He also studied Indian rhythmic processes, Greek rhythm, plainchant and folk music.

Since 1931 Messiaen has been organist at the Church of the Trinity in Paris. In 1936 he became a professor at

both l'École Normale (teaching ensemble work and sight-reading at the piano) and at the Schola Cantorum in Paris (organ and improvisation). Also in 1936, Messiaen founded the group 'La Jeune France' with fellow composers Andre Jolivet, Daniel-Lesur and Yves Baudrier. They presented a concert of their works in Paris and according to their manifesto "propose the dissemination of works that are youthful, free, as far removed from revolutionary formulae as from academic formulae...their only unqualified agreement is in the common desire to be satisfied with nothing less than sincerity, breadth of feeling, and artistic good faith." These words suggest a dislike not only for the music of the Second Viennese School but for the works of 'Les Six' as well. They sought to restore to music a more human and spiritual quality, combined with a seriousness of intention so sadly lacking in much French music of that era.

When war broke out, Messiaen joined the army and served as a hospital attendant until 1940, when he was imprisoned by the Germans. He spent two years in Stalag VIII at Gorlitz in Silesia during which time he composed the Quatour pour la Fin du Temps for clarinet, violin, cello and piano. This work was performed in the camp in January of 1941 for 5,000 fellow prisoners. After his release in 1942 he was appointed to the Paris Conservatory.

where he first taught harmony (from 1942), then musical analysis (from 1947) and composition (since 1966).

Messiaen is a renowned and influential teacher. Among his more famous students are Pierre Boulez, Karlheinz Stockhausen, Iannis Xenakis, Gilbert Amy, Alexander Goehr, Luigi Nono and Yvonne Loriod.

His open mind is an essential part of his character, and in our narrowly specialist age we should derive some comfort from the image of the French composer conversing in Latin with a Japanese ornithologist. This innate receptivity is one reason for his outstanding success as a teacher and, as he does not make slaves of his pupils, neither does he allow himself to be the slave of any of his techniques.4

Messiaen's association, since the early 1940's with the pianist Yvonne Loriod has resulted in the composition of his major works for piano: Visions de l'Amen, Vingt Regards sur l'Enfant-Jésus and the Catalogue d'Oiseaux. The piano, previously neglected by Messiaen, also features as a prominent instrument in many of his orchestral works after this time. Loriod is the foremost interpreter of his piano music and has exerted a profound influence on Messiaen's creative life. They were married in 1962, his first wife having died in 1959. Loriod has collaborated closely in the piano works, having done the fingerings for almost all of Messiaen's works for piano. Her pianistic ability is an important aspect in the effectiveness of Messiaen's piano writing.

4. Ibid., p. 78.
Messiaen, in an historical context, owes much to Debussy. Debussy is the last French composer of undisputed greatness and it is inconceivable that any subsequent French composer of significance could turn a blind eye to his achievement. As with Debussy, form is always as varied as the material. Messiaen's harmony, especially in the early works, stems partly from Debussy as can be seen by the use of dominant seventh or ninth chords and chords with added notes. The harmony has a coloristic rather than a functional role which has led to a rethinking of the relationships between pitch, rhythm and timbre.

Messiaen's analytical discoveries and creative acts in the fields of form, rhythm and timbre qualify him for a place amongst music's pioneers. But there is another and more fundamental reason why Messiaen should be considered the most important French composer since Debussy. One has only to look at the quartets and symphonies of Milhaud, the instrumental music of Poulenc and the pretty bubbles of Jean Francaix to discover what the reason is. Whether a work of Messiaen succeeds or fails, it is evident from the very start that the composer feels, in the depths of his heart and soul, the burning urgency of what he has to say. For that one can forgive much.5

Messiaen's music moves around three poles: the 'theological truths' of the Catholic faith; the theme of human love as symbolized by Tristan and Isolde; nature and birdsong especially in the works written from 1953 to 1960. It has sometimes been suggested that the musical influences professed by Messiaen are things that have

caught his fancy and which he has appropriated at random. This is a great misunderstanding of Messiaen's entire aesthetic and spiritual world.

Messiaen has often referred to the importance which the Catholic faith has for him:

The first idea that I wished to express, the most important because it is placed above all else, is the existence of the truths of the Catholic faith. I have the good fortune to be a Catholic; I was born a believer and it so happens that the sacred texts have struck me even from my earliest childhood. A certain number of my works are destined therefore to highlight the theological truths of the Catholic faith. This is the most important aspect of my work...perhaps the only one I shall not be ashamed of in the hour of my death.6

Messiaen speaks of human love and the love of nature not as being opposed to his faith but as being an extension of it. Concerning Tristan and Isolde, Messiaen states: "A great love is a reflection of the one true love, the divine love." He states that he loves nature not only for its own sake, but because he sees in it, as God's creation, a manifestation of the divine. The three main aspects of his work— the Catholic faith, the Tristan myth and nature—are "united in one and the same idea: divine love!" Messiaen's entire work is concerned either with the revelation of God through Christianity, the action of God in the form of human love or the action of God in nature.7


7. Ibid., p. 41.
Over and above any changes in Messiaen's musical language is "the constancy of his fundamental aim—the exposition of his mystical vision, using an imagery derived not only from Christian sources, but also from the whole of nature: the height of mountains, the stars, the colors of the rainbow, human love, the songs of birds."

CHAPTER 2

MESSIAEN'S USE OF BIRDSONG
IN THE CATALOGUE D'OISEAUX

Messiaen has frequently discussed his profound communion with nature and his mystical attachment to the sound-world of the birds:

It is in a spirit of no confidence in myself, or I mean in the human race, that I have taken birdsongs as models. If you want symbols, let us go on to say that the bird is the symbol of freedom. We walk, he flies. We make war, he sings. Among birds most fights are settled by tournaments of song. Finally, despite my deep admiration for the folklore of the world, I doubt that one can find in any human music, however inspired, melodies and rhythms that have the sovereign freedom of birdsong.9

Birdsong is an instinctive passion. Birdsong is also my refuge. In dark hours, when my uselessness is brutally revealed to me and all the musical languages of the world seem to be merely an effort of patient research, without there being anything behind the notes to justify so much work— I go into the forest, into fields, into mountains, by the sea, among birds.10

The above quotes suggest that disillusionment has partly been the reason for Messiaen's turning to nature for inspiration. There are few people in the world, composers or otherwise, who have devoted as much time to the study

10. Gavoty, "Who are you, Olivier Messiaen?", p. 35.
of birds and their ways of living. This scientific and aesthetic interest in ornithology dates from Messiaen's youth. He has covered a number of areas throughout Europe, taking down the songs by ear since he does not use a tape recorder. To Messiaen, the world of nature is a more perfect reality than the artificial civilization which man has created. The use of birdsong as the basis of composition is indeed a revolutionary concept in the history of Western music.

Messiaen's 'birdsong period' extends from 1953 to 1960. Even though he has used birdsong in works prior to 1953 and after 1960, it is during this period that birdsong predominates as the main musical material. The four major birdsong works are *Reveil des Oiseaux* (1953), *Oiseaux exotiques* (1956), *Catalogue d'Oiseaux* (1956-58) and *Chronochromie* (1960). In these works, Messiaen has treated birdsong in two basically different ways. In such works as *Oiseaux exotiques* and *Chronochromie* he treats birdsong as a flexible, almost abstract material and even brings together the songs of birds of different countries (something which would not occur in a natural setting). In the *Catalogue d'Oiseaux*, however, Messiaen creates a portrait of a particular bird in each of the thirteen pieces. These thirteen birds are heard in their natural settings and habitats so that the songs of the other birds in the region are also to be found. In all, the songs of seventy-seven
birds are heard in the *Catalogue*. Messiaen's vision does not stop there. He has further given the impression of a natural habitat by evoking the sounds and colors of nature: sunrise, sunset, the sounds of the sea, etc. All of these varied elements can take on different characteristics and realities due to their complex interrelationships. For instance, the progression of time throughout the day and night is an important factor in his material. Messiaen has pointed out how the various songs of a single bird can change and how, for instance, a bird may go into an ecstasy of improvisation at the height of a sunset.

Each song is associated for Messiaen with a particular place and time and consequently with a particular dramatic emotion. He recollects them in tranquillity, molds them into a musical form, always tending to organize and compress, and allows the sequence of events and birdsongs to guide the form of the composition. The material may or may not be musically related, but dramatically it represents the true sequence of the composer's emotions.11

The *Catalogue d'Oiseaux* is considered the most important work of the birdsong period and possibly Messiaen's greatest piano work. Along with a fully developed use of birdsong is to be found Messiaen's sophisticated rhythmic and harmonic techniques. The thirteen pieces of the *Catalogue* are symmetrically arranged into seven books. There are three pieces in each of the first and last books, one longer piece in the second and sixth, two in each of

the third and fifth, and the longest ('La Rousserolle Effarvatte') standing alone as the central piece in the fourth book. Each piece is preceded by a short preface describing the habitat of the principal bird and those that are associated with it. The settings range from the mountains of Dauphiny to the south coast of France and the habitats include moors, swamps, vineyards, as well as the mountains and the sea.

Messiaen has transcribed the songs of birds so that they may be played on conventional instruments. This modification of the songs was necessary because birds often sing too fast to be duplicated by a performer, their range is well above that of man-made instruments and they often involve micro-tones which cannot be performed on instruments tuned to the tempered scale. Therefore Messiaen has slowed down tempos, lowered tessituras by as much as four octaves, and widened the intervals while maintaining the same pitch relations so that a quarter-tone becomes a half-tone, a half-tone a whole-tone etc.

One of the most problematical aspects of Messiaen's use of birdsong is the accuracy of his transcriptions. Some commentators, as well as Messiaen himself, have tended to exaggerate the accuracy with which the birdsongs are transcribed in his music. For instance, in his prefatory note to *Reveil des Oiseaux*, Messiaen states that "there is nothing but birdsong in this work. All were heard in the
forest and all are perfectly authentic." Trevor Hold, in a critical study of Messiaen's use of birdsong ("Messiaen's Birds," *Music and Letters*, April 1971) notes that birdsong presents tremendous obstacles to making accurate transcription into staff notation. He states that birds have a quicker auditory reaction than humans and they tend to sing faster. This, coupled with their high tessitura, means that we do not necessarily hear what a bird actually sings. Consequently anyone who tries to note down the songs without recourse to the means of slowing it down is not likely to notate the authentic sound. In addition, bird-notes seldom remain on the same pitch level from one instant to another because the notes almost invariably slur either upward or downward. Furthermore, birdsong continually changes timbre, does not conform to either Western or Eastern scales and is rarely metronomically precise. Consequently, one becomes very skeptical of the frequent description of Messiaen's going into the field and taking down the songs by ear and using them 'authentically' in his music. Trevor Hold states:

For despite his verbal praise of the liberating qualities of birdsong, Messiaen does not take full advantage of its implications. In none of his birdsong pieces is there the spontaneity of the singing bird. His use of common, strict meters, strictness of tempo and precision of ensemble have the effect of destroying rather than evoking this spontaneity. He has succeeded in caging his birds rather than letting them sing freely. However, his birdsongs, as one would expect, are
'imaginative transmutation' rather than authentic transcription and as such contain many beautiful and imaginative moments.12

Accuracy is only relative since it is impossible and senseless to imitate nature slavishly. One has to bear in mind that Messiaen has achieved a more scientific accuracy in his rendering of birdsong than any composer has done before him. It is possible for the musician and listener to relate many of Messiaen's birds to their natural counterparts and to appreciate the beauty of both.

Since birdsongs vary a great deal from one species to another, it is necessary to categorize and classify the bewildering variety of birdsong to be found in the Catalogue. Nowhere is this necessity more evident than in 'La Rousserolle Effarvatte' (The Reed Warbler) which comprises book four of the Catalogue. This half-hour work is considered, by Messiaen, to be his most successful ornithological work. In it, Messiaen brings in by far the largest variety of birds in the Catalogue. These birds can be found in appendix one and the categories which these birds fall into can be found in appendix two. Messiaen's bird-songs can be divided into four main groups:

I. Calls
II. Short repetitive song-patterns with slight variations
III. Varying declamatory or melodic song-patterns
IV. Rapid, 'chattering' songs

Group I is based on the calls of birds which do not sing. These calls are not considered songs because of their limited range and musical interest. Messiaen colors these calls by the use of sharply dissonant and atonal harmony. Two examples from group I illustrate the harsh, percussive quality which Messiaen employs for these calls. Fig. 1a is the pheasant, its raucous cry and beating of the wings perfectly rendered by Messiaen. Fig. 1b is the coot which is to be played "as if one were striking stone." These two calls are very brief and quite dissonant.

Fig. 1a. Pheasant

Fig. 1b. Coot

Group II is not set as harshly as group I. The average dynamic level is soft as opposed to the violence of the previous group. Appendix three is a descriptive
chart of the birdsongs (and other sound events) in 'La Rousserolle Effarvatte.' In it, the groups of birdsong can be seen with their similar and differing characteristics. The birds of group II, for instance, can be seen as having similar qualities to one another. Fig. 2a is the reed bunting and Fig. 2b is the white wagtail. Both are very high and delicate in character. They also show great similarities in their rhythmic patterns and intervallic content. The white wagtail has the most rapid metronome marking of any sound event in the work.

Bruant des roseaux

Fig. 2a. Reed bunting

Bergeronnette grise

Fig. 2b. White wagtail

Group III forms an important set of birdsongs in the Catalogue but plays only a minor role in La Rousserolle. The blackbird, Fig. 3a, often has an implied tonal
focus in E major which can be seen here in the right-hand line. The blackbird has a lovely duet with the red-backed shrike which creates an effective contrast to the sunrise (score—pp. 11–15). Group IIIb is less melodic in character than IIIa. The nightingale, Fig. 3b, has a series of formulae which appear in an almost stereotyped sequence.
The first part consists of a series of repeated notes followed by a higher sound-complex. This is followed by rapid notes which often outline the interval of a major seventh. The third part is distant and slow as if it were the sound of another bird in the distance which gradually draws nearer. This sound is suddenly followed by two or three loud notes in the upper register.

Group IV predominates in 'La Rousserolle' because of the great length and variety of the songs. The reed warbler has two 'grand solos' both of which are eighty measures long and together account for nine pages of score. The sedge warbler is also of great importance because of its frequency and the length of its song. The songs of both birds undergo continual variation due to constantly changing pitch patterns, rhythm, dynamics and register. The other important bird of group IV is the great reed warbler, Fig. 4a. It makes only one appearance in 'La Rousserolle' but is unforgettable because of its violent

Rousserolle Turdoidé
Modéré \( \frac{4}{4} \) = 112 (aigre, lourd)

Fig. 4a. Great reed warbler

ostinati. In its rhythm and character, it is reminiscent of Le Sacre du Printemps. The song of the skylark, also in
group IV, is notable because it is the highest of all the birds. As seen in Fig. 4b, the skylark is heard at the very top of the keyboard.

![Musical notation for Alouette des champs (jubilation)]

**Fig. 4b. Skylark**

There are nineteen different birds in 'La Rousserolle Effarvatte.' This is an incomprehensible amount of material for the unaided listener to digest, but through study and patience the listener can be caught up in a vital and colorful world of sound. "Messiaen, humble before the vast diversity of Nature, has embraced this diversity in all its rhythms and colors to express to its fullness his Faith in its creator. Whether or not we share his Faith, we can welcome the richness and sincerity of its expression."13

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According to Messiaen, rhythmic music is "music which eschews repetition, bar lines, and equal divisions, which ultimately takes its inspiration from the movements of nature, movements which are free and unequal in length." Messiaen's definition is the very opposite of what is normally understood by the word 'rhythm.'

Part of the complexity of birdsong patterns undoubtedly stems from their highly irregular rhythms. "In the area of rhythm, where Messiaen has made particularly important inroads in the twentieth century, one finds not only the tendency towards arhythmicality that characterizes much of the music of Debussy but an almost complete lack of the periodicity that has dominated Western music." Thus, although all of the pieces in the Catalogue d'Oiseaux are divided into 'measures' the meter changes almost constantly from one measure to the next even though this is not indicated by a meter signature.


The lack of periodicity stems from Messiaen's study of Hindu rhythms (the deci-talas of Sharngadeva) from which he has derived the principle of 'added values.' An added value is a short value which can be added to any rhythm whatsoever, whether by a note, by a rest, or by the dot (Fig. 5).

\[ \text{Fig. 5. Three Examples of Added Values} \]

Highly intricate and complex rhythmic patterns are created by the use of added values throughout 'La Rousserolle.' This is particularly evident in the two grand solos of the reed warbler which are examples of the continuous variation process as applied to rhythm. Not only is there little rhythmic similarity between the two solos, there is only slight rhythmic periodicity within the solos. Adding to the rhythmic freedom and complexity is the use of added 32nd-note values. The use of added values occurs in approximately 25 percent of the measures in the second solo whereas they occurred in only 14 percent in the first solo.

Messiaen's rhythmic language is an essential element in his expression of the pulse of nature. It functions as the source of energy for the immense vitality and
life to be found in the *Catalogue d'Oiseaux*. Messiaen has long been fascinated with the sounds and beauty of nature. This work attests to his profound communion with both nature and man.
CHAPTER 4

ARCH FORM IN 'LA ROUSSEROLLE EFFARVATTE'

This work "is written for the Rousserolle Effarvatte, and, in general, to the glory of the birds of the reeds, ponds, and marshes- and of the birds of the woods and fields who are their neighbors."16 The setting is central France and the swamps of the Sologne district, south of Orléans. The work takes its character from this complex ecosystem and gives an artistic vision of its beauty and abundant vitality.

As befitting the reality of nature itself, the work is highly complex. Four appendices have been included which lend clarity to the overall organization. There are nineteen different birds represented in 'La Rousserolle' as well as much material not based on birdsong. These materials are shown in appendix one. This listing is organized so that similar categories of birdsong and non-birdsong are grouped together. These categories are explained in appendix two. Appendix three is a further categorization of the sound events in the work with reference to those parameters


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which contribute to both the unity and diversity to be found. Appendix four is a chart of the form itself.

The form of 'La Rousserolle' is dominated by the movement of the hours of the day. "In a technique that might be compared to time-lapse photography, more than twenty-four hours are covered, from midnight to 3:00 a.m. the following morning, thus allowing an entire cycle to take place." The hours of the day are notated in the score by Messiaen and form nine blocks of time as shown in appendix four. With the return of midnight, in episode six, a twenty-four hour segment has been reached and with it, a return of musical material. There is thus an overall arch-like form in which the last quarter more or less repeats the material of the first quarter in reverse order. The arch-like symmetry is especially evident when the middle of episode six is compared to the end of episode one. At that point the material begins to reappear so that half of episode six, seven and the coda equals episode one and the introduction.

The 'grand solo' of the reed warbler in episode seven is the most obvious point of return. The grand solo in episode one is almost exactly eighty measures long as is the solo near the end of the work. The 'music of the ponds' is also a particularly strong point of return because of its singular xylophone-like timbre and register.

17. Brown, Program Notes, Vox Inc., p. 3.
which the listener immediately associates with the beginning of the work. This material is approximately the same length at the end as at the beginning, though it is fragmented through the interpolation of measure rests.

The arch form of 'La Rousserolle' is further intensified by the movement of the sun and the motive representing night. These highly varied themes, more than any others, help to organize and unify the work since they represent the movement of the day. The 'night' theme serves as the most important non-birdsong element in episodes one and six. After the grand solo in episode one, this theme is heard four times within the space of only thirty-three measures. At the beginning of episode six, 'night' makes its imposing reappearance. Here it interrupts the last statement of the setting sun and plunges us back into total darkness.

The theme for sunrise and sunset similarly serves as the most important non-birdsong material in episodes two and five. In episode two, the music of the sunrise makes six appearances while the music of the sunset completely dominates episode five. It puts an end to the raucous activity of the evening birds and prepares the close of day and the eventual return of night.

The themes for night and sunrise/sunset can be seen as framing the large central birdsong episode (three). They serve as distinctive points of return to clarify the activity of the birds in episodes three and four. Episode
three is dominated by the songs of the reed warbler and sedge warbler. These birds account for eleven of the seventeen events to be heard in this episode. Episode three is the center of the time curve upon which the work is based and accounts for approximately one-third of the measures in the piece. The introduction through codetta material spans 239 measures, episode three is 265 measures long while episode four through the coda covers 250 measures. The overall structure can be seen as a large three-part form when the length of these sections are taken into account.

Episode four is a brief birdsong episode dominated by the song of the skylark. Though there are distinctive non-birdsong elements in this episode, its essential character is derived from the skylark's material. Thus, after 330 measures of birdsong domination in episodes three and four, the return of the sunrise/sunset material in measure 570 is a major structural event. It indicates the overriding importance of the movement of the day as the formal determinant in the work.
CHAPTER 5

TIMBRE AND REGISTER OF NON-BIRDSONG MATERIAL AS AN AID TO FORMAL COMPREHENSION IN 'LA ROUSSEROLLE'

The night and sunrise/sunset themes represent the grandiose and unalterable aspects of nature and are given vivid descriptive material by Messiaen. It is because their material is so unique in the score that these themes are able to exert such a strong unifying influence. Both themes are among the slowest in the score. Only the grasshopper and flower themes have slower metronomic markings. (The use of a distinctive metronomic marking for every sound event is an organizational device carried out very consistently throughout the score). But more importantly, Messiaen 'orchestrates' these themes with remarkable sensitivity to the coloristic possibilities of the piano so that they can not be mistaken for any other sound event.

In the case of the 'night', sunrise/sunset and 'music of the ponds' themes, unusual timbral effects have a structural significance in aiding aural memory and facilitating the sorting of vast amounts of thematic material. This is particularly important in a work which incorporates the songs of nineteen different birds many of which are quite similar in pattern and texture. Indeed, the events
that are most important in creating a meaningful whole are those which are not birdsong in character. These elements have distinctive characteristics created by the use of timbre and register. Included in this group are the non-birdsong materials seen in appendices two and three. Also to be included here are two important birds, the bittern and grasshopper warbler, whose 'unmusical' calls are immediately recognizable and thus function as unifying material.

The unifying effects of unusual timbre and register can be seen most clearly in the 'music of the ponds.' As previously mentioned, its two appearances are at the beginning and end of the work. It functions as an immediately recognizable sound entity because of its unforgettable timbral characteristics. In the score, Messiaen instructs that the right hand should be accentuated and that the effect is like a xylophone. This is achieved by placing the right hand near the top of the piano and reiterating isolated major ninths (Fig. 6). The irregularly placed mf accents lend a further percussive quality to that which the piano normally has in this register. The effect of the

Fig. 6. 'Music of the Ponds'
the left-hand material. Here, the lowest and middle range is utilized in a two to four-part texture. The intervals of the major and minor seventh and minor ninth predominate and conflict with the major ninths in the right. This material has been described in appendix two as a 'quasi 12-note mode.' The selection of notes in the mode is free however, being determined neither by serial considerations nor by a desire to have all twelve notes sound before any are repeated.

The 'solemnity of the night' material is certainly an impressive theme as befitting its subject. Within the space of only three measures (Fig. 7), Messiaen creates a motive which is capable of lending organizational unity to a 750 measure work. The range of 'night' is the bottom note of the piano to the top note (in its first appearance

Fig. 7. 'Solemnity of the Night'
only). The overall effect though is one of low register due to the use of very soft dynamic levels for the upper register. Messiaen instructs that the 128th notes be struck like a cymbal clash. The lowest note is to resonate like a tam-tam while the upper register resonates like metallic vibrations. The upper left hand, in meas. 2-3 of Fig. 7, is played ff (like trombones) while the lower note is played softly. This theme is conceived with the stark timbres of low brass and metallic percussion in mind.

The timbral effects of 'night' are achieved by the device of 'added resonance.'

The device of 'added resonance' is probably the one which has the most far-reaching implications both for Messiaen and younger composers. It can take the form either of a note or chord played quietly above a louder principal note or chord, or of a chord played loudly in the bass register of the piano against other material...In Catalogue d'Oiseaux there are many examples of birdsong colored with either upper or lower resonances, or both. The sound of the resonance notes should be absorbed as much as possible into the sound of the principal notes, so that the device becomes essentially a modification of timbre rather than a straight-forward harmonic device.18

The notes above and below the 'trombone' line in the 'night' motive are examples of simultaneous upper and lower resonance. These added, quiet resonances are not heard as individual sounds but are absorbed into the fortissimo trombone line.

Traditionally, harmony and timbre are quite separate concepts, but the use of added resonance brings the two together in a way which enables

harmony to function as timbre. This concept pervades much of Messiaen's harmonic thought, particularly in his later music. His chords become sound entities complete in themselves, and the listener should not be aware of the individual notes which constitute a chord.19

The music of the rising and setting sun derives its distinctiveness from Messiaen's preoccupation with the colors of nature and its expression in sound. "I am extremely sensitive to colors and sound-color relationships. I hear and see very precisely certain of my modes in violet, lilac and violaceous purple pigmented with red."20

Messiaen has devised a harmonic language which is able to convey the colors which are so much a part of his idiom. This melodic and harmonic vocabulary is to be found in his modes of limited transposition. They are used in 'La Rousserolle' primarily for the presentation of the sunrise and sunset since their character depends upon color. The seven modes of limited transposition are found in appendix five.

The modes of limited transposition are artificial modes which have no relation to the modes of folk-music or plainchant. They are based on the chromatic scale and divide the octave into two, three or four equal intervals. Each intervallic segment is based on the same organization of tones and semitones. The first mode is the whole-tone scale which is an exceptional case since it divides the

19. Ibid., p. 18.
20. Gavoty, "Who are you?", p. 35.
octave into six equal divisions. Because of its extensive use by Debussy and others, it is seldom used by Messiaen unless it is well concealed in the texture. Mode 2 is the one used most often throughout his works. It has also been used by Scriabin, Ravel, Bartok and others. In the sunrise/sunset material, modes 2 and 3 are the most prominent although modes 4 and 6 are also to be found.

Messiaen has often spoken of the 'charm of impossibilities':

....This charm, at once voluptuous and contemplative, resides particularly in certain mathematical impossibilities of the modal and rhythmic domains. Modes which cannot be transposed beyond a certain number of transpositions, because one always falls again into the same notes; rhythms which cannot be used in retrograde, because in such a case one finds the same order of values again- these are two striking impossibilities.21

The association of color and sound is an important element in Messiaen's music. Mode 2 is normally associated with different shades of violet, blue and purple while mode 3 suggests orange, red, green and gold.

It is not only harmonies and modes which give rise to color associations, however, but the totality of the music with its melodies, chords, rhythms and complexes of sounds and complexes of duration. As a consequence of these associations, one can speak of 'color' chords, and a melody which has harmonies associated with it could be said to be 'colored' by these harmonies, rather than 'harmonized' in the classical sense.22


The sunrise/sunset material is presented in lush chord-complexes which differ from any other sound event in the work. The texture varies from five to seven-part chords spanning the middle and upper registers. The first entrance of the sunrise (Fig. 8a) incorporates modes two and three. The first four chords (pink and mauve) are primarily in the first transposition of mode two. The third

Fig. 8a. Sunrise: First Appearance

transposition is employed in the right hand of the second chord. The next three chords (orange) utilize mode 3 in first transposition. The second appearance of the sunrise (Fig. 8b), is a revealing example of Messiaen's use of the modes. The modes are integrated here instead of being isolated as in the first statement. Whereas the orange was isolated from the pink and mauve in Fig. 8a, here the loud chords in mode 2 (pink and mauve) are followed immediately by a higher pp chord in mode 3 (orange) all in first transposition.
In the third appearance of the sunrise (Fig. 8c) the first three chords (mauve) are scored in the middle register and are mezzo-forte. These chords are derived from mode 4 in fifth transposition. The next three chords (gold) are contrasted again by dynamics (pp) and register (high). These chords are mode 6 in first transposition.

The sunset is presented with the same color palette as the sunrise. Its primary colors are red and violet with use again of orange and gold. The red and violet colors of the sunset equal the pink and mauve of the sunrise in that.
mode 2 is used for both. Orange is again derived from mode 3 and gold is again mode 6 (both in first transposition). When mauve was separated from pink in the sunrise material, it was based on the fifth transposition of mode 4. Similarly, when the violet of the sunset is isolated from red, it is to be found in mode 4, transposition five.

In order to give further unity to the sunrise/sunset material, the sunset has the same five and seven-part texture as the sunrise. It has a similar use of register and dynamic contrast as well as the same slow metronomic marking. However, the chords are presented in descending patterns to depict the sunset as opposed to the ascending chords used for the sunrise. The beautiful timbres created by the use of the modes of limited transposition is a quality unique to the sunrise/sunset material. It is immediately recognizable on each occurrence which accounts for its importance as a structural unit in 'La Rousserolle.'

Motives from Messiaen's great Turangalila-Symphonie can be found in the Catalogue d'Oiseaux:

Here the context is the operation of divine love in nature, or divine action on the cosmos through the evolution of life. In 'La Rousserolle Effarvatte,' some of the motives which reflect the undulating shape of the 'flower theme' from Turangalila are associated with actual flowers in the score: yellow irises, purple foxglove and water-lilies.23

The flower themes have the slowest metronomic indication in the score. This group is presented in a soft

dynamic range throughout (with occasional use of mezzo-forte). Though the upper register is generally employed, the texture varies to a great extent and ranges from three to eight-part sonorities. The greatest importance of flowers to the overall structure is to be found in the long central episode and the beginning of the following episode. There are three appearances of flowers in episode three and an additional one which begins episode four. This group is the only non-bird material to be heard for 365 measures. Its importance as contrasting material in these sections is readily apparent.

The first flower to appear in episode three is the purple foxglove (Fig. 9a). Its lush and sensuously chromatic sonorities form an immediate contrast to the manic, percussive exhortations of the reed warbler and sedge warbler. Further contrast is provided by its slow tempo and soft dynamic level which creates an immediate relaxation to preceding material.
The water lilies (Fig. 9b) are immediately pre-ceded by the black-headed gull with its indication 'cruel' and the coot (Fig. 1b) with its instruction 'as if one were striking stone.' These are indeed far removed from the
delicate, 'undulating' world of flowers. Messiaen especially exploits the contrasting nature of flowers by begin-nning episode four with another flower (the yellow iris). The use of the flower themes as immediately recognizable and unique material throughout the complex middle section is of great importance in establishing unity. The points of repose created by these themes can be immediately per-ceived and remembered by the listener and thus serve as an aid to formal comprehension.

The two most important appearances of swamp noises occur in episodes one and six. This material is heard in low, middle and high registers. However, the most dis-tinctive and predominant aspect of this material is the use of the low register (Fig. 10). Because so much of the
birdsong material in 'La Rousserolle' appears in the upper register, a motive centering in the low register serves as contrasting and unifying material because of its uniqueness. In episode six, this material serves as a strong point of return to material first heard in episode one.

The portion of swamp noises which centers in the low register is marked 'mysterious and indistinct' and ppp in the score (Fig. 10). It moves in rapid 32nds beginning deep in the bass and ascending to the middle register. This eerie timbre is further derived by the use of a quasi twelve-note mode with one hand on the white keys while the other is on the black. Throughout the score, Messiaen's concern for timbre and sonority is evidenced by his constant pedal indications. Here the pedal is to be held down throughout, thus creating the desired blurred effect.

![Fig. 10. Swamp noises](image)

The use of frogs is a very distinctive and often used sound event in 'La Rousserolle.' The use of frogs can be seen in the introduction and four episodes. Frogs are heard in chorus, smaller groups and individually. The most important use, though, is undoubtedly the 'chorus of frogs'
which appears near the beginning and end of the work (Fig. 11). It is the only use of the frogs in chorus and it functions in establishing a unique timbre at the beginning and end of the work for structural unity. The chorus is indeed a distinctive sound event since it stays at the bottom end of the keyboard longer than any other event. Unlike the swamp noises (Fig. 10), the chorus does not ascend from the depths. Its form of contrast is the chilling crescendo from pp to ff and the diminuendo back to pp. Like the swamp noises, the pedal is to be held down throughout.

\[ \text{(chor}\text{eur des grenouilles)} \]

\[ \text{Un peu vif} \ \ \ (\#) = 128 \]

\[ \text{pp fr} \]

\[ \text{8}^\text{e} \text{ bassa} \text{ cresc.} \]

\[ \text{pp} \]

\[ \text{m.g. dessus} \text{ b} \]

\[ \text{8}^\text{e} \text{ bassa} \]

Fig. 11. Chorus of frogs

The call of the bittern is as distinctive and pervasive as any sound event in the work. Its call is far removed from birdsong due to its low register which even uses the lowest four notes of the piano as a harsh chord-cluster. The greatest importance of the bittern (as with the chorus of frogs and music of the ponds) is its unifying function which links the beginning to the end of the work. This motive has been heard so frequently and contains such a strong 'cadential' figure that Messiaen chooses to end
the work with it. The bittern has a two-part call (Fig. 12). Part one is fast and pp with a two-line texture. Part two is extremely slow and loud with use of violent dissonance in a three and five-part texture. Part one describes the inhalation of air while part two depicts the bellowing noise which follows.

Fig. 12. Bittern

The long trill of the grasshopper warbler is the most unique sonority in the score. This material consists of only a fast, ppp trill at the top of the piano with the hands a half-step apart (Fig. 13). Its sound is compared, by Messiaen, to that of an insect and it is to be of

Fig. 13. Grasshopper warbler
interminable length. The grasshopper warbler is the only event of midday. It symbolizes the lassitude which grips nature during the heat of the sun at noon (the one point in the day when birds do not sing according to Messiaen). The silence of noon becomes complete when the grasshopper warbler also falls silent and is followed in the score by a long rest.

The use of long rests in order to clarify structural units is an important aspect of form in 'La Rousse-rolle.' In the case of the silence of midday, the rest becomes the structural unit along with the grasshopper warbler. The rest is so long that we next find ourselves at five in the afternoon with nature restored to full activity. Throughout the work, one can note the 'grand pauses' which particularly elucidate the movement of the hours of the day. After the final notes of the work is another long rest. This rest indicates that the work can never really be completed because it is a part of the endless cycle of nature.
6. CONCLUSION

'La Rousserolle Effarvatte' offers a richness of imagination that is both unique and perplexing.

Everything of Messiaen creates a mode of feeling and imagination that is both original and consistent, however much one may subjectively dislike it. Those of us who feel that it is in some measure the achievement of genius can point to that organic variety of imagination and that originality of execution which are the first prerequisites of genius.24

'La Rousserolle' includes such an unending variety of sound events that it is impossible for a listener unaided by the score to fully appreciate it. Especially in performance, it is the responsibility of the performer to enable his audience to come to grips with such difficult and unusual music. Since the music is so unorthodox, perhaps the orthodox methods of performing it should be dispensed with. For those reasons, the pianist should announce as many of the sound events as are necessary during the performance. The sound event that is being heard and the hour of the day are of great importance to an audience that would enjoy the work if given a chance. The announcing of events, if done quickly, clearly and at the proper moments, will greatly enhance the performance because of

the greater sharing of experience which will result. It is wrong to treat this work as if it were abstract music. It is program music in which Messiaen has succeeded in transforming the rhythms, sounds and colors of nature into a deeply personal and humanistic musical language.
APPENDIX 1

LIST AND TRANSLATION OF SOUND EVENTS
IN 'LA ROUSSEROLLE EFFARVATTE'

<table>
<thead>
<tr>
<th>Letter</th>
<th>French Expression</th>
<th>English Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Rousserolle effarvatte</td>
<td>Reed warbler</td>
</tr>
<tr>
<td>B</td>
<td>Rousserolle turdoide</td>
<td>Great Reed warbler</td>
</tr>
<tr>
<td>C</td>
<td>Phragmite des joncs</td>
<td>Sedge warbler</td>
</tr>
<tr>
<td>d</td>
<td>Bruits dans le marais</td>
<td>Swamp noises</td>
</tr>
<tr>
<td>E</td>
<td>Pie-grièche echorcheur</td>
<td>Red-backed shrike</td>
</tr>
<tr>
<td>F</td>
<td>Alouette des champs</td>
<td>Skylark</td>
</tr>
<tr>
<td>G</td>
<td>Rouge-queue à front blanc</td>
<td>Redstart</td>
</tr>
<tr>
<td>H</td>
<td>Rossignol</td>
<td>Nightingale</td>
</tr>
<tr>
<td>I</td>
<td>Merle noir</td>
<td>Blackbird</td>
</tr>
<tr>
<td>J</td>
<td>Râle d'eau</td>
<td>Water rail</td>
</tr>
<tr>
<td>K</td>
<td>Faisan</td>
<td>Pheasant</td>
</tr>
<tr>
<td>L</td>
<td>Mouette rieuse</td>
<td>Black-headed gull</td>
</tr>
<tr>
<td>M</td>
<td>Pic vert</td>
<td>Green woodpecker</td>
</tr>
<tr>
<td>N</td>
<td>Étourneau-sansonnet</td>
<td>Starling</td>
</tr>
<tr>
<td>O</td>
<td>Foulque</td>
<td>Coot</td>
</tr>
<tr>
<td>P</td>
<td>Héron butor</td>
<td>Bittern</td>
</tr>
<tr>
<td>Q</td>
<td>Bruant des roseaux</td>
<td>Reed bunting</td>
</tr>
<tr>
<td>R</td>
<td>Mésange charbonnière</td>
<td>Great tit</td>
</tr>
<tr>
<td>S</td>
<td>Bergeronnette grise</td>
<td>White wagtail</td>
</tr>
<tr>
<td>t</td>
<td>Grenouilles</td>
<td>Frogs</td>
</tr>
<tr>
<td>U</td>
<td>Locustelle tachetée</td>
<td>Grasshopper warbler</td>
</tr>
<tr>
<td>v</td>
<td>Solennité de la nuit</td>
<td>Solemnity of the night</td>
</tr>
<tr>
<td>w</td>
<td>Musique des étangs</td>
<td>Music of the ponds</td>
</tr>
<tr>
<td>x</td>
<td>Lever de soleil; Coucher de soleil</td>
<td>Sunrise; Sunset</td>
</tr>
<tr>
<td>y</td>
<td>Iris jaunes</td>
<td>Yellow iris</td>
</tr>
<tr>
<td>y'</td>
<td>Digitale pourprée</td>
<td>Purple foxglove</td>
</tr>
<tr>
<td>y''</td>
<td>Nénuphars</td>
<td>Water lilies</td>
</tr>
</tbody>
</table>

N.B. - Birds in upper case letters; non-birds in lower case
APPENDIX 2

CLASSIFICATION OF BIRDS AND NON-BIRDS IN 'LA ROUSSEROLLE EFFARVATTE'

Group Ia characteristics:

Short calls, homophonic and dissonant and usually atonal.

J Water rail
K Pheasant
L Black-headed gull
M Green woodpecker
O Coot
P Bittern

Group Ib characteristics:

Longer and more varied calls, homophonic, dissonant and atonal.

N Starling

Group II characteristics:

Short, repetitive song-patterns

Q Reed bunting
R Great tit
S White wagtail

Group IIIa characteristics:

Varied song patterns, melodic in style, often with tonal implications. Slower tempo than group IV.

I Blackbird

Group IIb characteristics:

Varied song patterns, declamatory in style.

H Nightingale

Group IVa characteristics:

Long strophes 'chattering' in style, continuous or broken up into shorter phrases. Rapid tempo. One or more notes tend to dominate as a modal 'dominant.'

F Skylark
G Redstart

Group IVb characteristics:

Same as IVa except that there is no pronounced dominant.

A Reed warbler
B Great Reed warbler
C Sedge warbler
E Red-backed shrike

Not classified (song consists only of a trill):

U Grasshopper warbler

Non-birdsong material:26

d Swamp noises - related in style to group IV
t Frogs - related in style to group Ia
v Solemnity of the night - a unifying motive (unclassifiable)
w Music of the ponds - quasi 12-note mode
x Sunrise and Sunset - modes of limited transposition
y Flowers - Turangalila motives

26. Ibid., p. 149.
## APPENDIX 3

**DESCRIPTIVE CHART OF SOUND EVENTS IN 'LA ROUSSEROLLE EFFARVATTE'**

<table>
<thead>
<tr>
<th>Event</th>
<th>Group</th>
<th>General</th>
<th>Basic</th>
<th>Basic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Register</td>
<td>Texture</td>
<td>Tempo</td>
</tr>
<tr>
<td>A</td>
<td>IVb</td>
<td>high</td>
<td>H2</td>
<td>fast</td>
</tr>
<tr>
<td>B</td>
<td>IVb</td>
<td>low-middle</td>
<td>H3-5</td>
<td>moderate</td>
</tr>
<tr>
<td>C</td>
<td>IVb</td>
<td>high</td>
<td>V</td>
<td>moderate</td>
</tr>
<tr>
<td>d</td>
<td>like IV</td>
<td>low</td>
<td>H2,H6</td>
<td>fast</td>
</tr>
<tr>
<td>E</td>
<td>IVb</td>
<td>middle</td>
<td>M</td>
<td>moderate</td>
</tr>
<tr>
<td>F</td>
<td>IVa</td>
<td>very high</td>
<td>H2</td>
<td>fast</td>
</tr>
<tr>
<td>G</td>
<td>IVa</td>
<td>high</td>
<td>M</td>
<td>fast</td>
</tr>
<tr>
<td>H</td>
<td>IIIb</td>
<td>high</td>
<td>H2-H3</td>
<td>fast</td>
</tr>
<tr>
<td>I</td>
<td>IIIa</td>
<td>high</td>
<td>H2</td>
<td>fast</td>
</tr>
<tr>
<td>J</td>
<td>Ia</td>
<td>high-low</td>
<td>H3,H6</td>
<td>fast</td>
</tr>
<tr>
<td>K</td>
<td>Ia</td>
<td>middle-low</td>
<td>H2,H3</td>
<td>fast</td>
</tr>
<tr>
<td>L</td>
<td>Ia</td>
<td>high</td>
<td>H2,H4</td>
<td>moderate</td>
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<td>M</td>
<td>Ia</td>
<td>high</td>
<td>H2,H3</td>
<td>fast</td>
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<td>N</td>
<td>Ib</td>
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<td>H3</td>
<td>fast</td>
</tr>
<tr>
<td>Q</td>
<td>II</td>
<td>very high-middle</td>
<td>H3</td>
<td>fast</td>
</tr>
<tr>
<td>R</td>
<td>II</td>
<td>very high</td>
<td>H3</td>
<td>moderate</td>
</tr>
<tr>
<td>S</td>
<td>II</td>
<td>very high</td>
<td>H3,H4</td>
<td>very fast</td>
</tr>
<tr>
<td>t</td>
<td>like Ia</td>
<td>very low</td>
<td>H2</td>
<td>fast</td>
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<tr>
<td>U</td>
<td>---</td>
<td>very high</td>
<td>H2</td>
<td>slow</td>
</tr>
<tr>
<td>V</td>
<td>---</td>
<td>low</td>
<td>H4</td>
<td>slow</td>
</tr>
<tr>
<td>W</td>
<td>12-note mode</td>
<td>l.h. low</td>
<td>H4,H5</td>
<td>slow</td>
</tr>
<tr>
<td>x</td>
<td>ltd. trans.</td>
<td>r.h. very high</td>
<td>H5,H7</td>
<td>slow</td>
</tr>
<tr>
<td>y</td>
<td>Turang.</td>
<td>middle-high</td>
<td>V</td>
<td>slow</td>
</tr>
</tbody>
</table>

H- Homophonic
H2- 2-line texture
H3, H4 etc.- 3-part, 4-part texture etc.
M- Monophonic
V- Variable (too changeable to be classified)
APPENDIX 4

FORM OF 'LA ROUSSEROLLE EFFARVATTE'

Introduction- Midnight (measures 1-18)
  \frac{w-t-P}{w-t-P}

Episode I- Three in the Morning (measures 19-133)
  \frac{A (grand solo, 19-100)-v/d/t}{A (grand solo, 19-100)-v/d/t}

Episode II- Six and Eight in the Morning (measures 134-234)
  \frac{x/I&E-G-x/I&E-y'-K-Q-M-Q-N-K-R-M-S-y'}{x/I&E-G-x/I&E-y'-K-Q-M-Q-N-K-R-M-S-y'}

Codetta- Midday (measures 235-239)
  \frac{U (long trill followed by the silence of midday)}{U (long trill followed by the silence of midday)}

Episode III- Five in the Afternoon (measures 240-504)
  \frac{A-C-y''-A-C-y''-B-C-A-L-O-y''-A-C-A-C-A}{A-C-y''-A-C-y''-B-C-A-L-O-y''-A-C-A-C-A}

Episode IV- Six in the Evening (measures 505-569)
  \frac{y'-U-O-F-t-F-t-J}{y'-U-O-F-t-F-t-J}

Episode V- Nine in the Evening (measures 570-612)
  \frac{x/P-H-x}{x/P-H-x}

Episode VI- Midnight (measures 613-655)
  \frac{v/H-P-H-d-t-v}{v/H-P-H-d-t-v}

Episode VII and Coda (w-P material)- Three in the Morning (measures 656-754)
  \frac{A (grand solo, 656-736)-t-w-P}{A (grand solo, 656-736)-t-w-P}

N.B.- A diagonal line separating sound events indicates repeating material.
APPENDIX 5

MODES OF LIMITED TRANSPOSITION

Mode 1

Mode 2

Mode 3

Mode 4
LIST OF REFERENCES


Gavoty, Bernard. "Who are you, Olivier Messiaen?" Tempo, Summer 1961, pp. 33-36.


