

**Olivier Messiaen's *Catalogue d'oiseaux*:
A Performer's Perspective**

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Abstract

This study explores Messiaen's *Catalogue d'oiseaux* (1956–58), a solo piano work which consists of thirteen movements, each of which is inspired by a bird found in France, together with other birdsongs from the same habitat. The complete performance of the *Catalogue* lasts approximately for 2½ hours, though individual movements are often chosen to be performed on their own or in groups. It is one of Messiaen's most important works of the 1950s, exhibiting a mature style of birdsong writing which greatly influenced his later work. A key event in the 1950s was Messiaen's meeting (in 1952) with the ornithologist Jacques Delamain, from which he obtained a detailed knowledge of birdsong

There are four chapters in this study, while the extensive musical examples can be referred to in Volume II. Messiaen's development of birdsong writing since the 1940s will be discussed in Chapter One, 'Introduction'. This includes an explanation of his creative journey while composing the *Catalogue*, and selected pages of sketches are analysed to identify how the composer transcribed his birdsong writing to the final score. The second chapter is concerned with details of Messiaen's piano writing in the *Catalogue*, highlighting some of the technical difficulties and in particular the aspect of the fingerings used in the work. Chapter three is the main focus for this study. Five movements from the *Catalogue* are selected for a performance analysis, including an identification of the different musical and poetic structures, discussion of Messiaen's musical language and of other aspects which aim to assist in a performance of these works. The last chapter is a discussion of interpretative issues where a selection of seven recordings are compared and evaluated. The objective of this final chapter is mainly to explore how pianists interpret these programmatic works, and the different approaches that can be employed.

Since the principal aim of this study is to illuminate issues of performance, the main intention of the analysis is to reveal an understandable and discernable structure in these works and to identify important features of the composer's style of piano writing. Along with the discussion of the *Catalogue*, earlier works will be explored in order to investigate Messiaen's development of piano writing which in the *Catalogue* received a whole new dimension from his transcription of birdsongs.

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In memory of my late father

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Chapter 1

Introduction:

**The progress of Messiaen's
birdsong writing up to *Catalogue d'oiseaux***

Chapter 1. Introduction: The progress of Messiaen's birdsong writing up to *Catalogue d'oiseaux*

Birdsong appears to be an important medium in Messiaen's life, and a major component in his composition. Though it should be mentioned that Messiaen is not the first composer to use birdsong, he appears to be rather different in that he uses these transcriptions seriously as a main musical and poetic subject within his work. Moreover, he actually notated the transcriptions in a specific time and place, presenting it as if it were a precise documentary work. It is interesting to identify what elements in birdsong have attracted the composer and how he related them to his music. In Messiaen's view, it is probable that, in the artistic hierarchy, birds are the greatest musicians on our planet.¹ The following discussion will include an examination of the development of Messiaen's birdsong piano writing until *Catalogue d'oiseaux*. The transitional stage of his birdsong writing is apparent after his meeting with the ornithologist Jacques Delamain in 1952, although details which he employed in the earlier works are not totally abandoned, but from 1952 birdsong is used in an absolutely different function. His progress in developing birdsongs also comes from his travel experiences and is charted in the collection contained in his 'cahiers'. Messiaen's eminence in portraying natural elements becomes apparent in his later works; however, the idea of birdsongs can be seen clearly developing through his earlier works, which are bound to his Catholic faith and the great mythic subject of Tristan and Isolde.

His devotion to birdsong takes him to many countries in his attempts to transcribe the natural sounds accurately. His determination to transcribe a particular song even took him as far as New Caledonia for the gerygone used in *Saint François d'Assise*.² Other examples are included in *Sept Haïkai* (1962) which involves birds in Japan and '*Des canyons aux étoiles...*' (1971-74) that brought him to Bryce Canyon. Throughout his works, four pieces are entirely devoted to birdsong: the *Catalogue d'oiseaux* (1956-58) and *Petites esquisses d'oiseaux* (1985) for solo

¹ Claude Samuel, *Olivier Messiaen Music and Colour: Conversations with Claude Samuel*, trans. E. Thomas Glasow (Portland, Oregon: Amadeus Press, 1994), p.85

² Peter Hill, ed. 'Interview with Yvonne Loriod', *The Messiaen Companion* (London: Faber and Faber, 1994), p.297

piano; and two works for orchestra and piano, are *Réveil des oiseaux* (1953) and *Oiseaux exotiques* (1955-56).

In later chapters, this study will focus on *Catalogue d'oiseaux*, a solo piano work composed in the years 1956-58, and will involve an analysis of a selection from among the thirteen movements. What is interesting here is how Messiaen demonstrates several structures by using a combination of birdsong and non-birdsong elements to construct a movement. Each movement holds a unique structure that exhibits Messiaen's intention to keep the sequence in a natural aspect. In other words, he applies the archetype of natural phenomena such as sunrise and sunset as an arch shape or a symmetrical movement, or a sequence of time that allows the subjects to progress, which gives a kind of overarching logical sense to any particular work. Within this study, five pieces of the *Catalogue* will be analysed from the perception of a performer.

Moreover, this study also looks into how Messiaen explores the resources of solo instrument, the piano, to present all these materials when other instruments might have been more effective in producing birdsongs. Messiaen of course gives his reasons:

The rendering of the timbre of the birdsong is particularly difficult. As the timbre is determined by a greater or lesser number of harmonics, I had to look for combinations of unexpected, reinvented sounds for almost every note of each birdsong. On the other hand, the piano, due to its extensive register and the immediacy of its attacks, is undoubtedly the only instrument capable of rivaling the rapid tempi and the changes in 'altitude' of certain great virtuosos such as the woodlark, the skylark, the garden warbler, the blackcap, the nightingale, the song thrush, the sedge warbler and the reed warbler. The piano alone is able to render the raucous or grating percussions of the raven and the great reed warbler, the scraping of the corncrake, the howl of the water rail, the barking of the herring gull, the dry and imperious struck-tone-like timbre of the black-eared wheatear, the sunny charm of the rock thrush or the black wheatear.³

³ Quoted from CD liner notes, *Catalogue d'oiseaux*, Erato ECD 71590 (March 1970)

The *Catalogue* does not emerge with a total change of pianistic and compositional style in Messiaen, though his previous great piano work, the *Vingt Regards sur l'Enfant-Jésus* (1944) was composed 10 years before. However, most of the old material used in the *Catalogue* is derived from a few specific works, especially *Turangalîla* (1948) and *Cantéjodjayâ* (1949). Another reason why Messiaen chose the piano for the *Catalogue* is that a solo performer may have more freedom of expression in terms of interpretation and the style of playing, since the sole intention here is to portray nature. In other words, a solo performer can render birdsong more easily with the necessary rhythmic and rhetorical flexibility than, say, an orchestra under the direction of a conductor. Development of his birdsong transcription is apparent through his knowledge of ornithology, along with the piano writings in some of his greater larger-scale works, which will be discussed here.

Messiaen's interest in birdsong began when he was only 18 months old, where Yvonne Loriod mentioned an incident in the interview with Peter Hill:

He was eighteen months old, and being pushed in a pram by his mother, when a bird began to sing, and he immediately threw down his bottle and raised his hand to tell his mother to be quiet and listen to the bird. He always loved birds and all his life he would note down their song.⁴

According to Robert Sherlaw Johnson⁵, the 'style oiseau' in Messiaen's work can be traced first in his organ work *L'Ascension* (1932-33), though the composer did not specify the figure as real birdsongs (example 1.1).⁶ No doubt, this example with the single melodic line of repeated dotted notes followed by a trill and then closing in an arabesque style shows very common features of birdsong writing. Perhaps the melodic pattern bears a slight resemblance to the chaffinch's song that exists in later works, though at that time, Messiaen may have just intended to write a birdsong-like figure to represent birds symbolically. Following the lead of his title 'Alléluias sereins d'une âme qui désire le ciel', the birdsong is being used in

⁴ Hill ed.1994, p.297

⁵ Robert Sherlaw Johnson, 'Birdsong', in Hill ed. 1994, p. 250

⁶ Griffiths stated that the first instance of a 'style oiseau' came from *La Nativité du Seigneur* (1935), see Paul Griffiths, *Olivier Messiaen and the Music of Time* (London: Faber and Faber, 1985), p.166

reference to heaven where Johnson suggests that it is an ‘unconscious marriage of birdsong and plainsong style here’.⁷ The composer first indicated the presence of birdsongs in *La Nativité du Seigneur* (1935) in the movement ‘Les Bergers’, not in the score, but through comments in his *Technique de mon langage musical* where he stated that the third main theme was an example of ‘a Magnificat, alleluistic praise in bird style’.⁸ Here, this example of organ writing has been more extended, though not in an ornamental style as the previous one but in a toccata-like figuration (example 1.2).

However, it is worth thinking back as far as Messiaen’s even earlier set of *Préludes* (1928), the first of which is titled ‘La colombe’ (the dove). Certainly there is no significance here of any calls or songs of birds, but the impressionistic and serene mood parallels the idea of the dove as a symbol of peace. Until ‘Liturgie de cristal’ in *Quatuor pour la fin du temps* (1941), the first work where Messiaen explicitly indicated bird names in the preface, the piano had not been seen as an important instrument for imitating birdsong. At this early stage, it is quite surprising that a specific time is given (between three and four o’clock in the morning) in the preface, indicating both the blackbird’s and the nightingale’s songs: their songs are transposed into a religious context representing the ‘harmonious silence in heaven’.⁹ Labelled as *comme un oiseau*, the violin notation obviously represents the nightingale with its high repeated notes and rotating pattern (example 1.3a), as it serves mainly as an ornamental decorative figure for the main theme which is the blackbird’s song on the clarinet. The third movement ‘Abîme des oiseaux’ is written completely for the solo clarinet. Here, birdsong is clearly established at the section *Presque vif* with a variety of articulations and arpeggio figurations that show how Messiaen explores the potential of the instrument (example 1.3b). Certainly, neither section – the *Lent, expressif et triste* nor the *Modéré* – relates to birdsongs but rather suggests the expression of the movement using the *chalumeau* timbre of the clarinet.

⁷ Robert Sherlaw Johnson, ‘Birdsong’, in Hill ed. 1994, p. 250

⁸ *ibid.*, p. 250, taken from Olivier Messiaen, *Technique de mon langage musical*, Vol.1/Text; Vol. II Musical Examples, English trans. John Satterfield as *The Technique of My Musical Language* (Paris: Alphonse Leduc, 1957), p. 42

⁹ See Messiaen’s preface to *Quatuor pour la fin du temps*.

Birdsong starts to appear in Messiaen's piano works from *Visions de l'Amen* (1943) and *Vingt Regards sur l'Enfant-Jésus* (1944). Messiaen's analysis of *Visions* can be found in the *Traité*, Vol.III. In the fifth movement titled 'Amen des anges, des saints, du chant des oiseaux' from *Vision*, the blackbird and nightingale remain as the composer's preferred birdsongs, though this time they are joined by the blackcap and chaffinch; and together there are short fragments of the serin, the babillard warbler and the sparrow on page 55 of the score.¹⁰ According to the analysis in the *Traité*, the composer specifies a few motifs that refer to the blackbird and nightingale. No doubt they appear to resemble his transcriptions in later works slightly, but are here in a much simpler form. It is interesting that, for this earlier work, Messiaen has even employed his *résonance contractée* which is transformed into arpeggios in order to represent the chaffinch (example 1.4).¹¹ This signifies that, at this stage, the birdsong appears merely for the function of symbolism with harmonic importance that dominates the birdsongs. It can be seen clearly from the A major theme written for the second piano, accompanied by the nightingale's repeated notes (the first piano) in a steady pulse. Another example is the chaffinch's song mentioned above; its harmony (an example of *résonance contractée*) serves to support the nightingale songs at the same time. It is noteworthy that the use of harmony usually only represents non-birdsong subjects in *Catalogue d'oiseaux*. In *Visions*, the nightingale's repeated notes also function as modulations as for example on page 55 (from G# to Bb to C, refer to example 1.5) before the sparrow (in septuplet hemidemisemiquavers) joins in.¹² Generally, all these descriptions in Messiaen's analysis show that the harmonic context holds major significance for the construction of birdsong. It should be specified that the harmonic features in this instance are not concerned with the aspect of the birdsong's timbre, but with the context of the movement.


Three movements in *Vingt Regards sur l'Enfant-Jésus* feature birdsong writing. Parallel writing in both hands is not apparent in comparison to *Visions*, since here the harmonic support has to be played by either hand. Therefore, most of the birdsongs appear in single melodic lines (the exceptions are the short phrases of the

¹⁰ Bird names are given according to Olivier Messiaen, *Traité de Rythme, de Couleur et d'Ornithologie*, Vol. III (Paris: Alphonse Leduc, 1994), p. 261

¹¹ *ibid.*, p. 262

¹² *ibid.*, p. 261

nightingale and the last passage in 'Regard des hauteurs'). However, it is important to note that parallel writing is of major significance in the later works *Réveil des oiseaux* and *Oiseaux exotiques*. Since *Vingt Regards* is devoted primarily to the expression of his Catholic faith, birdsong similarly serves a symbolic function. However, bird names now begin to be seen in the score, though in fact they are only found in 'Regard des hauteurs'. Indication of *comme oiseau* is similarly marked in the other two movements, 'Regard du Fils sur le Fils' and 'Regard des Anges'.

In 'Regard du Fils sur le Fils', birdsong appears as a decorative figure superimposed on the 'Theme of God', which serves to symbolise joy in contrast with the previous rhythmic canon that represents mysteriousness. In this ornamental style, Messiaen explained that his birdsongs writing here are based on two formulae (example 1.6) and most motifs are varied from 'climacus resupinus du plain chant' : .¹³ The two formulae thus provide us with a kind of open and closed phrasing for the bird passages. It can be seen that the second formula, in a sextuplet, is merely a common arpeggio accompaniment figure for piano writing in repetition (at the ending of the movement). Though a bird name is not specified here, Messiaen did mention a particular motif as 'spécial au merle'.¹⁴ In comparison to 'Liturgie du cristal', the melodic contour of the 'climacus resupinus du plain chant' in the blackbird's song is also evident (examples 1.7a and 1.7b, x). The clear significance is the increase articulations used in 'Regard du Fils sur le Fils' in contrast with the more lyrical writing in 'Liturgie du cristal'. However, we must consider that in 'Liturgie du cristal' the blackbird's song functions as a main theme, as opposed to the decorative manner use in 'Regard du Fils sur le Fils' and 'Regard des Anges'. The same formula of the blackbird's song is found in 'Regard des Anges', where we are informed by Messiaen's *Traité* that again, the blackbird's song is represented here.¹⁵ Without the composer's specification regarding the ostinato in the left hand, the figure in *L'Ascension* can easily be misunderstood as a birdsong such as the one in 'Regard des Anges' (examples 1.8a and 1.8b).

¹³ Messiaen, *Traité*, Vol.II, p. 444

¹⁴ *ibid.*, p.445

¹⁵ *ibid.*, p. 479

The more interesting birdsong writing comes from 'Regard des hauteurs' where flight is symbolised by the birdsong. Unprecedentedly, three bird names are confidently indicated in the score, the nightingale, the blackbird and the lark. Indeed, Messiaen thus creates a birdsong ensemble where both hands are involved with birdsong's motif. However, we can see that the texture and rhythm are simple and brief while the lark's song in the right hand gives a rather steady pulse that is far less complicated in comparison with his later birdsong duets. Further explanations are given about the other birdsongs in this movement, which include the song thrush and the garden warbler; together with the grand soloist – the skylark's song.¹⁶ This may have been the beginning of how Messiaen developed his contrapuntal birdsong writing, which grew immensely complicated in the later *Catalogue*. From the brief description of 'Regard des hauteurs' in *Traité*, although Messiaen specifies the other three birdsongs without any music examples, he did not identify which section of music they referred to. However, the characteristic of the song thrush's song can be easily identified in comparison with his later works (examples 1.9a and 1.9b). Though very brief, we can see that some of the characteristics of the birdsongs foreshadow his later birdsong transcriptions. Examples 1.10a and 1.10b show the characteristics of the nightingale's song; and the skylark's song where its pitch structure (pitching against the high Bb) has slightly foreshadowed to one of the features in this birdsong in his later works, though the skylark's song in 'Regard des hauteurs' is written in simple consistent semiquaver pulse (examples 1.10c and 1.10d).¹⁷

Another interesting element is the metronome marking; the nightingale's song in *Modéré* (quaver = 116), is similar to the nightingale's in *Réveil*; while the skylark's song at *Un peu vif* (quaver = 126) resembles 'L'alouette lulu' in *Catalogue d'oiseaux* though it features the woodlark instead. Although these works were written about ten years apart, their metronome markings are similar. Certainly, the birdsong notations in *Vingt Regards* are much simpler in comparison to the later works that are devoted entirely to the birdsong effects, because in those that Messiaen intended was realism. Information from his *Traité* leads us to some

¹⁶ *ibid.*, p. 459

¹⁷ Refer to the skylark's song in 'La rousserolle effarvate' and 'L'alouette calandrelle'.

further identification of the blackbird's song used in the last movement, 'Regard de l'église d'amour', on pages 161, 173 and 175 (example 1.11), though in very short fragments. However, these motifs seem to serve as a melodic function rather than to portray birdsong literally. Without the specification in *Traité*, it is difficult to identify the birdsongs used in these passages.

The following discussion regards Messiaen's use of birdsongs in his 'Tristan trilogy' which includes *Harawi* (1945), *Turangalîla* (1948) and *Cinq Rechants* (1948). *Turangalîla* appears to be the most influential work to *Catalogue d'oiseaux*, with some of its themes and harmonic sequence being used to represent non-birdsong subjects. Consequently, the use of these themes thus maintains a signature of Messiaen's originality even in a completely different work, such as the *Catalogue* which focuses primarily on birdsongs. Both movements in *Turangalîla* and *Harawi* that involve birdsongs are in the key of F# major, Messiaen's habitual choice for spiritual love.¹⁸ In his 'Tristan trilogy', Messiaen has begun to create a new direction for his music based on the Tristan myth, involving the subjects of love and death. Now birdsongs are symbolized in a different manner from his previous work; here they are associated with human expression, though through a surrealistic world. The poem of 'Amour oiseau d'étoile' in *Harawi* was inspired from a painting by Sir Roland Penrose from 1936, entitled 'Seeing is believing'. According to Davidson, Messiaen had never seen the actual painting but was struck with a reproduction of it in a Swiss periodical, *Forme et Couleur*.¹⁹ The picture shows a woman's head hung inverted in the night sky above the town and a hand reaching upwards to the heavens.

Before looking at the birdsongs in 'Amour oiseau d'étoile' from *Harawi*, what attracts our attention is how the composer structures the communication between the human voice and the birdsong's entry. The piano has served two purposes in each phrase; it has the theme together with the voice in chordal form, and later sustained, allowing the birdsong to enter as a descant (example 1.12a). This style of writing has definitely influenced the *Catalogue*. A clear example is the river theme

¹⁸ Jane Manning, 'The Song and Song Cycles', in Hill ed.1994, p. 152

¹⁹ Audrey Ekdahl Davidson, *Olivier Messiaen and the Tristan Myth* (London: Praeger Publisher 2001), p. 51, see footnote no. 52

with the blackbird's song in 'La bouscarle' (example 1.12b) and the sunrise theme in 'La rousserolle effarvate'. The emphasis in these works is straightforward. In 'Amour oiseau d'étoile', we can see that the focus is given to the theme of the voice which is in unison with the top voices of the piano chords, while the birdsong, in a simple single melodic motif, floats and fills the ends of the phrase. The dynamic also reveals Messiaen's intention, where the birdsong in pianissimo signifies it as a background motif encapsulated by the sustained chords and especially by the voice. In 'La bouscarle', the river theme has a different effect; it appears in a simple harmony but with an embellished notation of birdsongs which occupy the foreground.

The birdsong in 'Amour oiseau d'étoile' remains quite harmonically orientated. In this instance, a primary motif is set representing the chaffinch's song²⁰ (example 1.12a); while the variation of this motif or the blackbird's song (which appears as a secondary bird) uses pitches according to this fundamental motif (example 1.13). Again, without the reference from *Traité*, it is difficult to identify exactly which birdsongs are being referred to since Messiaen only indicates *comme un oiseau* in the score. The chaffinch's motif perhaps can be easily mistaken as the blackbird's song. However, it can be said that the purpose of identifying the exact birdsong is certainly not the primary concern for this work. From Messiaen's *Traité*, it is learned that the blackbird's song indeed appears in other two movements – 'Bonjour toi, colombe verte' and 'Doundou tchil' (examples 1.14a and 1.14b)

From *Turangalila* onwards, it is evident that Messiaen borrows material freely from one work to another. Many harmonic progressions in this ten-movement symphony are fundamentally derived from earlier works. It can be seen that similar themes or motifs reoccur throughout Messiaen's work but each represent different subjects. This shows that Messiaen is using cyclic form not within a work but in a selection of his repertoire, though in each their originality is undisputable. Therefore, the analysis of the *Catalogue* in a later chapter will examine how these materials are transformed to portray a variety of non-birdsong ideas. What is so remarkable is the *Turangalila* themes are borrowed despite their origins as the love theme, flower

²⁰ Messiaen, *Traité*, Vol. III, p. 307

theme or statue theme. These three main themes are found very obviously in two movements of *Catalogue d'oiseaux*: 'La traquet stapazin' and 'La rousserolle effarvate'.

Again, Messiaen only indicates *comme un chant d'oiseau* in the score of *Turangalila*, but gives more details in his *Traité*. He identified a few types of birdsongs in 'Jardin du sommeil d'amour'; the nightingale's song dominates the movement, followed by the songs of the blackbird, the whitethroat, the melodious warbler and the garden warbler. All these birdsongs are written for the piano solo. The function of the birdsongs here is similarly used as an embellishment towards the themes played by the strings and ondes martenot. However, Messiaen has noted that the role of the piano is as important as the orchestra (theme) and should be heard clearly. Unlike in *Harawi*, the birdsong motifs do not only occur at the end of the phrase but appear more freely in random within the theme. Although the characteristics of the nightingale's song are apparent in comparison with those in the later works, with the same repeated notes and the rotating patterns, the outcome of the song is quite different (example 1.15a). The main reason is that the birdsongs are bound the slower tempo of the theme; here, the marking is *Très modéré, très tendre* (quaver = 80); compare this tempo with the later examples which are *Vif* (quaver = 152) for the rotating patterns.²¹ In accompanying the theme, we can notice that the semiquaver repeated notes of the nightingale's song fill the beat in a calm and serene manner. This shows how the composer uses birdsong in a way to correlate the idea of the theme.

The birdsong fragments in the sixth movement are also well organized according to the phrasing of the theme. The one-bar motif of the blackbird's song (always occurs in the same notation) usually appears to decorate the phrase at the end of the theme (example 1.15b). Another interesting phrase is the single melodic line though it represents the songs of the whitethroat, the melodious warbler and the garden warbler.²² For this particular phrase, Messiaen has indeed transformed it in retrograde order for later appearances (example 1.15c). Therefore, we may

²¹ See the tempo for the rotating and repeated pattern of the nightingale's song in the *Catalogue*, in 'La bouscarle, 'L'alouette lulu' and 'La rousserolle effarvate'.

²² Messiaen, *Traité*, Vol. II, p. 286

conclude that at this stage, though the fundamental characteristic is showed in Messiaen's birdsongs, they are still bound very much to the context of a particular work. Until *Turangalila*, it can be said that birdsongs have two aspects; they serve mainly as a symbolic function for a work, but at the same time reveal some of their basic song characteristics.

Seeing that the piano is given quite an important role in *Turangalila*, Messiaen's focus on piano writing continues in *Cantéjodjayâ* (1949) and *Quatre études de rythme* in the late 1940s. This series of solo piano works creates a new approach for his compositional method, in particular the technique of *Mode de valeurs*. These two works do not relate to any of his ideology or symbolism and they are not works of great length. Perhaps it can be suggested that this series of piano works is a compilation of ideas. *Cantéjodjayâ* also serves as an important channel from *Turangalila* leading to *Le merle noir* and later to *Catalogue d'oiseaux*. In addition, it can be said that the *Mode de valeurs* section in *Cantéjodjayâ*, which is on a smaller scale, creates a precedent for *Mode de valeurs et d'intensités* (1949), the second of the *Quatre études*. The style of *Mode de valeurs* greatly attracted Messiaen's pupils, among them Stockhausen and Boulez.²³ The set of four *études* thus exhibits the composer's rhythmic language; he refers to a definition by Dom Mocquereau who sums up the ideas of Plato and the ancient Greeks on the subject: 'Rhythm is the ordering of movement.'²⁴ The *Quatre études* relates to how Messiaen employs various complicated rhythms in portraying nature in the *Catalogue*. Though some of them seem 'abstract', perhaps it is the rhythm that reveals the sense of nature, highlighting not only the picture of a scene but the mobility or the expression within the subject (the movement of water, the mysterious or serene night music and so forth).

Neumes rythmiques, the third *étude*, uses the technique of strophes which are devoted to the exploitation of the 'rhythmic neumes', and of non-retrogradable prime numbers. The first *étude* (*Ile de feu I*) and the last (*Ile de feu II*) are similarly bounded in terms of the use of symmetrical permutation and interversion. Some of

²³ Mark Delaere, 'Olivier Messiaen's Analysis Seminar and the Development of Post-War Serial Music', Eng. trans. Richard Evans, *Music Analysis*, 21/1 (2002) p.35

²⁴ Samuel 1994, p. 67

the materials in *Ile de feu I* show an influence on the later *Catalogue*. In Messiaen's own words, the second feature of the piece is in a piano style of Chopin. This short fragment thus gives a precedent of the kingfisher's flight in 'La bouscarle', though the flight passage is far more difficult in comparison to the passage in *Ile de feu* (examples 1.16a and 1.16b). Another instance is the fast glissando (such as the owl's call) with white against black keys (which will be further described in chapter two on 'Characteristics of Messiaen's indicated fingerings' on p.70). The birdsongs which occur at the beginning and at the end were still indicated only as *oiseau* though Messiaen explains them as 'typique du merle' in his *Traité*²⁵ (example 1.16c). Here too, the blackbird's song remains to serve as a kind of decorative figure on top of the main theme.

Messiaen's major turning point in his birdsong writing comes in April 1952. According to Hill's unpublished material, this date should be clarified for two works: *Le merle noir* (1952), which was previously dated 1951, and the fourth movement – 'Chants d'oiseaux' – in the *Livre d'orgue*. Messiaen indicated in the score that 'Chants d'oiseaux' was written in 1951 at Delamain's garden at Gardépée. However, he mentioned that 'After a stay in Charente with the ornithologist Jacques Delamain, I wrote my *Réveil des oiseaux* (1953), for piano and orchestra, and the 'Chants d'oiseaux' from my *Livre d'orgue* (1951)'.²⁶ This means 'Chants d'oiseaux' could not have been written then, since Messiaen only met the ornithologist Jacques Delamain in April 1952. Other ornithologists he worked with included Jacques Penot in the Camargue, and Robert-Daniel Etchécopar on Île d'Ouessant, the director of the migration research department of the Museum of Natural History.²⁷

It was a month after composing *Le merle noir* that Messiaen visited Delamain in south-west France. From that time, he systematically collected birdsongs in his 'cahiers' which also include 'descriptions of the unfamiliar landscapes of Japan and

²⁵ Messiaen, *Traité*, Vol. III, p. 123

²⁶ Peter Hill and Nigel Simeone, *Messiaen* (Yale University Press, forthcoming), taken from *Le Guide du concert*, p.60

²⁷ Samuel 1994, p. 91

Utah, a storm in the mountains, the colours of dawn and sunset.’²⁸ The study with Delamain thus became a transitional period in Messiaen’s birdsong writing.

How I met Jacques Delamain is very simple. My publisher, Alphonse Leduc, who owned a property in Charente not far from Delamain, talked to him about my endeavours. Some time later, Jacques Delamain wrote to me: ‘Come, I’m expecting you. His home, at Branderaie de Gardépée, was, I seem to remember, a large two-storeyed house. I had a bedroom on the first floor with a vast balcony on which I could settle down with my music paper from 4 in the morning, and take down at my leisure, and without disturbing anyone, birdsong at the break of day.

The house was situated at the centre of an immense garden in which Jacques Delamain had had a variety of species planted which attracted all kinds of birds... I had already, for a long time, devoted to noting more or less accurately the songs of birds, but without knowing which of them I was writing down. By profession a producer of Cognac, Jacques Delamain had used his spare time to study birds, and had become over the years an amateur who was recognized and respected by experts. And if his books are not strictly speaking scientific, they are none the less completely accurate, ornithologically speaking. It is he who taught me to recognise a bird from its song, without having to see its plumage or the shape of its beak, nor its flight, so that I no longer mistook a blackcap for a chaffinch or a garden warbler!²⁹

The revised date according to Hill’s research confirms that *Le merle noir* was composed before the composer’s meeting with Delamain and ‘Chants d’oiseaux’ was written after, which is April 1952. Certainly both works still bear some similarities as can be ascertained by comparing the versions of the blackbird’s song, since it exists in both works. Through both cadenzas, not only the pitch structures closely resemble each other, but the melodic contours and the shape of their arabesque patterns are also alike (examples 1.17a and 1.17b). Undoubtedly, the consistent indication of bird names throughout ‘Chants d’oiseaux’ suggested

²⁸ Hill and Simeone, *Messiaen* (forthcoming)

²⁹ *ibid.*, quoted from Delamain’s *Pourquoi les oiseaux chantent*

Messiaen's new assurance in his transcription after his study with Delamain. The fundamental characteristics of the song thrush's and nightingale's song in this movement can be compared with later birdsong works (example 1.18). This is a forerunner of the meticulous details in later works. Another interesting instance is the resemblance of the blackbird's cadenza with the birdsong's motifs in the earlier 'Regard du Fils sur le Fils' (examples 1.17b and 1.6). Notice that the primary pitches of these two examples; the blackbird's song in 'Chants d'oiseaux' revolves around the pitches of Ab D G B; this can be compared with the second motif of the blackbird's song in 'Regard du Fils sur le Fils' that is formed by the pitches D A G Ab. What made these examples of the blackbird's song identical, comes not only from their melodic contours but primarily their pitches. The circling movement within a few definite pitches in this birdsong's characteristic is explained by Johnson where he analysed them as 'focal pitches'.³⁰ On the other hand, Nichols, in his article on *Le merle noir* relates this kind of pitch structure to Griffiths's 'motivic island', which is derived from his analysis on *Mode de valeurs passages*.³¹ The result of Nichols's analysis shows the cardinal point of the blackbird song's pitches: A Eb D G#. Though not precise, these four pitches are closed to both 'Chants d'oiseaux' and 'Regard du Fils sur le Fils'.

A further point is that we should not neglect the last movement of *Livre d'orgue* 'Soixante-quatre durées' that its distinctive organization of chromatic rhythm of 64 durations is often highlighted. Accompanying this set of duration is a variety of birdsong writings. However, Messiaen does not regard them as 'real' birdsongs, as he said:

Ce ne sont pas des vrais chants d'oiseaux comme dans la 4e piece du 'Livre d'orgue' ou dans mon 'Réveil des oiseaux' pour piano et orchestre. Il s'agit plutôt de contrepunts mélodiques mélangeant différentes formules inventées, mais fortement apparentées au style de tel ou tel oiseau.³²

³⁰ Robert Sherlaw Johnson, *Messiaen* (London: J.M. Dent & Sons Ltd., 1975), p.140

³¹ Roger Nichols, 'Messiaen's 'Le merle noir': The case of a blackbird in a historical pie', *Musical Times*, cxxix (1988), p.648

³² Messiaen, *Traité*, Vol. III, p.228

Messiaen was commissioned to write *Le merle noir* (1952) for a flute *concours* at the Paris Conservatoire by Claude Delvincourt.³³ Not only did its structure inspire the composer to develop his birdsong works in later years, but this work also serves as a chain in which it carries *Turangalila* themes (example 1.19). In view of how these themes are transformed and employed in *Le merle noir* together with their occurrence in the *Catalogue*, refer to Chapter 3.3 on ‘La rousserolle effarvate’ (examples 3.3.37a – 3.3.37e). Though *Le merle noir* is a starting point that motivated Messiaen’s further intention of composing birdsong works, technical methods still hold a major emphasis. This is evident in the coda at *Vif* for the piano, in which the organized rhythm of each hand is switched after a section, creating an unrecognised repeated passage. Details of the rhythmic structure of *Le merle noir* are referred to in the analysis in Nichols’s article.³⁴

Messiaen’s progressing knowledge of ornithology no doubt influenced the two works for piano and orchestra, *Réveil des oiseaux* (1953) and *Oiseaux exotiques* (1955-56). The composer’s first idea for a work for piano and orchestra had been planned as early as July 1950³⁵, though at that date birdsong was not envisaged. It was later that Messiaen’s studies with Delamain together with his collection of birdsong in the *Cahiers de notations* (first entry is dated 14 May, 1952) gave him the idea for *Réveil*. The ‘cahiers’ shows that much of the work on *Réveil* was done in the summer of 1953. Both works show the importance to Messiaen of the playing of Yvonne Loriod (most of Messiaen’s piano works are dedicated to her). There are many occasions where Loriod was an assistant on Messiaen’s trips to transcribe birdsongs, when she would operate a tape recorder that enabled the composer to make revisions. Another sign that Messiaen valued Loriod’s abilities was that he asked her help with the comprehensive fingerings in *Réveil* (fingerings in published scores were normally marked by Messiaen himself).³⁶

Developments in Messiaen’s birdsong writing are apparent in these two piano and orchestral works. *Réveil* is the first work in which Messiaen depicts a period of time from midnight to midday, and uses only birdsong as his materials. The increasing

³³ Nichols 1998, p. 648

³⁴ *ibid.*

³⁵ Hill and Simeone, *Messiaen* (forthcoming)

³⁶ *ibid.*

number of birdsongs (38 birdsongs in *Réveil*), with each name specified in the score and translated in the preface, shows the level of the composer's confidence in his transcriptions and his increasing knowledge of ornithology. The structure of the whole work points towards the later birdsong works. Here, the alternation between the cadenzas and the orchestral sections, together with the passing of time (midnight to midday) not only provide a sense of natural flow but also a symmetrical pattern.

Another innovation in *Réveil* is the metronome markings, particularly in the last cadenza (where each bird has different tempo markings), which is quite unprecedented. Harmony is used to convey the birdsong's timbre; this is more evident in the orchestral writing than with the piano writing. One example is the phrase for the song thrush, which is in a dense texture formed by the wind and the strings (*Réveil*, p.12, see example 1.9b). The main notes are written for the wind instruments accompanied by the strings in a softer dynamic, making harmonies in ten parts. Birdsongs stand entirely on their own without any harmony, whether singing solo or conversing with other birdsongs. Another helpful feature is the use of onomatopoeic syllables designed by Messiaen to help the player imagine the timbre of the birdsongs.

One can notice that in *Réveil* Messiaen uses the piano to demonstrate the virtuosic side of the birdsongs rather than to emphasize their timbre. A very distinctive feature is the extensive use of octave playing (example 1.20a) and the tempi are generally faster than in the birdsongs given to the orchestra. Instead of timbre, these passages emphasise the melodic patterns of the birdsongs.

A good example to discuss is the nightingale's song, which appears prominently in Messiaen's earlier works of the 1940s and does so again in the 1950's. *Réveil* is distinctive because of its denser texture, with an increasing of dynamic markings and articulations. It is notable that in the third system of the first cadenza, the indication of *comme du clavecin* has been marked, and this recurs in the *Catalogue*. Two major differences can be seen in comparison with the later nightingale's song. The first is the detailed metronome markings, which are indicated for each different characteristic in the nightingale's song in the *Catalogue*, while only one metronome

marking indicated for the whole nightingale's song in *Réveil* (examples 1.10b and 1.20b). The second feature is that in the *Catalogue*, even though the songs are in double notes, they are not written in bare octaves but in different intervals. These songs usually function to provide an indefinite pitch or serve as a kind of timbre (unless the composer specifies a certain tonality for the birdsongs). More harmonies/pitches are often added at the accented notes or abrupt phrases, to accentuate the sound and emotion of the song. Some of the piano writings for the duet section, in particularly the last cadenza, exhibit a style not far from the *Catalogue* in terms of the articulation and dynamic freedom of each hand. However, the notation in each hand is written only in single melodic line.

Messiaen's new birdsong style did not initially attract much attention. The first performance of *Réveil* took place at Donaueschingen on 11 October 1953, and was directed by Hans Rosbaud. 'Despite a good performance the reception was a disappointment. The audience seemed indifferent, more interested in the war-of-words currently waged between the proponents of Pierre Schaeffer and his 'musique concrète' and the Studio for Electronic Music in Cologne'.³⁷

Even during the period of composing *Réveil* and *Oiseaux exotiques*, Messiaen's collection of 'cahiers' had already hinted at the material of the *Catalogue*. In one of the notes he made on the evening of 6 October 1953, in the Black Forest near Baden-Baden, he described the cry of the tawny owl – *vocifération douloureuse et lugubre*, followed by a long list of birds classified according to their habitat.³⁸ Some sketches in 1954 also signify that his transcriptions were directed towards creating a work rather than a collection. For example, on 20 June 1954, the sketch of a golden oriole anticipates 'Le loriot' from the *Catalogue*.³⁹ His plan at the end of 1954 to combine birdsongs with Balinese rhythms, several keyboard percussions (xylophone, vibraphone, celesta, two glockenspiel), metallic percussion (gong, cymbals, tam-tam, bells), solo piano and woodwind is a precursor to *Oiseaux exotiques*.

³⁷ Hill and Simeone, *Messiaen* (forthcoming)

³⁸ *ibid.*

³⁹ *ibid.*

Oiseaux exotiques was composed quite rapidly in a short period of time between 5 October 1955 and 23 January 1956. It was premiered on 10 March, 1956 in Paris (Petit Théâtre Marigny), conducted by Rudolf Albert with the solo piano played by Yvonne Loriod. Sources of these exotic birds are gathered from his visits to the bird markets of Paris and by listening to recordings. Different from *Réveil*, this work does not conform to a realistic time frame to provide a sense for its structure. Messiaen had created another scenario for *Oiseaux exotiques*, where birdsongs from different countries – India, China, Malaysia, North and South America – are brought together and superimposed on each other. Other materials that support the birdsongs are the Greek and Indian rhythms which are played by the percussion. Even before looking at the notation, the preface informs us of the composer's advice regarding sound production. He has stated that not only the piano, but the xylophone and the two clarinets should also be placed in the foreground due to their essential role. Further, the plan for instruments setting is also given; while he also recommended conductors and players read the details in his commentary. All these suggest that Messiaen is meticulous on the timbre of each instrument and required the players to pay attention to all of his markings.

In comparison to *Réveil*, the piano writing in *Oiseaux exotiques* is very close to those in the *Catalogue*. The cadenza at pp. 4-5 comprises four different birdsongs and the change in tempo even within a single birdsong is apparent (example 1.21). Another significant feature is that the harmonization of birdsongs is more varied, in comparison with the long octave passages in *Réveil*. Even if the songs are in dyads, the pitches are formed by different intervals though both hands remain in a parallel movement. It should be mentioned that this kind of parallel movement (though this points more to *Réveil*) can be considered a technical difficulty; in playing two melodic lines in opposite direction from both hands would be far easier. The change of piano writing thus creates many new techniques of playing; for example, the increasing pitches on the grace-note; the combination of both hands for rotating patterns or the alteration between two hands to complete a short phrase with dense notations. In many instances, the style of fingering indication in the *Catalogue* has already been foreseen in *Oiseaux exotiques*, such as the use of thumbs on double notes. Here, we will find that explanation of notes below the score and verbal descriptions upon the birdsongs are given, where this is commonly found in

Catalogue as well. One example is the red cardinal's song which is explained as *comme un crépitement de gouttes d'eau*.

***Catalogue d'oiseaux*: Important dates and journeys in Messiaen's birdsong explorations and some details of his 'cahiers'.**

From Hill's research in Messiaen's unpublished documents, certain details regarding the progress of the *Catalogue* are noted. This includes some dates and the journeys when Messiaen composed the thirteen pieces, since the order of these movements was arranged differently in the process of composition. In addition, the following paragraphs include some materials taken from his 'cahiers' (from Hill and Simeone's forthcoming *Messiaen*). The summary of the historical progress of the *Catalogue* can be viewed in Figure 1.

In many instances, Messiaen's cahiers reveal his interest in birdsongs as well as the bird's behaviour. Furthermore, the cahiers show his determination to experience the sound of each birdsong, and this interest may have been the reason for him taking his trip seriously in order to transcribe each detail meticulously.

With the use of sources obtained from Hill, I have had the opportunity to view some sketches of Messiaen's 'cahiers' (on the deposit at the Bibliothèque Nationale de France, Paris MS. no. 23056 pp.1-30). These sketches reveal how Messiaen worked on 'Le traquet stapazin'. It thus evidently shows how Messiaen authentically obtained his transcription, with date and time jotted on top of his notation. Within the sketches which are dated from 27-30 June 1957, some material used in 'La bouscarle' can also be identified. Sketches appear mostly in single melodic line phrases, which can be considered as Messiaen's first hearing of a particular birdsong. As Messiaen said:

I write down rapidly what I hear; the melody and rhythm. I do not note the timbre. As timbre arises from a more or less large number of harmonics it is necessary for me to seek combinations of unexpected sounds, to re-invent at each moment and for each bird.⁴⁰

⁴⁰ Bernard Gavoty, 'Who are you, Olivier Messiaen?', *Tempo* 58 (1961), p.36

Figure 1. Dates and events of Messiaen's collection of birdsongs and the process of composing *Catalogue d'oiseaux*

Date	Place and Event	Related movements in <i>Catalogue d'oiseaux</i> (the work listed below does not imply that the work is completed on the date).
1955	In the Sologne region (south of Orléans), with its network of ponds and lakes and among the marshes where Messiaen found the reed warblers	La rousserolle effarvate
1956 April	Second visit to the same place after the performance of <i>Oiseaux exotiques</i>	La rousserolle effarvate
June	Contacted the bird sanctuary of Camargue to make field trips.	
July	First time experienced the birds of Provence and Mediterranean coast.	Le merle bleu & L'alouette calandrelle
	Messiaen discovered the interesting landscape at Les Baux.	The weird rock formation may have inspired Le merle de roche.
14 July	Went to Paris, travelled via the Forez, an area on the north-eastern slopes of the Massif Central. On the road to St. Saviour-en-Rue Messiaen heard a flock of woodlark.	L'alouette lulu
6 Sep	Made his second trip to Ouessant.	Sketches on this trip are identifiable in Le courlis cendré.
		'Messiaen now starts to think about another piece in progress, 'Le loriot'. First he jots down the two chords that will open the piece, and frame the oriole's first solo. Below this, to the left, he writes a fragment of the oriole's song, exactly as notated on 20 June the previous summer, but this time with a descant of shadowing harmonies. He now think about harmonies for 'L'alouette lulu' (woodlark) and sketches a few chords to represent 'night'. ⁴¹

⁴¹ Hill and Simeone, *Messiaen* (forthcoming)

Early 1957	Composed six pieces of <i>Catalogue d'oiseaux</i> ,	<ol style="list-style-type: none"> 1. Le chocard des Alpes 2. L'alouette lulu 3. La chouette hulotte 4. Le loriot 5. L'alouette calandrelle 6. Le courlis cendré
30 March	Loriod gave the premiere of these six movements at a Domaine Musical concert.	
	'Indeed Messiaen now seems to have conceived it as a huge (perhaps open-ended) work, quite different from the organised symmetry of its final form: the diary contains further lists of bird pieces to write, including fifteen that were never composed. In later life Messiaen said that he had enough material for a second <i>Catalogue</i> but had never found the time.' ⁴²	
April	In the hope of improving his health, Messiaen went to Orgeval. On the way, Loriod and Messiaen visited Chartres. At Gardépée, he discovered a number of 'bouscarles'. This trip may inspired him to set 'La bouscarle' on the banks of the Charente.	La bouscarle
6 June		Finished 'La bouscarle'.
Late June	Travel south to the region of Perpignan which he explored with the ornithologist Henri Llomond. Saw rocky coastline near Banyuls.	Sketches from the 'cahiers' shown some notation that has contributed to <i>Le merle bleu</i> , <i>Le traquet stapazin</i> and <i>Le traquet rieur</i> .
28 June	Cirque de Mourèze	The setting for 'Le merle de roche'.
Summer	Petichet	Reworking <i>La rousserolle effarvate</i> which grows from 14 minutes to 32 minutes.
1958 23 Jan	Loriod played the revised version of <i>La rousserolle effarvate</i> in Messiaen's class. The piece was warmly received at the première at a Domaine Musical concert.	
End of March	Collecting birdsong – South through central France, via Issoire, Saint Flour, The Gorges du Tarn, Millau and Beziers, to Banyuls on the Mediterranean coast south of Perpignan.	
Late May	Returned alone to Banyuls, enchanted by the scenery of Cap Béar and Cap Rederis.	Collected the song of the blue rock thrush (<i>Le merle bleu</i>) and black-eared wheatear (<i>Le traquet stapazin</i>) : later stage of the work. Here, he also collected the song of the Orphean

⁴² *ibid.*

		warbler (the main birdsong in the middle section of <i>Le traquet stapazin</i>).
End of summer	Set off to south, research the birds of Causse	
26 June	Arrived at Mont Aigoual, the highest peak in the Cévennes	
	<p>Loriod accompanied birdsong expeditions with a tape recorder. Here I will quote an interesting event from Hill's text:</p> <p>On one occasion, Loriod recalls hearing a 'whistling' cry which she recognized and identified as a curlew. Messiaen was dismissive – 'too far from the sea'. Loriod insisted, however, and later at the hotel played him the tape, Messiaen conceding that she was right after all – 'Quelle oreille vous avez! C'est bien un courlis cendré, mais comment faites-vous puisque vous ne l'avez jamais entendu?' Loriod's reply tactfully turned her victory into a compliment – 'Mais si vous ne l'aviez pas si bien note dans votre pièce pour piano, que je viens de travailler, je ne l'aurais jamais reconnu!'⁴³</p>	
End of summer	Shows Loriod new pieces	<i>Le merle de roche</i> and <i>Le traquet rieur</i>
Early 1959	Preparation for the first complete performance of <i>Catalogue d'oiseaux</i> , where Loriod had six new pieces to prepare.	The last three to be composed were ' <i>Le merle bleu</i> ', ' <i>Le traquet stapazin</i> ' and ' <i>La buse variable</i> '.
15 April	Première of <i>Catalogue d'oiseaux</i> at the Salle Gaveau.	

It seems that some of the birdsongs in the finished piece are selected from the lists of transcriptions before the composer decides on which strophe should be used in the actual work. In some of these pages, fragments of different birdsongs are notated randomly and do not seem identical to the actual order in the score. Most of these sketches are attached with detailed descriptions about the characteristics of the songs. Messiaen would have thought that these descriptions are certainly useful and in the finished score there are short indications of expression (to describe a particular birdsong).

⁴³ *ibid.*

The cahiers display how Messiaen chose his intended songs for the actual score. This can be seen from the thekla lark's and spectacled warbler's songs. From the two long strophes of the spectacled warbler, one of which is dated 27 June 1957 midday and the other 30 June 1957 (5:10 am), it is apparent that Messiaen had chosen the latter for 'Le traquet stapazin' (examples 1.22a, 1.22b and 1.22c). The main difference between these two strophes is in the slight dissimilarity of pitch; the first is a semitone lower than that of the second, which belongs very much in E major. This may have been the reason for Messiaen's choice. One may wonder why these two spectacled warblers are so different. Was Messiaen starting to think of the birds as a companion to the ortolan bunting, and hence gave them the same key (E major)? One should also notice that the C# that belongs to the birdsong in the sketch is transformed to a non-birdsong harmony in the actual movement. It appears that the thekla lark's songs are being notated in many instances, with consideration that its song is more complicated in a virtuoso style, where the sketches seem to imply how Messiaen has captured the characteristics of the song.

Some of the indicated periods of time in these sketches do not conform with the narration of the actual score. One example is the melodious warbler's song. The description below its notation implies that the transcription was taken at sunset, delineating the colour of the sky in red purple above the mountain – little by little ... spread over the sea – in the sky – the first star (examples 1.23a and 1.23b). However, in comparison, the melodious warbler's song in 'Le traquet stapazin' is placed between the sunrise sections. Perhaps it is the loud and fast features of the song that Messiaen felt it was more suitable to be placed along the sunrise, in order to portray the brightness of the sun together with the abruptness of the black-eared wheatear's song. Another example is the thekla lark's song that alternates with the *Turangalila* motif (indicated the 'sea') after the sunset theme near the end of the movement. However, the sketch that matches this motif was taken at 7 o'clock in the morning on 30 June 1957 (examples 1.24a, 1.24b and 1.24c).

Another point is to view how Messiaen utilized or arranged the phrases within the strophes. In comparison with the score, we gather that some of the short fragments are chosen randomly from the long strophes of the transcription. Examples appear clearly in the spectacled warbler's and the black-eared wheatear's song (the

soloist). The apparent reason is that these birdsong motifs appear in fragments with consistent rests in between their strophes. Therefore, Messiaen has employed this fragment one at a time for each of the repeated frame⁴⁴ in the actual movement (examples 1.25a, 1.25b and 1.25c). For certain instance, short passages of birdsongs are selected from the cahier. For example, the black-eared wheatear in the cahiers sings in chains of short phrases. In the piece, however, it is never used like this. All its solos are short, or alternate with other music (for example, the sunrise theme).

The sketches also reveal how Messiaen arranged his narration for the movement based on the selection of these birdsong fragments. An example of this is to see how the composer numbered the arrangement of the birdsongs at the beginning of 'Le traquet stapazin' (example 1.26). The numbering is also noted in three pages of text, indicating Messiaen's plan for the actual scores; this includes the number of measure, duration of rests and the selected motif that are supposed to be used. These numbers are marked particularly on those birdsong motifs or phrases which have been selected to be employed into the score. Birdsong phrases are mostly marked in numbers while the non-birdsongs in letters (for example the thekla lark's harmony and the resonance chord after the corn bunting).

Some pages show how the composer reworked his ideas at a later stage; with added non-birdsong subjects, harmonization for the single line birdsongs, indications of fingering and so forth. Many are extremely close to the score along with the fingering indication. On one page, it seems that the *Turangalila* motifs were being figured out by the composer though in the final form they are not identical to the score. For this example, Messiaen laid out the modes he would prefer to use: here it shows that the colour mode 6(1) and 3(2) were written out. It might have been his intention to portray the colour of the sea or the sun that reflects the mountain at the end of 'Le traquet stapazin' (examples 1.27a and 1.27b). Several *Turangalila* motifs were displayed below these modes. Similarly, this applies to the sunrise-sunset cycle that is constructed by the *renversement transposé*. For his reference, Messiaen listed the transpositions of the harmony and wrote the actual theme below it.

⁴⁴ The 'frame' – refer to structure of the work in Chapter 3.5: 'Le traquet stapazin', see p.153

Sketches from pages 15-30 (No. 23056) are displayed with birdsongs complete in harmonization and are almost identical to the actual score but not in the right order. The sketch on page 19 is the exact notation for the first page of 'Le traquet stapazin' (example 1.28). One can also see how Messiaen composed on the non-birdsong harmony for the goldfinch's song. At one page, it seems that the harmony (*renversement transpose*) is in the form of a three-chord progression and not in the arpeggio pattern as in the score. However, the arpeggio pattern is found on another page though without the goldfinch's song (examples 1.29a, 1.29b, 1.29c). In addition, Messiaen eliminated the third harmony of the progression in the final score. Perhaps, the arpeggio pattern is used because it associates with the delicate style of the goldfinch's song in high register.

Phrases from 'La bouscarle' are found within these sketches of 'Le traquet stapazin' on pages 13, 14 and 20. These notations are very much harmonized as in the final score (examples 1.30a and 1.30b, examples 1.30c and 1.30d). They include some of the blackcap's phrases, the nightingale's song and some of the river theme (the climax). Page 20 shows a sketch that is close to the kingfisher's flight (examples 1.31a and 1.31b). The existing sketches in these pages may imply that Messiaen must have worked on some sections of 'La bouscarle' during the same time when he composed 'Le traquet stapazin'.

Primary sources from Messiaen's 'cahiers' certainly reveal to us something of the process of how in practice the composer transcribed birdsongs and how he arranged his material in contributing to a particular work. These descriptions and notations in his 'cahiers' also inform us of how Messiaen obtained his sources of materials authentically. Unlike other works such as *Turangalila* or *Vingt Regards sur l'Enfant-Jésus*, the *Catalogue* is not analysed in Messiaen's *Traité*. However, he compiled a selection of his birdsongs transcriptions, taken from the 1950s until the 1980s, in *Traité* Vol. V. In the *Traité*, birds are categorized according to their habitat or places and each birdsong is given a brief explanation. Examples of his works that are involved with a particular birdsong are attached followed by an individual description.

Messiaen's depiction of Nature in relation to other composers: Bartók and Debussy

Certainly, Messiaen is not the only remarkable composer to use nature elements and birdsongs in his composition. What is interesting is how composers portray the natural element in different styles and the intentions they wish to present through their works. Before looking into the details and analysis of *Catalogue d'oiseaux*, it is interesting to have a short discussion on Debussy and Bartók. The reasons for highlighting these two composers are simple: Debussy appears to be an influential composer on Messiaen; Bartók's method of collecting folk music and his perception regarding the nature is very much similar to Messiaen as well. The purpose of this discussion is not solely to identify the influence between these composers but more importantly, it is to see how they viewed and employed their 'nature' material in their work.

The influence of Debussy on Messiaen is nevertheless significant in many instances a fact which is evidently explained greatly in Messiaen's *Technique de mon langage musical* and *Traité*. We shall not forget that the admiration for Debussy had come at a very young age when Messiaen received the score *Pelléas et Melisande* as a gift for his tenth birthday. Debussy's influence on Messiaen does not relate to birdsong representations but is more inclined to some other musical ideas. In fact, it is clear that the outcome of each composer's work is completely different. Taking the representation of the 'sea' for example, Debussy seems to present his subject more 'straightforwardly'. However, we should take into account that perception of a sound to an individual is varied; therefore it may not be precise to determine strictly whether the representation is abstract or direct. From a performer's and a listener's view, I shall explain the comparison regarding the outcome of these presentations of nature subject from Debussy and Messiaen.

For example, the work that attracts my attention is Debussy's *L'isle joyeuse* (1904) in which the composer reveals the portrayal of sea/island picturesquely with the emotion of 'joy'. What is significant here is the tonality of the work in A major. We should recall Messiaen's colour mode where A major is associated with the colour of blue-green, and many of his representation of sea and river (water related)

subjects are bounded in this key. For example, the river theme in 'La bouscarle' and the sea in 'Le merle bleu' or the blue rock thrush's song which are all dominated by A major. However, based on the only example, it cannot be concluded that Debussy had a similar view as Messiaen in choosing A major key to represent the sea. In *L'isle joyeuse*, the movement of waves or sea has been clearly depicted by the use of trills, arabesque pattern, running and rotating notes which is not unusual in Debussy's piano writing. Despite using these melodic patterns to represent the movement of the sea, the chorale theme may perhaps relate to 'joy', the tranquillity of the island or the sea.

On the other hand, the outcome (sound) of Messiaen's depiction of these natural subjects are perhaps less easy to visualize by the listener. To a certain extent, it depends very much on his indication to inform the listener or the performer of his intended subjects. There is no doubt that Messiaen has wholeheartedly transcribed what he has heard or felt from the natural scene which he has depicted. However, we should understand a fundamental perceptual and imaginative principle where an individual hears or perceives sounds differently.

For the sea, like all other natural phenomenon, has its own way of sounding in Messiaen. There are a thousand examples of the sea in music, from Debussy to Rimsky Korsakov. You can usually expect to hear some kind of wave movement, an arpeggio or something like that. But the sea sounds different for Messiaen, like short, hard, firm knocks, for example. Or pointillist, in separate, flashing droplets: the way a wave runs back, or the way the wave strikes a rock, the way the spray flies up or shines in the sun – we all know it really. Yet it has nothing to do with imitation. Messiaen doesn't composed individual characteristic of the sea, and thus something of the platonic idea of the sea itself, which is represented in the sound. Sometimes he doesn't use the word 'sea' but 'water', and then it's quite different. For example, if you swim under water for a while you get a particular sound in your ears. It's not silent, it's quite a specific noise. And that's exactly what is heard in Messiaen : it is absolutely the same sound. And sometimes the water sounds happy, sometimes melancholy, and then at other times the chords are as sharp-edged and cold as blocks of ice

knocking against each other. How can there be sounds like that in the piano? It's his secret.⁴⁵

Here, I would like to draw further attention to Bartók who eminently uses natural elements and birdsong in his work. Moreover, what attracts my attention is the similarity between the two composers in responding to their sources. Messiaen's transcription of birdsongs in fact resembles very much Bartók's collection of folk songs.⁴⁶ Bartók's love of nature is also evident where he defined folk music as 'a phenomenon of Nature'⁴⁷, in which this even emphasizes Messiaen's birdsong transcription. The medieval concept of *natura naturans*, which is discussed in Harley's articles regarding Bartók's nature music idiom, reveals that Messiaen is not less different. As Harley explained, 'One of the ways to introduce the term into the musical domain is to discover the laws of organic growth, the patterns and symmetries found in leaves, sunflowers and seashells, in the temporal proportions of a composition'.⁴⁸ This certainly relates very much to how Messiaen structures and focuses his work according to natural elements, such as periods of unfolding time, symmetrical patterns and so forth.

Works by Bartók that feature birdsongs and natural elements include the 'Night music' from the *Out of Doors* piano suite (1926), the middle movement of the *String Quartet* no.4 (1928), the middle movements of Piano Concerto No. 2 (1930-31), the Music for Strings, Percussion and Celesta (1936), Sonata for Two Pianos and Percussion (1937), 'Elegia' from Concerto for Orchestra (1943), and the *Adagio Religioso* from Piano Concerto No.3 (1945). As being analysed by some writers such as Somfai⁴⁹ and Harley⁵⁰, the nocturnal sound of the 'Night music' from *Out of doors* at the beginning is very much a portrayal of frogs' calls and noises of insects. The nature voice that Bartók presents in this movement may have

⁴⁵ DG 493251-2, taken from CD notes – conversation with Anatol Ugorski on 13 May 1993, transcribed by interviewer Eleonore Buning (translation : Mary Whittall).

⁴⁶ A detail influence from Bartók on Messiaen can be found in Madeline Hsu 'Olivier Messiaen, the Musical Mediator' (London: Associated University Press, 1996)

⁴⁷ Bartók's *Essay*, 6, quotes from, M.A. Harley, 'Natura Naturans, natura naturata and Bartók's Nature Music Idiom', *Studia Musicologica Academiae Hungaricae* 36/3-4 (1995), p. 330.

⁴⁸ *ibid.*

⁴⁹ Laszlo Somfai, 'Analytical Notes on Bartók's Piano Year of 1926', *Studia Musicologica Academiae Hungaricae*, 26 (1984), p.8

⁵⁰ Harley 1995, p.331

been an idea for Messiaen such as his portrayal of various subjects in his night music in 'La rousserolle effarvate'. Though birdsong is not the main focus of Bartók's 'Nature subject', a 'concert' of North American birdsong has been traced in his *Adagio Religioso* from Piano Concerto no.3 (1945).⁵¹ In Harley's analysis, the songs of the Towhee, the Hermit Thrush, and the Wood Thrush in this movement are recognizable with real birdsong transcriptions by some ornithologists.⁵²

One important feature in Bartók's night music is the existence of chorale themes. This further suggests that Bartók has combined human (chorale theme) together with nature subjects (folk-nightingale melody). Here, we should not forget that chorale theme, as opposed to birdsong, is nonetheless common in Messiaen's *Catalogue*, though different from Bartók, where these themes are given a subject. For example, the river theme in 'La bouscarle' is a serene and quiet motif. Another example is the *Turangalila* motif in 'Le traquet stapazin' that represents the mountain, thus revealing to us the magnificence of the landscape. In comparison, the similar motif that is transformed to a finer texture which represents the flower theme thus presents a totally contrasting idea. However, it can be seen that the use of human emotion in Messiaen's work similarly applies in his birdsongs. Being anthropomorphic is not at all alien to Messiaen's birdsong description, as he himself explained:

[...] the nightingale seems to be passing brusquely from sadness to joy, from anger to renunciation, from rancor to forgiveness, or from supplication to victory, and it really goes from a slow tempo into a fast one, from a pianissimo nuance to fortissimo, with brusque and obvious contrasts.⁵³

Another feature is mentioned about how Messiaen highlights the importance of percussion instrument. This is evident in his *Réveil des oiseaux*, *Oiseaux exotiques* and also with the tendency of using the piano to portray the timbre of percussion

⁵¹ M.A. Harley, 'Birds on concert: North American birdsong in Bartók's Piano Concerto No.3', *Tempo*, New Ser., No.189 (June 1994), pp.8-16.

⁵² *ibid.*

⁵³ Samuel 1994, p.89

instrument as seen in *Catalogue d'oiseaux*. Nevertheless, the portrayal of percussion instrument by using the piano is one of Bartók's idiosyncrasies. As he stated,

'the piano's inherent nature becomes really expressive only by means of the present tendency to use the piano as a percussive instrument. Indeed the piano always plays the part of universal instrument.'⁵⁴

However, again I have to emphasize that the above feature does not bring about any real similarity in their piano writing. The similarity lies rather in how both composers admire the timbre of percussion instruments, and by using the piano as a medium to imitate the sound of these timbres, taking into account the wide register of the piano and the capability of producing a vast resonance.

Bartók's view regarding the problem of folk-song notation can be parallel to the complexities of notating birdsong for Messiaen. For birdsong transcription, Messiaen has described how he transcribes the 'natural' complexities of the song into an idiom suitable for the instrument:

A bird, being much smaller than we are, with a heart that beats faster and nervous reaction that are much quicker, sings in extremely swift tempos, absolutely impossible for our instruments. I'm therefore obliged to transcribe the song into a slower tempo. Moreover, this rapidity is combined with an extreme shrillness, for birds are able to sing in extremely high registers that cannot be reproduced on our instruments; so I write one, two, or three octaves lower. And that's not the only adjustment: for the same reasons I'm obliged to eliminate any tiny intervals that our instruments cannot execute. I replace those intervals, which are on the order of one or two commas, by semitones, but I respect the scale of values between the different intervals, which is to say that if a few commas correspond to a semitone, a whole tone or a third will correspond to the real semitone; all are enlarged, but the proportions remain identical, and as

⁵⁴ Bartók *Essay*, ed. Benjamin Suchoff (New York: St. Martin's Press, 1976; Lincoln: University of Nebraska Press, 1992) p.288, quoted from Victoria Fischer, 'Articulation Notation in the Piano Music of Béla Bartók', *Studia Musicologica Academiae Scientiarum Hungaricae* 36/3-4 (1995), p.286

a result, what I restore is nevertheless exact. It's a transposition of what I heard, but on a more human scale.⁵⁵

From here, we should certainly realise that there is much more limitation of notating the natural elements regardless of folk-songs or birdsongs. Therefore, a given notation is undoubtedly insufficient to represent the many characteristics of a given subject. Perhaps the best approach for a pianist is to listen to the real sound of these natural subjects. This was clearly explained by Bartók:

'...it does not suffice for a musician to notate exactly these melodies by ear alone, we must have recourse to the phonograph or gramophone as often as possible, even if we have to deal with apparently simple melodies. That is because the peasant's singing style is full of peculiarities, often very characteristic and worthy of recording with precision (such as the portamento of the voice, irrational rhythms, and so forth), which ... we are hardly able to notate down on paper with our conventional symbols.'⁵⁶

'[...] Bartók admitted that notation was at best an incomplete language.[...] He said, 'No matter how experienced the collector is, certain fine details... cannot be notated.... But even if a collector endowed with some superhuman talent succeeded in notating the melodies with all their fine nuances, there would still be aspects left that are incapable of notation: intonation and tone colour, for which we have no symbolic system.'⁵⁷

In the case of Messiaen's birdsongs, this is certainly relevant to certain particular characteristics such as the gliding calls, taking into account whether notes should be heard clearly or whether the rapidity should be given more attention; or even a slur couplet may be varied, as the first note may be lengthened slightly or the sound of the second note may be deliberately reduced in volume. This does not mean being unfaithful to the composer's notation: Messiaen certainly hoped that pianists

⁵⁵ Samuel 1994, p.95

⁵⁶ Bartók, *Essays*, p.59, quoted from Fischer 1995, p.297

⁵⁷ *ibid.*, p.14 quoted from Fischer 1995, p.300

could encounter how the bird sings in nature in order to portray them even more effectively. From his preface of *Réveil des oiseaux*, he advises the performer that:

‘comme il est demandé au pianiste, dans ses cadenza, l’imitation des attaques d’un très grand nombre d’oiseaux, je lui recommande quelques promenades en forêt, au printemps, surtout de bonne heure le matin, pour prendre connaissance de ses modèles.’⁵⁸

⁵⁸ Refer to the preface of *Réveil des oiseaux*.

Chapter 2

Piano writing in *Catalogue d'oiseaux*

Chapter 2 : Piano writing in *Catalogue d'oiseaux*

(A) Aspects of piano writing in *Catalogue d'oiseaux*

- Descriptions of the habitat using 'serially-oriented' passage
- Chorale passages
- Messiaen's contrapuntal writing
- Messiaen's harmonic sequences
- Etude-style passages
- Use of the piano to imitate other instruments' timbres, and other sound effects

(B) Characteristics of Messiaen's indicated fingerings

The *Catalogue d'oiseaux* and *Vingt Regards sur l'Enfant-Jésus*, Messiaen's two large-scale piano cycles, represent totally different subjects. Since the *Catalogue* is concerned entirely with birdsongs and the descriptive and evocative music of habitats, it is interesting to examine how Messiaen presents these materials by exploring the resources of a single instrument, the piano. From among the thirteen pieces, it seems that passages written in a similar style together with the use of piano effects can be categorized together. The composer has meticulously given details regarding the sound he intended, often in relation to certain subjects that the performer can visualize. Therefore, most of the birdsongs are marked with additional descriptions, while the atmosphere of the habitat is also described. Another issue which is worth examining is the comprehensive fingering which the composer indicated, how these fingerings affect the timbre of certain passages, and the composer's technical and aesthetic purposes. The first part in this chapter deals with the six categories of piano writing in the *Catalogue*, and the second part examines the significance of certain fingerings indicated by the composer.

(A) Aspects of piano writing in *Catalogue d'oiseaux*

Description of the habitat using 'serially-oriented' passages

This section examines Messiaen's use of twelve-note modes and rhythmic-durational *Mode de valeurs* to represent a translation from nature into sound. Some passages are long where they portray a scene as a broad background designed to frame the whole movement. In the discussion below, we shall look into how Messiaen uses this type of complex structure to depict each particular nature subject. Examples include the mountain passages in 'Le chocard des alpes', the night music in 'La chouette hulotte', the rainbow music in 'Le loriot', the reflection of willows and poplars in 'La bouscarle', the pond music in 'La rousserolle effarvate', the buzzard's flight in 'La buse variable' and the water music in 'Le courlis cendré'. Among these examples, the night music is undoubtedly the most difficult and complex, though it is fundamentally written as a single melodic line for each hand. It appears to be one of the significant compositional examples of Messiaen's *Mode de valeurs* that derives very much from his previous influential work *Mode de valeurs et d'intensités* (1949). The identity of this category can be observed from examining a few technical characteristics:

- a) Portrayal of non-birdsong subjects is musically realized in extended passages or sections;
- b) Most such passages sound atonal, thus displaying the style of Messiaen's incipiently 'serial' music: often written in a twelve-note mode or using the style of 'Mode de valeurs', as in *Cantéjodjayâ* and *Mode de valeurs et d'intensités*.
- c) Involves overlapping between both hands, since they sometimes share the same range; problems of fingering often occur; generally, both hands are of equal importance.

The grandness and the '*implacable et massif*' depiction of mountain landscape is thus represented by Messiaen's loud twelve-note mode chordal writing in the three passages from 'Le chocard des alpes'. Both the first and third passages are strictly

in 2/4, while the metre in the second passage is free: any number of crotchet beats with an added quaver (2 crotches + quaver, 5 crotchets + quaver, and so forth). In the orchestral works (*Réveil des oiseaux* and *Oiseaux exotiques*), it is clear that the strict metre in the tutti sections is pragmatically designed to help or co-ordinate the instrumentalists. Similarly, the presence of the time signature lessens the considerable technical difficulties in 'Le chocard des alpes', as it does also in 'La chouette hulotte'.

Messiaen's depiction of grandeur in the three mountain passages derives not only from the use of dynamics, but also from the accented chordal writing which thus metaphorically reflects the texture of the rocky mountains. This can be viewed where the chords are formed by inconsistent intervals with wide or angular leaps, which also includes the instability of the range within the reach of both hands. In Johnson's analysis, we read that:

Whereas in *Livre d'Orgue* the note-sets of this mode [the twelve-note mode] usually remain distinct from one another without overlapping, in *Catalogue d'oiseaux* they most frequently overlap in chain fashion, so that in homophonic passages such as the one at the beginning of 'Chocard des Alpes' it is impossible to determine a precise order of notes for each set. The main feature of the mode, however, remains intact. All the notes of the chromatic scale are treated equally so that no one predominates as a modal dominant or final.¹

Here, the broad lyrical sense of melodic and textural phrasing does not quite relate to the static chords in these passages. This flexibility and changeability of register occasionally results in passages where both hands meet within in the same range, though this is not by any means foreign to Messiaen's writing (example 2.1). Although only two staves are used, the voicing in both hands could easily have been distributed on three staves: there are times where the lower bass notes are distinctly heard below the other voices. What especially creates the rhythmic complexities in these passages is the leap of intervals in all the upbeat pulses (the dotted rhythm). This appears repeatedly in the first and last passages. Even though

¹ Johnson 1975, p.135

the tempo is not unreasonably fast, the dotted rhythms should be kept strict in order to maintain the distinct character of the theme. In this type of passage, questions of phrasing occur. Does Messiaen intend the pianist to phrase with some flexibility even in those passages where the original idea is abstract, as happens in the use of *Mode de valeurs*? One could hardly hear the sense of phrasing unless the performer phrases them clearly and deliberately. However, pianists can create their own phrasing which will give an inner understanding of direction towards the hand movement, though these phrasings might not be heard conspicuously. As Rink writes, '[...] music's representation in the performer's inner ear little resembles its appearance in the score [...]'.²

What creates the sense of phrasing might come from the rhythmic figure. In the first mountain passage, the 2/4 metre is counted in quavers. The elasticity of these chords in terms of rhythm and phrasing raises the difficulty for the performer to present the wholeness of a mountain or the section. Although these chords do not reveal recognizable motifs, a communication between the rhythmic figures can be identified. This is evident in the first two lines in which the rhythmic cell from the first two bars is repeated at bar 7 and again at bar 14, though they are varied (refer to example 2.1). Further, the first phrase, from bars 1 until 6, is constructed by three pairs of rhythmic figures (two bars each). This can be explained by the characteristics of the rhythm; the first two bars feature equal quaver beats; bars 3-4 have a series of syncopated, semiquaver upbeats; bars 5-6 contain a quaver beat which returns and ends with a longer note (minim). The strict metre in 2/4 thus characterizes the offbeat (semiquavers), and the quaver pulse can be interpreted by the performer as a signal to bounce off the syncopated rhythm. There is no doubt that the bar line equally serves as a 'bouncing' effect for the pianist over the ties (bars 3-6).

The second passage is far less complicated. Its phrasing is evident from the motifs in the first four bars; the same rhythmic figure progresses along with variations (example 2.1b). The third mountain passage has a similar 2/4 metre, though its rhythmic characteristics are slightly different. Its use of semiquaver values creates

² John Rink, ed. 'Analysis and (or?) Performance', *Musical Performance: A Guide to Understanding* (Cambridge: Cambridge University Press, 2002) p.48

more downbeats and the range for both hands is closer. In terms of the arrangement of the registers of both hands, it should be noticed that rhythmic figures can sound different from the way that they are notated. This is especially evident when both hands share the same range, as mentioned previously. For example, the two crotchets in the first bar will be heard simply as 4 quaver beats since both hands play in the same range. This, however, appears differently for the player when he/she feels the pulse in each hand from the notation (example 2.1c). In short, the close range written for both hands can be construed as Messiaen merging the two lines of rhythm into one.

In terms of fingering, the use of thumb and index finger in assisting the wide intervals of chord in the other hand are mostly indicated by the composer. With this method, it can be noticed that chords in each hand are often written in extremely wide intervals which are unplayable without the assistance of the other hand. However, the interval must adhere to the principle where one of the notes should be placed within the boundary of the stretch of the other hand. This alteration of fingering also functions to solve problems of hand position when both hands share the same register, thus avoiding one hand crossing over to the other too frequently. The extensive use of tritone intervals also contributes to a more awkward hand position, especially when leaps occur in upbeat with dotted rhythms.

The fixed dynamics in the mountain passages in 'Le chocard des alpes' bring us to another similar example, the reflections in 'La bouscarle' (pp. 2-4, bars 17-18).³ Although the dynamics of both examples are extremely contrasted, they share the similarity of maintaining the static atmosphere of both subjects; the permanence of the mountain and the reflection that is encapsulated in the stillness of the water. This type of passage reveals the problem of how the phrasing should be shaped while retaining the same dynamic throughout. An analysis of the significance of each theme will be useful, as mentioned above. A more exact control of hand position, with a soft and muffled touch throughout the section will be needed for the reflection passages in 'La bouscarle'. In this case, a horizontal movement in hand position should be applied to reduce the risk of accents in each chord.

³ See Chapter 3.4 'La bouscarle', example 3.4.9a.

With the use of the *Mode de valeurs*, the night music in 'La chouette hulotte' is the most serially organized passage. Again, the 2/4 rhythm reduces the technical difficulties for the player; further, the intensity of attacks such as in *Mode de valeurs et d'intensités* is omitted, which lessens the complication. Since the main idea in the night music comes from the variety of durations and dynamics, the choice of fingering is essential especially for the abrupt change between the contrasting dynamic (*fff* and *ppp*). One obvious example is that the loudest note *fff* for the highest A, being the shortest value, marks the importance of providing a sudden accent; this is difficult since the following note is to be played immediately, especially when both notes are in a wide interval with a contrasting dynamic (examples 2.2a and 2.2d x). Metaphorically, this perhaps reflects a sudden shock that creates a sense of fear of the night. The choices of fingering for the sudden A in *fff* must account for two circumstances (this refers to bars 8 and 69): the level of dynamic and the rapidity at which the next notation is reached. Since it is marked with the loudest dynamic, the use of third finger may provide a stable and firm fingering but the hand movement between the two notes will increase. The common fingering is by using the fifth finger, but the weight of the dynamic is lessened in comparison with the third, though the use of the fifth minimizes the hand movements between the notes. Other examples, such as at bar 8 (example 2.2a), require even more intensity since the accented note is followed by a dyad. At bar 77, the choices of fingerings are suggested (example 2.2b.). However, it is not certain whether Messiaen assumed pianists to use the fifth finger in all these instances, as he did not indicate any fingering in the score except at bar 98, where he specified that the F# is to be taken over the right hand, which consequently creates a limitation as the A has to be played by the fifth finger (example 2.2c.).

Aside from this, the variety of extreme duration also raises the question of accuracy in the releasing of note and the use of pedal. This occurs particularly in more complicated passages, mostly in the second night music starting at bar 64. This also refers particularly to the section where the bass is at a much lower register, sustaining with other voices that move rapidly. The question is how generously should the pedal be used. It has to be stated that the 'three-part counterpoint'⁴ is

⁴ Griffiths 1985, p.180

well arranged for the hand position though it is complicated at some points. One example is from bars 92-95 (example 2.2d). Here, no problem occurs for the bass note but the thumb that plays the A at bar 92 will have to be released at bar 93 for the top F. The third pedal could be used for the purpose of holding the A but the E has to be released quickly. The sustaining pedal is the alternative choice but the F will certainly still be held on when the D is played. Later at bar 95, the problem comes to the sustaining bass. It may be wise to use the third pedal in this case since the sustaining pedal will certainly influence the clarity for the top A. The effect of whether a generous or less use of the sustaining pedal will result in a different outcome. Such different approaches in presenting the 'night' passage will be discussed in Chapter Four. Another example regarding the arrangement of fingering is suggested by Hill at bar 70, where the G# in the left hand should be played by the index finger. This is to ensure that the G# is released at the correct moment, since the index finger needs to be released in order to play the lower G natural (example 2.2e).

Another form in this category is the pond music from 'La rousserolle effarvate'. Unlike the other examples, the distinctive effect is that the pond music features two contrasting ideas simultaneously. It does not quite conform to the style of *Mode de valeurs* such as in the night music, where the notations in both hands are formed by two rhythmic sequences (see Chapter 3.3 'La rousserolle effarvate', pp.108-109). Consequently, this results in two extreme expressions: the strict consistent semiquavers in the right hand at a high register with occasional accents, that contrast with the left hand figure, which are formed by a sequence of chords that move quietly, as if gliding from one to another. This creates a sense of opposite movements in both hands: the right, which moves vertically (since it strikes repeatedly the same two intervals of a ninth) while the left moves horizontally (since the chords are to be played softly). At times, a more careful and controlled hand position is required when the left hand chords move to the lower register, in order to maintain the soft dynamic in both hands in the extreme registers. Here, we have more information from the composer: Messiaen has indicated that the semiquavers in the higher register are to be sounded like the xylophone. This leads us to another later category regarding the imitation of instrument timbre, which will be discussed later.

The extreme register in both hands can be seen in many passages in Messiaen's works. It contributes to a sense of starkness though it also reflects the ethereality of Nature. In 'La buse variable' (pp.1-2, bars 16-17), the use of this effect is shown in the two flight passages of the buzzard, which Messiaen has described as *la Buse plane en cercles – les orbites de son vol emplissent tout le paysage* (example 2.3a). With each passage placed at the beginning and the ending, these two sections are displayed structurally again in the form of a symmetry. In view of the registers and the dynamics, it shows that the composer perhaps intends to depict the distance or nearness of the buzzard's flight. In the introduction, both hands are in extreme position while they slowly meet at the end of the section, along with a long, slow crescendo (representing the flight getting closer). In turn, the two elements that delineate the portrayal are contrary at the ending, which round off the movement together with the gradual distancing of the flight. In this case, the long crescendo and diminuendo require a careful control in order that the dynamic moves smoothly and gradually until the end.

From an understanding of the pedalling indication, the notes are to be pronounced crystal clear since each note changes with pedal. Moreover, the fingering indication also shows that notes are to be played smoothly in legato. Silent changes of finger are marked in a few places, thus implying a smooth legato touch between the notes. Though the *legatissimo* can be well achieved with the help of the pedals, particularly for notes at wide intervals, the pianist should also be aware of the slow tempo which can disrupt the sense of continuation. The change of pedal at each note should be executed carefully to avoid it being heard too obviously. The same problem occurs at the kingfisher's flight in 'La bouscarle' (example 2.4), though in a much more faster tempo. Due to the leaps between the quavers and the slow tempo in the buzzard's flight, the hand movement should be kept as horizontal as possible. It should be remembered that the whole idea of this passage is to reflect the subtlety of the buzzard's flight, which is opposed to the more active kingfisher's.

Note grouping is another feature that creates the problem of achieving the legato and the stillness in the buzzard's flight passages. One wonders about the reason for

Messiaen's arrangement of note groupings, since each bar is consistently written in twelve quaver beats. It can be noticed that after the first bar, notes are disengaged from the three-note grouping though the rhythms in each bar remain the same. There are two possible reasons. The first is concerned with the legato effect of the entire passage. One of the significations at the first bar of this passage is the clear contrary motion in both hands presented by the three-note grouping. The variety of grouping in either one, two or three quavers may be a reason to disguise the consistent rhythm; in other words, to avoid pianists being too dependent on the three-note pulse that always give a down beat on the first quaver. There is no doubt that in many cases, Messiaen's fingering is more inclined to achieve the importance of the legato touch, taking into account that some intervals are of great distance. Certainly, the rhythm is of no importance in this passage since the main portrayal of the flight comes from the construction of the melodic contour and also the dynamic. The second reason for Messiaen varied the grouping may have to do with the notation layout. This applies to the occasional change of extreme range for the markings of octave higher and lower, including the change of clef. It can be noticed that at each instance, notes are grouped according to the marking of the octave sign (example 2.3b.). Perhaps this avoids a confusing layout for the performer.

It is noteworthy that the habitat music in 'Le courlis cendré' does not frame the structure but appears at the end of the middle section. Though not in a similar style, the three habitat depictions occur one after another – the waves of the sea, the water music and the night music (pp.13-17). The single-line melodic passages in each hand that are employed in the water music is in a slightly faster tempo. Different from the above flight passage ('La buse variable'), it seems to depict the unsettled flow of the water. This is evident from the rapid change of *cresc.* and *dim.*, thus enhancing the swell of the water (example 2.5). Moreover, the dynamic sign may act as a guide in terms of phrasing within the whole passage. Similar to the previous examples, a *legatissimo* with the help of pedalling is crucial to provide the resilience of the 'water'. However, it can be noted that the fingering indications are emphasized here; each note in both hands is provided with fingering.

It is not long that the passage immediately switches to the night music which stabilizes the semiquavers into consistent quaver chords. This is not a complicated

passage in comparison with the previous examples, particularly in terms of rhythm or fingering complexities (example 2.6). The interesting issue is how Messiaen portrays a different 'scene' by exploring the pedal and dynamic effects. Here, the night music is depicted together with the fog, described by the composer as *répandent peu à peu*. This can be seen where the attacks of each chord gradually recede along the passages. Apart from this, longer pedal is used to create the resonance of the chords, depicting a foggy atmosphere that is both obscure and confused (which the composer stated at bar 170 – *brouillé, confus*).

Chorale passages : *Turungalila* or Tonal themes

Another category that depicts the habitat in some movements is written very much in chorale style. Usually, this appears as a theme which is lyrical and easily recognizable. The main characteristic of this theme is the formation of chords using both hands that move in parallel. Generally, this chorale passage reflects a calm and quiet subject, with a slower tempo to pronounce its harmony.

One of the most important materials that Messiaen recalls in the *Catalogue* is none other than the famous *Turungalila* theme. It is used evidently in 'Le traquet stapazin' at the sunset theme towards the ending that represents the colours of the sun which shine above the mountain (example 2.7). It should be noted that the sea music in the same movement is also taken from the *Turungalila* theme though with less dense harmony akin to the flower theme in 'La rousserolle effarvate'. The *Turungalila* theme that represents the sunset in 'Le traquet stapazin' is harmonized densely in both hands, where the outer voices (the top and the bass) are given for the melodic notes. Due to the extremely slow tempo, the recognition of the direction within the melodic contour is essential to achieve the long phrasing and lyricism, although the legato touch depends tremendously on the sustaining pedal and parallel hand movement.

The next example is the sunrise-sunset section in 'La rousserolle effarvate' (example 2.8). This theme is important to reflect the colour by using mode 6, which

appears in shorter phrases that alternate with birdsongs. Though both hands are similarly written in parallel direction, the texture of harmony is not dense as in the above example. Above all, perhaps the river theme in 'La bouscarle' is the most remarkable and original to represent this category (example 2.9). The theme is no different from the characteristics of this category. However, it should be considered as the easiest theme to be recognized due to its simple phrase structure.

Although these choral writings bear a theme (especially for *Turangalila* theme), pianists may undoubtedly bring out the melodic line naturally by emphasizing the top notes. However, since some of these chords are densely harmonized, the balance of harmony within these chords may come to mind. Let us consider one of Hill's descriptions from his lessons with Messiaen:

Messiaen detested the gratuitous bringing-out of the top note, which he regarded as a persistent vice of pianists. What interested him were the effects produced by experimenting with the balance within the harmony.⁵

Hill then explains a few examples of how the balancing of harmony might influence the presentation of tonality and colours. Together, it may give an effect on producing or imitating the timbre of the orchestra instrument.

This leads to the difficult example which occurs in 'Le loriot', in the rainbow theme (example 2.10). Here, Messiaen has indicated his intended melodic notes through the use of dynamic layering. Therefore, it is not a problem of interpretation but more of the technical difficulty. The chorale-like style in this passage is different, where the composer has used a more challenging technique to construct the theme. This occurs especially in the right hand chords where it needs to balance the melodic notes that are placed in the middle or the lower voice; at some point, the left hand also contributes to assist the theme since some of the intervals are beyond the stretch of the right hand. As a result, there is much movement between both

⁵ Hill ed. 1994, p. 275

hands in shaping the phrases notwithstanding that the theme is rather in a slow tempo.

Contrapuntal writing

The subject that Messiaen employs to construct his contrapuntal style is by using two birdsongs, which exhibits the spontaneity of unpredictable phrase and rhythm. This category may probably be categorized into the later features of Etude-like style, where it is a mixture of the birdsong motifs mostly written in fast tempo that display a virtuoso style. In addition, the birdsongs that are used to participate in the duet are usually equipped with a greater variety of interesting motifs instead of calls. Therefore, harmonic relationship is certainly not a major concern in Messiaen's contrapuntal writing, but short motifs with distinctive rhythmic and melodic patterns become the 'theme' of each voice. Examples in the *Catalogue* include the songs of garden warbler in 'Le loriot', the thekla larks in 'Le merle bleu', the goldfinches in 'Le traquet stapazin', the short-toed lark and crested lark in 'L'alouette calandrelle', and the reed warblers in 'La rousserolle effarvate'. Even though they are all written in Messiaen's contrapuntal style, the expression of each example is quite different.

The motif of the garden warblers' duet in 'Le loriot' (pp.4-9) seems to be most uncomplicated in terms of the elimination of articulation and dynamic, although it is not meant to be a simple passage (example 2.11). It is fundamentally based on a consistent rhythm in demisemiquavers, with an extremely fast tempo at *Très Vif* (quaver =160). Although the dynamic throughout the passage is compressed in *mf* (the only indication that Messiaen has marked), a slight variety of dynamic towards the shaping of the melodic contour is still important. However, this should not interfere with the fluidity of the line, since the overuse of dynamic level may defeat the delicacy of the birdsong. One difficulty is to execute the repeated notes with an equal touch since they occur randomly in the line.

The thekla larks and the goldfinches in both 'Le merle bleu' (pp.10-11) and 'Le traquet stapazin' (pp.21-22) are closer in terms of their style of writing. In

comparison with the garden warblers' duet, the thekla larks' and the goldfinches' contrapuntal passages involve a great detail of articulation, dynamic and phrasing. Coordination and the balance in both hands are required to display the varied characters of short phrases. In these duets, identification of the metres of each measure does not serve any purpose though occasionally there are a few continuous bars written in strict rhythm.⁶ It is quite apparent that the bar line functions to categorize the different motifs. Using the thekla larks' duet as example (p.10 from 'Le merle bleu' example 2.12a), the bar line seems to differentiate the motifs in the right hand rather than the left. This can be seen where changes of motifs in the right hand always appear within the boundary of the bar line, while most of the figures in the left hand overlap the bar line. The bar line may serve as a guidance for the performer to identify the grouping of different motifs, as well as to overcome the difficulties in approaching rhythmic fluctuation in a fast tempo. This is significant especially for memorization.

It is often not too complicated to analyse the birdsong phrasing, in which some passages depend very much on the pattern of rests and motifs. However, what is more complicated is the rhythm in prime numbers, which does not offer the conventional steady pulse, giving a sense of incompleteness. It is particularly easy to treat the three-note group simply as triplets which may defeat Messiaen's purpose of providing the intended rhythm. Nevertheless, the prime number of note groupings certainly is one of the ways to represent the nature of birdsongs. In reflecting the nature of the duet, it can be seen that the different grouping of note occurring in each hand creates a variety of phrasings and articulations. The imbalance accentuation in each hand and the fluctuation of rhythm thus appear to be fairly difficult since these duets are written in extremely fast tempo. Examples are the three note slurs against the two in the thekla lark (p.10, second system, example 2.12a x), the glides against the three notes slur (p.10 4th system, example 2.12b) and the goldfinch in 'Le traquet stapazin' at p.22 (four notes against three, example 2.13). It can be seen that in the thekla larks' duet, the grouping of notes is often dominated by the right hand. The slurs (p.10, fourth system, bar 2.12b x) in the left hand may be substituted by a three-note grouping which gives the motif of F Eb

⁶ Such as the goldfinch's duet in 'Le traquet stapazin' (p.21 system 2: bar 3 until system 3: bars 1-3).

G three times continuously. The reason Messiaen groups it in couplets is probably to align with the right hand glide which is in a consistent three semiquaver pulse. Here, the pedal marking is certainly meant for the glide with an accent, though this will obscure the three-note slur in the left hand. Another similar example is at page 11 from the first system at bar 3 (example 2.12c). In short, Messiaen's arrangement of note grouping always takes account of a clear notation layout in both hands, for the convenience of the reader and the player, and this results in the use of articulation to substitute a motif pattern.

Another significant feature from the three-note grouping draws us to look into the articulation. Looking back to the garden warblers' duet, the elimination of slurs for the three-note grouping may imply a light staccato touch. However, this contrasts entirely with the thekla larks' and the goldfinches' duets. The indication of slurs in these groups of notes thus requires more accentuation on the first note while a slight diminuendo along the slur is quite natural. In addition, the abundance of slurs in these two duets may produce a 'compressed' rhythm (the outcome also resembles a glide) rather than the more equal rhythm such as the garden warbler's song.

Dynamic is another feature to present the individuality of each bird in the duet. Overlapping of crescendo and diminuendo is common in these passages especially in the two strophes of the thekla lark's duet in 'Le merle bleu'. This especially occurs in the gliding motifs which appear repeatedly from one hand to another before the previous glide ends. One example is the dynamic of the gliding call at the second duet; the glide of the second thekla lark's song starts exactly at the peak of the first, affecting both hands in an unbalanced weight to execute the different dynamics (example 2.14). In these gliding motifs, one may wonder whether a slight decrescendo could be applied for the figure (demisemiquaver pattern) in the other hand, in order to enhance the resolution of the glide, though Messiaen specifies an indicated dynamic (*mf*).

Another example in which two types of birdsongs are used for the duet appears in the songs of the short-toed lark and the crested lark in 'L'alouette calandrelle' (pp.3-4, example 2.15). One significant feature in this duet is the strict metre (4/8) for the entire passage. In addition, it also involves an ABA structure which is

discussed in the analysis chapter. Overall, what distinguishes the difference between both birdsongs is the dynamic level where the short-toed lark's song is generally softer. Another feature is that the texture of this duet is not dense in comparison with other examples, and a sense of dialogue between both birdsongs does occur more clearly from the silences between the fragments. These render the duet more simple and straightforward, while the dialogue allows a kind of communication between both hands as well.

Perhaps the most challenging of all is the reed warblers' duet in 'La rousserolle effarvate' (pp. 26-30, 32-34, example 2.16a). These duet sections comprise more extended rhythmic patterns and changes of new motifs. Unlike the duets discussed above, the reed warbler's duet involves not only a single melodic line in each hand, but a mixture of dyads in a variety of intervals. In the whole duet passage, the two reed warblers' songs frequently share the same range, where one hand crossing over the other is used extensively. Moreover, the whole passage appears to be even more demanding with the fast tempo at *Vif* (quaver =144) and together with Messiaen's intention that the motifs should sound continuous without gaps.⁷ The reed warblers' duet is the longest of all the duets in the *Catalogue* though it does appear alternately with the shorter sedge warbler's song. A great stamina from the player is needed especially at the first long section of the duet (bars 374-448, lasting for about five pages), where the only obvious rest is at bar 409.⁸ Moreover, no single material is repeated throughout. One can almost describe this passage as an improvisation based on the characteristics of the birdsong. Notwithstanding, the combination of both hands, together with the accents and syncopated rhythm occasionally reflect a kind of jazz rhythms in some sections (bars 416-422 and bars 435-437, see example 2.16b).

⁷ Hill ed. 1994, p.278

⁸ More analysis is discussed in the analysis chapter regarding the recognition of phrasing from the motif pattern and rests.

Messiaen's harmonic sequences

In addition to the *Mode de valeurs* and chorale passage, another material that formed the non-birdsong depictions derives from various harmonic progressions which are Messiaen's hallmark. These harmonies are commonly found even in earlier works which include the *résonance contractée*, *renversement transposé*, *accords tournants*, chords that are formed by Messiaen's mode of limited transposition and so forth (example 2.17). The difference is that these chord progressions are transformed to arpeggios, chordal or melodic patterns in various rhythms. From this category, no matter how the composer employs these chords to represent all kinds of non-birdsong subjects, the sounds of these progressions indubitably let the listeners immediately recognize Messiaen's signature. Transpositions of these harmonic progressions are listed in *Traité* Vol. VIII.⁹ In referring to the modulations of these chords, it may be useful for the pianists to treat them as exercises in various patterns before approaching Messiaen's works. Similar to the function of scales practicing or such as our usual exercises in thirds and sixth, this may allow the hand position to be familiar with those harmonic progressions and thus recognize the sounds of the composer's characteristics, by way of any transformations.

In the *Catalogue*, we can see how Messiaen economically utilizes these chords by transforming them to portray different materials. Some examples are shown in Figure 2. In some instance, the order of these progressions is changed, even in augmentation or a simplified version. Most of the discussion regarding the harmonic sequence can be referred to Chapter 3: Analysis. One example is the chord sequence that emphasises the rhythmic structure of '*anacrouse, accent, désinence*'; where in many instances, the complete version of four-chord sequence is not written in order. Examples can be found in a short fragment in 'L'alouette calandrelle' (bar 46) and 'La rousserolle effarvate' (bars 162-163).¹⁰ This means that the whole function of '*anacrouse, accent, désinence*' is not complete. Another example is the *renversement transposé*, that appears prominently as the

⁹ A discussion of the various chord tables can be referred to 'Messiaen's chord tables: ordering the disordered' by Cheong Wai-Ling, *Tempo*, Vol.57 (226), pp.2-10

¹⁰ See Chapter 3.2: 'L'alouette calandrelle', p.102 and Chapter 3.3: 'La rousserolle effarvate', p.126

Figure 2.

Some examples of Messiaen's harmonic progression used in *Catalogue d'oiseaux*

Harmony	Works	Representation	Bar No.	Ref: <i>Traité</i> Vol. VIII
<i>résonance contractée</i>	Le merle bleu	resonance of bell	31-32	pages 150-164
	Le traquet stapazin	vineyard	2	
	La rousserolle effarvate	sunrise	135, 140, 146	
	L'alouette calandrelle	resonance	15	
	La bouscarle	resonance	12, 14	
	Le merle de roche	Night	1	
<i>renversement transposé</i>	Le traquet stapazin	Sunrise-sunset and resonance for the goldfinch's song	107	pages 142-147
	L'alouette calandrelle	resonance	24-5, 49, 51	
<i>accords tournants</i>	La rousserolle effarvate	water lily	367-74	pages 166-172
	L'alouette calandrelle	resonance	19	
Four chords pattern – <i>Turangalila</i>	Le traquet stapazin	vineyard	1	Vol. II page 240
	La rousserolle effarvate	sunrise	168-9	
	L'alouette calandrelle	resonance		
Changing seconds and thirds – <i>Turangalila</i>	L'alouette calandrelle	resonance	20	Vol. II page 239
				Vol. III page 303
' <i>anacrouse, accent, désinence</i> '	La rousserolle effarvate	sunrise	149, 162-3	Vol. II page 372
	L'alouette calandrelle	resonance	46	
<i>thème d'accords</i>	Le traquet stapazin	sunrise	133	Vol. II page 486

fundamental harmony to represent the sunrise-sunset music in 'Le traquet stapazin' (pp.8-10), but is in an augmented form with modulation, allowing other progressions to be superimposed on it.¹¹

The most commonly used is the *résonance contractée*, which functions mostly as a supporting harmony for birdsongs. However, it does become a subject in 'Le merle de roche', depicting the night music (example 2.18). Here, the *résonance contractée* is used in a lower register to portray the darkness, though this is a simple two-chord sequence if we compare it with the complexity of mode duration in 'La chouette hulotte'. However, the night music in 'Le merle de roche' is not associated with any 'fear' although it appears to correspond to the depiction of imaginary stone figures, giving a kind of motionless atmosphere.

No matter which progressions are used to represent the various subjects in the *Catalogue*, the indications that Messiaen provides are no doubt crucial. Without any specification or description, it is difficult for the pianist to imagine the detailed portrayal of the movements, even though similar progressions are transformed or improvised to correlate with each depiction. Although it is true that some of Messiaen's depictions are apparently easier to recognize (such as the waves and blue sea in 'Le merle bleu' at p.6), his indication is important to describe the subject he intended, though later this depends on how the pianist interprets or imagines it at different levels. This relates to the discussion of 'Use of the piano to imitate other instruments' timbres and other sound effects' on page 54.

Etude-like passages

It can be observed that certain passages which involve both birdsongs and non-birdsongs appear very much in the style of an etude. Most of them are constructed by a sequence of harmonic progression which usually represents the non-birdsong figure; or passages of birdsongs in consistent rhythmic or melodic pattern, for

¹¹ See Chapter 3.5: 'Le traquet stapazin', p.159

example excessive repetition of notes, or tremolo formed by the rotating of both hands. Some of these passages involve questions about the choice of fingering to be used, though Messiaen indicates some fingering in most of the sections. The fingering or suitable hand position is important in order to produce an effective sound that is essential to represent the subject.

The first example is the kingfisher's flight in various arpeggio forms, though the left hand figure is merely a single-line broken chord. What makes it sound like a 'study' is the consistent stretch between the thumb (all white keys) and other fingers that are required to play the chords (all black keys). Despite being in extremely fast tempo, the difficulty lies in the hand position with the fingering of 235 or 245 to be stabilized on those chords successively in different positions (example 2.19). Further, though the whole passage is marked in *p*, a slight application of *cresc.* and *dim.* is natural to the curve shape of the phrase; this is to enhance the movement of the flight. The later flight passage (from bars 163-166) is even challenging where the black-key chords patterns are played three times, but each in different positions.

Another example to demonstrate the etude style is the glissando from birdsongs or calls. A fine example can be found in the curlew's song from 'Le courlis cendré' where the same ascending glissando motif is repeated in various dynamics for seventeen times successively (example 2.20). Here, it should be noted that each glissando fragment moves in ascending motion but contrasts in dynamic (*dim.*). In comparison, the glissando is not as difficult if it appears in loud dynamic. In turn, the more gentle and smooth glissando of the robin and the little owls' call require much control.

Repeated notes in fast tempo are indubitably difficult in terms of the choice of fingering. One apparent example is the rock bunting's song in 'Le traquet stapazin' (example 2.21) which occur in two passages. The repeated B which circle within E and G# result in an E major tonality for the song. Perhaps, individuals may have a preference whether or not to follow the composer's fingering (4-3-2). Some might prefer not to change fingering for the repeated notes, as opposed to Messiaen's marking (4-3-2), since the interval B-G# may be better played with the fingering of

4-2 instead of 3-2. However, presumably Messiaen did not intend to have finger changing on these repeated notes in some instances, where some fragments are only indicated with 4 on the first repeated notes. The reason is obvious since the fourth finger is needed for the stretch of wider interval: B – C#. However, if there are more than two repeated notes, pianists certainly could have the alteration of fingering, as long as the fourth finger remains at the last repeated note before it drops on to the next pitch.

Another birdsong that features repeated notes is the redstart's song in 'La rousserolle effarvate' at bars 150-159 (example 2.22a), which Messiaen marked as *gentiment monotone*. Here, the Bb is generally repeated but the characteristic of this song is to demonstrate the exquisitely delicate single melodic line, lingering above the sustained resonance harmony. Though it is not considered a difficult section, the evenness of touch and the coordination between both hands are important. Most of the repeated notes are played by the left hand but the alternation between both hands and its rhythmic grouping are different in each bar (although the whole section is written in semiquavers and demisemiquavers). Similarly, the evenness of the semiquavers is constructed by different groupings of notes with most of the groupings in three semiquavers followed by two. Although pianists should try to achieve an equal rhythm with a delicate tone quality for each phrase, Messiaen's grouping of notes may function to highlight the melodic contour he intended. For the pianists, the grouping of notes thus serves as an indicator for the contour of the melodic line; the shape of the line can be very different if the grouping is changed. Compare these two examples (example 2.22b).

Referring to the previous category, I would like to mention again the garden warbler's song, which equally exhibits repeated notes in some of its fragments. However, even though the garden warblers' duet is classified as a contrapuntal style, it can be considered as a mixture of different technical passages. This includes repeated notes, flexibility of the coordination in both hands, evenness of touch and so forth. These characteristics are quite similar to the acrobatic flight of the alpine chough in 'Le chocard des alpes' (example 2.23).

In view of the demands of the *Catalogue*, the practice of double notes in thirds, sixths, sevenths or ninths is useful to pianists. Further, most of the dyads that are formed by tritone interval and a firm (frame) hand position should be strengthened especially in approaching fast passages. In addition, one of Messiaen's typical birdsongs is the extensive use of grace-notes in double notes especially to represent a sliding vocalization. One good example is from the reed warblers' duet. The whole passage is full of dyads in a variety of intervals, while most of the time each hand is required to cross over to the other. The next example is the flight passages in 'La bouscarle', the third against sixth chords after *harmony litany* (example 2.24). This appears to be a much simpler section, since each pair of chords is formed similarly. However, even though the composer gives a similar fingering for each pair of chords, the hand position will need to be changed slightly for the distance between intervals of D-F and A-F#.

Messiaen's use of double notes in harmonizing birdsongs leads us to discuss the 'tremolo' playing. The difficulty lies in the rotation of both hands in parallel direction. It will be far easier if both hands are moving in the opposite direction. Some examples of birdsongs which have this feature is none other than the nightingale, the sedge warbler and the wren. Interestingly, Liszt's *Saint François d'Assise* 'La prédication aux oiseaux' from the *Two Legends* is full of trills that involve parallel movement in both hands. One might wonder if this has been one of the influences on Messiaen's piano writing, though Liszt's parallel trills serve as a soft background harmony while Messiaen's always portray the song of the birds as a foreground subject.

Use of piano to imitate other instruments' timbre, and sound production

Despite portraying all sorts of birdsongs or non-birdsong subjects, Messiaen has fully explored the piano even to the extent of imitating other instrumental timbres. The reason is to give more specific description regarding the sound he intends to portray, not merely by giving his notation. Moreover, this has probably provided better information for the pianists in order to produce the touch or tone to imitate the sound more effectively. The common instrumental timbres used for imitation in

the *Catalogue* are the xylophone, glockenspiel, the tam-tam and gong and so forth. One may recall the importance of these instruments to *Réveil des oiseaux* and *Oiseaux exotiques*.

Being the longest movement, 'La rousserolle effarvate' also appears to have more sections which are indicated with the imitation of instrument timbres. 'La chouette hulotte' has its distinctive quality where its 'fear' motif is represented by the timbre of the timpani. Here, the action of touch should be acute and with energy although its dynamic level is in pianissimo and in a low register. This is to give an imitation of attack such as the mallet of the timpani. The indication of *sourdine seule* and *très sec* is thus reasonable, since the notation is in the lower register which already provides a kind of resonance itself, even without any use of pedalling.

The most common imitation of instruments in the *Catalogue* is by using the two extreme registers of the piano. It seems that the glockenspiel and the xylophone are favoured by the composer where the timbres of these instruments are imitated through the higher range of the piano. Here, the glockenspiel is imitated by the goldfinch's song in both 'Le traquet stapazin' (example 2.25a) and in 'La buse variable' (example 2.25b). Accordingly, it may be suggested that a metallic floating touch is advisable, but Messiaen's emphasis of *très clair* should not be neglected. The timbre of the xylophone is used for more subjects. As a non-birdsong subject, it appears most remarkably as the pond music in 'La rousserolle effarvate', representing the consistent major 9th interval. Differently from the previous example, the consistent semiquaver with the ticking sound of the high register represents the steadiness and quietness of the night, as if moving from second to second. Another example is the glissando of the sedge warbler. This may again suggest the lightness of the glissando to parallel with the timbre of the xylophone even though it is in a loud dynamic. Further, the glissando is required to be played straightforwardly and directly such as using the mallet on the keyboard. Another related example is the glissando of the reed warbler (example 2.26) but here, the harp timbre is indicated. However, this could possibly mean that the glissando is to be played in extremely fast tempo, as we may imagine how a harpist glides on the strings, though the techniques in both instruments are surely entirely different.

The xylophone has occurred in certain characteristics of the nightingale's song similarly in 'La rousserolle effarvate' (example 2.27) as the rotating motif. Again, although it is marked with *forte*, it may be executed with a lighter touch in order to portray the instrument timbre. The same example can be found again in 'L'alouette lulu' (example 2.28). Another characteristic of the nightingale's song that leads to the use of the lower register in the piano, is the resonance of the tam-tam and gong. Both examples of the repeated chords from the nightingale's song in 'L'alouette lulu' (example 2.29) and 'La bouscarle' (example 2.30) are indicated with *clavecin mêlé de gong* (harpsichord and gong). This seems to be a more distinctive timbre, where a pitched instrument – harpsichord – is mixed with the resonance of the gong. The imitation of the harpsichord nevertheless appears earlier in the nightingale's song in *Réveil des oiseaux* (p.2) in the piano, though the piece itself is an orchestral work. In terms of the resonance of the gong, the chords in these examples may be more appropriate to be played without too much emphasis on any pitch, but allowing the whole harmony to resonate freely together with the assistance of the pedal. Nonetheless, the gong plays a special role in *Oiseaux exotiques* where it provides the Indian deci-tâlas rhythm to accompany the birdsongs. On the other hand, the tam-tam is paired with the cymbal, written as a trill in a quiet dynamic that functions to create a low resonance in *Réveil des oiseaux* (p. 3).

The solemn night motif in 'La rousserolle effarvate' has been marked with most descriptions of the instrumental timbres (example 2.31). Three layers of resonance are constructed to represent the scene. It begins with *comme un choc de cymbales* (like the shock from the cymbals) that is created by a arpeggio-like cluster of chords; this resembles a change of scene or giving a declaration of the presence of the night. The arpeggio lands directly towards the lower notes which imitate the tam-tam, though using a single A but in *fff*. The use of thumb on this note thus specifies the intention of the composer, which is further discussed in 'Characteristics of Messiaen's indicated fingerings' in later sections.¹² These two layers are sustained to allow the third voice to emerge, and are a combination of *comme des vibrations métalliques* and *comme des trombones*. From the chord

¹² See p.67

harmonies, the timbre of the trombone (in the tenor) stands out in fortissimo above the resonance of other notes. The left hand thumb that is used for the 'trombone' notes may be suggested to provide a round and heavy touch to represent the rather mellow but rich tone quality. In relation to the brass instrument, Messiaen even describes the common gull's call in 'Le courlis cendré' (example 2.32) to imitate the horn timbre. Regarding the timbre of the tam-tam, we should not forget the yellow iris motif in 'La rousserolle effarvate' which is similarly followed by two single-chord motifs (example 2.33). Here, the composer indicated as *tam-tam lointain* (in the distance), in which the chords are played in extremely soft dynamic to reflect the sound in a further distance.

Above all, 'Le merle bleu' has some significant features regarding the imitation of instrument timbre. The two-bar figure which always precede the blue rock thrush's song is described as *enveloppé, halo sonore, comme une résonance de cloche* (example 2.34). The notation is ranged at the middle and slightly lower register which does not seem to portray the kind of bell-like sound found in other examples. Perhaps this is a lower bell-tone, and its resonance is not as sharp as those in the high register. Since it is marked only in *mf*, the accent may well not be played too directly but allows the sound to come off freely. Another interesting section is where the blue rock thrush's song is accompanied by the sequence of 'gong' representations, with the instruction *imiter les grands gongs, les tambours allongés de Bali* (example 2.35). The intervals of fourth and fifth within the chords thus provide a kind of spacious effect of the gongs.

In the aspect of sound production in the *Catalogue*, it can be noticed how the composer transcribed a particular sound with emotion and expression. As discussed in Chapter Four 'Interpretation and Comparison of Recordings', some of the birdsongs' effects are merely noises that do not focus on specific pitches; instead they present a kind of timbre. Typical examples are the raven's call in 'Le chocard des alpes', the hoopoe and corncrake in 'La bouscarle', the bittern's call in 'La rousserolle effarvate', and the common gull which appear in many movements. Certainly, all these tend to be calls in the lower register and formed by a dense harmony. In this kind of notation, there are greater possibilities to produce different sound effects from each similar example. Pianists may choose to emphasize a

specific pitch in one of the voices, or give a good balance to each note. However, articulation and dynamic equally count towards the overall effect. Here, I would take the example of the raven's call in 'Le chocard des alpes' (example 2.36). Its characteristic is significant for the fast gliding slurs which are short and brusque. From Messiaen's fingering, it can be noticed that emphasis is given to the three chordal slurs but he maintains the strongest finger position for the first accented chord. The sounds of these slurs are probably intended to represent a kind of 'pulling' effect, where the accent is drawn slightly heavier and longer over the later two chords. Another similar example can be found in the carrion crow's call in 'La buse variable' (example 2.37), displaying a kind of harsh gliding descending phrase. Although the composer has stressed the importance of clarity, the clarity in this instance may not refer to the pitch, but more on how an overall sound effect is produced.

For other non-birdsong materials, there is no doubt that the composer's descriptions can influence the way his notation is approached. Giving a simple example is the eagle's flight that ascends *immobile et mystérieuse* (example 2.38). Although moving in ascending, the whole phrase is marked *pp*. With all these indications, it suggests that we best play it with less hand movement, letting the fingers crawl from one note to another, akin to a calm and steady flight.

(B) Characteristics of fingering

Detailed indications of fingerings by the composer can be seen increasingly in his piano works from the late 1940s, such as the piano solo pieces *Cantéjodjayâ* and *Quatre études de rythme*. In his two birdsong works for solo piano and orchestra written in the 1950s, the fingerings in *Réveil* is far less compared to *Oiseaux exotiques*. However, even some of the fragments in the earlier works such as *Vingt Regards sur l'Enfant-Jésus* (1944) are occasionally marked with fingerings. Messiaen continued to indicate fingerings in the *Catalogue* and even more meticulously in his later birdsong works such as *Petites Esquisses d'Oiseaux* (1984), where fingerings are written for each note and at each change of melodic pattern. In the interview with Claude Samuel, the composer explained that:

I am a very meticulous man, and I note with great care on my manuscripts the tempos I desire, the dynamics and bowing when it involves strings, articulation for the woodwinds, fingerings for the keyboards. I demand simply that my indications be respected; but I'm always appreciative of the artists who play my music, who devote weeks, months, sometimes years of work to it.¹³

It is true that the given fingerings provide many details regarding the shapes of certain fragments of birdsong. To some extent, one does not even have to work out a suitable fingering for the complicated birdsong phrases. There is no doubt that individual preference may differ, but it is certain that the composer had his purpose in specifying his own fingering. In an interview with Peter Hill, Yvonne Loriod, Messiaen's wife and to whom the *Catalogue* is dedicated, stated that all the fingerings in the piano score are entirely by Messiaen. She further points out that:

¹³ Samuel 1994, pp.201-202

Messiaen had a very good feeling for piano sound. He used to play to the class, he played everything that we discussed, even very difficult works, and as a result his sense of fingering was very, very good. But of course there are difference between one person's hand and another's, and between man's hand and a woman's. Some of his fingerings didn't suit me...¹⁴

We should be aware that the fingering indications for the birdsong passages not only provide suitable hand positions in executing his piano writing, but also give us an understanding of a wide range of attacks, weight, and timbre of certain notes. Understanding the fingering of a composer also assists in our interpretation. As Newman writes:

When a composer inserts his own instrumental fingerings here and there in his scores, he mainly seems to be volunteering technical solutions that the performer might not discover for himself. But in so doing that composer may also be supplying clues, intentional or not, to his interpretive preference – for example, to the articulation of a passage, the realization of an ornament, the grouping of an idea, or even the tone colour and projection in a texture.¹⁵

In the following paragraphs, the discussion of the fingering is focused on 'La rousserolle effarvate' due to its length that involves a great amount of material used; though other piano works will also be highlighted.

Omission or the use of the thumb in birdsong writing

Throughout the score, it is noticeable that the use of the thumb is carefully considered. The composer uses the thumb extensively in certain passages; however, there are some particular phrases where the composer seems to avoid using the thumb.

¹⁴ Hill ed. 1994, p. 292

¹⁵ William S. Newman, 'Beethoven's Fingerings as Interpretive Clues', *The Journal of Musicology*, Vol.1, No.2 (Apr., 1982), p. 171

Throughout the birdsong writing in 'La rousserolle effarvate', one significant indication is that the thumb is used at the interval of second. This is certainly not a new device in Messiaen's piano writing, since it appears in his earlier piano works, where it is often used for huge resonance chords (where there is often an interval of a second at the bottom of the chord) (example 2.39a, b, c, d, e). This technique enables the composer to create wider intervals within a chord because it 'releases' the index finger. In the birdsong writing, particularly from *Oiseaux exotiques* onwards, the thumb on double notes is often used for a slurring effect either upwards or downwards (examples 2.40a and 2.40b); or slurring from a succession of double notes passing from left to right hand or vice versa (examples 2.41a and 2.41b). Fingerings are even indicated for grace-notes such as the acciatura. This device enabled Messiaen to present not only a double note, but also a three-note acciatura (examples 2.42a and 2.42b) with a convenient hand position to present the call of the green woodpecker at bar 199. In some cases Messiaen specified the use of thumb on double notes even though they can easily be played with the thumb and index finger. For instance, at bar 119 (example 2.43), the A and B falling to D and E can easily be played with 5-4 and 1-2, but the composer indicated a thumb on both D and E notes. With reference to the three-demisemiquaver slurs, it may be that Messiaen intended to reduce the finger action of executing this slur from the first note slurring downward to the third demisemiquaver; the second finger may create a heavier touch for the E note, whereas the thumb on two notes may lessen the touch leading the second demisemiquaver to the third.

One of the most important intentions of Messiaen's fingering is to enable the playing of birdsongs at an extremely fast tempo. Another contribution from the double thumb is that the composer had the opportunity to transcribe more pitches for a particular birdsong. Moreover, the interval between two pitches can be extended since the fourth and the fifth finger are able to stretch further away from the thumb that plays on a semitone or tones, even in slurs; whereas if the semitone and tones are used simultaneously by the thumb and second finger, the stretch will be considerably lessened. This device can be found throughout the *Catalogue*.

The excessive use of the thumb on double notes reminds us of some passages in the third movement of Ravel's *Gaspard de la nuit* – 'Scarbo' (example 2.44a), even

though the approach is not concerned with birdsongs. The use of thumb in this passage also resembles Messiaen's 'Regard de l'Esprit de joie' (example 2.44b) which was discussed by Madeline Hsu.¹⁶ Hsu explained that this is a 'pivot technique' where the thumb is acting as a pivot, allowing the 2-3 fingers to alternate to the right and left. In 'Scarbo', the entire double-note melody moves closely in semitones and tones. Here, Ravel's main intended idea is to explore the continuous dyads in legato style. This gives a kind of gliding effect along the keys using double notes in succession. Perhaps this influenced Messiaen slightly since he admired the work and it appeared as one of the main teaching materials in his analysis class.¹⁷

Using thumb for two or more continuous notes

There are other significant features in the use of the thumb. The use of thumb in succession is common in Messiaen's scoring. This fingering produces several functions that are illustrated in the following examples. Looking back to a birdsong passage in *Vingt Regards*, 'Regard du Fils sur le Fils' (example 2.45a), the thumb is marked in succession for two notes which are followed by a higher grace-note. Either Messiaen was concerned with the clarity for these quick notes, or it is used for the purpose of aiming easily to the grace-note. The effect of using the thumb creates an accent for all three notes. On the other hand, if two different fingers are used upon the first two notes, together with the staccatos and in such a quick tempo, the player may potentially simply glide through the notes. This is common since concentration is often given in achieving the higher note, thus obliterating the staccato touch. From another point of view, the use of continuous thumb is to make the grace-note easily found. Another example is taken from *Turangalila symphony* 'Turangalila 2' (example 2.45b) at the beginning of the piano cadenza, although a grace-note is not involved here.

¹⁶ Madeline Hsu, *Olivier Messiaen, the Musical Mediator – A study of the Influence of Liszt, Debussy, and Bartók* (London: Associated University Press, 1996) p.68

¹⁷ Samuel 1994, p.177

In *Oiseaux exotiques*, this can also be seen in the semiquaver triplet by the vesper sparrow's song (example 2.45c). All the above examples are written in staccato or non-legato. Elsewhere in *Oiseaux exotiques* he uses the thumb for power (example 2.46 x). He also requires the pianist to play consecutive thumbs in legato. In an example from *Neumes rythmiques* (1949) (example 2.47a), the thumb is marked for three continuous notes (from G# - F# - E). Here, we notice that the composer emphasizes the legatissimo of the slur. In the same works (example 2.47b), another example also implies that Messiaen doesn't want the pedal to be used.

A similar example is found in the first movement of the *Catalogue*, 'Le chocard des alpes', where the thumb is used continuously in one of the phrases from the flight of the alpine chough (example 2.48). A very simple reason is due to the extremely fast tempo, and to reduce the finger action from the jump (high G), which enables the performer to prepare for the next group of notes. Without the indication, pianists may not hesitate to use 2-1 finger for the F# and F. The use of the thumb on both notes may give more clarity and also a glide effect, although it is clearly inconvenient to execute the thumb on the black key.

Being an important piano solo work after the *Catalogue*, the gliding effect through the employment of thumb is also very common in *La fauvette des jardins* (1970). Most of the thumb indications are written especially for the double note passages. However, the first appearance of this device is used not for the birdsong but the music of the 'tree-alders' (example 2.49a). The way of writing where the glide connects the two notes (Bb to B), is very similar to the earlier example of *Neumes rythmiques*. Another example from *La fauvette des jardins* is where the thumb joins three notes continually A# G# G, but unlike the passage in *Neumes*, the legatissimo is easily achieved with the pedal indication (example 2.49b). For the birdsong passages, this device is used both for the purpose of gliding and to obtain clarity, which had been mentioned earlier. Other related examples from the same piece can be seen in (example 2.49c, d, e, f, g).

Positioning of the hand according to the fifth finger

Generally, if leaps occur in succession within a phrase or in a quick tempo, one will look for a hand position or a certain finger as a 'pointer'. From example 2.50, it is natural that one may depend on the thumb (right) in position for the F natural which derives immediately from a high leaping Bb. Instead, the composer has marked the second finger for the F. This may be explained by the fact that, the use of a 5-2 fingering involuntarily lessens the pressure of the hand since the fragment is written as *pianissimo* and *sourdine seule* (mute only). In contrast, more tension may be generated if the thumb is used (using 4-1 fingering for B and F note) as the leaps from the high Bb involve quite a distance together with an extremely fast tempo. Example 2.51 is an instance where Messiaen avoids the use of the thumb. Here, the balance of the hand position is more difficult when the fourth and the fifth finger are on the black keys (Ab and Bb) rotating with the lower E using the second finger. I personally find that using the thumbs in both hands with the right (23 1 or 34 1) and the left (1-4) accord the pianist more control in providing an equal rhythm. Another similar model can be found in example 2.52; the fourth finger which doubles with the fifth somehow restrains the flexibility of the movement; another choice is to use the second and third fingers in rotation with the thumb. The red figures indicate the suggested fingering. In consideration of the same range shared by both hands, Messiaen may have omitted the use of thumb in order to achieve a better hand position.

It may be possible that Messiaen is trying to avoid the thumb being employed too many times in succession. Whenever he indicates the 5-2 fingering, we notice that the thumb is used either for the preceding or the following intervals or chords. In some instances, one wonders whether the composer is trying to avoid using the thumb in order to imitate the light touch of the harpsichord as in the music by Scarlatti and Rameau; although he also had an admiration for Chopin's work, as he explained:

Perhaps I first ought to tell you what sort of piano music I like. I like Rameau and his harpsichord pieces very much, for the harpsichord is the ancestor of the piano. I also like Domenico Scarlatti for the same reason. I adore Chopin, the ballades as well as the preludes and études, the scherzos as well as the Barcarolle, the Berceuse, and the 'Funeral March' sonata; I love all Chopin, who is the greatest composer for the piano. He discovered the most extraordinary passagework, fingerings, and combinations.¹⁸

Apart from the rotating patterns mentioned above, the huge rotating chords by both hands in the sedge warbler's third strophe are noteworthy (example 2.53). Notice that after the accented couplets, the chords which begin in *pianissimo* that gradually make a crescendo back to the accented couplets are marked with fingerings in the right hand (2345 instead of 1234) and (5432 instead of 4321) in the left. Looking into the details of the interval formed by the chords – in the right hand (F# G# A# C#) and the left (B D E F), the fourth and fifth fingers from both hands are a distance of a third apart. One might wonder if an alternative fingering with 1234 in the right and 4321 in the left would be more accessible? Perhaps Messiaen's fingering in the left hand encourages a greater movement in attacking the final chord of the bar. Further, another reason may be to avoid the thumb bending inwards that results in an unnatural hand position (especially for the black keys). This situation follows to another similar chord which was repeated twice in the same strophe using the fingering 2345 (example 2.54), but here it is more reasonable as this chord descends from the first of the gliding calls, thus the fingering 2345 is used for the reason of resolving the tension of the chord.

The above feature appears not only in the *Catalogue* but in many of the later works. For instance, this fingering can be seen in some examples from *Petites esquisses d'oiseaux* (example 2.55a). This refers not only to chords ending without the use of the thumb, but also applies to some of the scalic passages (example 2.55b). In this particular example, by looking at the descending glissando-like figure (part of the robin's song) which is alternately played by both hands, we can see that each time the left hand begins with the second finger (instead of starting with the thumb, followed by the 2nd, 3rd and 4th fingers on C A G F – which will give more control

¹⁸ Samuel 1994, p.114

in positioning the notes). The preference for starting with the second finger is because the action of the four fingers will probably produce a more balanced diminishing tone; whereas, although the thumb may gain more control over the groups of notes, it can cause a heavy touch for the first note. Through the metronome marking *Vif* (quaver = 184), together with pianissimo in one pedaling for the whole scale, this descending figure should be presented in the most delicate manner. A further examination is that Messiaen's fingering also keeps the hands well apart according to the arrangement of the hand position, where sometimes the left hand back, the right hand forward or vice versa; and this may be the reason why the thumb is omitted in order to give more space to either hand.

However, it might be true that the thumb may not be well placed if there are frequent changes of hand position, for instance crossing hands from one to another. One of Debussy's descendants, Marguerite Long reported Debussy's opinion on the thumb:

In the Etudes the omission of fingering, in which Debussy usually believed, is remarked on in the Preface. The player may make his own decisions. 'One is never so well served as by oneself.' Yet in 'Pour les huit doigts', the last study in Book 1, Debussy stated that 'the changing position of the hand makes the use of the thumbs awkward. Its execution would become acrobatic.' Temptation, however, became too strong for me and, as I found the effect of using the thumbs satisfactory, I hastened to disobey (Let's find our own fingering', said the Preface.) Confronted with the success of this *fait accompli* the composer could only applaud. He thereupon decided to authorize the use of the thumbs.¹⁹

In 'La rousserolle effarvate' (example 2.56) the omission of thumb to suit the hand position is evidenced in the beginning of the reed warbler's duet, where the Bb – A is marked with the second finger instead of the thumb; the use of second finger thus provides more space since not only is the left hand crossing over to the right, but both hands are fighting for the notes in the middle register. However, avoiding the

¹⁹ Roger Nichols, *Debussy Remembered* (London: Faber and Faber, 1992) p.179

use of the thumb, especially in some of the chords in wider intervals no doubt raises inconvenience for smaller hands. Apart from the *Catalogue*, this is obvious in some later works such as chords from *Couleurs de la Cité céleste* (1963) (see examples 2.57a and 2.57b). Further examples also can be extracted from *Petites esquisses* (examples 2.58a and 2.58b). In the first example, the chord may easily be played with the fingering 5321 on the notes E G A C but Messiaen indicated with 5432. The 5-4 fingers which are imposed on E G thus create an unnecessary stretch whereas the fingering 5-3 lands firmly on the interval of a third.

Fingering in relation to Timbre

It is indubitable that some of the fingerings which strike our attention stem from the composer's intention to achieve a certain effect from imitation of an instrument's timbre or a particular resonance. As stated in the above section, some of the fingerings given by Messiaen are shown to avoid the use of the thumb in certain rotation patterns; but here, what has been observed is that the thumb is specified in several instances although other fingerings are the usual substitution. The most obvious example is from the 'solemn night' motif (example 2.59), where the rolling cluster chords rooted on the lower A note are played by the left thumb. This particular note is marked 'like the tam-tam' with the dynamic *fff*. By taking into account the distance of the keyboard range, the most usual fingering a pianist will employ on these notes may be the third finger or by using two fingers simultaneously to produce the *fff*. Another approach is suggested by Peter Hill, where the crossing of hand is omitted and the last two notes are played similarly using the right hand. Though this is powerful, it is more risky; in favour of the thumb, one can see the note while hitting it high. However, concerning the imitation of the 'tam-tam', the thumb may produce a more rounded sound to resonate the vibration of the low string. To strike the notes with these loud dynamics, other fingers such as the third or the second will tend to create a sharper tone. Therefore, it is important to note that there is much to be considered in terms of the dynamics and other indications in order to produce the composer's intended timbre.

In other solo piano repertoire such as in *Cantéjodjayâ* (examples 2.60a and 2.60b), the thumb is often used at the end of a phrase, sometimes at an extreme register for both hands. This may bear some resemblance to 'La rousserolle effarvatte' which has been discussed above. Similarly, the accents indicated for the thumbs should not be struck too directly in avoiding a sharp tone, but with a heavier and rounded tone. To consider the leaps and the hand position at the opposite end of the keyboard, the use of thumb may have delayed the directness to land firmly on the notes.

In 'La rousserolle effarvatte', the bellowing call of the heron contributes a contrast to the above feature (example 2.61). Here, Messiaen marked both the accented notes of the right hand with third finger. However, one wonders why the composer did not use the thumb such as in the above examples? In considering the imitation of the call, the third finger thus produces the directness of the heavy strident low sound of the heron. Another example of the consecutive use of the third finger can be found in *Turangalila* (example 2.62). Here, the composer may intend to produce a sharper and more direct tone colour to serve the indicated accents.

Fingerings indicated to serve for a birdsongs pattern

One reason that Messiaen indicated his fingering particularly for the birdsongs is to assist the pianist in understanding the direction of a certain phrase or even a short fragment. It is not surprising that in his scoring for birdsong especially since *Réveil des oiseaux*, the changing of hands is so frequent when executing a melody of a solo birdsong due to the highly varied intervals within a fragment. In 'La rousserolle effarvatte', examples can be found at the end of all the red-backed shrike's phrases. Both hands are used for each ending of the red-backed shrike's phrasing and Messiaen carefully indicates fingerings in order to suit the shape of the song's pattern. From example 2.63, in the last system on page 14, again one can easily imagine the fingering of 5-1 on the right hand G and C notes; again, the reason Messiaen did not use the thumb on the C is because it is not the concluding note and he wished to avoid an inappropriate accent.

The main reason Messiaen provides a detailed fingering when both hands are alternately used to perform a birdsong melodic line is because the composer was concerned over the continuity and the flow of the birdsong fragment. Messiaen's birdsong not only appear in complex melodic contours, often divided between the hands, but hand crossing is also often used with specific indications. Hand crossing greatly affects the hand position and this creates a problem of fingering. This will be discussed in 'Hand Crossing' in a later section.

Glissando – with or without use of fingerings

Glissando is one of the important features in Messiaen's birdsong transcription. This is for the purpose of imitating one of the common birdsong characteristics where its pitch is glided from one note to another, either in ascending or descending. Examples of the glissando call can be referred to the owl, the curlew, the robin and the song thrush. Here, I would like to discuss the fingering in presenting the glissando effect. In the *Catalogue*, they are often written either by using an entirely black or white key, or a variety of scalar patterns. One should understand that it is not quite feasible to achieve a perfect glissando for keyboard instruments in comparison to the string or wind instruments. In Messiaen's glissando, most of the notations were written in notes rather than a dash between two notes, though there are a few exceptional examples which will be shown later. The reason is that there are many instances where his transcription of a glissando is made up of a mixture of scale patterns, rather than the common glissando with a consistent interval of a 2nd where one can simply use a finger or two to 'gliss' through the keyboard from one note to another, in a great distance and even at a fast tempo. However, it is worth noting that even when Messiaen's glissandos are formed either completely on the white or black keys, all the notes are usually written out. One example can be found in the xylophone glissando from *Oiseaux exotiques* (example 2.64). Here, Messiaen could have simply notated the highest and the lowest note with the glissando symbol. This shows that he is being

meticulous about the details for scoring his work, preferring to notate as clearly as possible his indication rather than using musical symbols.

There are a few examples where Messiaen uses the glissando-dash symbol such as in 'La rousserolle effarvate', 'Regard de l'Onction terrible' and in *Ile de feu I* (examples 2.65a, 2.65b and 2.65c). This may be due to the extremely fast tempo where the composer felt it is impossible to notate all the notes due to the notation layout. In 'La rousserolle effarvate', one can find that some of the glissando passages (with written notes) are indicated with different explanation such as *brillant, comme un glissando de harpe* or *comme une glissade perlée, mais violente* (examples 2.66a and 2.66b). It is important to explore a set of fingerings to present different glissandos, in achieving both speed and the equal touch, especially when both hands are used.

In the case of 'La chouette hulotte', the '*miaulé*' effect from the little owl is another interesting point. The right hand is written completely with white keys and the left hand on black keys (example 2.67). Naturally, the number of notes in the left hand is fewer, compared with that of the right hand, even though both are supposed to start and end the glissando simultaneously. Although fingerings are indicated for both hands by the composer, it is quite possible to use the finger to 'gliss' from the C up to the E on the right hand; this may give a more balanced rhythm together with the unequal value from the left hand, as the 'gliss' technique will eliminate the gap between the change of fingers within the glissando. This might not be Messiaen's original intention, as he would have specified in the score if the 'gliss' technique should be used. However, when Peter Hill suggested this to the composer, he apparently liked the effect. Another reason comes from the dynamic; notice that both glissandos are in a soft dynamic where the second 'gliss' is even softer, from pianissimo to *ppp*. Using different fingers for these notes may gain more control over the soft dynamic level rather than using the conventional 'gliss' technique.

This glissando in 'La chouette hulotte' is similar to *Ile de feu I* (example 2.65c) in the fact that the right hand uses all white keys while the left employs all black keys; another similarity is that there are more notes in the right hand than the left.

However, the most important difference in these two examples is that the number of notes and ranges from the right hand in *Ile de feu I* are much greater than in 'La chouette hulotte'; the glissando in *Ile de feu I* covers two octaves while 'La chouette hulotte' only uses slightly more than one. This may be another reason why Messiaen chose to use a dash symbol for the glissando instead of writing the entire notes. There will not be ample time to complete the glissando in *Ile de feu I* if fingerings are used. Another point is that the example from *Ile de feu I* is written in *forte*, which contrasts with the softer glissando from 'La chouette hulotte', and therefore the use of 'gliss' technique is certainly a better choice.

The glissando from 'Le courlis cendré' which is referred to as '*tragique et désolé, dans le sentiment d'un glissando*' ought to be highlighted (example 2.68). This short glissando motif repeats seventeen times continuously along with the rise and fall of the dynamic. The pedal is held throughout the passage and Messiaen even specifies 'sans ralentir', to remind the player not to slow down at the end of the passage. However, this glissando is formed chromatically in both hands, and ends with a rising tritone interval. Chromatic scale patterns may produce the glissando more effectively due to the nearer pitches. Fingerings are provided, both hands starting with the thumb; the left hand continues the glissando using the fifth finger, but the right starts with the index finger and changes again in the middle of the glissando. It is not surprising that Messiaen used both thumbs to accentuate the first notes of each glissando but the immediate change from the left thumb to the fifth finger seems rather awkward since the two notes are only a semitone apart. Indubitably, again this may be Messiaen's intention of achieving uniformity from both hands, or to be certain that both notes are more likely to have the same timbre.

Another more ambiguous fingering comes from the song thrush's glissando from 'Le loriot' (example 2.69). For the right hand, the glissando starts with the index finger and changes at the Ab using the thumb, ending with the fingering 1-3-5. However, it is quite a puzzle as to why Messiaen did not end the last two notes with fingering 3-4 since both the notes are only a tone apart. The use of 3-5 also affects the hand position, as if one is required to squeeze the fingers close together. At the beginning of this glissando, I would suggest that the use of the thumb may gain more dynamic, especially if it is marked with accent and particularly in *fortissimo*.

Perhaps, the reason that Messiaen chose the index finger to begin the glissando is that the use of the thumb can affect the hand position at the beginning of the 'gliss' from Bb to Db; since the thumb will be required to bend inwards to the black key (as mentioned at p.65).

Generally, glissando which is written in entirely white or black keys with a consistent interval of a 2nd can be considered the easiest and straightforward. One can either use the 'gliss' or with finger technique. Scalic passages with inconsistent intervals may need a secure fingering and hand position in order to achieve the glissando smoothly in a fast tempo. This may be the most difficult glissando pattern due to the inconsistent intervals. The chromatic glissandos may have the most effective outcome if they are played with an equal touch, since the pitches are closer and always consistent to one another.

It is important that we should always imagine the glissando in terms of birdsong rather than executing it 'technically'. Clarity of notes is not important, as Messiaen indicated most glissandos with pedaling, to avoid hearing the notes individually. However, the robin's glissandos from *Petites esquisses d'oiseaux* (examples 2.55a and 2.55b) may have a different characteristic. Since the song of the robin is 'gentle', the frequent occurrences of the glissando, usually in descending, should be enhanced with a soft and light touch. Too much pedal will definitely worsen the effect, as the line of the glissando requires clarity in contrast to the usual loud and noisy 'gliss' from other birds. However, the effect of the glissando cannot be achieved if notes are not played in an equal touch and *legatissimo*. We should always bear in mind that the piano is a percussive instrument. As mentioned earlier, to produce the birdsong with this kind of *portamento* effect can be much easier on a string instrument. It is the equal touch from both the finger or hand position that contributes to the luminous soft gliding calls.

In addition, Messiaen has explored another form to create the gliding call of the birdsong without using a scalic feature. There are many instances where two chords are used to portray the gliding effect, chords either in rich harmony or simply in double notes. Examples are found in almost all his birdsong repertoire but the most

prominent example will be in 'La chouette hulotte', which will be discussed in detail in Chapter Three, Analysis.

Different glissando fingerings are very much affected by the notation and the overall patterns, especially when alternative hands are used. One also needs to identify the types of glissando the composer intended, by taking account of the tempo, touch, character or imitation of different timbres. In Neuhaus's writing, he strongly recommended that pianists should not only depend on the first three fingers in chromatic scales. The fourth and fifth finger should be equally practiced regardless of speed or force. In order to master glissando with all the fingers, he suggests the sliding finger technique for all five fingers (examples 2.70a and 2.70b)²⁰.

Cross hand

As mentioned earlier, hands crossing over each other may create fingering problems as it will affect the hand position. Before examining the cross hand technique in Messiaen's piano writing, it is important to discuss the frequent use of the marking – *m.d*, *m.g*, *dessus* and *dessous*. The simple reason for the composer indicating these terms is that both hands share the same register at the same time; this is similar to the reed warblers' duet in 'La rousserolle effarvate' which was mentioned earlier. Other examples can be referred to examples 2.71a and 2.71b.

One of the main reasons Messiaen often indicates *main droite* or *main gauche* is that the written intervals are too wide for the stretch of one hand. This is especially identifiable in Messiaen's birdsong works as the overall register of a particular birdsong can be of great range. However, this device is used even in a single melodic line in his non-birdsong work, *Cantéjodjayâ* (example 2.72), where the left thumb is always placed on the D# while the first G# in the phrase is played by the left hand third finger. The next example is in the last phrase of 'Le traquet stapazin' (example 2.73), where the spectacled warbler's song is written in a much slower tempo. Unlike the previous phrases, Messiaen has indicated that the pedal should

²⁰ Heinrich Neuhaus, *The Art of Piano Playing*, trans. K.A. Leibovitch (London: Barrie & Jenkins 1973), pp.150-151

not be used. Here, we may notice that the left thumb is required to move under the other fingers which hold the notes of the E major chord with added sixth; before the last bar, the thumb quietly takes over G# allowing the third finger to play the D#. The pedal is only indicated for the last chord, which produce a clean E major chord with added sixth.

Another more challenging alteration of hands can be found in 'Le loriot' from the 'rainbow music', written in three staves (example 2.74). What causes the difficulty is that the main theme (*mezzo forte*) in the middle stave is played mostly by the right hand, but occasionally alternates with the left; the top layer acts as a resonance to the theme while the bottom layer provides the harmony. Both hands need good balance and coordination to highlight the middle layer figuration smoothly and in shape. To a certain extent, this can be more difficult because some of the main notes are not necessarily at the bottom of the top layer and vice versa; at times the three layers share the same register and indications of *dessus* and *dessous* are marked. Looking at this, one may find this very much resembles the technique of a fugue, each hand requires a very controlled coordination with the other in order to shape the inner themes.

Occasionally, there are examples of some ambiguous indications. For example, one of the phrases from the blue rock thrush's song in 'Le merle bleu' (example 2.75); the ending with two repeated double thirds of the right hand seems to be in a better position if kept under the left, but Messiaen marked this to the contrary. Consequently, this may cause inconvenience where the right hand is placed above the left, since the left hand requires a free movement for the leaps to the black key (C# and F#).

The most significant feature of the use of hand crossing comes from 'Le merle bleu' (example 2.76). It is noticeable that the timbre formed by the right hand melody, tinted with the soft upper register harmony in the left hand, creates the hallmark of the blue rock thrush's song. Here, both hands will focus on the right side of the keyboard; the left hand which crosses over to the right has a distance of nearly an octave from the right. Therefore, it results in a fairly inconvenient hand position. It would be quite possible to change hands, where the double notes are played by the

left, and vice versa, to avoid the crossing of hands. However, we must realize Messiaen's intention of using the hand crossing technique. Notice that the left hand which plays in a higher register has an indication of *mezzo forte*, while the right hand is *forte*. Therefore the composer may prefer the main theme to be played in the right hand; as the double notes in fourths and thirds with different articulations can be more controlled by it. The left hand acts as a resonance or a harmonic upon the right hand theme. The same idea resembles the short-toed lark's song from 'L'alouette calandrelle' although both hands have only a single line melody without involving the cross hand technique. Therefore, it is not as complicated as the blue rock thrush's song.

The *Turangalila* motif in 'Le traquet stapazin' which suggests the 'sea' involves hand crossing as well, though it is in a much slower tempo (example 2.77). Similarly, the right hand has the theme written in double notes. However, note that the structure of this motif is written in three layers of voice; the left hand harmony flanking the right hand motifs, where the chord appears below the theme and then crosses over the right hand. Dynamics are different for the three voices; the left hand chords which cross over the right has the softest dynamic, *pianissimo*. Messiaen has designed that each quaver in the motif be accompanied by a chord, but judging from the dynamic level, the bottom chords which occur at the first and fourth quaver are more important to provide a sustained bass for the whole motif. Although in a slow tempo, the balance between the hands is essential, especially when concentrating on the legato and in shaping the right hand motif while the left hand moves across and back over the right.

Tremolo

In discussing Messiaen's indication of *m.d* and *m.g* throughout the score, another arrangement used by the composer is the rotating motifs of the birdsong. Most of these rotating patterns thus create a tremolo effect. A clear example can be found in 'Le courlis cendré' (example 2.78) from the rotating call by the curlew. The right and left hand form a perfect 5th apart and each hand is rotating between semitones ending with a higher tritone. Messiaen has arranged the rotation so that each hand

plays the perfect fifth interval alternately, the left hand with C# and G# is placed over the right which has the notes D and A. This in turn reduces the finger action but replaces it with the co-ordination of the rotation wrist movement. Furthermore, this device creates a vertical direction instead of a horizontal movement between both hands. It is questionable whether the rotating passage is similarly effective if the normal fingerings are used, which also means that both left and right hand fingers are moving in the same direction. However, in terms of giving a technical change, since the curlew's song has the gliding pattern in chromatic notes where fingers from both hands are required to move in parallel, perhaps Messiaen is trying to use another method for this rotating pattern in order to give the pianist a different fingering arrangement. It is useful when new technique of playing are used for the same material, as this will sometimes enhance the effectiveness. This device is also helpful since the rotations are written in *fortissimo*, the player may gain more sound when two notes are played by each hand. The same technique appears in 'Le traquet stapazin' (example 2.79), although this is not a long rotation of similar notes, it has the same idea; the note in groups are rearranged so that each hand is responsible for the notes in both staves, therefore indirectly reducing hand movements. However, this device can only be employed if the interval between the two staves falls in the limited stretch within each hand.

However, there are many instances where this fingering can be used in other passages throughout the *Catalogue*, even though the composer did not indicate otherwise. One example can be found in the song of the wren in 'Le loriot' where the rotating pattern occurs at the end of its phrase (example 2.80). From the example, the B-G will be played by the left hand while the Bb-F# by the right. This produces a suitable combination since each pair is formed by a pair of either white or black keys. Another example is from the sedge warbler's song in 'La rousserolle effarvate' (example 2.81) where the F#-B can be played with the right hand while the G#-C using the left; and for the second bar, D#-G on the right and E Ab on the left. We may notice that in comparison with the previous example, the rotating pattern from the sedge warbler is formed by tritone intervals. For the rotating technique in piano playing, it is usually easier to execute it when the notations in both hands are written in an opposite direction; however, if they are in a parallel direction, the arrangement as stated above is a good alternative. This device would

perhaps produce more power especially for passages in *fortissimo* and is more effective when playing in an extremely fast tempo. In addition, the trill from the grasshopper warbler in 'La rousserolle effarvate' can also be played by using this device. From the example (example 2.82), the G Ab will be played in the right hand and the A Bb in the left. When using the usual fingering, hand movements will be increased when both hands are rotating at the same time in a similar direction. However, this movement will be lessened when one hand (playing in intervals) alternates with the other.

Chapter 3

Analysis:

- 3.1 La chouette hulotte**
- 3.2 L'alouette calandrelle**
- 3.3 La rousserolle effarvate**
- 3.4 La bouscarle**
- 3.5 Le traquet stapazin**

Chapter 3. Analysis

This chapter offers a performance analysis of five selected movements from *Catalogue d'oiseaux*. The main focus is a study of their musical structure and material, including issues of harmonic style, thematic patterns, rhythms, phrasings and so forth; each analysis with differs in emphasis, however. For example, 'La chouette hulotte' is dramatically distinctive because of the strong portrayal of the night and the owl's calls; 'Le traquet stapazin' has a remarkable complexity of structure, while 'La rousserolle effarvate' features the great brilliance and virtuosity of the reed warbler's song. These features are analysed according to a pianist's viewpoint, and the hope is to achieve an understanding of the pieces which would help a performer. The order of the movements analysed – 'La chouette hulotte', L'alouette calandrelle', 'La rousserolle effarvate', 'La bouscarle' and 'Le traquet stapazin' – does not follow the order in the *Catalogue*. The arrangement here is based on the chronology discovered by Peter Hill and Nigel Simeone in their forthcoming book *Messiaen*. As mentioned in Chapter One, 'Introduction', the chronology of each movement is different from the order of pieces in the *Catalogue*. 'La chouette hulotte' and L'alouette calandrelle' were among the six pieces that were completed first by Messiaen: Loriod gave the first performance of these six movements at a Domaine Musical concert on 30 March 1957. The longest piece in the *Catalogue*, 'La rousserolle effarvate', was the next movement Messiaen composed at that time, but it was completed too late for Loriod to perform. Further, this lengthy movement was extensively revised later, and its timing increased from 14 minutes to 32. 'La bouscarle', was completed in June the same year, while 'Le traquet stapazin' was among the later movements completed in 1958.

3.1 La chouette hulotte

The distinguishing feature of 'La chouette hulotte' is how Messiaen distilled his own feeling of fear from the owl's call into the work. Unlike other pieces in the *Catalogue*, which are structured around features such as the passing of time, sunrise or sunset as a frame work for the birdsongs, 'La chouette hulotte' focuses only on the evocation and representation of the night (dark) and the owl's call dramatically seen through the medium of human emotion. In other words, the piece relies more on how the darkness and the owl's call affects the composer, thus the subjective feelings of the composer are more substantially important here than in other pieces. Together with 'L'alouette lulu', both works are contained in book 3 from the *Catalogue* and are distinct from each other for their representation of 'night'. With the delicate song of the woodlark, 'L'alouette lulu' provides a serene nocturne which is in a total contrast to 'La chouette hulotte'. The owl's observations were at two o'clock in the middle of the night, in the woods of Saint-Germain-en-Laye and at Petichet near Grenoble. The preface describes the owl's call as:

L'appel de la Hulotte est tantôt lugubre et douloureux, tantôt vague et inquiétant (avec un tremblement étrange), tantôt vociféré dans l'épouvante comme un cri d'enfant assassiné!

(Sometimes the call of the tawny owl is lugubrious and sorrowful, sometimes it is vague and disquieting (with a strange tremor), and sometimes a terrified shriek, like the cry of a murdered child!)

Figure 3

The Structure of 'La chouette hulotte'

Group	Subject/ motif	Details & Bar no.	Indication	Indication- Summary
Group 1	Night	Mode in chromatic rhythm: bars 1-26		A
	Fear	Single melodic line: bars 26-32		B
	Owl	Long-eared owl: bars 33	Cx	Ci
		Little owl: bars 34-36	Cy	
		Tawny owl (the dominant bird): bars 37	Cz	
Fear	Single melodic line: bars 38-42		B	
Owl	Long-eared owl: bars 43-47	Cx	Cii	
	Little owl: bars 48-50	Cy		
	Tawny owl: bars 51-56	Cz		
	codetta passage of the tawny owl : bars 57-60	Cs		
	Pause	Silence: bars 61		PAUSE
Group 2	Night	Mode in chromatic duration (longer): bars 62-116		A
	Fear	Varied: bars 117-122		B
	Owl	Long-eared owl: bars 123-126	Cx	Ciii
		Little owl: bars 127-128	Cy	
		Long-eared owl: bars 129-130	Cx	
Little owl: bars 131-133		Cy		
Tawny owl (longest): bars 134-137		Cz		
	Codetta: bar 138-143	Cs		
Coda	Owl	Tawny owl: bars 144-152	Cz	D
	Resonance	Silence: bars 153 Interval 7 th using C-A motif from the tawny owl's call: bars 154		

Structure

Three main subjects are used in this piece: the owls, which are the long-eared owl, the little owl and the tawny owl; the 'night' section and the 'fear' motif. Unlike other pieces in the *Catalogue*, these subjects are used economically since the work does not involve other species of birds or broader background subjects: the setting being in darkness, no other subjects can be observed other than 'sound' and emotion as conveyed in sound. This work can be structured in two main parts, the second being an elaborated repetition of the first. In other words, each section or subject in the latter part is expanded using the fundamental cell from the first part. Figure 3 shows the overall form of this work.

The first part serves as an introduction to all the ingredients; two sections of the owls' calls occur where each is preceded by the 'fear' motif. The first owl's call group (Ci – bars 33-37) is a short section where it functions to display the fundamental characteristics of each owl; while the second (Cii – bars 43-56) presents the development of the owls' calls, although the tawny owl's call is particularly featured.

After the long pause in bar 63, the recurrence of the 'night' section signifies the beginning of the second part. All the subjects in this part are twice as long as the first, though the ordering within the owls' group alters slightly. From Figure 3, one will notice that the three different owls are arranged in the same order as in the first part: the long-eared owl, the little owl and the tawny owl. The arrangement only differs slightly at the last strophes (Ciii – bars 123-152), where the long-eared owl and the little owl alternate twice before the entry of the longer tawny owl's call. After the codetta from bars 138-143, the tawny owl's strophe appears again but is magnified so that it signifies human emotion; this section is the coda of the piece. Followed by the fading tawny owl's call, the work ends with four resonance chords. Overall, the structure of 'La chouette hulotte' is clear and straightforward. The climax comes at the coda, the most distinctive section amongst others, where the composer summarizes the piece by merging the tawny owl's call with his own emotion.

The night music – the used of chromatic duration

In examining the ‘night’ music in ‘La chouette hulotte’, it brings us back to *Mode de valeurs et d’intensités* (1949), in which the mode of a chromatic duration is highlighted. Other related works which employ this device are *Cantéjodjayâ* and passages in *Saint François d’Assise*. Similar to both *Mode de valeurs et d’intensités* and *Cantéjodjayâ*, the ‘night’ music from ‘La chouette hulotte’ is written in three voices but all three are based on a single mode which is constructed by one to forty-nine demisemi-quavers; covering a range of four octaves moving chromatically from the A above middle C in descending (example 3.1.1). This is in contrast to other works, unlike *Mode de valeurs et d’intensités*, the different level of attacks is not one of the elements in the mode of ‘La chouette hulotte’.

Although all the three voices are based on one single mode (example 3.1.1), each voice uses a wider range of notes from this particular mode. This is contrary to *Mode de valeurs et d’intensités*, where each voice is only restricted to a twelve-note mode (example 3.1.2). Another example is from *Cantéjodjayâ*, each voices are set according to an eight-note mode (example 3.1.3). One can see that in ‘La chouette hulotte’, the top voice itself covers the first to thirty-fifth duration from the mode; the middle from the first to forty-fourth duration and in the lowest, from the sixth to forty-ninth duration. Therefore, the overlapping between the voices appears to be much greater. The wider range of each voice may justify that the composer intend to increase the range of each voice in portraying the night music more naturally.

Chromatic duration in ‘La chouette hulotte’: the differences with *Mode de valeurs et d’intensités*

1. All three voices are based on a mode.
2. No use of a mode of attacks.
3. Some notes are shared between the three voices.
4. There is a plan of dynamic (Figure 4). It is in a symmetrical form and the same letter-name notes are always in the same dynamic (example: any F# is *mf*).

When analyzing *Mode de valeurs et d'intensités* in his *Traité*, Messiaen explained that the three voices are moving as if in three different tempos; the top voice *presto* (based on demisemiquavers), the middle *moderato* (semiquavers) and the lowest *andante* (quavers).¹ Similarly, this description can be applied to 'La chouette hulotte'. Although the arrangement of the three voices follow the same mode, we are still able to notice that the number of notes used increasingly lessens (longer duration) in the lower voices. This appears especially in the bass where longer durations are used to 'support' the above two voices. At the end of the second 'night' music, the top voice concludes the section with thirty-third and thirty-fifth durations, as if allowing 'time' for the two lower voices to come to an end.

As mentioned, the different attacks are not included in 'La chouette hulotte' but dynamics are organized in the form of symmetry (Figure 4). One dynamic level is shared for two different notes, except for the two pivot notes – D# is *ppp* and the loudest note – A, is *fff*. All these dynamics are fixed regardless of different registers. Accordingly, we may realize that the most contrasting dynamic can be achieved with the tritone interval A – D#. Notes which are closer, for example in semitones, give less dynamic contrast on both sides of the mode. The contrast of the dynamic increase according to the distance of the interval. However, it is interesting to note that after a certain degree of interval, for instance, A to D# onwards, the dynamic contrast will again gradually become lesser due to the effect of the symmetrical arrangement. For example: A to Bb – interval 9th, if this interval is inverted, it becomes interval 2nd which fulfills the above statement that the closer interval are with less dynamic contrast.

Figure 4

A	G#	G	F#	F	E	D#	D	C#	C	B	Bb	A
<i>fff</i>	<i>ff</i>	<i>f</i>	<i>mf</i>	<i>p</i>	<i>pp</i>	<i>ppp</i>	<i>pp</i>	<i>p</i>	<i>mf</i>	<i>f</i>	<i>ff</i>	<i>fff</i>

¹ Messiaen, *Traite*, Vol. III, p.126

Here, we are able to notice that Messiaen has presented his 'night' music in several ways. The use of mode in 'La chouette hulotte' is an effective way to evoke a feeling of uneasiness and unstableness. This effect comes from the rhythmic fluctuations and the inconsistency of the different dynamic levels of notes; though the mode is written in a strict 2/4 time, similar to *Mode de valeurs et d'intensités* and in *Cantéjodjayâ*. In contrast, we can notice how Messiaen portrayed a contrasting night scene in comparison with the 'pond music' in 'La rousserolle effarvate' that reflects a serene atmosphere (though mysterious) with the use of consistent 9th interval. Another feature of tranquil 'night' music is from 'L'alouette lulu', represented by the use of a progression of four-chord motif in a slow tempo, and at the same time functions to support the delicate woodlark's song. However, the chromatic duration of the 'night' passage in 'La chouette hulotte' is presented as an independent section and it serves as the background music for the entire piece, where it does not correspond directly with the owl's call. It gives an atmospheric prelude to the work which is followed by the laconic 'fear' motif that triggers and anticipates the owl's call.

A few mirroring rhythm can be found in the two passages of the 'night' music. At the beginning of part one, a symmetrical rhythm is formed by the middle and lower voices from bars 1-4 (example 3.1.4). Later, at the beginning of part two, there is a non-retrogradable rhythm constructed by the top and middle voice at bars 64-66(1) (example 3.1.5). However, it should be noted that since these voices share the similar mode, it may be difficult to generate a complete retrogradable or non-retrogradable rhythm for the whole passage; from the two examples, the ending of one voice does not match the other as each has a different value. Therefore, this should be considered as an incomplete retrogradable or non-retrogradable rhythm.

'Fear' motif

With only a stark single line of repetitive notes, Messiaen transcribes the frightful feeling by imitating the timpani's timbre (example 3.1.6). In order to imitate the timbre, the composer uses the repetitive C as the fundamental note, occasionally with an anacrusis of Db and F#. The F# appears at the end of the phrase which

gives a tritone interval, one of Messiaen's idiosyncrasies for melodic contour.² This single melodic line is decorated with inconsistent dynamic markings and articulations that contribute to the presentation of 'fear'. There are a total of three appearances of this 'fear' motif throughout the whole work and each precedes the owls' call section. Together with rhythmic changes, each phrase is slightly extended than the previous, but the fundamental features remain similar. The anacrusis Db becomes a new pitch in the second time but sounds only once. However, its importance becomes more apparent in its third appearance in part two. This anacrusis acts as a disruption to the repetitive note, which suggests a state of worry. In the third phrase, its occurrence as an anacrusis appears more regular, regardless of the inconsistent rhythm in each bar.

The 'fear' motif is remarkable for its simplicity in contrast to the dark complexity of the night music. Furthermore, an interesting point arises between these two background subjects. The night music has the top and lowest voice using A, while the 'fear' motif focuses on C. These two notes are in fact the most important pitches for the entire work, which are the main pitches of the tawny owl's call. By looking at the background music as opposed to the owls' calls group, we can see that the composer has arranged both the night music and fear motif towards the lower register, giving the owls' calls a higher range instead. Without Messiaen's indication for the release of the pedal, the last interval at the ending is sustained, allowing the resonance to vibrate and slowly vanish into the night. Interestingly, the composer does not neglect the C-A motif where it is written in the inner voice.³

² More examples of the use of tritone interval is discussed in Chapter 3.3 'La rousserolle effarvate', p.116

³ This is indicated by Messiaen in the score.

Owls' calls

This is the only work in the *Catalogue* where no other birds are involved except those of the owl family. Here, although each owl has its own characteristics, the main idea which contributes to the distinctiveness of the entire work is the variety of their gliding calls. However, the gliding call is one of the most common features in the palette of birdsong characteristics; and what is important is how Messiaen transcribes these owls' calls so that they sound 'frightful'. The three species from the same family, the long-eared owl, the little owl and the tawny owl, are always structured together in a section without the interruption of any background music. In many works from the *Catalogue*, although Messiaen often grouped different birds' calls in a similar order throughout a piece, the difference in 'La chouette hulotte' is that the unity can be seen where the three birds are from the same family and each presents a similar characteristic – the gliding call. Each call from this owls' group only develops in the second strophe (Cii).

As mentioned above, the first appearance of the owls' call section (Ci) is primarily an example for introducing each bird's characteristics (example 3.1.7). It is important to be aware of the contrasting tempo among the different owls' calls, otherwise one can hardly distinguish the three species clearly; all three have the gliding call though they are varied in terms of tempo and timbre. As marked, being the soloist of the work, the tawny owl has the slowest tempo at *Lent* (semiquaver = 66), almost a quarter slower than the long-eared owl's. However, it does occur in a slightly faster tempo at *Un peu lent* (semiquaver = 76) in later sections. Changing of tempo for a particular bird is rarely seen in the *Catalogue*; the most obvious example will be the nightingale, where the change in tempo marking signifies the different song patterns.

Figure 5

Harmonic Development of the Tawny owl's Gliding Call

Strophe	Types of gliding calls	Related pitches	New pitches	Description
Ci	c1: bar 37		C-A C#-Bb D-B Eb-C#	Open interval C-A, C#-Bb
Cii	a1: bar 51	C-A C# - Bb	F#-Eb Db-Bb	Closed interval C-A, C#-Bb
	b1: bar 53 b2 (octave): bar 55	C-A C# - Bb F#-Eb Db-Bb		Using the same harmony but a different gliding call pattern
	c2: bar 54	C-A F#-Eb Db-Bb	G-E F-D Eb-C	The above harmony is accumulated on the right hand, left hand added with new pitches.
	c3: bar 56	C-A Eb-C G-E F#-D#		Using the same pitches from the previous harmony
Ciii	b3: bar 134	C-A	A-F# Ab-F E-C# Bb-G	Second group – new pitches for the first gliding call in this section
	c2: bar 135 b2: bar 136			
	c4: 137	C-A Db-Bb Eb-C#	G#-F# A-G	Similar as previous chords.
Coda	a2: bar 144	C-A D#-C# G-F#	C#-B B-G	A mixture with new and previous harmony.
	b4: bar 145	C-A Db-Bb G-F# E-C#	A-G B-E	First gliding call after the second codetta (Cs), extended to more new pitches
	c5: bar 146	C-A Db-Bb A-G	Ab-F F-Db	The C-A of c5-c6-c3 is written in the same register

	c6: bar 147	C-A C#-Bb Eb-C#	D-B	but harmonized differently.
	c3: bar 148			Similar to the previous chord in Cii.

Notes:

1. The harmony for this table is organized according to the pitches of each pair of chord.
2. The bold letters indicate that the pitch derived from the previous chords.
3. The dotted line indicate the important secondary harmony, the first is F#-Eb in group 1 –Ci and Cii; and E-C# or Eb-C# in group 2 – Ciii. Notice that the Eb-C# derived as early as the first chord (c1) at the beginning.

The Tawny Owl

The harmonic modification of the C-A motif gliding call.

Although the tawny owl is the soloist of this piece, its strophe does not appear completely independent but always positioned after the calls of the long-eared owl and the little owl. The huge dynamic and dense chords from the tawny owl may be the reason why it is positioned at the end of the section, since this may create a sense of momentum from the more delicate calls by both the long-eared owl and the little owl. In *The Messiaen Companion*, Peter Hill explains how Messiaen transcribes the tawny owl's glissando into music:

[...] Messiaen managed to create in illusion by a careful judgment of pedaling allied to fading dynamics. [...]The music begins to acquire a sense of movement, first in a series of tiny variations in which the C-A is the common factor, varied in harmonization, then in a primitive development, which is simply a diminuendo. (the owl fading into the distance).⁴

⁴Hill ed. 1994, p.327

With reference to Messiaen's *Traité*, we may obtain some further descriptions regarding the gliding calls of the owl. There is a notation in *Traité* which was taken in Aube, at one o'clock in the morning on 5 April 1977. According to the notation, each phrase is constructed of two slightly different calls or 'cri' (example 3.1.8). The first (a) is more direct, preceded with an anacrusis and perhaps in a faster tempo. The second type of call (b) is preceded with a few repetitive notes that gradually become louder before the glides. Here, it is possible glide (b) is slower, where Messiaen was able to identify the more elaborate chromatic descending notes of the call thus emphasizing the inner pitches between C-F# (example 3.1.8 x)⁵. We may take this example as a reference on how the composer has intended the gliding sound from the chromatic notes. According to his description of these two different calls:

Gliding (a) : *anacrouse, accent très fort et très clair, muette. (comme un cri terrorisé de femme ou d'enfant qu'on assassine - hurlement terrifiant!)*

Gliding (b) : *l'anacrouse est sèche, piquée, comme un pizzi Bartók, les 3 notes qui précèdent l'accent sont nettement scandées et percutées – l'accent est bref - il est suivi d'une désinence tremblée, étrange, comme une gamme chromatique d'Onde, au timbre mystérieux et trémolé – comme un hoquet d'angoisse.⁶*

Although the notation in *Trait* is taken after he composed 'La chouette hulotte', there is an extremely close resemblance between the two. Only two minor dissimilarities are found: first, the second glide does not resolve to A but to F#, giving a tritone interval instead; secondly, with reference to the score, the gliding call that appears as a couplet without any anacrusis (c1, c2 and so forth) is slightly different from the notation. For the following analysis, I will number each gliding call in order since this is not a lengthy piece, for example (a1), (b2) or (c1). The harmonic analysis of the following discussion can be referred to Figure 5.

⁵ Messiaen, *Traité*, Vol.V, p.229

⁶ *ibid.*

The most significant feature of the tawny owl is how the composer varies the harmony with the C-A motif as a skeleton. Other than the two patterns of gliding calls, there is no significance in the melodic contour of the tawny owl's call. In other words, the development of the calls in this piece is based entirely on the change of density and harmony to produce the call's effect, particularly in producing a 'frightful' sound. By referring to all the three owls' sections Ci, Cii, and Ciii, one will be able to notice that the harmony is transferred and exchanged among the sections. The same pitches are being used repeatedly to certain extent, but in different orders, registers or combinations.

The first tawny owl's call in Ci (bar 37: c1) gives the fundamental harmony (example 3.1.9). Its wide interval in both hands contributes to a thin texture and the C-A motif is written in the inner voice. The combination of the thin texture with a wide interval is what I termed as 'open' interval, which is opposed to the 'closed' interval in later gliding calls. We may examine how the composer rearranged the same harmony in different voices to produce different timbre. Notice that the 'open' interval from the right hand is used again in the second owl's call group (Cii) but has been altered to become a 'closed' interval in the left hand (a1 – example 3.1.10). In other words, this shows how the composer uses the same pitch to change the timbre of the original dyads. Apart from the 'closed interval' in the left hand, the added notes on the right similarly give more density to the dyad. This glide, which is repeated twice, is very close to Messiaen's notation (a) in *Traité* where it is preceded with an anacrusis. Here, the C-A motif is given greater emphasis, where it is doubled at both outer voices, thus making the pitch more prominent. The B-G# in the right hand functions similarly as the Db-Bb since both of them serve to produce a 'clash' sound against the C-A motif. However, the F#-Eb is a pair of new pitches and should be considered essential. The reason is that apart from the two pairs of notes (B-G# and Db-Bb) which encircle C-A, the F#-Eb provides a tritone interval (to C-A) that may even exaggerate the dissonances of the chords. From this gliding (a1) the same harmony is continued in gliding (b2) and (c2)(example 3.1.10). Gliding (b2) is the second glide from Messiaen's notation (b) where the repeated notes precede the gliding call; the second appearance of (b2) after (c2) is written in a higher octave (example 3.1.10 x). Interestingly, gliding (c2) is again added with new pitches, which clearly emphasize the increment of density

along each gliding pattern. For this dyad, all the previous harmony from (b2) is gathered in the right hand, while the left hand presents a new harmony very much of the C and A minor chord but with added F and E (example 3.1.10 y). Here, the composer has utilized all five fingers in both hands to obtain a dense harmony. Although new harmonies develop in each gliding call along different sections, the identity of the tawny owl's call is not lost since the C-A motif is constant. Gliding (c3) marks the original idea from Ci in the same tempo *Lent* (semiquaver = 66), which is slightly slower than (a1) and (b2) *Un peu lent* (semiquaver = 76).

The intensity of feeling also comes from the use of added value along (a1) to (b2): bars 51-53. Notice that the downbeat of the first glide in (a1) is in three semiquavers, extended to four in the second occurrence and then five in (b1 and b2); these are followed by gliding (c2) where the tempo is even slower. Another interesting point is about the gliding (b2) in the higher octave, where its tempo remained at *Lent* (semiquaver = 66) but not *Un peu lent* (semiquaver = 76). The reason is that Messiaen focuses to enhance the intensity of the gliding call. Despite the glides becoming slower, the higher range and louder dynamic portray that the owl's call is getting nearer to the listener, although at the end of the strophe, the appearance of gliding call (c3: bar 56) resumes to the plain double notes dyad. Again, the fundamental harmony has not changed though it is in a different arrangement, where the top three voices use the left hand pitches from the previous (c2) dyads; while to conclude its strophe, the F#-Eb (D#) remains but is written in the bass (see example 3.1.10). Before concluding the first group, Messiaen ends the entire section with a passage that denotes a kind of atmospheric summary, or a codetta of the owl's call, which is indicated as Cs (refer to Figure 3); Peter Hill explains that it is an afterthought, by way of suggesting the shuddering and trembling which sometimes curdles the owl's call.⁷ This particular section occurs twice in the work, in an extended form in part two. It suggests more as to epitomize the owl's character as *vague et terrifiant*, and the C-A motif is used where chromatic notes (B and Bb) are filled within the interval (example 3.1.11).

⁷ Hill ed.1994, p.327

At the ending of Ciii, the codetta (Cs) appears between the two tawny owls' strophes. The tawny owl begins its entry by using only gliding call (b) and (c) where these patterns are repeated twice; and for the coda after the codetta, all gliding calls a, b and c are used. In Ciii, repetition of harmony occurs in most of the dyads where we can notice that gliding calls (b2) and (c2) at bars 135 and 136 are an exact repetition from the previous strophe (Cii). However, being the first appearance in this section, glide (b3) presents a slightly different harmonization (example 3.1.12). The original C-A is placed in the bass while it is accompanied by all other resonance; new pitches of Bb-G and A-G# appear where they may be used to flatten the sound of B-G# and A-F within the same chord (a very common feature of Messiaen's birdsong characteristic in either blurring the pitch or emphasizing the bird's double or triple pitches). To begin the strophe, one notices that the interval between the notes is furthered, and together with a higher register in the right hand, again all these contribute to a thinner texture. The intensity reoccurs with the previous glide (c2) and (b2). However, the occurrence of (c4) suggests a slightly new harmony (example 3.1.12). To a certain extent, the Eb which is sharpened to E in gliding call (b4) should be considered important for the flow of harmony towards the ending. In drawing our attention to the final glide (b4) in the coda, there is a harmonic relationship along (b3) – (c4) – (a2) – (b4); the E from (b3) is flattened in (c4) and (a2) but raised again in (b4) (examples 3.1.12 and 3.1.13). At this point in (b4), the combination of E, G# and B may constitute a close E major tonality. It must not be forgotten that glide (b4) is preceded with (a2), as it is a glide with anacrusis but slightly different from the previous strophe. Here, the anacrusis is formed by three-demisemiquaver double notes. Although the density of chords in this coda is incompatible with the couplets such as glide (c2), I would state on the basis of Messiaen's extreme indication of *comme un cri d'enfant assassiné*, and together with the sharp resonance in (b4) at the highest range among the previous calls, that here is the climax of the piece. With a short silence, the climax resolves with the gliding pattern (c) for three times (c5, c6, c7). All harmonies of these three gliding calls come from the previous strophes (example 3.1.13) and interestingly the third is gliding (c3), where it is also used to conclude both strophes – Cii and Ciii. Though each is constructed to a different harmony, the C-A motif remains in the same register all the time and the three appearances again

have an added value in order to extend the intensity of the call, at the same time getting softer each time and slowly fading away.

The long-eared owl and the little owl

Both the long-eared owl and the little owl are secondary birdcalls in this piece. The obvious contrast between the secondary owls and the soloist – the tawny owl – is the tempo and the more agitated glides. Although the three species are always written in the same strophe, there is always a short silence before the tawny owl announces its call; two quaver rests appear each time between the little owl and the tawny owl, thus giving an anticipation of the tawny owl's entry.

It is worth noting that the long-eared owl begins its entry almost immediately after the 'fear' motif, thus capturing the more agitated character from the strike of the 'timpani'. Similarly, the long-eared owl presents its three call patterns (*li lii liii*) right at the beginning of Ci, to form the fundamental material for later strophes (example 3.1.14). The focal pitches of the long-eared owl are Bb E B and they are used throughout in the three strophes. In its second appearance at Cii, its call is extended, where a retrograde pattern can be identified; the strophe begins with two bars of *liii*, followed by two bars of *lii* and one bar of *li* (example 3.1.15). The first two bars can also be identified as a combination of *lii* and *liii* since both features are included. With a faster tempo, the gliding call of the long-eared owl is significant for its bouncing effect from the lower anacrusis.

As mentioned, the long-eared owl's call alternates with the little owl's in part 2. Here, more elaborated glides can be seen where the glide is springing from the B to E at bars 125 and 126 (example 3.1.16a), thus giving a tremendous distance for the second glide (over an octave). After the little owl's call, a similar pattern reoccurs but this time it is focused on the descending slurs dyad derived from the call pattern (*li*) (example 3.1.16b). The number of calls are gradually getting less by the added rest and the last dyad ends with Bb-Eb instead of the original E; perhaps the Bb-Eb

suggests a more fulfilling ending for the long-eared owl's call. In addition, the function of the added rest may suggest a written out ritardando.

Among the three species, the little owl's is the simplest call without any development in later strophes. An example of the little owl's call notation can be referred in example 3.1.17a, taken from Messiaen's *Traité*.⁸ The two gliding patterns (gi and gii) are always repeated, though in different order throughout all three strophes. The first pattern (gi: refer to example 3.1.7) is a 'gliss' in two appearances; the first starts with C-E and is transposed to the dominant G-B, though the second 'gliss' is omitted in Cii. It seems that this ascending 'gliss' gives a contrary effect towards the tawny owl's descending call. This pattern has a fairly close resemblance to the bittern's call in 'La rousserolle effarvate' where the black keys are superimposed on the white keys. The second gliding pattern (gii) is very similar to the bouncing glide exemplified by the long-eared owl. However, the little owl's glide has a more strident timbre due to the higher range together with the emphasis on a dissonance between the F and F# (example 3.1.17b). Again, through the device of added rest, Messiaen has created a scene where the three calls of the little owl (gii) in Ciii become increasingly distant; this may represent the idea that the owl has either ended its call or flown to a further distance. As explained earlier, this device occurs at the end of the tawny owl's call, where the dynamics are gradually softer within the three calls. Another description comes from Peter Hill, who commented that the owls approach and recede through the darkness.⁹

From the above analysis, we can see that the mode of chromatic duration appears to be the most significant feature, but the harmonic variation that Messiaen has developed from the simple owl's call is equally interesting (see Figure 5). From the summary in the table, we may notice that the C-A occurs in every glide regardless of its harmonization. Even though new pitches are introduced, they do not interrupt the character of the owl's call since previous harmonies are not entirely neglected. Figure 5 summarizes the use of harmonies and pitches for the tawny owl's call. Other than the C-A motif, two pairs of secondary harmonies contribute to the distinctiveness of the tawny owls. As mentioned in a previous section, notice that

⁸ Messiaen, *Traité*, Vol.V, p.233

⁹ Hill ed.1994, p.329

the F#-Eb appears in all the glides; this second pair alternates between Eb-C#, Eb-C, and E-C#, which are derived from the beginning of the call (c1). The table shows the correspondences of each glide and identifies how the new harmonies are introduced.

What distinguishes 'La chouette hulotte' from other movements is the economic use of material with simplicity to highlight the dramatic sense between the owl's call and the night music. This whole movement also seems to concentrate on a single emotion based on one portrayal of the night scene, where the only subject that may give a slight contrast is the little owl's call. Although the simplicity of the owl's call does not contribute to the complexity in melodic or rhythmic features as in other movements, it is the timbre, which is created by a non-tonal harmonic variation that integrates the individual gliding calls.

3.2 L'alouette calandrelle

The shortest piece from *Catalogue d'oiseaux*, 'L'alouette calandrelle' is the companion of 'La bouscarle' in book 5 and lasts for approximately 5½ minutes. It is a depiction of a warm afternoon, recalling Messiaen's visit to Les Baux in July 1956. According to Messiaen¹⁰, the landscape of this piece (the desert of La Crau) takes inspiration from 'Mirèio', by the great Provençal poet, Frédéric Mistral (1830-1914).¹¹ The poem was used by the composer Charles Gounod in the opera *Mireille* and about a girl who died escaping across the desert (La Crau) because the family disapproved of her marriage.

Three periods of time are acknowledged by Messiaen in the preface – two, four and six o'clock in the afternoon. Its simplicity comes not only from the minimal description of the habitat (*Chaleur et solitude de désert de la Crau*), but also fewer secondary birdsongs. Apart from the short-toed lark, other birdsongs that are involved in this piece are the crested lark, the skylark and the trio of the cicada (an insect), kestrel and quail, which are always arranged together. Although this may suggest that 'L'alouette calandrelle' is the easiest piece from the *Catalogue* (along with 'L'alouette lulu'), its structure is highly interesting and far from simple.

Structure

In order to identify the construction of this piece, I began by examining how the materials combine to form each section and how they flow within the piece. A consistent arrangement of material is clear in each section, but more interestingly, the combination of sections present a unique angle to the structure (Figure 6). The first section introduces the two-chord motif at the beginning together with the soloist's song (the short-toed lark), which I indicate as X. Other sections in a similar style but with more extended ideas are X'(1) and X'(2); however, the

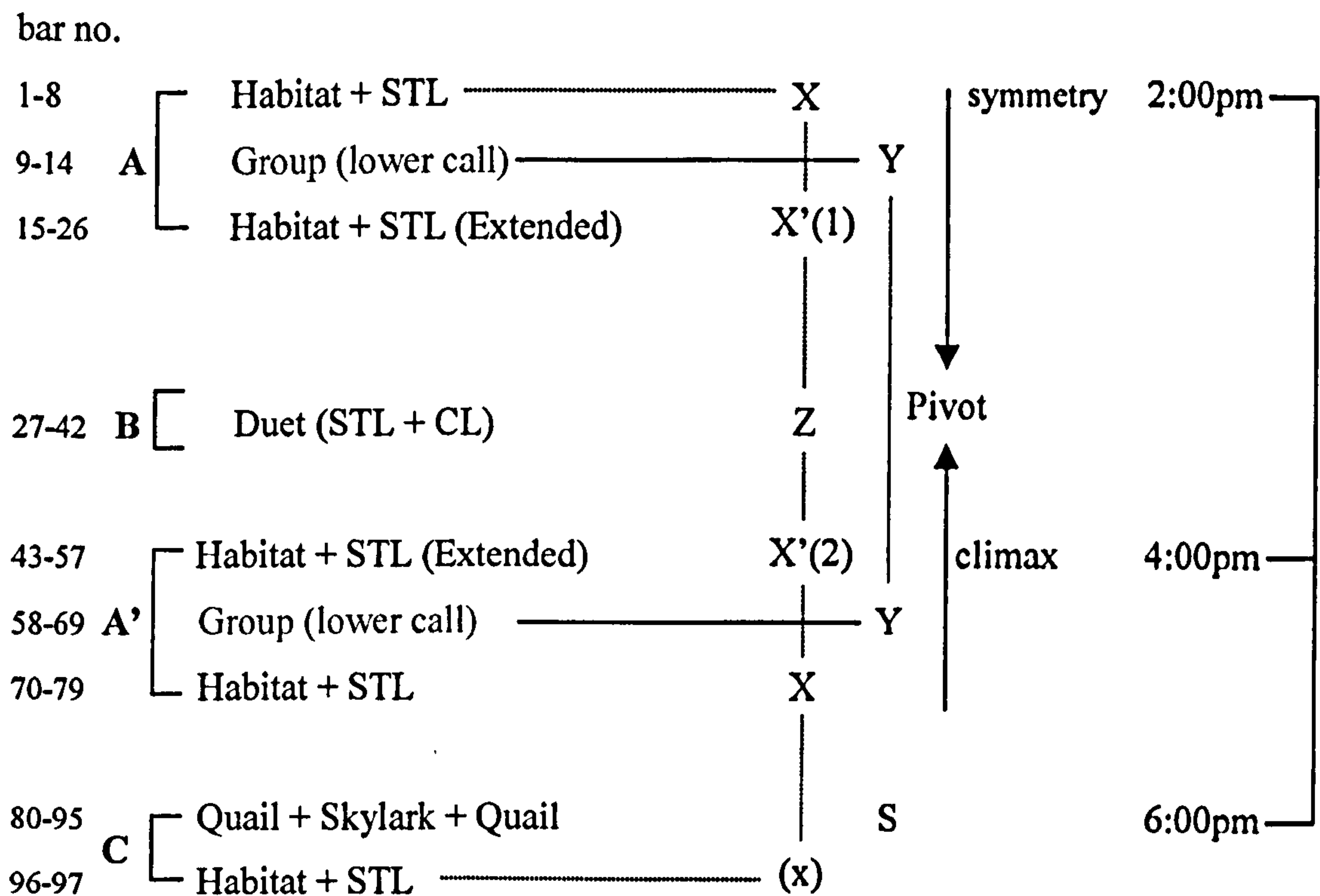
¹⁰ Messiaen, *Traité*, Vol.V, p.528

¹¹ A brief biography of Frédéric Mistral : <http://www.kirjasto.sci.fi/fmistral.htm>

background harmonies in these sections are not the two-chord motif but comprise familiar harmonies which are hallmarks in Messiaen's works. The section with lower pitch calls from the cicada, kestrel and quail, is labelled Y. The duet by the soloist and the crested lark is Z and the coda of the piece, S, involves the skylark's song that is flanked by the call of the quail, followed by a phrase of the soloist's song that rounds off the movement.

Figure 6

The structure of L'alouette calandrelle



- * STL : short-toed lark
- * CL : crested lark
- * Group : cicada + kestral + Quail
- * ----- = the mobility of the soloist
- * ----- = the static frame of the trio
- * → = symmetrical sections

'L'alouette calandrelle' presents two important features in its structure. The first to be observed is a symmetrical arch shape, with the three sections (A) mirrored by the three (A') that come after the duet. Although the later group of (A') is much longer, its arrangement of subjects is basically the same. The details of each section will be further explained in subsequent paragraphs. The duet between the soloist and the crested lark is the pivot of the two (A) sections and this results a palindromic form. At first glance, one expects the duet to be the climax, having the fastest tempo (apart from the skylark) and appearing at the centre of the piece. However, the period of time given by the composer leads us to believe that X'(2) should be considered as the climax, since the time (four o'clock) which is specified in the soloist section X'(2) precisely marks the centre between two and six o'clock¹². Moreover, this is where the short-toed lark performs its most excited strophe vigorously, with a louder dynamic that is triggered by the momentum of the background harmony.

However, the significance of both the short-toed lark's song and the trio give another shape to the structure. With the emphasis on the short toed lark's song, it can be noticed that its strophes are developed from the beginning section until the climax X'(2), and that later it returns to its original motif in a recapitulation, echoed in the last bar of the piece. Its motif gradually expands from the first phrase in the introduction. More explanation of the soloist's song will be given in the following paragraph. Along the developments of the soloist, there are the two sections of 'trio' (Y) that appear before and after the pivot section (duet). In *The Messiaen Companion*, Peter Hill interprets this as a static frame that allows the soloist's songs, which are presented as a form of theme and variation, to develop as a mobile element.¹³ In short, the soloist's song seems to be interwoven between the two main frames (the trio) and the background chords that provide a harmonic support for the birdsong. The journey of its song can be seen to develop starting at the beginning, gradually extending at [(X'(1))] and then competing with the crested lark in (Z); later increasing in dynamic and length in [X'(2)], and then finally returning to its calm vocalisation at the ending (x). The superimposition of this type of structure very much resembles the sunrise and sunset cycle in 'Le traquet stapazin', as well

¹² Refer to the preface.

¹³ Hill ed. 1994, p.329

as the river theme in 'La bouscarle'. The static position of the trio may also be functionally parallel to the reflection section from 'La bouscarle' and the night music of 'La chouette hulotte'.

Birdsongs

Aside from the soloist, namely the short-toed lark, there are altogether five other birdsongs or calls that contribute to the piece. As discussed above, the three species that are always grouped together forming a section on their own, the trio, are the cicada, the kestrel and the quail (Y). Note that the cicada is not a bird but an insect. This reflects Messiaen's awareness of the surrounding noises, his attention not solely directed to birdsongs. Analogous to this are the frogs' calls that appear in 'La rousserolle effarvate'. The crested lark and skylark appear more as the 'guests' since they emerge only once although both sing in a fairly lengthy strophe. Their songs also present themselves distinctively: the crested lark sings in duet with the soloist, while the skylark appears as an alien to the rest of the material not only contrasting with the soloist but coming as a great surprise after the calmness of the whole movement.

Following the above discussion regarding the 'theme and variation' form of the short-toed lark's song, its motif and focal pitches will be analysed in depth. Although the relationship of colour-tonality is not the main focus in 'L'alouette calandrelle' (such as in the spectacled warbler from 'Le traquet stapazin' or the kingfisher's flight in 'La bouscarle'), a skeleton of pitches provides us with a sense of tonality in birdsongs, particularly those of the soloist. The distinct characteristic of the short-toed lark's song is its ringing timbre where both hands are playing in the treble register. The main pitches that come from the left hand *mf* are paralleled with the right hand notes *p* (example 3.2.1a). This sound effect is close to the blue rock thrush in 'Le merle bleu' though the short-toed lark's song is simpler.

Without much complication, two sets of pitches are easily identified (Figure 7). Section X and X'(1), at the beginning and near the end, are enveloped by two chords: A major (added B) in the left hand and B flat 7th in the right. One should

not ignore the F# triad which precedes the song, but is sustained throughout each phrase as it provides a background resonance. The combination of these chords does not mark a clear tonality but it creates a sound for the soloist's song.

Figure 7 Two sets of pitches from the short-toed lark's song

	First set (1 st)				Second set (2 nd)				
	Bb major 7 th / A major				A/Bb/B C/C# Eb G# (~ A diminished)				
Sections	X	Y	X'(1)	Z	X	Y	X'(2)	C	(x)
Set	1 st		1 st	2 nd	2 nd		1 st		1 st

The 'theme' of the soloist's song is introduced at the opening of bar 2, which uses the first set of pitches mentioned above (Bb major 7th / A major, refer to example 3.2.1a). The core of the song is constructed from two motifs (example 3.2.1a: x and y); the first is bound within the triad of the chords (A major and B flat 7th) and the second features the repetition of the higher B/A flat before it resolves. Also significant are the rests and pauses. It is noteworthy that the rests are consistent: either a longer rest of two quavers with a pause, or one quaver punctuating each phrase. The correspondence between the soloist's song and the rest is a blueprint for how the song develops. At first, the soloist's song appears in fragments, one phrase at a time, separated by pause and rests; later, three phrases and a pause, and these signify the beginning of the song's development. For further information, example 3.2.1b shows one of Messiaen's notations of the short-toed lark's song from his *Traité*.¹⁴

In the duet section, the short-toed lark's song has a second set of pitches which comprises A/Bb/B - C/C# - Eb - G#, and occasionally resolves to D, E, and F (example 3.2.2). Generally, the short-toed lark focuses on the pitch of a quasi - C# diminished chord (the Eb occurs rather than E), while the crested lark takes over the

¹⁴ Messiaen, *Traité*, Vol. V, p.528

A major triad with added B from the soloist at the beginning. Here it can be observed that in the duet section the repeating motif of the short-toed lark is on G# and this recalls the pitch that is derived from the opening resonance (enharmonic Ab). Similarly, the timbre of the duet is similar to the soloist's song at the beginning; the left hand (crested lark's song) is louder than the right hand's melodic lines (soloist's song) but the function here is to reflect a dialogue between the two birdsongs. The song of the crested lark is close to the short-toed lark in comparison with a few recognizable motifs (example 3.2.3).

Nonetheless, the duet section itself presents a kind of ABA form as well. This can be observed from both birdsongs' melodic patterns: bars 27 to 30 recapitulates at bars 39 to 42 and the middle section starts at the end of bar 32 where the crested lark consistently accentuates the B natural and resolves to C#. The termination of the middle section is clear at bar 38 where both birdsongs seem to resolve and merge into one melodic line.

The set of pitches used in the duet section is continued in the following section X'(2). The soloist's song is most varied in this section, as it develops to build its climax. It is notable that the B natural, which serves as the resonance of the song in the right hand at the introduction, does not appear until it ends the section. Another significance of the X'(2) section is that the overall pitches are much lower, and more sonorous. The most interesting contribution to the climax in this section is from the support of the background music (which will be discussed later), which is now loud and agitated while the soloist's song maintains the same tempo *Un peu vif* (quaver = 108) throughout.

The two 'trio' sections give a direct contrast to other birdsong in 'L'alouette calandrelle' (example 3.2.4). The most obvious is the cicada with lower register calls indicated as *sec et monotone*, followed by the loud and accented calls in repeated chords by the kestrel. On the other hand, the undertone and plaintive three-syllable call of the quail is mysterious and suspenseful. With its consistent rests between its call, it suggests a standstill which acts as a bridge, anticipating the emergence of a new section. The quail's call even appears independently, unattached to the section when (near the end of the movement) it flanks the

skylark's song. Its function is nevertheless the same, giving a quiet and calm suspension before the skylark bursts out; but ingeniously, the composer closes the skylark's song with the quail's call, which remains unmoved by the skylark's outburst, and so keeps the tranquil mood.

As mentioned, this group of calls, which appears twice, serves to provide a frame for the structure. However, along with the development of the soloist's song, the second group of calls is similarly extended. It is noticeable that the number of bars of the second group is doubled (12 bars) from the first group (6 bars). However, the bar number does not determine the length of both groups because of the extended duration of notes in the second group (example 3.2.5).

The skylark's song in 'L'alouette calandrelle' is very similar to the one in 'La rousserolle effarvate'. Both examples have nearly the same pitches, and the only difference is that the skylark in 'La rousserolle effarvate' is slightly faster. The pitches which allow us to easily recognize its song are A C G/F# rising to higher B natural (example 3.2.6a). In 'La rousserolle effarvate' the F# and B are playing together as a chord (example 3.2.6b). The skylark in 'L'alouette calandrelle' not only brings a sense of surprise to the overall tranquillity but it also provides an aura of brightness opposed to the serenity of the atmosphere. Notice that the skylark in both movements has a similar indication, where its song is described as 'jubilant'.

Background music (habitat)

As mentioned earlier, the background music of this piece serves only one purpose aside from representing the warm desert, where it gives a harmonic support to the soloist's song. This method is common in the *Catalogue*, with notable examples from 'Le loriot' and 'L'alouette lulu'. The two-chord motif opens 'L'alouette calandrelle', and is repeated throughout the section (example 3.2.7a). Notice the affinity between these chords and those in 'Le loriot' (example 3.2.7b). The left hand's parallel fifths are similar, together with the right hand B# and C#, except that the chords in both pieces move in opposite directions. In 'Le loriot', the chords

move a tone upwards, giving a kind of expansion to introduce the oriole's song, which might also correspond with its portrayal of the early morning and the rising of the sun. In 'L'alouette calandrelle', the chords move downwards (resolving), thus suggesting a calm and serene effect, allowing the soft soloist song to emerge gently. This two-chord motif appears three times in both sections X at the beginning and near the end, although the chords in the later section (X) at bars 70-79 are sustained longer for the extended soloist's song.

As mentioned earlier, the background music which appears in the X' sections is made up of typical Messiaen's harmonies. However, neither X' sections (at bars 15-26 and bars 43-57) have any description of the habitat. It is either meant to be similar to the previous indication (*Chaleur et solitude du désert de la Crau*) or these harmonies function to magnify the development of the soloist's songs. The beginning of the X' section at bar 15 is derived from two pairs of chords, the *résonance contractée*, in arpeggio pattern (example 3.2.8). This is followed by the second harmony at bar 17 which is exactly similar to the beginning of 'Le traquet stapazin', the four-chord progression from *Turangalîla*. Both appearances of this progression in *Turangalîla* and 'L'alouette calandrelle' are in a faster tempo in comparison to the slow and calm depiction of the vineyard in 'Le traquet stapazin' (example 3.2.9).¹⁵

The third harmony at bar 19 is made of *accords tournants*, a three-chord pattern that is similarly used in 'La rousserolle effarvate' for the water lily depiction and many other works (examples 3.2.10a and 3.2.10b). Following that is the famous harmony found in *Harawi*, *Cantéjodjayâ* and *Turangalîla*, a descending motif with a succession of interval seconds and thirds in the right against diminished fourth and fifth in the left (examples 3.2.11a, 3.2.11b and 3.2.11c). Here, the descending chord progression finishes on F# major, recalling the resolution of the first two-chord motif at the beginning. Very quickly this tonality disappears and is followed by the last phrase, where chords of the *renversement transposé* are used (examples 3.2.12a and 3.2.12b). However, again, being a four-chord progression, the arrangement of these four chords is slightly altered; the fundamental chord of this

¹⁵ See example 3.5.1a to 3.5.1d

progression is placed last, giving a resolution to the whole section. It can be noticed that all these harmonic patterns described above move downwards, such as the two-chords motif at the beginning, and therefore maintain the tranquil mood. All these background harmonies in section X' are varied, alternating between chordal, *Vif* (quaver = 160) and arpeggio, *Vif* (dotted semiquaver = 152) patterns. Although this is one of the simplest pieces from the *Catalogue*, Messiaen has involved many important harmonies in this single section.

After the duet, there is a greater development in both the subjects in [X'(2)] within a wider dynamic range. All the background phrases follow the same tempo *Vif* (quaver = 160), similar to the chordal harmony in section X'(1). Overall, the fast tempo with the louder dynamic transforms the section to be more propelling and agitated in contrast to the previous soloist sections. This section continues to introduce more of Messiaen's characteristic harmonies. After a long pause, section [X'(2)] starts with a descending chordal which appears to be a series of appoggiatura that is taken from *Harawi* 'Katchikatchi les étoiles' (examples 3.2.13a and 3.2.13b).¹⁶

The next figure at bar 46 is another four-chord series from *Turangalila*, found also in *Cantéjodjayâ* which features the expansion and reduction effect of the phrase (examples 3.2.14a, 3.2.14b and 3.2.14c). This is part of Messiaen's terminology to describe the chord progression as '*anacrouse, accent, désinence*'. However, only the first two chords are used – '*anacrouse*'. The *accent* and *désinence* are omitted. This is followed by two chords of the *reversements transposés* at bars 49 and 51, corresponding with the soloist's song (example 3.2.15). Similar to the series of four chords, only the first two chords are used but here, the unchanged pedalling combines all of the harmonies that give an even denser resonance to the soloist's song.

The last background harmony is the longest, and its harmony is the familiar *thème d'accords*, taken from *Vingt Regards* (examples 3.2.16a and 3.2.16b). The same harmony is used similarly in *Cantéjodjayâ* and *Cinq rechant* (examples 3.5.2b and

¹⁶ Messiaen further explains that the significant contrary motion of this progression is derived from Honegger, refer to *Traité*, Vol.III, p.312

3.5.2d). Interestingly, Messiaen combines the chords of both hands in the same register, which results in the upper chord being played by the left hand for pianistic reasons. This chord progression is closely akin to the *résonance contractée* where the top voice is resolved, maintaining the lower voice of the left hand but with a different combination of inner pitches.

3.3 La rousserolle effarvate (The reed warbler)

'La rousserolle effarvate' (The reed warbler, book 4) is positioned at the centre of *Catalogue d'oiseaux*, and is the longest of the thirteen movements. The work lasts for approximately thirty minutes; by contrast 'L'alouette calandrelle' (The short-toed lark) lasts for only five and a half minutes. It is set in the Sologne region, between Saint Viâtre, Nouan le Fuzelier, Salbris and Marcilly in Gault. Being the core of the *Catalogue*, 'La rousserolle effarvate' is not only the lengthiest movement but also a conscientious programmatic piece that covers an observation of 27 hours, starting from midnight until 3 o'clock the next morning. The music which is heard at the beginning returns at the end of the piece, thus reflecting a cycle of daily events, life and nature – where birds continue to breed and die. All these eventually give us a view of the eternity of nature. Therefore, as I have mentioned, this can be considered as a meticulous observation of nature, though not documented by a visual medium, but ingeniously transformed into music by Messiaen. In 'La rousserolle effarvate', the soloist is the reed warbler, although the two species from the same family – the sedge warbler and the great reed warbler play important roles too.

Briefly, it is interesting to examine the habitat and the soloist bird (reed warbler) scientifically in comparison with Messiaen's portrayal of each subject in 'La rousserolle effarvate'. First, let us examine some of the characteristics of the actual bird and the relevance of other aspects of nature used in this piece. The reed warbler lives amongst the reeds on lakes and marshes; due to its considerably small size, the bird is often hardly noticeable. Referring back to the score, the existence of the lake-music, the frog calls, the representation of the marsh, and the bittern's call justified Messiaen's effort to establish the habitat of the reed warbler. All these subjects can be found in wetlands and marshes with extensive reed beds.

Figure 8

The Structure of 'La rousserolle effarvate'

Section	Time	Content	Indication	Other
A	Midnight 12:00am	Introduction (habitat)	M.P + fg + b+	
B	3:00am	Main Strophe 1	RW1 + pause	
		Night +Habitat	n+ m(a)+ n+ m(b)+ f+ n	<u>Sunrise's form (S)</u>
		Sunrise(1) and birds	S1+ (bb and r.b.s) S1+ (bb and r.b.s) S1+ r.s	a a b c
		Sunrise(2)and birds	S2+bb S2+(bb and r.b.s) S2+(bb and r.b.s)	a' a'
	8:00am	Flower Strophe Instrument effect Flower	y.i Others birds tt y.i	
	Midday 12:00pm	Instrument effect Bird	tt GHW + pause	To represent the silent of midday
C	5:00pm	Main Strophe 2 Flower Main Strophe 3 Flower Main Strophe 4 Flower Main Strophe 5	RW2+SW1 p.f RW3 +SW2 p.f GRW+SW3 +RW4 +b.h.g+ c w.l RW5+SW4+RW6+SW5+ RW7	a b a b a' b a' (Climax) ↓
B'	6:00pm	Instrument effect Flower Instrument effect Bird	tt yi tt GHW Ct	Skylark's solo
	9:00pm	Strophe	S1+f+sl+f wr + pause	Sunset solo, no birds except the bittern; Nightingale and Representation of night.
	3:00am	Sunset (1) and Sunset (2) Birds and Habitat Main Strophe 6	S1'+S2'+b+S2'+S1'+B+S1'+ B+S1' N+S2'+n+N+n+N+b+N M(b)+M(a)+S2'+f+ n +pause RW8 + pause	
A'		Habitat (ending)	Fg +MP+ b + pause	In retrograde order

Initial for birdsongs and non-birdsong subjects

Non-birdsong

Music of Pond	-	M.P
Noise in the marsh A	-	m(a)
Noise in the marsh B	-	m(b)
Solemn Night	-	n
Sunrise	-	S1
Sunrise	-	S2
Sunset	-	S1'
Sunset	-	S2'
Yellow Irish	-	y.i
Purple Foxglove	-	p.f
Water lily	-	w.l
Instrument (tam-tam)	-	tt

Birdsongs

Reed Warbler	-	RW
Sedge Warbler	-	SW
Great Reed Warbler	-	GRW
Grasshopper warbler	-	GHW
Blackbird	-	bb
Red-backed Shrike	-	r.b.s
Redstart	-	r.s
Pheasant, Reed bunting, Green Woodpecker, Starling, Great Tit, White Tail	-	Others
Black-headed Gull	-	b.h.g
Coot	-	ct
Skylark	-	sl
Water Rail	-	wr
Nightingale	-	N
Bittern	-	b
Frog	-	f
Frog Group	-	fg

Structure

In this movement, the structure may appear to be complex due to the huge number of subjects (birdsong and non-birdsong). For instance, aside from the warblers, there are another sixteen different birdsongs or calls used. The non-birdsong subjects taking part in this piece include the landscape (the pond), sunrise and sunset to portray the time of the day, the music of the 'solemn night', noise from the marshes and three types of flowers: the yellow iris, the purple foxglove, and the water lily. The setting of the landscapes (the pond, flowers and marshes) form a fundamental frame in allowing birdsongs to establish within their boundary. It becomes apparent that 'time' is leading all other subjects, which may be equivalent to Messiaen's idea – the flow of the music.

Here, all the subjects have been arranged into a table according to the time specified by the composer in order to view how the material contributes to the overall structure (Figure 8). It is straightforward enough that the indicated times of day in the score provide a logical form for the movement. The arrangement of the music for the whole piece is tabulated as ABCB'A' and this forms a quasi-palindromic structure. The four main groups of strophes that alternate with the 'flower' themes, and are established at the central of this piece, also serve as a development section in leading to the climax of this piece. Before the ending – 'music of the pond' – the reed warbler strophe is heard again. This provides a symmetry with the beginning of the music (Figure 8: RW1 and RW8). Throughout the following analysis, it is possible to notice that each subject contributes a function to the music and also exhibits a relation towards nature. Besides, the table also shows the order of these subjects arranged in a particular group and how they extend into a larger section. For instance, the sunrise motif with the blackbird and the red-back shrike's duct contribute five phrases (with the red-start in the middle), and thus form a section on their own (Figure 8, S) according to their identical phrase and structure. The last chord of the sunrise is sustained over the songs of the blackbird and the red-backed shrike. Another example is the appearance of flowers in the development section that occurs in between a strophe of the warblers (Figure 8, Section C). After each appearance of the short flower theme, the increasing momentum of the strophes

gradually builds up to a greater intensity towards the climax, where the duet of the reed warblers alternates with the sedge warbler in section C.

In short, the structure in 'La rousserolle effarvate' is fairly straightforward despite the huge number of subjects used. The fundamental approach in identifying the construction of this movement is mainly to group the large number of birdsong into the frame that is contributed by the non-birdsong subjects. Secondly, the cycle of the day and night will provide a logical sense in leading all the subjects in the entire structure.

The music of the pond (introduction and ending)

In the introduction, the composer portrays two ideas in his music, the ambience of the mysterious night¹⁶ and the habitat of the reed warbler which is set at a pond. The stillness of water is represented by the consistent repetition of two major 9th intervals in the right hand with occasional accents (example 3.3.1a). The bell-like effect, produced by the very high-pitched major 9th intervals, is imitating the timbre of the xylophone¹⁷. Messiaen has ingeniously formulated the rhythm with accents where after the first two semiquavers, the accents are separated by an added semiquaver in each system (example 3.3.1b). The added semiquaver – A flat in between the two pairs of accents creates a contraction for the B flat semiquavers: the number of the A flat semiquavers augments while the B flats reduce in the following systems. When these groups of semiquavers reach the end of the pond music, this B flat accent has run through a cycle of the contraction of semiquavers and becomes the first note of the accent (the B flat accent marks the end of this passage, but if the music continues, the Bb will be followed by the Ab immediately, which is contrary to the beginning – Ab to Bb).

This high pitch interval of 9th is superimposed on a series of chords in the left hand which covers almost two-thirds of the piano register. It is noticeable that even in such a quiet introduction, the composer explores the whole range of the piano.

¹⁶ Messiaen indicated 'mysterieux' at the beginning of the piece.

¹⁷ Indication by Messiaen. – *comme un xylophone*.

Although there are a total of nine different chords in this progression, each system is restricted to seven chords where the remaining chords continue in the next system (example 3.3.1c). This means that the nine chords are superimposed on the seven-value rhythm. It is noticeable that there is a continuous augmentation at the sixth chord in every system. For instance, the sixth chord at the opening is a semiquaver, and this semiquaver goes through an augmentation of an added semiquaver in each system (example 3.3.1c). The rhythm of the left hand is established similarly at every system. What causes the transformation of the whole introduction is the effect of the added value on the sixth chord in each system. In a total of ten systems, the fourteen semiquavers from the first system will reach twenty-three semiquavers by the last system. Each system becomes longer, as if the music draws gradually into the deepness of the night. Looking back to Messiaen's earlier works, this resembles 'Liturgie de cristal' from *Quatuor pour la fin du temps* (1941) where in the piano, the twenty-nine chords are superimposed on the seventeen value.

Another interesting point in this introduction is the sustaining pedal, which is consistently fixed on the third chord in the progression (except for the first pedal at the beginning). This chord (F C G) becomes an important figure in accumulating the resonance, or as a changing point within the cycle of each chord progression. Nonetheless, the harmony does not muddle the consistent bell-like effect which is written at the highest register with the sharpest timbre. The combination of the extreme upper register of the bell-like effect, together with the chords moving quietly underneath produce an atmospheric passage. Looking at them metaphorically, the bell-like figure (interval 9th) may be suggested as the reflection of light on water, as if the water occasionally glitters under the moonlight. On the other hand, its consistency of semiquavers pulse can be portrayed as the stillness of the night, and the accents epitomize an occasional interruption by the wind or the slight disturbance to the water.

It is necessary to discuss the ending of the piece in relation to the introduction. The music of the pond at the end recaps the introduction although it moves in retrograde order. Apart from that, the ending is not as intense and consistent as the beginning, since the consistency of the semiquavers is occasionally interrupted by silence. According to Peter Hill, these rests which are placed between the phrases, are

described by Messiaen as 'the mist creeping across the water'¹⁸. Here, it is imperative for us to know how meticulous the composer has been in his transcription, as he did not neglect to denote even this tiny visual distraction into his music. Again, an augmentation of the rests occurs against the shorter phrasing of the 'music of the pond', where the number of crotchet rest increases in each silence. The rests become longer while the music of the lake diminishes. Followed by a long silence, the bittern's call appears again. As mentioned before, the composer could have terminated the piece with the lake music but he uses the short abrupt call of the bitterns instead. Perhaps he was trying to reflect the cycle of nature in his music where the depiction of this portrait at this hour and at this time is supposed to be heard continuously day by day; and the bittern's call reminded him of the beginning of the next cycle.

The frogs' and bitterns' calls from bars 11 to 18 may have more function to create noises or interruption in the stillness of the night rather than to signify a melodic idea. This can be justified with the use of resonance from the very low register in order to produce a mellow timbre. By using a long trill in 'tonic-dominant-tonic' (A – E – A) together with the left hand triplet (formed by double notes of major 2nd), this produces a call that sweeps up like a wave, in a huge crescendo and decrescendo (example 3.3.2). After a short silence, the bittern's call appears three times consistently, cascading the black note against the white note within a semicircle of notes rooted on G (example 3.3.3). This call functions as a short 'bridge' between sections that appear at the beginning of the piece, within the sunset theme and at the end. The bellowing calls of the bittern in a very low cluster of chords provide a contrast with the later reed warbler's song in a higher register.

The scene of the night is not only represented by the 'music of the pond' but also by another refrain, indicated by Messiaen as 'solemn night' (n)(example 3.3.4a). This refrain corresponds to the motifs of 'noise of the marsh' in two depictions: m(a) and m(b) together with the frog's call (example 3.3.4b). These subjects are arranged in a section in this order: n+ m(a)+ n+ m(b)+ f+ n (refer to Figure 8) after the reed warbler's first strophe. Even though the night music is marked as 'solemn', it is

¹⁸ Hill ed.1994, p.339

written with a *fortissimo* motif in cluster chords rolling from the middle to the very low register. The sound effect is described by the composer as a 'shock from the cymbal' and the bass note is sounded 'like a tam-tam'. This is followed by a series of 7th interval simultaneously played by both hands. These intervals are significantly designed. Different layers of dynamics for the voices are specified: the right hand intervals at the very high register are played in *pianissimo* presenting the vibration of the metal; the tenor is written in *fortissimo* which refers to the sound of the trombone; while the bass gives a soft resonance (*piano*). The soft vibrating notes in the right hand and the bass thus signify Messiaen's fondness for generating harmonics from chords. Here, the resonance of the cluster chords might create a more atmospheric idea especially when the imitation of 'tam-tam' is indicated for the lowest note. On the other hand, the words 'solemn night' are more likely to refer to the interval of 7th with the constant strikes of the loud tenor notes. These cluster chords may serve another function in drawing the attention of the listener to the change of the scene, since its entry is loud and abrupt after the long pause.

The first 'noise in the marsh' motif is formed by two short fragments, a fast rising and falling arpeggio motif followed by a repeated slurred dyad in tritone intervals that gradually fades off. The second 'noise' is a longer section, portraying the marsh as 'confused and mysterious'. It starts consistently with two bars of semiquaver chords and then gradually builds up the 'noise' in a quasi-pentatonic wave-like arpeggio in both hands, in contrary motion, until it reaches a 'chord on the dominant' on D (the G is absent, see example 3.3.4c). Incessantly, the frog calls continue in the lower register. Here, another short motif that similarly represents the 'marsh' (example 3.3.4c, x), which is written in trills in higher register, gives a contrast with the lower-register frogs' calls. A view is presented from the description above between the characteristics of the frog and marsh motifs. The previous lower-register 'marsh' noises in arpeggio that contrast with the higher trill motifs may give an impression that the frog's call is hidden in the marsh. In the dark, we can imagine that Messiaen might not have visualized the marshes, but it may be possible that he heard the noises from the marshes that were caused by the wind. All these subjects appear again nearer to the end of this piece, though in different orders, when these motifs alternate with the nightingale's song. Harmonically, the motifs of 'solemn night' and 'noise in the marsh' suggest a sense

of dominant – tonic (A – D) from their bass notes; first, in the ‘solemn night’ motif, it can be noticed that the first note of the cluster chord – D, acts as a spring bouncing other notes across to the low A in the bass; second, the ‘confused and mysterious’ marsh motif starts with an A minor triad formed by the bass notes and ends its section with the ‘chord on the dominant’ – D.

The strophes of the reed warbler, the sedge warbler and the great reed warbler

Due to the mass material of the birdsong involved in this work, I would like to discuss these strophes based on one bird at a time in order to avoid confusion. Although certain fundamental characteristics of the reed warbler’s song can be identified, some of the strophes in this piece may appear to be quite different from one another. The reason is that new motifs are introduced in later strophes while original motifs are very much developed and improvised at the same time. It is possible to ask why Messiaen has chosen the reed warbler as the main songster for this work. The main reason is that the characteristic of the reed warbler’s song is greatly varied. Apart from that, the wide range of attacks, dynamics and effects may have been the reason why Messiaen selected it as a soloist for the climax of his *Catalogue*. The characteristics of the reed warbler song were described by Messiaen as:

Le chant est sauvage, très scandé, souvent en valeurs égales, fait de notes répétées 2 et 3 fois. Le timbre est métallique, grave et bruissant, genre guimbrade, guitare, métallisé d’Onde, pizzi doublé d’un gong, chevalet (ponticello) des cordes, etc.¹⁹

According to Messiaen’s *Traité*, the notation of this reed warbler’s song was taken down in 1955 and later transcribed for the piano.

The reed warbler’s strophes are longer than most of the solo birds in the *Catalogue*. Although the garden warbler (same species) and the thekla lark sing in quite a long

¹⁹Messiaen, *Traité*, Vol.5, p.593

strophe as well, their songs' patterns are comparatively more constant. With a combination of the different characteristics of the reed warbler's song in a fast tempo, there is no doubt that Messiaen's virtuoso transcription is more than enough to challenge the pianist. The varieties of the motifs in this birdsong contribute to the thematic complexity of the strophe. This raises the question of how pianists understand the complicated phrasing of these birdsong passages, and how these birdsong strophes correspond with other sections within the whole work.

There are altogether eight strophes of the reed warbler. As mentioned, the first and eighth create a symmetry framing all the other sections, except the introduction and the ending – 'the lake music' of the piece (Figure 8: RW1 and RW8). Some of the shorter reed warbler passages do not contribute as a main strophe. However, these short passages continue with the song of the sedge warbler or the great reed warbler to form a main strophe. It is probable that the main strophe in the development section was an idea taken when Messiaen was transcribing the birdsong on 8 July 1956, as he explained that at 3 o'clock in the morning, the song of the reed warbler was interrupted by a stormy wind and a few seconds later, the song of the sedge warbler joined in; and later when the wind was calm, the two reed warblers sang together.²⁰ All these descriptions are very much analogous to the ideas in the development section of 'La rousserolle effarvate'; first, the alternating song from the reed warbler and sedge warbler, and then the duet from the reed warblers. Only the storm is omitted, and the great reed warbler is not mentioned in the actual scene Messiaen had observed.

Example 3.3.5 illustrates the notation of the reed warbler which was transcribed by Messiaen on 7 July 1956²¹, the first five bars are used in the seventh reed warbler strophe: RW7 (examples 3.3.5a and 3.3.5b). This notation was transcribed in a single line melodic form without any harmonization. From *Traité*, it is important to understand Messiaen's intention to relate the birdsong subject to the non-birdsong subjects, and to arrange the different subjects comprehensively according to the observation he made. In other words, Messiaen has carefully infused his experience as an ingredient into his work.

²⁰ *ibid.*, p.600

²¹ *ibid.*, pp.599-600

By looking at other pieces in the *Catalogue*, we can notice a few methods by which the composer related birdsong to the form or structure of the work:

1. by superimposing a birdsong on a harmony that serves as a background
2. by using birdsong to communicate to other birds or other subjects in nature (as a dialogue)
3. birdsong acts as a section independently and
4. by using two similar or different birdsongs as duet.

Looking back to the transcription of the soloist – the reed warbler, Messiaen uses all the characteristics mentioned above except the first point. Although the reed warbler's song in the development section alternates with the 'flower' theme, its song does not depend on the support of the 'flower' harmony. Rather, there are always small gaps of silence before the reed warbler's song establishes its repertoire. This is even significant for the two main strophes at the beginning and at the end, where they are preceded by a long pause. Studying the music psychologically, Messiaen might have felt that the reed warbler's song is too extraordinary to stand on its own and ideally should be placed as the soloist birdsong in the pivotal movement of the whole *Catalogue*.

Here, I would like to mention Johnson's classification of birdsongs which are in four main groups: first, calls; second, short repetitive song-patterns with slight variation; third, varying declamatory or melodic song-patterns and four, rapid 'chattering' songs, either continuous or broken up by short rests.²² Let us now look into the details and structure of the reed warbler's strophe. Although the motifs in the long strophe of the reed warbler seem ornamental and improvised, certain motifs or patterns of the birdsong can be traced in order to see how they develop into a musical shape. Messiaen had presented four characteristics of the reed warbler's song in his *Traité*²³ (example 3.3.6). However, in this study, the motifs are based on the strophes written in the score, identifying how the motifs develop and how the new motifs in later strophes are infused. A few examples illustrate the

²² Johnson 1975, p. 132. He further illustrates a table in which all birdsongs in the *Catalogue* are listed into four categories, refer to p. 134

²³ Messiaen, *Traité*, Vol. 5, p.594

distribution of the reed warbler's motifs from RW1 to RW8 (example 3.3.7). Here, I will also discuss the complicated phrasing in some of the selected strophes. The long strophe in RW1 can be divided into several sections as below:

RW1 :	a	a'	b	c	d	a'
Bar no.:	19	20	52	62	66	90

Three elements can be used as a guide in identifying different sections in a strophe – first, the unifying rest between the songs; the rising pitches at the end of a phrase; and the dynamic at the beginning of a section (which tends to be *p* or *pp*). There will be no one way of structuring the reed warbler songs, and these three elements listed above can either be applied simultaneously or individually in identifying the sections. Realization of these three elements will give an easier understanding to the score. Three-semiquaver rests occur frequently; some of these rests are preceded by an *acciacatura* rising to a higher note or chord with accent, and here the ending of a section may be formed (example 3.3.8). Except at bars 35 and 55, all the occurrences of the three quaver rests are followed by a motif with a softer dynamic, and this may reflect a sign for a new section too, as in section RW1: b, c, d and a' (last). However, not all the characteristics above appear for the remaining strophes. As mentioned, although the reed warbler's strophes are related to a certain extent, they are all varied enough to be discernable. This is in contrast with the recognizable nightingale's song, whose characteristics are more stereotyped.

The first strophe RW1 (bars 19 to 100) is presented clearly with the distinctive use of ornamentation (*acciacatura*). There are some exceptional difficulties in exploiting these grace-notes when it comes to performance; that is, the grace and main notes are both written using the same note together in an extremely fast tempo *Vif* (quaver =144) (example 3.3.9a). Moreover, the repeated *acciacatura* pattern comes two, three or four times in succession. For example, it occurs at the first bar of the opening strophe and in most of the beginning of a new section (section RW1a', d, a). This characteristic is stated in one of Messiaen's notations from his *Traité* Vol. 5 (example 3.3.6), along with the onomatopoeic syllables – Tchi ri Tchi

ri Tchi ri, where the Tchi apparently represents the grace-note.²⁴ It is technically demanding to play these repeated notes at fast speed and with clarity. One can imagine the rapidness of the hammer bouncing back from the strike of the grace-note to the main note. However, more challenges appear not only when these notes are articulated with *staccato* and *piano*, but both hands also play simultaneously at opposite ends of the keyboard. This grace-note figure is even difficult when it is written in double notes (example 3.3.9b x) for both hands, requiring the player to achieve a balance and equal weight in executing these staccato dyads.

On the use of extreme registers, Messiaen once claimed: 'I believe I was the one of the first to make simultaneous use of the extreme treble and extreme bass registers of the keyboard, not only for gentle effects but for loud, contrasting effects'.²⁵ Even in the first strophe (RW1), the reed warbler's song has already shown a great variety of difficulties including various attacks, different levels of staccatos, and most of all, clarity. When playing this strophe, one realizes the limited human capability in re-producing birdsongs. Apparently, not only are the articulations in some strophes highly varied, the leaps between each pattern of the birdsong are at great distances too, for example, at RW1: bars 29-35 (example 3.3.9c), 38-43 and 72-76. Birds are capable of singing in wide leaps and this causes large interval or leaps in register of music. Here, both hands are either moving in contrary motion or parallel, and the shape for the melodic contours in both hands changes rapidly. Therefore, understanding the keyboard geography together with the phrasing is imperative to handle these passages.

The texture of the reed warbler's song is mainly formed by doubling of notes either in an extremely close or wide interval (mostly at RW1); this appears in chords which are mainly constructed by intervals of 2nd, 4th, 9th and 7th; or occasionally in thickly textured chords (for exclamatory effect). Again, tritone interval is featured in the reed warbler's harmonies, for instance B-F, E-Bb and Eb-A (example 3.3.9d). As Richard Toop writes 'any student of Messiaen's style in the 1940's will have found that one of its most consistent stylistic features is the 'affective' cadential

²⁴ *ibid.*, p.593

²⁵ Samuel 1994, p.116

close with a falling tritone in the treble'.²⁶ The use of the tritone in birdsong may appear as one of Messiaen's idiosyncrasies to formulate his melodic idea not only in birdsongs but also in other works, as he stated in his *Technique de mon langage musical* (example 3.3.10).²⁷ Occasionally, a perfect 5th or 4th using E flat and B flat occurs in RW1: bar 9, 13, 20 (the beginning of second section in RW1a'), 62; and a perfect 4th in the bass appears at the last two bars of the strophe: Ab-Eb. It is possible that an E flat tonality is a hidden vertebra for the birdsong's harmony. In order to imitate the bird pitches more precisely, one device can often be seen especially in Messiaen's birdsong works after *Oiseaux exotiques*, where a single note is often played simultaneously with another note, a semitone or tone above or below, thus emphasizing that the pitch of the bird is not limited to one note. More examples can be seen from other works (examples 3.3.11a, 3.3.11b and 3.3.11c).

Birds' notes seldom remain on the same pitch from moment to moment but slur upwards or downwards, and often in both directions. Many notes are so constantly changing pitch that estimates have to be averaged.²⁸

[...] some birds, including the Brown Thrasher, Wood Thrush, Blue Jay, Coudian Finch and Reed Warbler can sing more than one note at the same time, and perhaps some birds such as the Wood Thrush as many as four (Saunders 1923, 1929, 1959; Potter et al. 1947; Borror and Reese 1956; Thorpe 1959, 1961).²⁹ (see Figure.9 : graph illustrates notes sounded simultaneously by the reed warber³⁰)

²⁶ Richard Toop, 'Messiaen/Goeyvaerts, Fano/Stockhausen, Boulez', *Perspective of New Music* Vol.13, No.1 (Autumn-Winter, 1974), p.146

²⁷ Messiaen, *Technique de mon langage musical* (Paris: Leduc, 1944 English translation, Leduc, 1956), p.32

²⁸ Brand, A.R. 'Vibration frequencies of passerine birdsong', *Auk* 55:263-268; quoted from Armstrong, E.A. *A study of bird song* (London, Oxford University Press, 1963)

²⁹ Armstrong 1963, p. 256

³⁰ *ibid.*, p.34

Figure 9

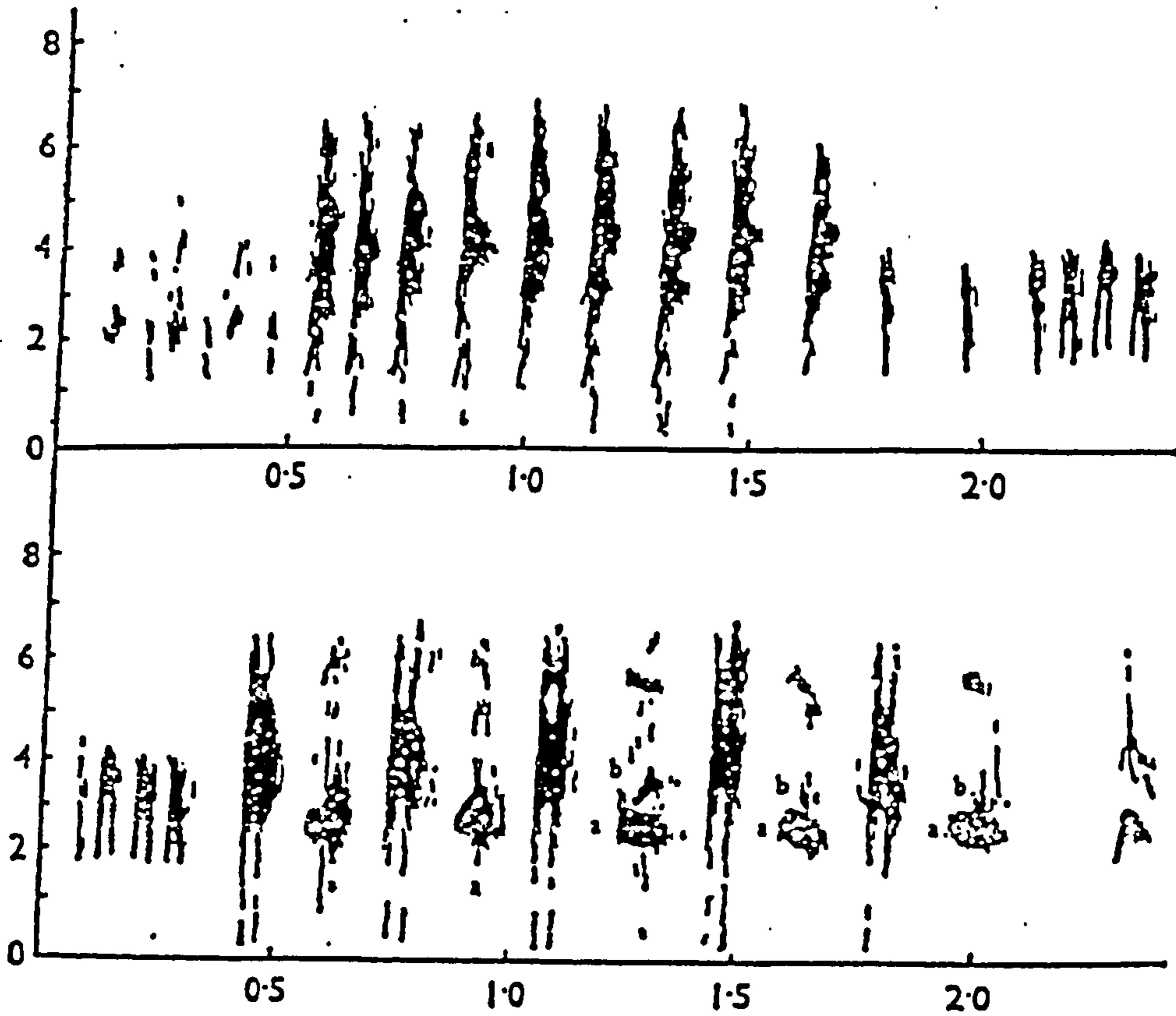


FIG. 7. 'High front' sounds of very short duration and great frequency range alternating with notes of two harmonically unrelated fundamentals (a) and (b) sounded simultaneously as produced by the Reed Warbler (*Acrocephalus scirpaceus*). Vertical scale: frequency in kilocycles per second. Horizontal scale: time in seconds. (After Thorpe 1959)

This device bears a resemblance to how Debussy meticulously imitated the bell sound in his Prelude, *La Cathédrale Engloutie*. Unlike other composers such as Rachmaninov (*Second piano sonata Op.36*) and Liszt (*Les Cloches de Genève*) who portray the bell imitation in a more tuneful melodic figure, Debussy uses a major second in octaves (interval 9th) to reproduce of the bell's pitches. Notably, a strike of a bell produces not only one but several pitches at the same time. Rayleigh's 1890's research paper, *The Sound of Bells*, shows an observation by the writer that one could easily detect six pitches by just tapping on various places of a bell. Rayleigh applied his research to church bells and he was puzzled that when the bell is struck, it produces not only one but up to five pitches which are: D' F#' A#' G#''+ B''. The main pitch among the sounding pitches is said to be B''.³¹ Messiaen, as Debussy with the bell effect, chose to explore the piano as a versatile instrument in imitating the exact pitches, rhythm and articulation of a bird's call.

The frequent tritones and different intervals used in the strophes leads us to discuss the focal pitch of the reed warbler's strophe (refer to example 3.3.12), which I have categorized in groups. The first group is the most important primary pitch centre, followed by the second according to their recurrences in each strophe. The primary pitch center includes the main notes used for the reed warbler's song. Belonging to the same family, the sedge warbler shares almost the same pitches with the reed warbler, which will be explained in a later paragraph. It may be crucial to see how Messiaen correlates the three species among the strophes by forming a focal pitch.

Apart from the first, the eighth strophe and the grand duet in the development sections, the length of the reed warbler's strophes from RW2 (bars 240 to 249) to RW4 (bars 344 to 357) that lead towards the development are comparatively short, as the reed warbler sings alternately with the sedge and great reed warbler. Some later strophes are either added with new motifs, or with previous fundamental motifs that are mostly improvised. To some extent, the reed warbler's song may be difficult to recognize on first hearing. For example, the first six bars from the second strophe (RW2 bars 240-245), which appear after midday, are entirely new material from the previous motifs. Here, the gliding call is a new material, though in

³¹ Rayleigh, *The Sound of Bells*, cited from <http://www.hibberts.co.uk/rayleigh.htm>

a different style from the glides such as the owls' and the swifts' calls (examples 3.3.13a, 3.3.13b and 3.3.13c). The reed warbler's gliding calls are thinner in texture and in quick tempo. After this call, another gliding *portamento* effect continues in a pentatonic harp-like sound (example 3.3.13a). Then, the song returns to its usual characteristic, and the strophe ends with F in the right hand and Eb in the bass. The Eb may reflect the hidden key of the previous strophe RW1. Another unifying character of this strophe in comparison to the previous is the three-semiquaver rest before its phrase ends. The three-semiquaver rest appears again similarly at the end of strophe RW3.

In this strophe (RW3: bars 264 to 278), the idea of *acciaccatura* dropping on to a two or three-chords figure, which is derived from RW1, is much more emphasized (example 3.3.14a, x). The two types of gliding calls in this strophe are brought from the second strophe, where the pentatonic harp-like glissando appears again, though in a shorter version. This glissando is followed immediately by the gliding call four times in succession, and it terminates its strophe with the same motif from the previous strophe (example 3.3.14b). These loud and accented gliding calls thus evoke as one of the signal to build up the intensity towards the climax for the later sections. Regardless of the reed warbler or the sedge warbler's song, it is noticeable that all sections after the second reed warbler strophe are written with louder dynamics, and levels of accent are increased to create more intensity. In RW3, the phrasing can be suggested as [(2+2)+ (2+2)+ (2+2)+3]. The song patterns of the reed warbler's strophe often raise ambiguities in the direction of the phrasing. For instance, the single quaver in the first group (2+2) at the third bar can be treated as a resolution from the second bar, or as a down beat which bounces to the accent in the fourth bar (example 3.3.14a, y). In this instance, pianists may need to decide the function of this one-bar quaver rhythm, although either way is not inaccurate. The fourth strophe (RW4) is the last short strophe before the black-headed gull and the coot's call make their appearances, anticipating the tremendously grand duet performed by the two reed warblers. More varied rotating motifs are presented here which appear from the previous motif (example 3.3.15)

The grand duet of the reed warbler starts after a short silence which ends the quiet and mysterious 'water lily' theme. This duet is arranged in the main strophe 5

according to this order: RW5+SW4+RW6+SW5+RW7 (Figure 8). The three sections RW5, RW6 and RW7 are presented by the reed warblers' duets. However, a short five-bar fragment of *portamento* pentatonic calls by a single reed warbler together with the rotating calls from the sedge warbler present a short 'bridge' before the entry of the third duet (RW7). Although some of the previous motifs are used again, the juxtaposition of the two warblers' song adds great interest particularly in terms of rhythm. The first duet (RW5: bars 375 to 448) is the longest strophe and can be divided into four sections: a b c d, according to the birdsong motif (example 3.3.16). New ideas emerge in this duet. The first is from the second warbler, presented by the accented major 7th interval in the left hand (Bb – A, example 3.3.17a). This interval not only plays a role in providing a syncopated rhythm against the first reed warbler's song, but the emphasis on Bb also serves as a bass for this duet. Example 3.3.17b (i to iv), x, shows how these intervals are distributed to other sections. Unlike the sedge warbler' song where trill is its common characteristic, this is the first time that the reed warbler uses trills to create intensity towards the climax. Another new motif that appears in section C (bar 421, example 3.3.18, x) and later repeated in RW6 and RW7, is quite similar to the previous motif (Bb –A). Though both similarly emphasize Bb, the latter is written in tritone with a different rhythmic pattern. One of the technically demanding passages is when the two reed warblers' songs are written closely in the same register, for example, at the beginning of the duet (RW6).³² This requires the performer to cross hands one over another at a fast tempo *Vif* (quaver =144), especially in the first two sections of RW5. Other examples occur at bars 375-376, 378-379, 382-384 and 389-395. Messiaen has mentioned in his *Traité* that this dazzling duet is extremely difficult for the pianist, especially to produce the different attacks in each hand in a vertiginous tempo.³³

The juxtaposition of the phrasing from both warblers adds to the complication of rhythm. By nature, it is illogical that two birds sing in the same tempo and phrasing at a time. They usually perform spontaneously at their own pace. Messiaen seems to present this authentic effect in the duet especially at section RW5: a and b. It is noticeable that the first warbler motifs depend more or less on the bar line for each

³² See Chapter 2 regarding the characteristics of fingerings, 'cross hand', p.73

³³ Messiaen, *Traité*, Vol. 5, p.594

of its motifs; while flexibility of the rhythm can be seen more from the second warbler. Examples are at bars 380-382, 391-395, 397-399.³⁴ These highly syncopated rhythms even create a jazz-like rhythm, especially in two of the fragments from RW5 and RW6 (examples 3.3.19a and 3.3.19b).

The climax of this piece is at RW6 where the texture and dynamic of the reed warbler reaches its pinnacle in rotating notes and trills, formed by a cluster of chords in the left hand (example 3.3.20). The music then turns into three gliding calls with a crescendo, ends with an A# and descends with chords in equal semiquavers pulse. The three top notes (F# G# A#) which begin the trills recall the sunrise-theme motif in 'gold' colour (refer to later sections at p.127). This duet (RW6) ends with three *acciaccatura* chords, becoming gradually softer and slower by added rests. As mentioned above, this strophe is followed by the loud *portamento* gliding calls from the single reed warbler and then the rotating calls from the sedge warbler, ending its fragment on an accented A before RW7 continues the music. The A may function as a harmonic connection to the beginning of RW7 (example 3.3.21a). This is the last strophe in main strophe 5 and as mentioned before, the beginning of this strophe is taken from Messiaen's notation in 1956. Instead, the motifs in this strophe gradually become more melodic at the conclusion of the whole duet section. (example 3.3.21b).

Unlike the complicated hand crossing in the duet sections, the last strophe (RW8) recalls some of the ideas from the first reed warbler's strophe. Most of the motifs established from RW1 until RW7 are summarized in the last strophe, RW8; some examples can be referred to (example 3.3.22). However, notice that the *acciaccatura* repeated notes from RW1 do not occur in this or other strophes. Motifs in RW8 are generally more constant in comparison with RW1, where fewer rests are seen. In this case, using the rest as a guide to identify phrasing within this strophe is not feasible. However, sections in this strophe can be arranged as: a, b1, b2, c1, c2, d, a1, by identifying the characteristics of motifs at the beginning of each section, which are the very fundamental reed warbler's song patterns (example 3.3.23). Materials in sections RW8 b1 and b2 are derived from the last section of the first

³⁴ This recalls the complexity in Messiaen's contrapuntal writing of the thekla lark's songs discussed in Chapter Two, p.45.

reed warbler's strophe RW1; the falling of the fourth chord from the three repeated chords in c1 is inverted with the rising fourth chord in c2 (example 3.3.23, x). In general, this strophe is presented in a more melodic style than the previous, by introducing a new short melodic fragment (example 3.3.24) although their focal pitches remain almost the same. These melodic fragments often start on Eb while most of the accented notes use B, Bb and A. The strophe ends with a major 7th interval in the right hand with the top note B, and C# in the left. These two notes are then resolved to A and C of the frogs' call after the long pause.

Although the sedge warbler and the great reed warbler are not the soloists in this piece, their songs play an important role in the music development. Their songs' characteristics contribute more to create the effects of noises, cries, and gliding calls. For example, there are a few motifs from the sedge warbler written in different tempo to create an *accelerando* (examples 3.3.25a and 3.3.25b). Similarly, its trill appears in three of its strophes, using a *crescendo* from *pianissimo* to an extremely loud dynamic. From my experience, the difficulty for the pianist is to create a continuous trill between the changes of chords when each trill ascends to a higher range (examples 3.3.26a and 3.3.26b). This can be compared to a technique from the percussion, such as using a few mallets in both hands for a trill on the marimba. The sedge warbler often ends its song in *fortissimo*, a contrast to the flower theme that follows after each strophe. Surprisingly, there are motifs derived from the reed warbler too (example 3.3.27) and perhaps this is an imitation of the sedge warbler as both species take turns to sing their strophes. Ornithologists regard the sedge warbler as one of the noted mimics. Some writers also regard the reed warbler as imitative.³⁵ Therefore, this again justifies how Messiaen interestingly correlates the same motifs of the reed warbler and the sedge warbler!

The great reed warbler's song appears only once in 'La rousserolle effarvate' after the second 'purple foxglove' section. Apart from the *Catalogue*, it appears in *La fauvette des jardins* (1970) in a very similar style (example 3.3.28a). Different from the two warblers, the great reed warbler's motifs are generally formed by a contrasting lower register motif leaping to a higher register call (example 3.3.28b), with a more heavy and powerful dynamic than the other previous warbler, described

³⁵ Armstrong 1963, p.72

by the composer as *râclé, bruit de ferraille* (noise, sounds like scrap metal or old iron). Messiaen's notation of the great reed warbler's song taken on 9 July 1959 in La Camargue is akin to this strophe (example 3.3.28c, x).³⁶ In this notation, Messiaen even indicates orchestral instruments for the different motifs in achieving a closer timbre for the birdsong. Although it is not a notation as exact as the great reed warbler's song in 'La rousserole effarvete', the indication of the instrument may help us to imagine the timbre of the great reed warbler.

Sunrise and Sunset

Apart from the 'flower' motifs, the sunrise theme is the next cantabile passage in this piece. The sunrise and sunset in this movement reflect an arch-like shape as the sunset motifs move in retrograde order, which naturally provides a contrasting effect that represent the brightening and diminishing daylight. The sunrise's phrase is teamed with the duet of the blackbird's and the red-backed shrike's songs. A total of five phrases appear in this section:

Sunrise (s) :	a	a	b	c	a'	a'	(refer to table1).
Bar no. :	134	139	144	160	171	184	

Unlike the reed warbler's strophe, the phrasing and structure of these three subjects (sunrise, the songs of the blackbirds and the red-backed shrike) are clear; after the sunrise theme made its entrance, a two-chord motif of *résonance contractée* follows (example 3.3.29, x) in order to sustain the two singing birds. In this instance, the chords function to represent the 'sunshine' as a background for the birds.

The sunrise and sunset depiction is one of the main ingredients in the *Catalogue*. It appears notably in 'La rousserolle effarvete', but also in 'Le loriot' and 'Le traquet stapazin'. In 'Le loriot', the sunrise motif is presented by a series of chords rising consistently in an arch-like shape but not in different layers of voices. However, the

³⁶ Messiaen, *Traité*, Vol.5, p. 616

sunrise and sunset theme in 'Le traquet stapazin' is more comparable to 'La rousserolle effarvate' in terms of the layering of voices, though the outcomes of both presentations are different. The texture of the sunrise and sunset theme in 'Le traquet trapazin' is much more dense (examples 3.3.30a and 3.3.30b) since it associates with the grandness of the mountain (see analysis, Chapter 3.5 'Le traquet stapazin').

The sunrise motif of 'La rousserolle effarvate' is constructed in two layers of voices written for both hands in parallel motion. The first layer forms the chordal theme which acts as a 'ground' for the whole structure of this section (example 3.3.29, yi). This motif corresponds to a floating-like chordal ascending fragment (yii), and together with pianissimo it creates a gradual rising effect for the sun to emerge. With the use of Messiaen's mode of limitation, colour-chords are emphasized here; the first layer of the sunrise theme (yi), is formed by mode 2 which represents the colour of rose and mauve; the ascending motif (yii), from mode 3(1) depicts the colour of orange, representing the colour of the sunshine.³⁷ After the ascending motif, both hands are drawn to the middle register with a two-chord motif which has been mentioned above.

A closer examination reveals a harmonic connection between this two-chord fragment and the blackbird's song. All these chords, which precede the birdsongs, are again derived from Messiaen's harmonic sequence. The first two chords, which appear at bar 135 to sustain the blackbird's song, is none other than the *résonance contractée*. It is notwithstanding that the double notes E and B from the blackbird come from the inner notes of the preceding chord (the second chord of *résonance contractée*) (example 3.3.29, z). Both songs of the blackbird and the red-backed shrike are written in mode 3 (2) (blackbird) and mode 3(4) (red-backed shrike), albeit a few exceptional notes that do not belong to the mode. The blackbird's song establishes a very strong emphasis on E major intervals, although there are times when it moves slightly away from this key, such as in the second and fifth phrase. The emphasis on E major intervals seems not only to represent the brightness of the sunrise but may also be an idea of the composer to reflect the emotion of the

³⁷ The colour are stated in the score, p.11

singing blackbird in the morning, as the word 'gai' (cheerful) is indicated in the score. Furthermore, the sense of E major key also serves as a dominant key to the A major chord (the second chord of the *résonance contractée* in the right hand).

After the *résonance contractée* has been repeated twice for the two phrases of the blackbird's songs, it is extended to a four-bar progression starting at bar 146; where the *résonance contractée* is followed by a mixture of other chord sequences; bar 147 is a pair of harmonic sequences derived from mode (5) used in the beginning of 'Le traquet stapazin'³⁸ and in the *Turangalila*; bar 149 is the first half of the 'anacrouse, accent, désinence' progression (example 3.3.31a, z). This time the last chord is transformed to a lower interval, introducing the song of the redstart. Again, the chord which supports the redstart's song provides a harmonic cohesion; instead of the inner notes, the outer notes from the chord, F (enharmonic E#), is the dominant of the Bb by the redstart; and this Bb in turn serves as a dominant to the Eb (enharmonic D#) in the bass. The redstart's song in this section (section b) contributes a kind of anti-climax and a contrasting texture against the blackbird and red-backed shrike, suggested by the composer as *monotone* and *gentiment*. This is the most simple and straightforward song in the whole piece, despite the very short calls from other birds. Each phrase begins with an emphasis on a high B note, with a unifying semiquaver rest at the end of every bar, although the values of each bar are different. Its main pitches resemble very much the reed warbler, which include B, Bb, E, Eb. Two groups of pitches encircle the central note of the song (Bb). They are four (A, E, D, C) above, and another four (Ab, F, Eb, Db) below (example 3.3.31b). Two other notes, C and F#, join in the theme at the fourth bar before the strophe ends, where the C acts as a spring in bouncing the Db to a higher F# and later even higher to A (example 3.3.31a, x). The difficulty lies in the repetitive notes in a soft dynamic, where the player should achieve a balanced tone quality in both hands.

Interestingly, at the fourth phrase, the later half of 'anacrouse, accent, désinence' continues after the redstart's song and after the two bars sunrise-colour depiction (example 3.3.32, z). The first half of the progression appears again (bar 163) before

³⁸ Refer to the construction of harmony in Chapter 3.5 'Le traquet stapazin' on p. 157.

ending with the *thème d'accords* from *Vingt Regards* (bar 164). Again, the bass of the *thème d'accords* provides an E major for the solo blackbird. The fifth phrase is the longest in this section, the progression of the vineyard terrace that is seen in 'Le traquet stapazin' appears again, and finally ends with a two-chord sequence with a much lower interval. The *résonance contractée* concludes the last phrase of this section and sustained for the duet, exactly in the same transposition of the first phrase that features the decorated A major chord.

The first motif of the sunrise theme transforms into a new material after the redstart song at the fourth phrase in this section (c), although its texture is fairly similar to the previous appearance. The first layer is now written in three chords in succession without any interruption of chords from other voices, while the last chord supports an ascending echo-like motif (example 3.3.32, yi and yii). The first three chords (yi) represent the colour of mauve, from mode 4(5), and the echo motif (yii) embodies the gold colour from mode 6(1). All six chords move upwards; the first three top notes: F F# and A, are echoed by the later three chords with a ringing bell-like F# G# and A# in the right-hand top notes. The chords in this motif are extended at the last phrase of the section, moving slowly in ascending from the first three chords continuously to *fortissimo*, representing the sun as it rises to its zenith.

The sunset appears after the skylark's and the water rail's song (bar 569), which ends the momentum of the virtuosic development section (duet) by the warblers. Unlike the sunrise, the sunset theme does not correspond with any bird until the bittern's call interrupts. All the chordal motifs move slowly downwards, suggesting that the brightness of the day is fading. The theme establishes itself individually at the beginning of the section, but later its phrase slowly alternates with other features such as the bittern's call, the solemn night's motif and the nightingale's song. The sunset theme soon becomes shorter in length, thus reflecting the disappearance of the light. Three chords – E flat, C minor and A minor make a cadence point for the last three fragments of the sunset's motif and at the same time these phrases alternate with the bittern's call before the sunset theme terminates with darkness (example 3.3.33a). In the last phrase, the A minor chord is sustained throughout the nine descending chords, described by Messiaen as '*le disque rouge du soleil rejoint son reflet et s'enfonce dans l'eau*' (the colour of the sun in red is joined with its

reflection in the water). These nine descending chords are to be played with a decrescendo to the softest dynamic as if the chords are dissolved into water. Interestingly, the A minor which is mentioned above also provides a 'dominant – tonic' structure from the sunrise to the sunset harmony; as we may recall that the blackbird's song in the sunrise music is written very much in E major.

Similar to the sunrise theme, the sunset theme transforms after the first nightingale's strophe into a new motif. This is described by Messiaen as *triste et sombre comme des hautbois et cor anglais* (sad and dark such as the oboe and cor anglais). Again, the top notes of the first three chords (F# F D#), are echoed by the floating chords (A# G# F#), an exact retrograde from the previous sunrise motif (example 3.3.33b). Throughout the nightingales' strophes, the sunset music slowly dwindles away while the solemn night's motif takes its place reflecting that the day is turning into darkness.

The inner structure of the sunset music is slightly different from the sunrise's, since the sunrise phrases are mainly paired with the blackbird's and red-backed shrike's song. However, it is the position of the sunrise and sunset section which contributes to the symmetrical form, together with the ascending and the descending motifs. Here, the songster which replaces the two morning birds is none other than the nightingale. The nightingale's strophes are independent enough to stand on their own without the support of harmony from either the motifs of the sunset or the solemn night. One reason is that the characteristics of the nightingale's song are more stereotyped (it can be easily identified through a few distinct characteristics), different from the more varied melodious vocalization in the songs of the blackbird and red-backed shrike.

The nightingale was a favourite subject used by Messiaen throughout his career. As discussed in Chapter One, 'Introduction', the first appearance of the nightingale comes in 'Liturgie de cristal' from *Quatuor pour la fin du temps* (1941), where the violin imitates the song in repetitive notes together with rotating patterns. In *Réveil des oiseaux*, the nightingale is introduced at the outset of the piece by a solo piano, with most of the characteristics of the birdsong displayed even with onomatopoeic syllabuses to enhance its authenticity. However, its appearance in 'La rousserolle

effarvate' not only includes details of the song's significance, but also includes different metronome markings allocated for each different pattern within a strophe. The very obvious change is that the bare octaves in *Réveil's* nightingale are fully harmonized in the *Catalogue*. The increase of accents and sudden attacks in *fortissimo* also provides more effective timbre for the birdsong (example 3.3.34). We can also notice that the characteristics of the nightingale's song in this movement are very similar to the one in 'L'alouette lulu' and 'La bouscarle'.

There are four nightingales' strophes between the 'sunset' theme and 'solemn night' motifs. In the first strophe, five patterns can be categorized according to the different tempo markings. The nightingale's motifs in the other strophes that are derived from the first can be referred to example 3.3.35. Above all, the nightingale's song is the more recognizable birdsong in Messiaen's transcription since its characteristics are obvious, namely short melodic fragments with rests. The difficulty for the pianist in playing the nightingale's song is in the continuous change of metronome markings. Another feature is the repeated notes that rise to a higher register; this requires a suitable fingering to execute a smooth crescendo along the repeated notes, not necessarily according to Messiaen's indication. Pedalling is carefully indicated, as the pedal is another important device to perform various effects such as to distinguish accents, either with a great resonance or in a dry, abrupt manner (example 3.3.36x); the pedal is also important for the slurring effect of a bird's call (example 3.3.36, y). The 'lunar' sound³⁹ of the nightingale also depends greatly on the sustaining pedal, described by Messiaen that the calls are coming from a distance and are gradually drawing nearer (example 3.3.36, z).

Some of the harmonies in the nightingale's theme derive both from the reed warbler's strophes and often from the last chord of the solemn night's motif which precedes it. The first three strophes end each of their first phrase with a perfect 5th (E and B); this might recall the E major of the blackbird. In relation to pitches, the first chord of the nightingale's strophe often derives from either a semitone above or below the last chord of the solemn night's motif.

³⁹ Samuel 1994, p.88

Birdsong as a link (transition or bridge)

Flower

The subjects which have been discussed, including the warblers' strophes, the sunrise and sunset sections, and the music of the pond, exist independently as if a piece on their own since most of them are separated with long pauses. Even in this lengthy movement, each musical phrase or fragment is indicated with a bird's name, or elements from the habitat. In the *Catalogue*, no musical phrases are left without explanations by the composer. The 'flower' theme is one of the examples in presenting not only a nature-connection but also a contrast in comparison with other materials. All the flower motifs in 'La rousserolle effarvate', which are derived from the undulating shapes of themes in *Turangalila*, are uniformly indicated with the same metronome marking, *Lent* (semiquaver = 80).

The first yellow iris motif (example 3.3.37a) at bar 192 occurs after the sunrise theme, with the duet of the blackbird and red-backed shrike. Its appearance marks an end for the sunrise theme and more importantly, it presents a short three-bar prelude that anticipate the following group of morning-birds' calls. The yellow iris motif ends with Messiaen's *renversement transpose*, though not in a complete progression. From example 3.3.37a, b, c, d and e, we can see that the *Turangalila* themes in *Cantéyodjayâ* (1949) and *Le merle noir* (1952) contribute to the flower motifs in 'La rousserolle effarvate' despite each being varied in rhythm and range. Apart from the *Turangalila* motif, another significant feature of the flower theme is the use of a melodic contour from Debussy's *Reflets dans l'eau*, employed by Messiaen in many of his works.⁴⁰ Example 3.3.38 exhibits this melodic contour in different motifs taken from a selection of works.⁴¹

The second motif from the yellow iris motif (bar 231) appears between two pairs of two-chord motif in crotchets, indicated by the composer as 'like the tam-tam from a distance'. In terms of structure, the first and second yellow iris motifs flank the group of morning birds' calls (see Figure 8). The second yellow iris motif is constructed from a combination of two single melodic lines in both hands, moving

⁴⁰ Messiaen, *Technique de mon langage musical*, p.32

⁴¹ Messiaen's preference on tritone interval in his melodic structure is also shown in these examples.

in a mixture of either parallel or in contrary motion. The main motif from the left hand is another flower theme derived from *Cantéyodjayâ* (example 3.3.37b i and ii). However, the melodic contour also resembles one of the flute fragments from *Turangalîla* (example 3.3.37b, iii). The chromatic movement of the motif is illustrated as *x* and the changing of accidental within a note is shown as *y*. This motif ends with a D# (Eb), together with a bass on B flat, thus reminding us of the hidden E flat tonality from the reed warbler.

The purple foxglove first appears after the first sedge warbler's strophe. This flower theme is more harmonized, with a sequence of chord progressions. Similar to the yellow iris, it appears only twice in this piece. Example 3.3.37c (i) illustrates how the theme has been interestingly transformed from the flower theme in *Turangalîla*. It is interesting to examine how the theme has been transformed from the 'flower theme' in *Turangalîla*. What makes this flower theme remarkable is the use of acciaccatura that holds the bass, which had a slight reminiscence to the first movement 'Regard du Père' in *Vingt Regards*. The ending of this motif not only bears similarity with a fragment from *Le merle noir* (example 3.3.37c iii, *x*) but again reflects the melodic contour from Debussy (example 3.3.38 z and example 3.3.37c ii, *z*). What characterizes this motif is its charming harmony, which contrasts with the agitated and articulated warbler's song. Two chords dominate the theme (example 3.3.37c iv): first, a second inversion of E flat with added B (Bb bass) and the second inversion of B major with added G –not G sharp (F# bass). After the two chords appear twice, the second inversion Eb chord continues to start a new phrasing with an added 6th note. The phrase augments to allow an additional two chords in between the two previous chords, and this produces a descending bass line (Bb, Ab, G to F#). Moreover, the extension of the chords also directly results in a longer phrase, as the previous two one-bar phrases are extended to a three-bar phrase (1+1+3).

This chromatic chord progression returns again in the second appearance of the purple foxglove after the second sedge warbler's strophe and before the great reed warbler's strophe (example 3.3.37d iv). The harmony of this progression is exactly the same, even though the composer gives a slightly similar flavour to the fourth chord – a B major chord, with an added sixth note (Ab: G# enharmonic example

3.3.37c iv). This chord progression is repeated three times in this section. The longer phrasing followed by a shorter one is in contrast with the previous purple foxglove's motif. Again, the chromaticism reminds us of one of the motifs from *Turangalilâ* via *Cantéyodjayâ* and *Le merle noir* which was mentioned earlier (example 3.3.37d i, ii and iii). This time the penultimate phrase of the theme repeats Debussy's melodic contour and the inversion of this shape concludes the theme (example 3.3.37d, iv).

The 'water lily' theme that precedes the reed warbler's duet makes its entry as the third species of flower in this piece. Its presentation is rather different from both the yellow irish and purple foxglove. The effect of this flower motif is more mysterious where the motifs emerge in both hands that explore the further ends of the keyboard moving in unison (the right hand is in parallel fourths). The use of the extreme register on the piano thus resembles the second movement in *Vingt Regards* 'Regard de l'étoile'. In the water lily theme, the outer layer of the motif encapsulates a series of resonance chords – *accords tournants* which appears in many of Messiaen's other works (example 3.3.37e i). For example, this resonance chords can be found earlier in *Cantéyodjayâ* (example 3.3.37e ii), where the hallmark of these chords are that they repeat part of their notes (usually top notes), but allow other voices to move within the chords. Unlike the water lily theme, the *accords tournants* in *Cantéyodjayâ* are presented as the main theme in strong fortissimo accents. Here, the complete water lily theme shows a tonic and dominant relationship where the first note starts on G# (enharmonic Ab), reaches at Eb in the second half of the theme, and resolves to G# again. Even though this is not in the tonality of Ab or Eb major, it gives the shape of a perfect cadence to the theme (example 3.3.37e i). The ending of this theme thus reflects the chromatic pattern found in Messiaen's *Technique de mon langage musical* (example 3.3.37e i and iii, x).

Tam-tam

As mentioned before, Messiaen requires the performer of this piece to imitate many orchestral instruments for their timbre: this includes the tam-tam. This paragraph deals with a short two-chordal motif (example 3.3.39) which flanks the second yellow iris themes. Similar to the 'solemn night' motif, it has an atmospheric character. Its first appearance is probably to anticipate the silence of midday, where two chords in fifths are played quietly in two crotchets against a low resonance in the bass. In the second appearance, the chord is sustained through the grasshopper warbler's trills (in the highest register), the only audible sound during midday. As mentioned by Messiaen, during midday, birds fall silent and do not sing between noon and one o'clock.⁴² The recurrence of this 'tam-tam' chord comes at 6 o'clock in the evening after the climax of the reed warbler's duet, and again framing the yellow iris theme. The use of such instrumental effects can also be seen in 'La chouette hulotte' as discussed previously, where Messiaen emphasizes the feeling of fear by imitating the timbre of the timpani (example 3.3.40).

Other birdsong

The first appearance of the tam-tam effect is preceded by the group of birdsong which occurs after the sunrise section and the first yellow iris. These are the pheasant, reed bunting, green woodpecker, starling, great tit, and the white wagtail. This group of birdsong fills the daytime between morning and midday. Their songs only appear in this section of the piece. A variety of birdsong characteristics are displayed: there is the extremely high register of the reed bunting, the raucous cry of the pheasant, the amusing and whimsical song of the starling and the insistent call of the great tit. Here, Messiaen even depicts the movement of the pheasant 'flapping its wings' with a rotating pattern in a low register (example 3.3.41).

Another two birds which serve more as a transition between other sections are the black-headed gull and the coot. The black-headed gull's fragment appears once

⁴² Samuel 1994, p.93

only before the call of the coot, and its fragments is quite similar to the reed warbler (example 3.3.42 and example 3.3.43). The call of the coot is repeated twice in this work, once before the water lily, and another time before the skylark's song. Its call is in a constant pattern represented by a hammering top B note and is always ended in loud, accent chords. This B note is also used again by the skylark's song in the same manner, albeit in a more continuous phrasing. The skylark's section has a similar function to the group of morning birdsongs, as it represents a codetta to the development section; while the group of birds is served as a codetta for the sunrise section. The skylark's song is in two strophes, with the interruption of the frogs' calls in between, forming an ABA structure. Messiaen's anthropomorphic intention is shown where he indicates the skylark's song with '*jubilation*'. The style of the song may be the reason for the description, where it is formed by a generally high pitch in extremely quick tempo, with a characteristic of always aiming for the accented top note (B). The skylark's song also occurs at the ending of 'L'alouette calandrelle' with the same indication (*jubilation* and *vehement*). In 'La rousserolle effarvate', after the skylark's song, the frogs' calls appear again before the water rail makes its entry with three different motifs (example 3.3.44). Again, the water rail's first accented chords are based on an augmented fourth chord with the same B in the higher register, similar to the skylark's.

3.4 Analysis : La bouscarle

'La bouscarle' is another work that emphasises the importance of music and colour in relation to tonality. The main habitat involves water, and therefore the piece has the same feature as 'Le merle bleu' and 'Le traquet rieur', both of which focus on A major, which represents the colour of water (river, sea, lake). Unlike these movements or even 'Le traquet stapazin', the tonality in 'La bouscarle' does not derive from the birdsong transcriptions but mainly from the habitat and the portrayal of the colour and movement of the kingfisher. What distinguishes 'La bouscarle' from other movements of the *Catalogue* is its remarkable lyrical subject – the river theme in A major 6th. In the *Catalogue*, 'La bouscarle' is the ninth movement; with its companion 'L'alouette calandrelle' it forms the fifth book. Its companion piece in the palindromic position of the *Catalogue* is 'La chouette hulotte' where both share some similar characteristics.

'La bouscarle' was written in Charente on the last day of April. The time of day is not specified, as in other movements, though the nightingale's strophe that appears near to the end of the work may represent the 'night'. However, it seems that this movement is either briefly portraying a day or is a depiction of a very early morning before sunrise, since Messiaen indicated in the preface that the kingfisher, whose flight is positioned towards the end 'exposes its beautiful and forget-me-not colours to the sun' (*Vol nuptial du Martin-pêcheur, qui tourne, exposant au soleil ses belles couleurs de myosotis*). As well as the river theme, the other main habitat portrayal is the two sections that represent the reflection of the willows and poplars, and both sections are symmetrically positioned in the work. Colour is the main focus in 'La bouscarle' where it is represented by the kingfisher's flight and plumage (blue and green). Nevertheless, it is noticeable that the harmony of the river theme shares with the kingfisher's, in that it not only portrays the colour of blue (river), but also provides the reflection of the kingfisher.

The sections that portray the reflection of willow and poplars in 'La bouscarle' recall a similar style in 'La chouette hulotte', where the *Mode de valeurs* technique is used. Although the two sections in 'La bouscarle' are not formed by the *Mode de*

valeurs, it is highly organized in another rhythmic system which will be discussed in later paragraphs (pp.143-144). Sharing a similar function, the two sections are placed at, or near the introduction and the ending that serve as the 'backbone' of the habitat. Both are either without colour ('La chouette hulotte') or use muted colour ('La bouscarle'). The main difference is that the 'night' theme in 'La chouette hulotte' is written more complicatedly to present the fear of the night; while the whole reflection in 'La bouscarle' is written in pianissimo representing its stillness and tranquillity.⁴²

Structure

Most of the subjects in 'La bouscarle' are not arranged in a definite order. However, two features should be examined in order to analyse the structure. The first is none other than the short motif of the cetti's warbler while the second is the sequences of the river theme. The appearance of the cetti's warbler motif is distinct in leading other subjects, forming a total of nine groups including the introduction and the ending (Figure 10). The arc of time, which gives shape and direction to other pieces, does not exist here. It is replaced by the river theme, which reveals a kind of open and closed cadence within the whole structure. This shows that both subjects (the cetti's warbler and the river theme) are equally important in contributing to the overall structure.

If the cetti's warbler motif is viewed as the leading subject for each group, it is important to examine the correlation between the groups. Both the introduction and the ending of this work use nearly the same subjects: the colour of the kingfisher in *A major*, *résonance contractée*, and the moorhen's call which does not appear in the middle sections at all. However, it should be mentioned that the emergence of some new subjects, such as the sand martin and the yellow wagtail's call, do not exist at the introduction but only at the ending. Another important subject is the reflection of willows and poplars, which has been mentioned above, where its symmetrical position also becomes an important landmark for the structure; its first appearance

⁴² Hill describes that here, 'Messiaen requires the performer to adopt an 'impressionistic' style of performance, with the hazy blending of half-lights and subtle use of pedal and half-pedal'. See Hill 1994, p.341

is in the second group and later in the penultimate group. Along with this are the fast ascending chords which start from the A major that represents the blue and green colour of the kingfisher; this fragment appears similarly in the introduction and the closing sections.

Within the middle groups, another link can be identified between group 3 and 6. Though the order of the subjects is more flexibly arranged in these groups, there is nevertheless a correspondence between these sections. Here, we may notice that group 3 resembles group 5, but with an extension (the *Harmony Litany*) that continues at the end of the kingfisher's flight in group 5. Group 4 mirrors group 6, but the wren's call is replaced by the chaffinch's call. However, it is clear that the order of the river theme does not follow faithfully the order of these groups. Therefore, the river theme and the birdsongs form two different pairings. Assuming that the cetti's warbler's call is at the beginning of each section, then group 3 pairs with 5 and group 4 with 6 according to the arrangement of the birdsongs. However, if all the river motifs are positioned as the last subject of each group, it suggests another couplet where group 2 pairs with group 3 and group 4 with 5, with the 'closed' cadence at group 3 resolving the 'open' cadence of group 2 (see Figure 10).

In this paragraph, I will explain the phrases of the river theme in relation to how they contribute to an open-closed cadence. Though the motif of the river theme is basically written around an A major 6th chord from mode 3 (1), it presents a kind of 'cadence' within its theme. Most of its harmonies derive exactly from the kingfisher's colour (blue and green) that appears at the introduction and the ending (this can be referred to the harmonic analysis in a later paragraph). The river section which starts at group 2 can be suggested as an open cadence (R1: example 3.4.1) while the following section at group 3 is the closed cadence (R2: example 3.4.2). Although R1 involves a four-phrase theme (which equally provides a complete 'cadence'), it is R2, which is always positioned after the cetti's warbler's call and the kingfisher's flight motif, that contributes a full cadence for the river theme. In other words, R2 is a continuation of R1; since R2 is a single long phrase where its motif is developed from the third phrase of R1. The 'tam-tam' at the lower register

Figure 10

La bouscarle (Structure)

<p>Group 1 (Introduction)</p> <p>Cetti's warbler Moorhen Kingfisher Kingfisher (Blue and green) Resonance contractee Moorhen Resonance contractee Moorhen</p>	<p>Group 3</p> <p>Cetti's warbler Kingfisher's flight River (c) + Robin R2</p>	<p>Group 5</p> <p>Cetti's warbler Kingfisher's flight + H.L River (c) + Robin R2</p>	<p>Group 7</p> <p>Cetti's warbler Corn crake River (Climax) R3</p>	<p>Group 8</p> <p>Cetti's warbler Hoopoe Wren Nightingale Kingfisher's flight + H.L Reflection Sand martin Moorhen</p>
<p>Group 2</p> <p>Cetti's warbler Reflection River (o) + blackbird R1</p>	<p>Group 4</p> <p>Cetti's warbler Corn crake Song thrush Wren River (o) + Blackbird R1</p>	<p>Group 6</p> <p>Cetti's warbler Corn crake Song thrush Chaffinch</p>	<p>Group 9 (Ending)</p> <p>Cetti's warbler River (c) + Robin (R2) Corn crake Yellow wagtail Kingfisher Kingfisher (blue and green) Resonance Contractee Cetti's warbler</p>	

* H.L : *harmony litany*

* River (o) : open cadence

* River (c) : close cadence

also suggests the conclusion for the river theme which is later sustained for the robin's call. As mentioned, this open-closed cadence occurs again at groups 4 and 5.

Nevertheless, the most important feature is where the river theme contributes to the climax (R3: example 3.4.3); this happens in group 7 as the theme is transferred to the dominant key of E major. Not only does this group mark a main cadence (a dominant of A major: E major), it is also the longest river section with a new birdsong – the blackcap. Related features between R3 with R1 and R2 can be noticed: an inverted melodic contour (examples 3.4.1x and 3.4.3 x), and the use of the same melodic notes with different harmonies (examples 3.4.2 y and 3.4.3 y). This dominant harmony is further emphasized at the short descending motif which occurs three times continuously. The last appearance of the river theme uses R2 but the robin's song is extended as it moves towards the ending of the movement.

The overall summary of the river theme can be formulated as:

(R1 + R2) → (R1 + R2) → R3 → R2
(Climax)

The way this river theme functions is very similar to the sunrise-sunset theme in 'Le traquet stapazin' where these subjects assist the flow of the structure and provide the mobility to the portrayal from beginning to the end. Both themes in these two pieces are superimposed on the birdsong sections. However, 'Le traquet stapazin' presents a kind of continuity (sunrise-sunset), while in contrast the river theme moves in an ABA shape, as evidence from its modulation to E major. The river theme will be further discussed in a later paragraph.

Colour

The main representation of colour in this movement is the kingfisher, not from its song but its plumage, which is blue-green. These colours are highlighted by two motifs, both using chords from mode 3 and fundamentally in the key of A major. The first idea is a short and extremely fast ascending chordal phrase; while the second is a series of arpeggio chords which represent the flight of the kingfisher.

The ascending-chord motif that reflects the kingfisher's colour is the first subject that announces the A major tonality in this movement (example 3.4.4a). Its harmony comes from mode 3(3) though with a borrowed C. This phrase, which moves almost in chromatic is not a new material since it reminds us again of *Turangalila*. It appears consistently in the piano from the first movement of *Turangalila*, moving in descending though in another key that lands in Eb major chord (example 3.4.4b). We may observe how Messiaen explored his own material, and identify the flexibility of the same idea in portraying different subjects. Appearing only twice, the lightning fast motif seems to give a glimpse of the kingfisher's flight; first to present itself at the introduction and later at the ending, suggesting that it flies away from the scene.

However, the second idea of colour representation by the kingfisher's flight is positioned in the middle section between group 3 and group 8. In portraying the flight, Messiaen brilliantly employs two patterns of arpeggio chordal passages, and the ascending and descending direction thus depicts the bird's movement. This flight passage is presented three times within the work, where the third appearance is a combination of the first and the second arpeggio motifs. The first is formed by using broken chords rising and falling, with A major and E major 7th (example 3.4.5a). Chords that are played by the right hand, using a mixture of transpositions from mode 3 with pairs of alternate single notes and triads, may indeed represent the flap of the wings. This right hand figure can be found earlier in 'Regard du silence' from *Vingt Regards* p. 130, but in a completely different approach (example 3.4.5b). Since one of the primary ideas in 'La bouscarle' is to reflect the colour of the kingfisher, the fundamental tonality (A major and E major 7th) in the

left hand results in a totally different flavour. Not only does the entire passage become more distinct, it equally establishes a sense of cadence within its phrase.

The second idea of the flight does not sound entirely different from the above, though it is written in a slower tempo. The alternate pairs of single note and chords are omitted but a more challenging idea is developed, where a series of chords in first inversion is played by the right hand (example 3.4.6a). Again, this is another material which has been used in *Visions de l'Amen*, from the fifth movement 'Amen des Anges, des Saints, du chant des oiseaux', which is taken from the theme of Golaud in *Pelléas* (examples 3.4.6b and 3.4.6c).⁴³ Although the left hand similarly provides the A :major tonality, only A and E are repeated within the two phrases. The bare perfect fifth on this account may reflect the transparency and lightness of the flight. This overall idea features a transposition from the right hand while the left remains in the same harmony. The extension that follows is the *Harmony Litany*, a harmonic pattern which Messiaen used extensively in his earlier works (examples 3.4.7a and 3.4.7b).⁴⁴ The characteristic of this harmony, where the movement involves inner notes that move in semitones while flanked by the similar outer voice, clearly suggests that the flight of the kingfisher is in a steady position.

A series of dyads in both hands continues very quickly after a crescendo of the *Harmony Litany*, where now the flight seems to plunge suddenly and then rise again more slowly but with great force (*ff*) (example 3.4.8a). All these descriptions are evidenced from the extremely fast tempo *Vif* (quaver =160) for the sudden descending dyads and later followed by the *rall. molto* at the end of the phrase. This series of dyads that are constructed of thirds in the right hand and intervals of sixths and sevenths in the left derives from the *résonance inférieure contractée* (example 3.4.8b). This figure appears as early as in *Quatour pour la fin du temps* 'Vocalise, pour l'Ange qui annonce la fin du temps' at *Presque lent*, though a mixture of other harmonic sequences appears together in the same passage (example 3.4.8c).⁴⁵ More examples can be found in 'Amen des étoiles' from *Visions du l'Amen* (example 3.4.8d) and in *Harawi* 'Syllabes' (example 3.4.8e). In example

⁴³ Messiaen, *Traité*, Vol.III, p.260

⁴⁴ Messiaen, *Technique de mon langage musical*, Vol.II, p. 42

⁴⁵ These additional harmonic sequence can be found in *Technique de mon langage musical*, p.39

3.4.8a, we can also see how Messiaen uses the second chord of *résonance contractée* for each quaver chord at *rall. Molto*.

The third entry of the kingfisher's flight, however, is the longest, since it follows after the climax of the river. All materials of the kingfisher's flight that appear previously are gathered here. The arpeggio motifs are extended through modulation, the longer figuration for the *Harmony Litany* and the *résonance contractée* are also prolonged.

Reflection of willows and poplars

The two sections of 'reflection' provide a serene contrast to the abrupt and brusque soloist's call. As mentioned, the style of this section is similar to the 'night' music of 'La chouette hulotte', the movement symmetrical to 'La bouscarle' in the *Catalogue*. It is written in 2/4 time, Messiaen's preferred time signature for *Mode de valeurs* music (as in *Mode de valeurs et d'intensités* and 'La chouette hulotte'). What is more interesting in 'La bouscarle' is the organization of the rhythmic sequences (example 3.4.9).

If the rhythm of both hands is calculated according to the duration of a semiquaver, a set of note-values can be identified in each hand. For example, in the first passage (pp.2-4), the fundamental set of values in the left hand is 5335 535 while 4224 424 in the right. Figure 11 shows that the value in the right hand value is consistently one semiquaver shorter than the corresponding value in the left hand. In the middle of the passage, a much longer value appears, although it does not sound or signify a climax; these are the 13 semiquavers in the left hand and 12 semiquavers in the right. Surprisingly, in the second section of reflection (pp.17-18), not only does Messiaen abandon 2/4 time, but the organization of rhythm is also not significant. Another main difference is the emergence of silences, and this function may be similar to the ending of 'La rousserolle effarvate', where the rests that increase between the phrasing describe the tranquillity of the lake occasionally covered by the mist.

Figure 11

First passage:

L.H [5335 535] [444] [5335 535] [343] [13] [333 4] [333 4] [345 9 35]
[5335 535]

R.H [4224 424] [333] [4224 424] [232] [12] [222 3] [222 3] [23]
[444 24] [4224 424] [333] [4224 424] [232] [12]

*In right hand, the first 5 groups are repeated again giving an ABA form.

Second passage:

L.H [445] [rest] [595 51] [rest] [5535] [343] [13] [23331]

R.H [2244] [rest] [24 333 422 431] [rest] [232] [12] [23 445] [2223]
[2223] [2223] [23]

*The only definite set of figuration is [343] [13] from L.H contrary to [232] [12]

* [2223] repeated three times on the L.H which is derived from the first passage.

A sense of phrasing within the passage can be identified (example 3.4.9b x). One obvious example is where, in some bars, the chord resolves on the second beat, again using the melodic contour in Debussy's 'Reflets dans l'eau' as discussed before (example 3.3.38) Another instance is where the phrase ends with two crotchets in a bar, such as at bars 21 and 33.

River theme

Since the structure of the river theme is discussed in the previous paragraph, this section will deal with its harmony which is equally important in contributing to its colours. Although there are no indications of colour for the river motif, it should be realized that all the harmonies are derived from the first motif of the kingfisher's

flight (example 3.4.4a), except for the last chord of each phrase that lands on A major 6th. At the same time, the top voice of each phrase concludes in one of the notes of A major (example 3.4.1); where the three phrases end in A, E, and C# respectively.

Another remarkable related harmony worthy of mention is the chord progression of mode 3 which is explained in Messiaen's *Technique de mon langage musical* Vol.2 p.52, example 333 ⁴⁶ (see example 3.4.10a). Indubitably, the second phrase of the river theme is derived directly from the first and second chord of this progression from mode 3 (1) (example 3.4.1). However, the first phrase of the river theme comes from the tonic chord of mode 3(3) (with a D major triad in the right hand example 3.4.10b). This is also one of Messiaen's favourite harmonies, and another example appears in the form of a grand arpeggio pattern in 'Regard du silence' p.131 (example 3.4.10c). The composer has further explained in his *Traité* ⁴⁷ that this presents an effect similar to Ravel's 'Ondine'. Again, I would like to recall the previous example in *Turangalila* p.17 (example 3.4.4b) where this chord appears repeatedly before it descends, using the chord progression similar to the first motif of the kingfisher's flight that was mentioned earlier (see 'La bouscarle' p.1).

Overall, this lyrical river theme indeed invokes a flavour of the 'Theme of God' from *Vingt Regards*, and also especially in 'Amour oiseaux des étoiles' from *Harawi*. Although both examples are written in F# major, different from the A major river theme, what contributes to their resemblance are the melodic contours and the way each phrase is resolved. This is even evident in *Harawi*, where the end of each phrase is sustained, allowing the entry of the birdsongs. However, it should be mentioned that the two examples in F# major certainly depict hugely different subjects (the 'theme of God' and the portrayal of a painting by Penrose), both of which greatly contrast with the everyday reality of the river.

⁴⁶ Messiaen, *Technique de mon langage musical*, Vol.II, p.52, example 333

⁴⁷ Messiaen, *Traité*, Vol. II p.488

Birdsongs

The birdsongs in 'La bouscarle' do not contribute long strophes as do those of the reed warbler, the thekla larks or the reed bunting in other movements. Most of the birdcalls here, except the nightingale and the sand martin, are short, although several such birdcalls are arranged to form a small section, a common compositional technique in the *Catalogue*. However, the composer has highlighted 'La bouscarle' with an extreme quality of the birdsong and habitat; the brusque and violent declaration of the cetti's warbler that contrasts with the calm and lyrical river theme or the quiet reflection of willows and poplars. Similar to the cetti's warbler, birds such as the moorhen or the kingfisher have calls that are dry and curt, or there is the corncrake, with its repetitive low and throaty calls. In contrast, the more lyrical birdsongs act as companions to the river theme. These include the songs of the blackbird, the robin and the blackcap.

Cetti's warbler

The soloist of this movement is described as *brusque et violent*, which has a similar description to birdcalls such as the black-eared wheatear in 'Le traquet stapazin'. Similar characteristics of the cetti's warbler's call can also be found in *Réveil*, where an authoritative call is given though it is only represented by the solo clarinet (example 3.4.11a). Certainly, the call is harmonized (not related to tonality but timbre) in 'La bouscarle' when compared to the clarinet's single melodic line. However, according to Messiaen, this bird is seldom seen but is heard everywhere around the water area. Its timbre is like a small trumpet together with a tambourine, and is extremely powerful and authoritative.⁴⁸

In 'La bouscarle', although the cetti's warbler's call are varied (examples 3.4.11b, 3.4.11c and 3.4.11d), they are based very closely on two motifs: the accented chords are followed by the second motif, that involves a rotating group, with both hands, which occasionally ends with grace-note (such as in the second variation). Both motifs are written in different tempi, the first indicating *Modéré* (quaver = 108) while the second is almost like a trill in a much faster tempo *Un peu vif*

⁴⁸ Messiaen, *Traité*, Vol.V, p. 625

(quaver = 138). The three variations appear according to the group order, and it is apparent that from group 4 onwards the motifs move in retrograde order (123 321). In group 7, the cetti's warbler's call is simplified to a lighter texture: both hands play single rotating notes for the second motif (example 3.4.11e). The change in the contrasting texture may be a signal to anticipate the climax of the river theme.

The songs of the blackbird, the robin and the blackcap

These three birdsongs present a style which contrasts completely with the songs of the soloist and other birds in 'La bouscarle'. Their songs are delicate and serve one similar purpose: all their appearances are associated with the river theme to which they act as afterthoughts. Even with almost the same timbre, by using a higher register which is supported by the harmony of the river theme, the difference between these three birdsongs is mainly their melodic contour.

The arrangement of these three birdsongs is set quite permanently according to the order of the open-closed cadence that feature in the river theme, discussed previously under 'Structure'. All the blackbirds' songs appear only in the 'open cadence' of the river theme (groups 2 and 4) while the robin always concludes at the 'closed cadence' (groups 3, 5 and 9). The reason for positioning the robin's song at the conclusion of the river theme may be due to its more 'gentle' and 'delicate' melodic style which serves as a resolution. The song of the blackcap, however, only appears once during the 'climax' section (group 7) with several phrases.

Here, it is worth mentioning the blackcap' song in more detail since it is used in many of the Messiaen's works, including *Réveil*, *Chronochromie*, *La Transfiguration*, *La Fauvette des Jardins*, *Méditations sur le Mystère de la Sainte Trinite*, *Saint François d'Assise* and *Un vitrail et des oiseaux*. The composer has explained the bird in great detail in his *Traité*, Vol. 5, including many transcriptions taken mostly in Petichet in 1980 (example 3.4.12a). According to Messiaen, the phrases of the blackcap's song are full of spaces (rests), but in weak sound and only

audible when the bird is close enough.⁴⁹ One of the main reasons why Messiaen chose to use the song of the blackcap rather than the blackbird or the robin for this section (the climax of river theme) is that the blackcap's song seems to be more capricious with its delicate motif (*clair et doux*), although it occasionally ends its phrase in a more accented motif (*refrain joyeux, autoritaire, éclatant*). In *Réveil*, Messiaen displays the virtuosity of the blackcap's song in one of the piano cadenza (example 3.4.12b). However, in *Réveil*, it is written only in bare octaves; both samples have the same metronome marking, though 'La bouscarle' includes another slower tempo which highlights the contrasting motif within the song. Another difference is that in 'La bouscarle', the blackcap's song is gentler in comparison to *Réveil*, which is overall more articulate. The reason may derive from the tranquillity of the river that supports the blackcap's song, and the fact that the composer required a different interpretation towards the song where he indicated '*clair et doux*'.

Beside *Réveil*, the blackcap's song performs an equally important role in Messiaen's opera *Saint François d'Assise* in 'The Sermon to the Birds'. This is where Messiaen described the extremely difficult rhythm such as the 'Hors Tempo' for the orchestra which is in 2+2+3/(32) and so forth.⁵⁰ However, the tempo of this passage is slower than both works mentioned above. Here, the blackcap's song appears after the turtledove's when Brother Masseo attempts to introduce the birds Messiaen heard at the Carceri. According to Messiaen, the blackcap is the *capinera*: 'which is to say the blackcap of Assisi, whose song is always entrusted to the entire woodwind section with a suspended-cymbal trill'.⁵¹

Other birdsongs or birdcalls

With the exception of the nightingale's and the last strophe of the robin's song, all the birdcalls are relatively short and agitated. The call of the wren has the same characteristics and arrangement as the chaffinch. The order in groups 4 and 6 are

⁴⁹ Messiaen, *Traité*, Vol.V, p.314

⁵⁰ Messiaen, *Traité*, Vol.V, p.333 and Samuel, p.237

⁵¹ Samuel 1994, p.237

fairly identical but the wren's call is replaced by the chaffinch's and the river theme does not exist in group 6. Other than that, the rest of the birdsong is in the same category as the cetti's warbler, where their calls are abrupt, dry and usually very detached. They are the kingfisher, moorhen, song thrush, corncrake, yellow wagtail, sand martin and hoopoe.

The wren's and the chaffinch's songs can be found in many works of Messiaen. Unlike others, the characteristics of these birdsongs are rather distinctive and easier to be identified. Furthermore, they always appear in one phrase and terminate their songs clearly. The wren's song usually starts with a few repeated notes, followed by a trill and a rotating pattern before it concludes its phrase (examples 3.4.13a and 3.4.13b). Its timbre in the orchestra is found again in *Saint François d'Assise*, 6 tableau, 'le Prêche aux oiseaux' (pp. 48 and 49), which is represented by the woodwind section but without the rotating pattern as mentioned. The chaffinch's motif is recognizable even from the beginning of its first few notes (the first note is held slightly longer, usually with a dotted note) and is occasionally followed by some repeated notes which move down a tone or semitone, and later a rotating pattern with a terminating motif (examples 3.4.14a and 3.4.14b). The notes of this rotating pattern for the chaffinch involve a closer interval compared to the wren, together with a denser harmonization. In *La Fauvette des Jardins*, there are even three chaffinches that respond to each other, all giving the same characteristics though each sings a lower pitch than the previous.

The song thrush in 'La bouscarle' equally presents the fundamental characteristics that appear in other works (examples 3.4.15a and 3.4.15b). It occurs twice in 'La bouscarle' and always appears after the corncrake's call. Similar to the wren and chaffinch, it is described as 'triumphant' and is strongly articulated. Its ascending glissando-like motif in this work also appears in 'Le loriot' (example 3.4.15c). A great example of the orchestrated song thrush's song can be referred again to *Réveil*, where the songs are in a form of tutti (example 3.4.15d). According to Messiaen:

The song thrush is one of the most brilliant birds, and although each individual thrush has its own invention, the song is still quite recognizable. It's an incantatory sort of song with strophes generally repeated three times. But! These strophes are never identical, which is to say, the bird invents a strophe, repeats it three times, then invents another, also repeated three times, and the next day it'll invent another dozen of them, all repeated thrice, but after the three repetitions, it's over; the thrush invents a new strophe, repeated in its turn. Moreover, within these strophes, the rhythms are excessively pronounced and varied, and they accompany melodies of timbres.⁵²

Both the kingfisher's and the moorhen's calls are positioned in the introduction and near to the end. Here, the call of the kingfisher is not important; as the emphasis is on its colour and flights. Its call is rather consistent with short and dry staccato notes (example 3.4.16). This resembles the moorhen's, but the moorhen's is more animated, where its call marches up in semitone with a sense of hesitation due to the rests in between, and burst out in a call of surprise to end its phrase (example 3.4.17). The call of the corncrake is categorized with the hoopoe in a lower register. Its call is similar throughout, giving a cluster chord to produce a rough and hard timbre (example 3.4.18). In contrast, the hoopoe (example 3.4.19a) only appears once where its call is more calm and steady, almost like the quail's in 'L'alouette calandrelle'. Messiaen indicated in the preface that the hoopoe's call is in an anapaestic rhythm, a term used in the poetry where two short unstressed syllables are followed by one stressed syllable. The hoopoe's call can be found in *Réveil* where it is represented by a mixture of wind instruments (example 3.4.19b). Though similarly quiet, the tempo is *Très vif*, which contrasts with *Lent* in 'La bouscarle'. One may wonder the great contrast between the two samples. There are three possible reasons; the first is that the species of hoopoe in 1953 was different from that in 1957; the second is that Messiaen may have heard or interpreted them differently and third, that he was writing a very different piece of music, as observed earlier in the case of the blackcap.

⁵² Samuel 1994, p.89

Being its only appearance, the sand martin's song emerges quietly after the reflection of willows and poplars sections (example 3.4.20). Its song is nevertheless slightly longer than the rest of the birdsong. The lightness of its song is suitable in providing a bridge between the returning of the calm 'reflection' passage and the agitated moorhen's call. The yellow wagtail similarly appears only once which is after the last corncrake's call towards the end. Its call roughly resembles the herring gull with the *acciacatura* but in much softer dynamic (example 3.4.21).

Overall, most of the birdsongs that appear in 'La bouscarle' are used in many of Messiaen's works. There are two main contrasting subjects under which other materials are categorized. The first is the cetti's warbler, which reveals its authoritative style from its song and the second is the river theme, which displays its calm and serenity. Interestingly, 'La bouscarle' also exhibits how the composer explored mode 3 with its colour representation, and presents a more tonal harmony for the river theme and the kingfisher.

3.5 Le traquet stapazin

Similar to 'Le merle bleu' and 'Le traquet rieur', the observation of 'Le traquet stapazin' (the black-eared wheatear) is set in Rousillion. According to the preface, this transcription took place at the end of June in the region of Banyuls. Since the order of the work (book 2) is symmetrical to 'Le merle roche' (book 6), both works last for approximately fifteen minutes, which are the second longest after 'La rousserolle effarvate'. In this work, what attracted the composer are not only the birdsongs but also the landscapes that he admired, such as the terraced vineyard, the rock cliff, the mountain and the sea. As he mentioned in an interview with Claude Samuel:

In the course of the journeys that were the origin of the pieces in my *Catalogue d'oiseaux* entitled 'Le merle bleu', 'Le traquet rieur' and 'Le traquet stapazin,' I became acquainted with the region of the Pyrénées-Orientales, and it was love at first sight. From the very first instant, I was absolutely thrilled by that extraordinary place, which combines the blue of the sea, over hanging cliffs, terraced vineyards, forests of cork oak and even perpetual snow.⁵³

Indication of the landscape descriptions are attached to each different birdsong appearance, such as the 'edge of the road' for the soloist – the black-eared wheatear, the ortolan bunting which sings in the vineyards, the spectacled warbler which is heard in the scrubland, the herring gull flying above the sea, and the ravens' calls which are heard from the rock cliff. In contrast, the only three non-birdsong subjects which stand out individually are the terraced vineyard, the sunrise-sunset music, and the *Turangalila* motif that represents the sea. However, the correspondence between these subjects and a particular birdsong still exists even though they are generally established as a more individual passage. The rest of the landscape motifs in 'Le traquet stapazin' are relatively short compared to others, unlike 'La chouette hulotte', which consists of long individual sections of night music that are similar to 'La rousserolle effarvate'; or the depiction of the mountain in 'La chocard des alpes'. The relation of the birdsong and non-birdsong subjects in

⁵³ Samuel 1994, p.35

'Le traquet stapazin' resembles much more 'Le loriot', 'Le merle bleu' and 'L'aloutte calandrelle', since their non-birdsong subjects only serve to provide harmonies to the birdsongs. In other words, the background scene is transformed more frequently since it is not a large section that serves as the backbone of the observation.

The soloist is the black-eared wheatear, though its appearance may not be as prominent as soloists from other pieces in the *Catalogue*. Peter Hill stated that the spectacled warbler's song is also a soloist instead.⁵⁴ One of the reasons is because of its occurrence to conclude the work instead of the black-eared wheatear; since Messiaen usually ends movements in *Catalogue* with the soloist's song or call. The style of ending in 'Le traquet stapazin' by using the spectacled warbler's song is similar to the blue rock thrush's song that ends 'Le merle bleu'. Both songs are transformed to an extremely slow tempo, which function as an afterthought where Messiaen indicates *souvenir du merle bleu* in 'Le merle bleu'. In 'Le traquet stapazin', the song of the spectacled warbler is more attractive due to its strong correlation with the key of E major, and thus characterizes its song more lyrically and remarkably. Although with very short and abrupt calls, the black-eared wheatear does serve its role as a soloist due to its consistent appearance throughout the piece. Its importance also includes the correspondence with the sunrise motifs, where both form a very essential section. Apart from these two birdsongs, there are another nine birdcalls or songs involved.

Again, time is another source that directs and constructs the structure of this piece. From the preface and through the indication in the score, the flow of time does not seem to be focused until the middle section where the sunrise music begins. In contrast to 'La rousserolle effarvate', the specification of time is not marked in the score but only in the preface. Four periods of time are indicated in the preface: sunrise at five o'clock in the morning; nine o'clock in the morning when the songs of the orphean warbler, rock bunting, corn bunting and thekla lark are heard; followed by nine o'clock in the evening when the sunset begins; and ten o'clock at night before the spectacled warbler's song brings the work to a close. Although

⁵⁴ Hill ed. 1994, p.336

there is a complete portrayal of sunrise to sunset in 'Le traquet stapazin', it does not provide a cycle of a day as in 'La rousserolle effarvate' and 'Le merle roche'. For 'Le traquet stapazin' the presentation of the sunrise and sunset music thus creates a new secondary structure for the entire work.

Structure

In this work, two sources contribute to the overall structure: the pairing arrangement of birdsong and landscapes, at the beginning – (L) section, and the sequence of the sunrise and sunset music (S). Throughout the work, it is clear that overlapping of subjects within different sections occurs on several occasions. Before the sunrise section, the order of the birdsong and non-birdsong can be identified based on the consistency of their arrangement. Here, three identical sections are established based on the fairly similar order of the subjects before the sunrise music begins. This can be noticed at the beginning of the work where each section is introduced by the 'terraced vineyard' music. These sections are gradually extended from one to another, a very common idea in other works as well (a particular habitat or birdsong is introduced in the first section with a short pattern or motif and later becomes more developed in later sections). However, all the non-birdsong subjects remain unchanged throughout these sections, giving support to the variation of each birdsong. The order of these three sections can be referred to Figure 12.

Birdsongs which are attached to this section (L) include the black-eared wheatear, ortolan bunting, spectacled warbler, herring gull, raven, and the goldfinch. At the third section, the orphean warbler's song, very much a 'foreigner' of (L) appears near to the end of this section. This is one of the overlapping ideas of subjects mentioned above, since the orphean warbler is supposed to be in the group of birdsongs that belong to the sunrise section. However, it may be one of the composer's ideas where he intended to arrange the order of the subjects 'naturally' to complement the flow of his observation; where the orphean warbler's song in (L) section may function as a link, in anticipating the sunrise section. We may notice

Figure 12

The structure of 'Le traquet stapazin' : superimposition of two sections (L) and (S)

Section	Subject	Section	Subject (time)	Subject (merge)
L	Terraced vineyard Black-eared wheatear Ortolan bunting Spectacled warbler Herring Gull Goldfinch			
L	Terraced vineyard Black-eared wheatear Ortolan bunting Spectacled warbler Herring Gull Raven Goldfinch Herring Gull			
L	Terraced vineyard Black-eared wheatear Ortolan bunting Spectacle warbler Raven Herring Gull Goldfinch Spectacled warbler Herring Gull Spectacled warbler			Orphean warbler
		S	Sunrise + Black-eared wheatear Rock bunting Corn bunting Melodious warbler	Orphean warbler
		S	Sunrise + Black-eared wheatear Rock bunting	Orphean warbler Thekla lark
L	Terraced vineyard Black-eared wheatear Ortolan bunting Black-eared wheatear (2) Raven Goldfinch Black-eared wheatear Ortolan bunting Black-eared wheatear Herring gull Sea+ spectacled warbler		S Sunset + Black-eared wheatear	Orphean warbler Sea + thekla lark

that a symmetrical order of this birdsong can be found as it occurs again after the sunset music, perhaps to suggest that this marks the end of the sunrise and sunset cycle. Another example of the use of overlapping subjects is the thekla lark which also belongs to the group of birdsong after the second sunrise music, but is paired with the *Turangalila* sea motif near the end of the work (at the fourth L section).

The sunrise music develops a new structure after the three (L) sections. This section signifies the start of the day with a different set of birdsongs, with the exception of the soloist, which remains. First, the sunrise motif alternates with the soloist song; then at nine o'clock (written in the preface) the songs of the rock bunting, orphee warbler, corn bunting, thekla lark and the melodious warbler alternate with one another. Subsequently, the sunrise music occurs again for the second time, but it is as if a continuation from its previous theme that is derived from a series of chord progression, which will be discussed in later paragraphs. However, there is a diminution of duration against the increase of dynamic within the theme each time it alternates with the black-eared wheatear's call. The increase of dynamic and the ascending chord progression until the quaver chord may portray the sun has risen to its zenith.

Section (L) occurs again after the sunrise establishment, thus portraying the songs in the daylight before sunset. This section may even be in an extended form if we eliminate the sunset music, the occurrence of the thekla lark's song that corresponds with the sea motif, the duet of the goldfinches and the depiction of the mountain which corresponds to the spectacled warbler's song. However, the sunset music is somehow superimposed on this section (L) and functions to lead the music into the 'night'. Here, it conveys to us an idea that the use of sunrise and sunset music has provided a flow of time for this section, since Messiaen only specified the time at the sunrise music but not at the beginning of the work. Also by using similar music at the beginning of the work, the composer has concluded with the suggestion that all the birdsongs have flown into the distance. In order to depict the idea of distance, the spectacled warbler's song is written in a slow tempo; the song is not heard but is represented as a memory ('souvenir').

In short, all the subjects are categorized in two types of sections: the first is the representation of different landscapes (L) together with their birdsongs, and the second contributes to the flow of time (S) – sunrise and sunset, correspond with a different group of birdsongs. It can be considered that (L) is the fundamental framework, due to its fairly consistent arrangement of subjects. However, it is later interleaved with the sunrise-sunset cycle and both sections merge until the end. This can be seen from a few points: first, the subjects in (L) continue after the sunset (section (L) recapitulates before the sunset and after the end of sunrise); second, the appearance of the thekla lark's song, which is one of the subjects from the sunrise music; and third, the sunrise-sunset cycle provides a flow of time for the recapitulation of (L) section, where the original indication of landscape is added with descriptions regarding distances and the start of the night (*dans la vigne et la nuit* and *loin sur la route*). The structure of this piece is explained by Peter Hill in *The Messiaen Companion* as a 'double structure' which is used similarly in 'L'alouette calandrelle'.⁵⁵ This means that the structure of the work cannot be viewed linearly, as there are two layers of sections that interpenetrate from the middle to the end of the work.

Landscape and habitat

Terraced vineyard

It should be noticed that there are two different functions of non-birdsong music in this work. There are some in which the composer had clearly indicated the landscape description, but some only function as a harmony to support a particular birdsong. As mentioned earlier, most of the habitat indications are even attached to the birdsong itself. However, another distinctive feature is Messiaen's characteristic harmonies that appear greatly in this work, such as the *résonance contractée*, *renversement transposé* and the modes of limited transposition. Apart from this, we should be aware of the relationship between the habitat music and the birdsongs in correlation to the strong influence from E major. Except for the sunrise-sunset and

⁵⁵ Hill ed.1994, p.337

the sea passages, most of the shorter landscape representations appear in a similar form without any development.

Being the first landscape in the beginning of the piece, the terraced vineyard is the primary habitat taken by the composer for this observation. There are altogether four occurrences, all of which remain exactly the same, and serve clearly as a leading subject for each (L) section. The last appearance of the vineyard motif is undoubtedly significant as this is the point where its section is superimposed with the sunrise-sunset cycle. Although this two-bar motif is relatively short, it is established independently without a connection to any birdsongs. Even though the black-eared wheatear's call is followed by this motif in order to present a complete phrasing, it can be noticed that the sustaining pedal terminates immediately before the birdcall's entry. Furthermore, only the vineyard motif stands individually above other non-birdsong subjects in (L) sections.

Though the first four chords at the beginning are slurred as one whole phrase, it is formed by a sequence from two pairs of chords (example 3.5.1a). The harmony of both pairs comes from none other than mode five, and through this mode, both chord progressions are derived from the prominent figure which Messiaen stated in his *Technique de mon langage musical* in Chapter X⁵⁶. The first chords of each pair are formed by mode 5 (6) and mode 5(4) (example 3.5.1b x and y). One example is found in the second movement of *Turangalîla* 'Chant d'Amour 1' at p.39 though it is not written in pairs (example 3.5.1c). This chord progression is also stated in Messiaen's *Traité*⁵⁷ (example 3.5.1d). The only difference in the terrace vineyard is that the chords are moving in an opposite direction.

The combination of both pairs thus gives a slight inclination to the key of E major, a prominent tonality for the entire work. Not only does the first chord consist of two notes in E major triad, albeit decorated by Bb and F#, but the inner voices of the first four chords move chromatically between E Eb E F# and finally land on a lower E in the bass. This lower E, sustained throughout the whole bar, provides a bass for the top harmonies which conclude with a chord *résonance contractée*

⁵⁶ Messiaen, *Technique de mon langage musical*, p.35

⁵⁷ Messiaen, *Traité*, Vol. III, p.175

(example 3.5.1a, Z). Here, we may notice one of Messiaen's compositional techniques of producing an ambiguous tonality within the chords. In the first four chords, the Eb and G appear as well, which constitute a sound of Eb major; the first chord after the bass (E) is a Eb triad but together with the B natural, this may provide three possible keys: E major, E minor and Eb major. However, due to the emphasis of E in the bass, the Eb triad will not sound too prominent. It may be one of the reasons why Messiaen wrote the notes enharmonically as D# A# G instead of Eb Bb G. It is noticeable that the harmony of this chord (the first chord at bar 2) is very much an extraction from the original *thème d'accords* from *Vingt Regards*⁵⁸(example 3.5.2a); it also appears in *Cinq Rechants* under the lyrics 'lîla lîla, ma mémoire-ma caresse...'⁵⁹ (example 3.5.2b); and similarly it occurs many times in *Turangalîla* (example 3.5.2c) as well as *Cantéjodjayâ* (example 3.5.2d). This harmony has a close resemblance to the *résonance contractée*, due to its characteristic of having the same bass note against the top notes that move a tone lower. Therefore we may notice that both types of harmony usually appear as a series of chord progressions as in *Cantéjodjayâ* (example 3.5.2d x). For the *résonance contractée* which ends the terraced vineyard motif, again the E in the bass seems to contribute as a second inversion of A major triad, and this leaves us with an incomplete cadence. The function of superimposing a tonality against the other in this device is probably to create a more atmospheric effect. Although the ambiguity of tonality appears, there is no doubt that the whole work sounds very much in E major which comes indubitably from the songs of the spectacled warbler and the ortolan bunting.

Other background subjects in (L) section

Within the same section, all other non-birdsong subjects are merely harmonies that function to support each different birdsong. However, it is identifiable that not all birdsongs in this section are provided with a background harmony; these birdsongs are considered more abrupt and dry, such as the herring gull and raven. Even though they are not preceded with a background motif, Messiaen has indicated each

⁵⁸ A more clear example is in the sunrise music at p.9 (second system, first bar)

⁵⁹ Messiaen, *Traité*, Vol. III, p.162

of their habitats clearly together with their songs. One should not forget that this includes the soloist – the black-eared wheatear. This is why ‘Le traquet stapazin’ gives us a wide selection of landscapes within a place, ranging from the herring gull that flies in the sky, to the raven which calls from the cliff and the black-eared wheatear that calls at the edge of the road. On the other hand, birdsongs that are more lyrical and gentler are generally supported by a background harmony such as the spectacled warbler, ortolan bunting and the goldfinch. This type of background subject which supports a particular birdsong will be analysed in the ‘Birdsong’ sections.

Sunrise and sunset

As discussed in the previous paragraphs, the sunrise and sunset’s cycle starts after the three (L) sections and is later superimposed on the fourth (L) section until the end. No doubt, the sunrise and sunset is one of the most important subjects for the *Catalogue*, since they signify the passing of time and serve to correspond with particular birdsongs. Two works that have individual passages of sunrise and sunset are ‘Le traquet stapazin’ and ‘La rousserolle effarvate’. Both are associated with colours, but that of ‘Le traquet stapazin’ seems to have more detailed description, as ‘*le disque rouge et or du soleil sort de la mer et monte dans le ciel*’ for the sunrise motif and ‘*entouré de sang et d’or, le soleil descend derrière la montagne*’ for the sunset music.

Instead of a lyrical motif which portrays the rise and descent of the sun such as in ‘La rousserolle effarvate’, the chord progression of *renversement transposé* is employed. Four sets of modulations from *renversement transposé* (C#-E-G-Bb) form the whole sunrise theme (example 3.5.3a). The bass that ascends from C# to Bb is the only sign that portrays the rise of the sun, but here we should note that the chords ascend in a slower manner, since one fundamental chord is transposed three times from the same bass note, and each transposition consists of other layer of voices (example 3.5.3b). Corresponding to the black-eared wheatear’s song, the sunrise chords from C#-Bb do not appear continually. The first two progressions

(C# and Eb) are interrupted by a new group of birdsongs before the last two continue again. As mentioned, a diminution of duration occurs at the last sequence (Bb), signifying the end of sunrise. Here, we can notice that the rhythm of the sunrise is decreasing while the black-eared wheatear's song is extended until the last chord or the climax, where the two black-eared wheatears sing in response to each other.

These series of chords serve as the main theme, but are flanked by two pairs of chords from a higher and lower voice. Throughout the sunrise music, the lower voice consists of two pairs of dyad which appear alternately. Both pairs bear a close resemblance again to *Cantéjodjayâ* (examples 3.5.3b and 3.5.3c: x and y); the only difference is that the lower A is omitted in the first pair, leaving double notes in each hand; and for the second pair, the left hand notes are inverted – from an interval of 2nd in *Cantéjodjayâ*, to an interval of 7th in 'Le traquet stapazin'. Both pairs of chords are considered an extraction from the two transpositions of *accords tournants*, in retrograde, from the third to the second chord (example 3.5.3d i and ii). Similarly, the same type of harmony is employed for some of the upper voices, which are derived more straightforwardly from the harmony of *accords tournants*; the first two pairs of upper voice chord come from the first and third chord progression, though the two chords omit the repeated top note (G and F) that are the original hallmark of this progression (example 3.5.3e i and ii); and the bass note of the first chord is a semitone higher (example 3.5.3e *). Generally, this progression appears in its original form in other works, reminding us of the water lily passage in 'La rousserolle effarvate' and in *Cantéjodjayâ (globouladjhamapâ)*.⁶⁰ However, with its significance of the repeated top notes among three chords, there are other possible transpositions that contribute to the same feature using the repeated notes; since five notes are shared within the three chords. This increases a wider progression of the harmony, such as the sunrise harmony in 'Le traquet stapazin'.

The next type of chord that forms the upper voices is again taken from *Cantéjodjayâ*, at the *simhavikrama* passage (example 3.5.2d). This harmony has

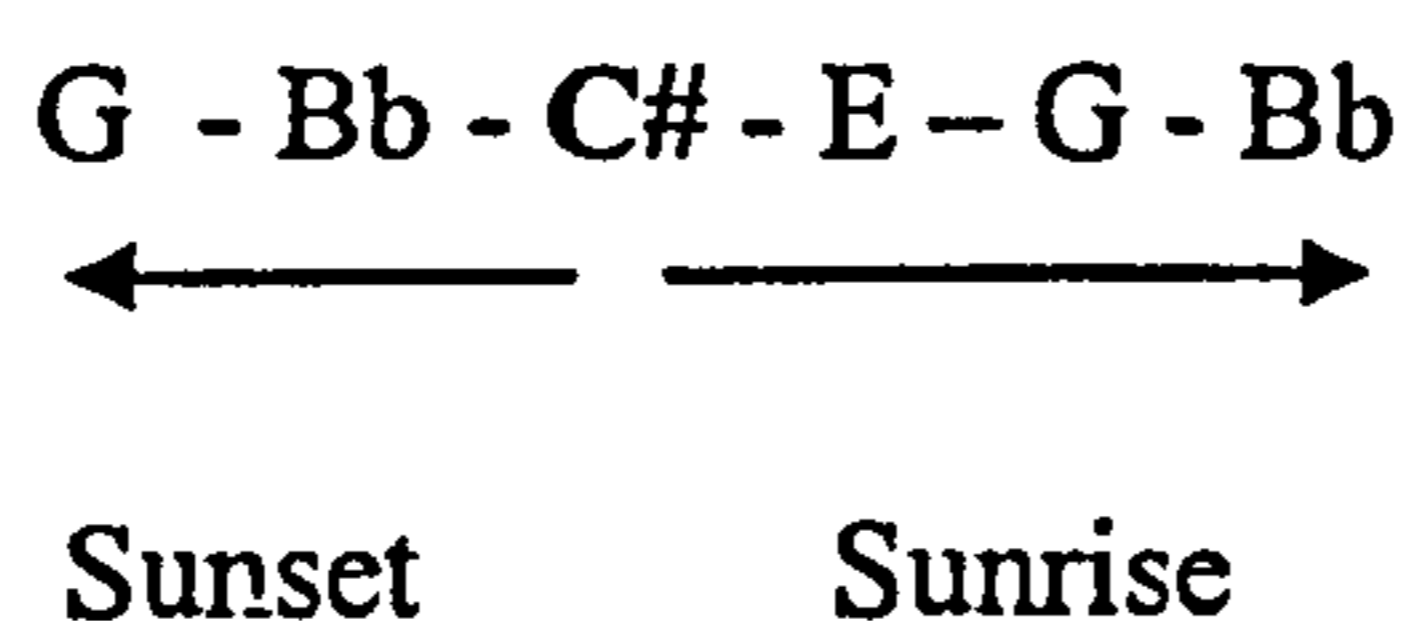
⁶⁰ See example 3.3.37e.

already been mentioned at the terraced vineyard motif in an earlier paragraph, though here the example is even clearer as it occurs in its original form. One example can be found in a similar scale-chord passage in *Vingt Regards* ‘Par lui tout a été fait’ p.44 (example 3.5.4a) which is the *thème d’accord*. It features a scale-like passage, where the movement of the chords are very much in the *résonance contractée*; although the chords are ascending, they occur in pairs as each has the same bass note (example 3.5.4b).

For the sunset music, all similar harmonies from the sunrise section are used except that they move in descending. However, the overall length is much shorter with the appearance of only three main phrases. There is always an augmentation of duration at the last two pairs of chords in each phrase (example 3.5.4c). Only three fundamental chords from the *renversement transposé* remain, but in a different order – C#, Bb, G. From this order, apparently the C# appear as the pivot of the sunrise and sunset progression, or it can be considered that the arrangement is in palindromic form as well (Figure 13).

Figure 13

Fundamental notes (bass) from the *renversement transposé*



Unexpectedly, Messiaen did not retrograde the sunrise ascending motif in the sunset theme to portray the fading of the sunshine, as in ‘La rousserolle effarvate’. Unlike the sunrise music, the black-eared wheatear’s song does not appear to correspond with the sunset music. All three phrases descend in sequence except that each first pair of lower voice chords remains unchanged, as in the sunrise music. The last pair of chords in each phrase is always resolved to a tone lower, thus representing the descent of the sunset. However, although both the sunrise and sunset motifs show a basic direction of ascent and descent, it is important to note that the focus of the

scene has changed. Previously the composer observed the sun rising from the sea, but later setting behind the mountain.

Not only is the harmony of the sunrise–sunset music based closely on *Cantéjodjayâ*, it is also worth noting that the rhythm is based on the Indian *tâla*, *jayacrî* (example 3.5.5). The whole sunrise theme is a mixture of eight quavers, equivalent to a 2/4 time or five quavers. Three quavers are then added to the sunset theme in each phrase. Apart from the main chord (minim) it is the consistent rhythm (semiquaver and quaver) in each pair of chords that marks the significance of the theme.

Turungalîla motif

Near to the end of the piece, three remarkable motifs that depict the sea and the colour of the sky above the mountain are all derived from *Turungalîla* motif. The key of E major is prominently established by these two motifs. The sea motif enters soon after the sunset music, which falls similarly in the same section (the fourth L section) (example 3.5.6). The appearance of the sea is as if the composer reminds us of the previous landscape observation: the sunrise, and the birds – herring gull that fly above the sea. Apart from that, it is noticeable that the last occurrence of the herring gull's call is heard right after the sea motif. All three phrases of the *Turungalîla* motif which appear in sequences, are flanked similarly by an E major sixth chord although they resolve to different harmonies. Each phrase is sustained to provide harmonic support for the thekla lark's song. The first sea motif ends similarly in E major sixth chord; the second phrase is resolved to close A major 11th chord; and the third closes the entire theme that ends by A diminished chord with added G#. Here, the relation of dominant-tonic thus exists where both the second and the third phrase resolve from E to A though not as directly as E major to A major. However, these three phrases also signify an incomplete cadence anticipating or resolving to the next chordal theme in E major 6th (the mountain depiction). The descending sequence from this sea music again parallels the effect of sunset – since the music is moving towards 'night'.

The next two *Turangalila* motifs are chordal themes that represent the colour of the sky on top of the mountain; this may be Messiaen's observation of sunset associated with the mountain. Both chordal motifs share a similar function as they bring back the spectacled warbler's song to conclude the piece. The first motif is derived from the 'love theme' where it represents the colours of red, orange and purple from the sky (example 3.5.7). This motif appears twice; the first appearance is an antecedent of the phrase where it sustains on the E major added sixth chord for the entry of the spectacled warbler's song; the second appears in a complete phrasing of the 'love theme' and again this is followed by the spectacled warbler's song. This motif also reminds us of the yellow iris music from 'La rousserolle effarvate', which contrastingly appears as a single note melodic theme. The second chordal motif is found similarly in *Cantéjodjayâ* (examples 3.5.8a and 3.5.8b) but in a single melodic line. Again, it originates from the sixth movement of *Turangalila* 'Jardin du sommeil d'amour' (example 3.5.8c).⁶¹ With this longest lyrical non-birdsong subject, together with the density of its harmony, it gives a satisfying theme to signify the conclusion of the work. Again, the theme ends on E major sixth, the chord sustained for the spectacled warbler's song, but this time in longer cadenzas.

Birdsongs

One of the questions regarding the birdsongs in 'Le traquet stapazin' is that a few other birdsongs are so significant as to be mistaken as the soloist if the title of the piece is not given. Undoubtedly, two groups of different birdsongs can be identified according to the two sections from the structure: (L) and (S). Almost at all times the two groups of birdsongs are categorized in the boundary of each section, and this is how they form the structure of the work. The only birdsongs which occur in both sections are the black-eared wheatear, orphean warbler and thekla lark; the orphean warbler and the thekla lark form a symmetry with each other: the orphean warbler appears in the third (L) section and the sunrise section; while the thekla lark appears in the sunrise section and the fourth (L) section (Figure 14).

⁶¹ Messiaen, *Traité*, Vol. II p.278

Figure 14

Third (L) section	Sunrise section	Fourth (L) section
Orphean warbler	Orphean warbler / Thekla lark (main strophe)	Thekla lark

The following paragraphs deal with birdsongs, together with some of the non-birdsong subjects that serve to provide a support of harmonies. All the birds in 'Le traquet stapazin' can be categorized according to whether or not they are associated with the key of E major. For example, birdsongs that are attached to this key include the spectacled warbler, the goldfinch, the ortolan bunting and the rock bunting.

The soloist – Black-eared wheatear

Both the black-eared wheatear and the spectacled warbler occur in 'Le traquet rieur', the penultimate piece in the *Catalogue*. Being the soloist bird, the black-eared wheatear's call is always heard after the terraced vineyard music in the first three (L) sections and in the sunrise-sunset music. During the fourth (L) section, the black-eared wheatears' calls appear more than once, not only after the vineyard motif but several times following the superimposal of the sunset motif. Another reason is that the arrangement of subject in the fourth (L) section is more varied since it serves to conclude the work.

According to Messiaen's *Traité*, the black-eared wheatear's call is often found in dry places without resonance.⁶² This call is based on a short fragment of single melodic line, the pitch doubled in various intervals that do not contribute to any tonality (examples 3.5.9a and 3.5.9b). Since the work has a strong bond with E major, this may be the reason that the composer tends to end the calls on certain

⁶² Messiaen, *Traité*, Vol.V, p.522

itches, with mostly B, Bb, C# or G#. What distinguishes the call is not so much its pitch but the whole character of the fragment. The extremely fast tempo very much disguises its pitches for the listener. What stands out is its abruptness and dry timbre, especially in contrast with the sunrise-sunset music that produces a variety of resonance. From the first to the third (L) section, the soloist appears only once in each section, in short (one-bar) fragment. This gives a great contrast in comparison to other birdsongs in the same section, which either have longer strophes or occur more than once.

During the sunrise music, the development of the soloist is apparent, especially with regard to the technique of playing. Even though the calls are still written in intervals, the notes are arranged in order that each hand is playing alternately in two-part chords (example 3.5.9c). This arrangement is used because of the increased distances from one dyad to another in the very fast tempo; but these intervals can be executed flowingly by alternating the hands.

When the sunrise section ends, the soloist motif extended to a five-bar duet from the two black-eared wheatears (example 3.5.9d). This is one of Messiaen's way of developing the material, by having more than one solo bird singing, as we have seen in the reed warbler's duet in 'La rousserolle effarvate'. In 'Le traquet rieur', the two black-eared wheatears appear to sing in dialogue. Another example is from 'Le merle de roche', where the response of both male and female eagle owls' calls communicate in quite a different call pattern; the male owl's call is a glide while the female's response is in lower repeated slur notes (example 3.5.9e).

Returning to 'Le traquet stapazin', one notices how the composer has differentiated the response of the same bird calls; the first black-eared wheatear is written similarly as before, with single melodic notes in both hands; and the call is answered by the second bird in which both hands play double notes alternately. The effect of the second call is that the interval of each hand is closer, but the distances between both hands are wider (example 3.5.9d). Towards the end of the work, before the sea motif emerges, both birds give the impression of changing their call's pattern with each other; this time the first black-eared wheatear's call is written with the double-note device in each hand, answered by the second call in single melodic

figure. We should not forget that the dynamic contrasts also contribute to the effectiveness of the dialogue. When only one bird is involved, even with more than one fragment (more than one bar), the dynamic always remains the same, mostly in *forte*. However, there is always a change in dynamic if the dialogue occurs, in order to accentuate the difference.

Birdsong in relation to tonality: E major

There are three birdsongs which suggest 'Le traquet stapazin's tonality is in E major. They are the spectacled warbler, the ortolan bunting and the rock bunting. Although the combination of these birdsongs and calls establish a key for the work, it is questionable whether the songs are literally observed by the composer in that particular key, or if it is the composer's intention to employ the tonality to express certain musical functions (as discussed in Chapter One, 'Introduction'). The ortolan bunting and the rock bunting can hardly be used as comparison since they occur only in 'Le traquet stapazin'. However, the spectacled warbler is a good example with reference to its occurrence in 'Le traquet rieur'. Apart from the valuable sketches discussed in Chapter One, which revealed how close Messiaen's transcription in comparison to the final score is, another source is the notation from Messiaen's *Traité*.

In Messiaen's *Traité*, the spectacled warbler is described as resembling the whitethroat, where it comprises small movement of melody that moves up or down.⁶³ Its song is delicate but virtouso and often reflects a bright colour. There are altogether four notations from *Traité* and the harmony of E major sixth chord is evidently significant. The notation, which was taken at Banyuls in Cap l'Abeille on the 29 June 1957, at five o'clock in the morning is no doubt a transcription for 'Le traquet stapazin' (example 3.5.10a). Although the example shows a longer strophe which is in contrast to the extremely short fragments in 'Le traquet stapazin', one of the similarities is the motif which starts on G# and descends (example 3.5.10a x); this is the core of the spectacled warbler's theme.

⁶³ Messiaen, *Traité*, Vol.V, p.508

Overall, most of the spectacled warbler's strophes appear as a one-bar phrase and are usually preceded by a non-birdsong harmony that signifies the scrubland.⁶⁴ The quaver chord thus resolves its B or Bb note to the E major birdsong, giving a dominant-tonic while the inner semiquaver chord is formed by a series of interval fifth. The pitches of this chord seems to be derived from the harmony that preceded the ortolan bunting though not exact (example 3.5.10b y). However, this two-chord motif does not function to support the spectacled warbler's song other than to present the habitat. One notices that it occurs only at the first three (L) sections but not in every single strophe. At the fourth (L) section, this motif is replaced by the enormous *Turangalila* chordal theme which provides the E major sixth chord for its song. This is where the strophes are extended to longer phrases, in comparison to the previous short fragment.

However, by looking at the same birdsong in 'Le traquet rieur', two differences are discernable. The harmony that support the spectacled warbler's song is different; instead of E major, as in 'Le traquet stapazin', the strophe in 'Le traquet riur' is sustained by an A major chord (example 3.5.10c). The main reason is that in 'Le traquet stapazin' the spectacled warbler is reflecting the brightness of the day and also the colour of sunshine. Referring to Jonathan W. Bernard 'Modally-based coloration of Messiaen's compositions' from *The Messiaen Companion*⁶⁵, the key of E major is akin to mode 3(1) or 3(2) which is matched with the colour of orange and gold. Furthermore, the pitches of the spectacled warbler's song are very noticeably derived from mode 3(1).

Although the spectacled warbler's song in 'Le traquet rieur' is similarly set in the scrubland, the whole work is associated strongly to the sea (*joie de la mer bleue*). Birdsongs in this habitat such as the blue rock thrush and herring gull play a major role in this work. This can explain why A major chord is used for the second appearance of the spectacled warbler's song, since the composer intended to depict the colour of the sea. We may notice that the A major always represents the colour of the sea (blue) as in 'Le merle bleu'. Indubitably, we can refer to the preface of

⁶⁴ Refer to Messiaen's indication in the score.

⁶⁵ Jonathan W. Bernard, 'Modally-based coloration of Messiaen's compositions', Hill ed., 1994, p.207

‘Le traquet rieur’ where after Messiaen described the occurrence of the spectacled warbler, there follows a description of the colour of the sea: *Un coup de vent passe sur la mer, toujours bleu saphir et bleu Nattier, argentée de soleil. Joie de la mer bleue.*

The next difference in these two works is that the spectacled warbler’s song in ‘Le traquet rieur’ has a longer strophe together with a wider dynamic range. The continuous strophe that lasts for a few systems without any rests is quite different from Messiaen’s notation in *Traité* and ‘Le traquet stapazin’. However, the spectacled warbler in ‘Le traquet stapazin’ seems to sing only in *mezzo forte* throughout all its strophes. Contrastingly, the dynamic range of the spectacled warbler’s song in the ‘Le traquet rieur’ may have been more accurate in referring to Messiaen’s notation in *Traité*, since it ranges from *pianissimo* to *fortissimo*. One possible reason that Messiaen had for limiting the dynamics of the spectacled warbler in ‘Le traquet stapazin’ is to highlight the bird’s characteristics (gentle and delicate) distinctively from the surrounding birdsongs. In short, all these may show how the composer varied a particular song according to the suitability of the music.

Ortolan bunting

The ortolan bunting’s call is always preceded by two chords, with a sustaining bass note: C (example 3.5.10b ii). These two chords are derived from the three-chord motif in *Harawi* ‘Katchikatchi les étoiles’ (example 3.5.11a x), though they appear in a completely different manner. In ‘Le traquet stapazin’, both chords are written in *piano* together with the sustaining pedal, as opposed to the light staccato and louder dynamic in *Harawi*. Here, we may be able to see that these two chords resolve to other harmonies differently. In *Harawi*, the three-chord motif is answered by another three chords, which are very much in an inverted direction such as in *Turungalila* (example 3.5.11b). In contrast, the two background chords correspond with the ortolan bunting in terms of tonality. Again, the sound of Eb major, such as in the vineyard motif, fairly emphasized within the two chords that are opposed to the E major birdsong. Though it is in E major, the composer did not neglect the harmonies of the two chords; the Db Bb is inverted to become the appoggiaturas for

the calls⁶⁶; the Eb (D#) and C appear, but quietly, as a resonance at the top voice of the call.

Rock Bunting

This is the next birdsong which contributes to the E major tonality (example 3.5.12). Messiaen described it as cheerful, with a melody that seems to turn around like a spinning top.⁶⁷ There are only two strophes of the rock bunting in the work, both in (S) section; it functions very much as an introduction of the 'morning' birds before other birdsongs are established. The first strophe of the rock bunting is shorter while the second, which occurs after the whole sunrise section is completed, is much longer. Though E major is apparent from the right hand pitches, the song is constructed much closely in the pitch of a diminished chord, where the high repetitive B is generally bounced by C# and E. The only exception is the G# appears instead of a G. However, the left hand serves to provide a double tone, which is one of the birdsong harmonic devices similarly found in many other works.

Although the rock bunting's song makes an important contribution to reinforce the E major key and is considered as the first new ingredient in section (S), it serves only as an introduction and is not a soloist in this section. The orphee warbler and the thekla lark are evidently the soloists in this section since their occurrences are more noticeable. The rock bunting's song thus functions more like the melodious warbler's, which only appears once before the second sunrise passage begins.

⁶⁶ This resembles the open and close interval discussed in Chapter 3.1 'La chouette hulotte' on pages 88-89.

⁶⁷ Messiaen, *Traité*, Vol.V, p.243

**The soloist in the sunrise-sunset cycle (S) and the relation of their harmony:
the songs of the orphean warbler, the corn bunting and the thekla lark**

Leading from the rock bunting, the orphean warbler and the thekla lark are the centre of attraction in this 'morning' section. Though the orphean warbler makes its entry in a short two-bar call before the sunrise music begins, there are altogether four longer strophes which alternate with the single-phrase corn bunting's song; the first appears after the first sunrise section; and the other three strophes occur after the second sunrise section. The fact that Messiaen keeps to the same order for these two birds, that are presented four times, marks their importance in this middle section.

The orphean warbler's song is characterized by a rather loud dynamic, and overall, its song is in a variety of slurs in dyads, a very common feature in most of the birdsongs. Here, some of the slurs are decorated with *acciacatura* either in one or both notes of the dyad, upwards or downwards (example 3.5.13a). This also reminds us of the gliding effect among birdcalls, though the orphean warbler's song is in a faster tempo. Another feature of this birdsong is the Greek rhythm known as 'cretic' or 'peonic' (example 3.5.13b x) which Messiaen uses in many of his work as early as *La Nativité du Seigneur* and also in many birdsong rhythms.⁶⁸ The orphean warbler's song maintains a fairly consistent song pattern, except that occasionally one can find a slight variation in repetitive pattern, such as in the third strophe at bar 176. The consistency of its song in several strophes enhances its role in the middle section as a soloist.

Functioning as a short bridge between the orphean warbler's strophes, the corn bunting similarly appears four times in the sunrise section. Its appearance greatly resembles the songs of the wren and the chaffinch which usually appear in a one phrase strophe. Here, the corn bunting provides a contrast with the orphean warbler's song not only with its softer dynamic but also in a much higher register (*doux, comme des cassures de cristal*) (example 3.5.14). Non-birdsong harmony is used to sustain each corn bunting phrase. In its four appearances, the outer phrases

⁶⁸ Johnson 1975, p.37

(the first and the fourth) uses the same harmony while the inner phrases (the second and third) shares another harmony.

With a rather long strophe for its first entry, the thekla lark's song serves to conclude the sunrise section, even though it occurs again in the fourth (L) section in correspondence with the sea motif. The intensity and virtuosic value in this song in the sunrise section contributes to the climax of the whole work, since it provides not only a variety of dynamics but also different attacks in an extremely fast tempo (example 3.5.15). Furthermore, the composer's indication should be taken into account – *chant au vol, joyeux, grésillant, mêlé de cris* - where the thekla lark's song directly highlights the brightness of the morning. There are altogether six strophes that constitute the long passage of its song, where each is similarly preceded with a one bar descending non-birdsong motif to sustain the higher register birdsong.

There is a clear significance within the focal pitches of each birdsong within the sunrise section.⁶⁹ Since the work is very much in E major, it is worth examining how far the birdsongs contribute to the key. In identifying their pitches, this may also reveal a correlation between the strophes as to how they combine to be a 'team' in the same section. Both the thekla lark and the rock bunting give a remarkable repetition on B, but the thekla lark does not contribute an obvious E major tonality. Although its B often pairs with the G# in thirds, occasionally the E appears in the top voice, and the D# (Eb) in the bass interrupts the harmony. However, the later appearance of the thekla lark, which corresponds to the sea motif, presents totally different pitches; even though three phrases of its songs are sustained with three different chords, the birdsong remains its pitches on D#, G# and D. The three notes may have derived from the sea motif which preceded the birdsongs (example 3.5.6).

The orphean warbler and the corn bunting, both of which inhabit a more alien tonality, share some of their pitches with the thekla lark and the rock bunting. Since the orphean warbler's song is distinctive as a result of its slur patterns, the pitches should be examined in both its accents and the resolution of the slurred dyads. It

⁶⁹ The focal pitch of birdsong in 'Le traquet stapazin' is discussed by Johnson in *Messiaen*, 1975, p.140

can be noticed that the downbeats are often in E, G or Ab and lead to F# at the third strophes; while the slurs resolve mostly on A and later to Eb, though not consistently. However, the harmony of the slurs between both hands does not form E major, although the E appears constantly. One of the reasons is that the orphean warbler's song focuses more on its density and has a more straightforward rhythmic structure, which is in contrast to the thekla lark that concentrates more on melodic contours and the vitality of the song (although it occasionally mounts to a gliding call). The emphasis on A given by the melodious warbler (example 3.5.16) makes its tonality much closer to the orphean warbler, since its only appearance is positioned after the first corn bunting's phrase. However, the C# and E that occasionally spring towards the repetitive A give a slight flavour of an A major triad, the subdominant of the home key.

The corn bunting similarly does not contribute to the E major triad. However, even though the top note of the phrase is frequently on C, the register on the left hand may give a clearer emphasis for the B. Nevertheless, the overall pitches of the corn bunting can be categorized like the orphean warbler; although they do not contribute to the key of E major, some of their pitches insinuate E major indirectly.

Other birdsong in (L) section and their harmony

Goldfinch, Herring gull and raven

Among the three birds in (L) section, the goldfinch is in contrast to the herring gull and the raven. It is one of the high register birdsongs sustained by a non-birdsong harmony. The length of each strophe appears differently in each (L) section, and the most distinctive belongs to the fourth strophe where two birds sing in duet.

The higher register goldfinch's song is in a single line melodic pattern. Its song characteristics are more similar to the spectacled warbler, the rock bunting or the corn bunting. Messiaen indicates that the song should be in a very clear tone like the timbre of the glockenspiel. In this movement, not only the goldfinch's song seems to be more varied than other birdsongs, the non-birdsong subject which

sustained its song also changes each time. The first and the second strophes are related more to E major; the first is sustained by the spectacled warbler's E major sixth chord, while the three phrases from the second strophe are sustained by the chord progression of *reversement transposé* over a fundamental B; and both melodic lines use B and E frequently (example 3.5.17a). Though the goldfinch's song appears in one phrase, the third appearance of the goldfinch's song precedes not only one but two non-birdsong subjects. The first harmony uses some pitches from *Vingt Regards – thème accord*; the second thus returns to the previous *reversement transposé* fundamental chord but in a different inversion (example 3.5.17b). At this time, the song does not reflect the E major triad pitches, but focuses strongly on C, F and Bb instead.

However, the most interesting is the last strophe where the birds sing in duet (example 3.5.17c). It is noticeable that the non-birdsong harmony here, which is marked as '*massif*', is similarly used at the previous (L) section for the raven. The duet of the goldfinches is barely related to the E major tonality, except for the second bird which sings in the lower register that contributes more frequently to B and E that always rise up to A. Overall, the tonality may have changed slightly in this strophe, where Bb, A and F# appear to become the principal leading note by the first goldfinch's song. Turning to another example, the same bird occurs in 'La buse variable' only twice where both strophes appear to be exactly the same (example 3.5.17d). However, the goldfinch in this work sings very much in an A major triad with a simple rotating melodic pattern. Its use of A major may have derived from the yellow hammer's call which is in a repeated fifth interval in the right hand.

The last two birds which will be discussed are the herring gull and the raven. Singing in a lower register in comparison with other birdsongs, both calls have the same characteristic although the herring gull's call is more varied and sings in a higher register than the raven. One of the more recognizable calls of the herring gull is at the second (L) section, which is a call in repeated notes with acciacatura, starting in a loud dynamic and gradually becoming softer (example 3.5.18a). These two birdcalls contribute a great contrast to the more gentle birdsongs such as the spectacled warbler and the goldfinch. Accent and loud dynamics are exaggerated with abrupt change in rhythmic patterns (example 3.5.18b). Even though these

birdcalls do not present any tonality within their strophe, it can be noticed that some of their notes occasionally give a slight inclination towards E major or to pitches in semitone lower or higher that are near to the key; these notes often appear from the top notes of the bird calls (examples 3.5.18c and 3.5.18d).

Although there may have been other reasons for the composer to adjust the tonality in each of this birdsong, the above examples show that many times a particular key is used for a certain reason. The most apparent is the correlation with the colour that Messiaen intended to portray, such as the colour of the sea or the sunrise and sunset depiction. Some of these non-birdsong passages affect other birdsongs in the same work and encourage them to be written in a similar key, for example the difference between the spectacled warbler in both 'La traquet stapazin' and 'La traquet riuier'. However, the E major in 'La traquet stapazin' becomes a focal point for most of the subjects which enables them to correspond even more effectively towards the whole work. Furthermore, the key thus serves the composer's idea of portraying the brightness of the scene where this is brought out by some of the birdsongs.

The five movements are very different from each other, even though they come under the same title – *Catalogue d'oiseaux* – and are composed with the same intention, to make music of birdsongs and of non-birdsong subjects. Even the most abstract sections are each intended to portray an image or idea. This is significant in 'La chouette hulotte', where Messiaen fuses emotion and darkness with the use of his *Mode de valeurs*. It may be possible that Messiaen relates dark or grey colours to atonal or serial writing⁷⁰.

'La rousserolle effarvate' highlights in its structure the flow of the cycle of day and night. Another important feature is the reed warbler's song, which includes a variety of demanding pianistic techniques in contrast to other soloists in the

⁷⁰ Allen Forte, 'Olivier Messiaen as Serialist', *Music Analysis*, 12/1 (2002) p.5

Catalogue. This movement is not complex in terms of structure, but involves more subjects. Similarly in 'Le traquet stapazin', the *Turangalila* themes are used where each movement portrays different subjects. In 'Le traquet stapazin', its exceptional quality is the design of the structure that involves a juxtaposition and superimposition of sections and subjects, based on a static frame and the cycle of sunrise and sunset. This is comparable with the short 'L'alouette calandrelle'; in this, however, the structure is not represented by the cycle of the day but features the mobility or the variation of the soloist – the short-toed lark's song superimposed on the static frame, a section which consists of the calls of the kestrel, cicada and quail. In terms of the use of mobility of subjects, this brings us to reveal the design of the river theme that provides an inner structure in 'La bouscarle'. Not only is there a tonic-dominant cadence placed very obviously in the overall sequence of the river theme, but there is also a modulation to the dominant at the climax section, thus signifying Messiaen's conventional use of tonality to a certain extent.

Coloured-hearing synaesthesia affects a relatively small percentage of the general population.⁷¹ An individual may or may not be able to perceive Messiaen's association of colour with his mode of limited transposition. However, the realisation of his mode-colour with the nature element can facilitate the evocation of a subject in our imagination. In the *Catalogue*, it is notable that the colour of blue is always associated with A major, such as the sea in 'Le merle bleu' and 'Le traquet rieur', and the river in 'La bouscarle'. One may wonder whether it is a coincidence that the use of A major which depicts the sea could have been influenced by Debussy's *L'isle joyeuse* which is written in A major, as mentioned in the previous chapter. Another work that may shed light is the first movement of Liszt's *Two legends* 'Saint François d'Assise – La prédication aux oiseaux' which is similarly written in A major, though it does not relate to water or sea.⁷² On the other hand, the significance of E major is in connection with the sunshine (the colour of gold), for example in 'Le traquet stapazin' and 'Le loriot'. In 'Le loriot', the gold of midday reflects in E major already heard in the soloist's song.

⁷¹ Hill (1994), p.204

⁷² In regarding the use of modes, Street has stated that Liszt appears to have been the first to have employed Messiaen's mode 2 in the 1830's. Refer to Donald Street, 'The Modes of Limited Transposition', *Musical Times*, Vol.117 no.1604 (1976), pp.819-823

The most valuable feature in this analysis is the understanding of the structure of each piece, since it is important for a pianist to correlate the ideas of a movement. Furthermore, it is interesting to trace Messiaen's musical style from his previous writing and the multifarious transformation of these ideas in relation to different elements of nature. The recognition of his harmonic style, melodic structure and in particular rhythmic functions no doubt provide an insight, at least to a certain extent, for us to comprehend Messiaen's music more effectively.

Chapter 4

Interpretation and Recordings by Different Pianists

- 4.1 La chouette hulotte**
- 4.2 L'alouette calandrelle**
- 4.3 La rousserolle effarvatte**
- 4.4 La bouscarle**
- 4.5 Le traquet stapazin**

Chapter 4: Interpretation and Recordings by Different Pianists

This chapter will function as a response to the beginning of Chapter Two regarding Messiaen's piano writing in the *Catalogue*, discussing how pianists interpret the composer's notation and his performance indications. It is one of Messiaen's characteristics that he was extremely precise and detailed with regard to performance direction, in order to avoid any ambiguity. A clear example can be seen in *Catalogue d'oiseaux* where individual metronome markings are given in each subsequent bar of different birdsong patterns. Verbal explanations are frequently added to describe his portrayal of a subject or the kind of expression he intended. From the time of *Réveil des oiseaux* (1953) onwards, the composer not only provides the background of the music, but often gives advice to the players as well. Seating plans for different groups of instruments are laid out, as it is Messiaen's intention to create certain acoustical effects in both time and space. However, since *Catalogue d'oiseaux* is a solo work, each performer has the authority and absolute control to interpret Messiaen's notation in their preferred style and manner of playing, and it is interesting to what extent performers react to the structure of each work or the sonic and imaginative possibilities of the indicated notations. Pianists are exposed to these printed materials in all their breadth and complexity, and this may enable them to imagine the portrayal Messiaen intended. The verbal indications are thus an intrinsic part of the notation. Nevertheless, it cannot be denied that the particular quality of each individual's imagination and interpretation towards each and every similar subject is always different.

In this chapter, a selection of seven recordings is used to identify how pianists interpret the five movements from the *Catalogue* (corresponding to the movements analysed in the previous chapter). These include recordings by Yvonne Loriod¹, Anatol Ugorski², Peter Hill³, Martin Zehn⁴, Roger Muraro⁵, Carl-Axel Dominique⁶

¹ Yvonne Loriod: Erato ECD 71590 (March 1970)

² Anatol Ugorski: DG 493251-2 (March, April and November 1993)

³ Peter Hill: Unicorn-Kanchana DKB 9062,9075, 9090 (December 1986, April 1988 and December 1989)

⁴ Martin Zehn: ARTN 74321 72122-2 (February, March and April 2000)

⁵ Roger Muraro: Accord 465 768-2 (February 1999)

and Håkon Austbø⁷. All these pianists recorded the entire *Catalogue*, while Roger Muraro's was taken from a recording during a recital at the 'Présences 1999' Festival given at Radio-France, at which he performed the entire cycle. In considering the background of these pianists, Yvonne Loriod is important not only because she was the closest person to Messiaen but also due to the fact that the entire work is dedicated to her. Both Hill⁸ and Dominique have studied *Catalogue d'oiseaux* with the composer. The interpretation of each selected movement will be discussed separately, since each is formed by a distinctive structure and form of narration. Although it is indubitable that certain idiosyncrasies of the pianists may be recognized, the main purpose of analyzing the interpretations is not only to view the style of their performance but also to see how they understand and communicate the different portrayals in the context of each movement. For further reference, the overall timing from each recording is given in Figure 15 on page 210.

4.1 La chouette hulotte

In this movement, we are able to hear how pianists approach the dramatic sense of 'fear' from the combination of the night music and the owl's call. The *Mode de valeurs* has been used to portray the night music although Messiaen did not specify that this passage represents 'fear'. The description of 'fear' is only indicated for the 'timpani' motif. However, the style of *Mode de valeurs* which gives different layers of dynamic and unpredictable rhythmic figures thus portrays the unsettled moment in the darkness. Despite the distinctive use of *Mode de valeurs*, this movement highlights the sense of intensity in the slow tempo. These are all derived from the simplicity of the owl's slow gliding calls formed by different timbre of harmonies.

Overall, there are two approaches which can be gathered from the interpretation of different artists. Pianists such as Loriod, Zehn and Ugorski adopt slower tempi. This applies particularly to Loriod as she interpreted the whole movement in a

⁶ Carl-Axel Dominique: BIS-CD-594/596 (July and December 1992)

⁷ Håkon Austbø: Naxos 8.553532-34 (April and August 1996)

⁸ Hill ed. 1994, pp. 273-282

somewhat more passive and languid manner. In turn, the more intense and unsettled approach is employed greatly by Hill and Muraro. The difference between the fastest and slowest version is apparently unremarkable (at only 39 seconds) although the contrast is quite significant audibly.

Austbø	7:25
Muraro	7:31
Hill	7:33
Dominique	7:34
Ugorski	7:40
Zehn	7:42
Loriod	8:04

For the *Mode de valeurs* passages, although most of the pianists generally adhere quite faithfully to the given metronome marking, the different executions of the touch for each dynamic influence the overall sense. For example, Loriod seems to give the louder dynamic notes a slight hesitation, presenting an impression that these notes bear more weight. Consequently, the effect may occasionally impinge on the rhythm. This applies especially to the shortest note value with the loudest volume, which is a crucial point contributing to the portrayal of a sudden attack or fright. However, there is no doubt that the heavier touch gives greater resonance particularly in the lower register. Therefore, her rendering provides a much broader sound for the background, emphasizing the idea of an atmospheric scene rather than evoking a feeling.

A similar approach is taken by Ugorski and Zehn, where they seem to provide phrasing to the mode passage, resulting in distracting the listener from focussing on the layering of dynamics. It should be highlighted that these pianists are inclined to find a shape or contour within the night passage, especially for the second appearance where a diminuendo is used towards the end despite the fixed dynamic of each note. This is especially evident in Dominique's version where the last B note (second 'night' music at bar 114) is surprisingly played almost as *mp* rather than the indicated *f*. Zehn has a rather legato touch for this passage and therefore his rhythm seems to be predictable.

On the other hand, the designated dynamic for each note is emphasized acutely by Muraro and Hill. It is obvious that their dynamic range is wider, and the direct attack of the louder dynamics (*f*, *ff*, *fff*) thus creates much more unsettled or sometimes even shocking moments throughout the passage. Hill's approach is not so much to give a shape to the overall passage but to keep the intensity of each moment, from the combination of rhythmic figures together with the attacks, through to the very last beat of the passage and avoiding a sense of closure. However, despite Muraro employing a softer dynamic on the B in the second night passage (signifying the end of the passage as in Ugorski's), his execution of the dynamic palette is also outstanding. In some instances, it is noticeable that his attack on certain pitches is extremely abrupt and this is effective in maintaining the uncertainties in the music.

The simplicity of the fear motif follows the complexity of the night music. Here, almost all pianists seem to play quite differently regardless of the rhythm, articulation and timbre. The most significant timbre is executed by Ugorski. Even in such a low range, his timbre successfully serves the indication *très sec*, thus giving a novel sound than the previously resounding mode passage. Furthermore, a slight *accelerando* is used in the repeated semiquavers (example 4.1.1 x) not only to generate more momentum to the line but also effectively to lead a sense of direction to the owl's call. However, Loriod and Dominique place more emphasis on the clarity of the rhythm although the heavier touch is evident in providing a calm mysterious 'fear' effect instead of an agitated and exciting one. Their staccatos are fairly heavy, providing a firm and stable pulse throughout the line. In turn, Muraro treats the demisemiquavers as grace-notes (example 4.1.2) by keeping them extremely short, simulating a kind of sudden 'heartbeat'.

The very similar representation of fear occurs in the 'codetta' that rounds off the owl's call section. Dominique's version is quite distinct. Again, he opts for a clearer sound where the pedal is scarcely used in opposition to the indication. The dry sound of the repeated notes seems hardly effective in producing the resonance to depict the function of *étrange, inquiétant*. He might have chosen to parallel with the previous figure in terms of articulation (at the first bar of the codetta), where the accent is followed by dry repeated chords (example 4.1.3). However, Austbø has

the opposite articulation, where the pedal is used in both places, thus contributing greater sound to the whole section. This particular motif may have been intended to produce a kind of tremolo effect with the sustained lower register chords. Furthermore, the greater resonance is probably more effective in recalling the mode passage of the frightful night.

The varied tempi of the owl's calls are important, where they decide the duration of suspense not only involving the slow gliding call, but also the rests in between each call. Marked with the slowest tempo at *Lent* (semiquaver = 66), the gliding call of the tawny owl is being held for four, five or six semiquavers before it resolves. A slightly faster tempo at *Un peu lent* (semiquaver = 76) also occurs in two instances. No pianists are slower than these tempi; Muraro, Dominique and Zehn's are notably faster: Muraro at approximately (semiquaver = 85) and Dominique (semiquaver = 77). However, the most effective and natural resolution of the gliding call are played by Muraro, although his solution is to decrease a great level of dynamics perhaps from *ff* to *p* (example 4.1.4 at bar 137) rather than the indicated *mf* and *f*. In order to highlight the augmentation of rhythm, it is important to decide on the duration of holding the gliding chord before allowing it to resolve (example 4.1.5 at bars 146-152). Here, each call is extended together with the decrease of dynamic. Though it is a conventional way to round off the music, it also functions in reflecting the distance from the call, where each call is getting weaker and further away.

In terms of shaping the owl's call, the pianists appear to have two methods of articulating the figure such as at bar 55 (example 4.1.6). With the pedal indication, a slur is automatically formed from the first semiquaver towards the first note of the triplet (where the pedal is supposed to be released). This is particularly stressed in Hill's and Zehn's versions, where they treat the staccato triplet in a short and crisp manner, leading towards the gliding chord. This creates the quite marvellous effect of a birdcall, together with the effect of enhancing the intensity driving on towards the gliding chord. Ugorski delivers a different approach from this where he releases the pedal before starting the triplet in a much softer tone, giving more focus to the dynamic rather than the articulation. Furthermore, he uses a greater weight for the staccato particularly at the later section at bars 134 and 136 that have the same

articulation. This may have come from his intention to view the passage *retentissant*, as marked by the composer in providing a greater sound to fill the surroundings.

Another interesting feature is the triplet rhythm of the tawny owl's call. Notwithstanding that the triplet rhythm appears quite similar to the faster figure (three demisemiquaver), both of which move towards the glides (example 4.1.7, bar 53). Here, it is quite surprising that Loriod treats both rhythms equally, where the triplet is played extremely fast rather than equated to the value of two semiquavers. Therefore the more suspending effect of the triplet rhythm does not occur in Loriod's version.

Although this movement reflects a darker side from the whole *Catalogue*, the active call from the long-eared owl and especially the little owl may have given a much brighter sound against the *lugubre et douloureux* of the tawny owl. This effect is clearest in Hill's recording, where he articulates them more straightforwardly and with delicacy. As mentioned, Loriod's and Dominique's are completely different; the slurs and accent of these two calls are greatly heavier in both versions. Hill executed the glissando most successfully, with the softest dynamic but maintaining a crystal clear tone quality.⁹ Most of the pianists ignore the diminuendo of the glissando, giving a much louder touch, although it is true that the fast delicate *p* to *pp* is not easily achieved.

A different interpretation rises again for the last appearance of the long-eared owl's call, which features the short descending slurs couplets (example 4.1.8). Here, Muraro has a distinctive application where he treats the demisemiquavers as grace-notes, like the similar approach he used in the previous timpani 'fear' motif. This makes the second note of the couplet serves as a downbeat and consequently the top voices of the descending couplets E D C are brought out, which is rather remarkable. Most pianists keep these slurs short and energetic except for Loriod and Dominique who have an unhurried and steadier rhythm.

⁹ See example 3.1.7 at Vol. II p.104

It is worth mentioning the pedalling of the owls' calls. All the pedalling except the two sections from bars 43-46 and 123-126 are sustained over the last note or chord. It may be serve as an effect to create or to carry out the resonance to fill the 'night' but it can also be a way to portray the distances of the call. Comparing the little owl's high register call between Muraro's and Hill's versions (example 4.1.9), Hill may have viewed the call in a nearer distance. However, Muraro sustains each call even longer by omitting the staccatos (and almost avoiding the rests between each call), and this may reflect the call that comes from a further distance with reverberation. Linking to the longer sustaining chord, this leads to the rests between the owls' calls. It appears that Hill seems to be more patient in allowing the adequate silences that are notated, while Zehn and Ugorski tend to rush over to the next call at many instances. However, Hill continues with the long-eared owl's call immediately after the 'fear' motifs, giving the impression that they belong to the same section. In contrast, most pianists take a longer time for the semiquaver rest before they start the owl's call section. In addition, with the slowest tempo, Loriod ends the movement quite significantly, allowing the sound to linger long enough as she clearly reminds us of the C-A motif (example 4.1.10).

Although the night music is presented as a background for the entire movement, it is important to differentiate its quality against other non-birdsong materials. This background music does not define a place or habitat, but functions to evoke an emotion for the environment. Through the discussion above, the little owl's call can be interpreted slightly different against the 'fear' presentation of other subject since it has a higher register and a fast motif. This may contribute to a different level of emotions for the whole movement. However, another possibility is to maintain the integrity of the unpleasant representation of the night and owls in a more passive manner, such as in Loriod's and Dominique's versions.

4.2 L'alouette calandrelle

What highlights the distinctive quality of this piece is its serenity, especially as it is positioned right after the tremendous 'La rousserolle effarvate'. As a calm movement, it forms an interlude before 'La bouscarle' which opens spectacularly with the authoritative cetti's warbler's call. In other words, 'L'alouette calandrelle' can be viewed as a movement of 'rest' or a standstill in the middle of the cycle of *Catalogue d'oiseaux*. From another perspective, this movement can represent the brighter view (depicting the hot summer) in contrast with the night scene in 'La chouette hulotte', as both are positioned symmetrically on either side of 'La rousserolle effarvate'.

Ugorski	4:25
Austbø	4:53
Dominuque	4:57
Muraro	5:09
Loriod	5:25
Hill	5:38
Zehn	5:51

For this movement, Ugorski gives the shortest performance at 4:25 minutes while the longest is by Zehn at 5:51 minutes. One obvious reason may have come from the shorter length in the overall pauses in Ugorski's recording. This is especially clear before the entry of the duet section. Further, similar to Muraro, he smoothes out the contrasts, leaving the ideas to flow naturally and eliminating any tension in between different sections. This is evident in his rendering of his quail's call and skylark's song which will be mentioned later. In addition, his shorter pauses also lessen the tension and anticipation in between the sections. Zehn is the slowest as he takes a slower tempo for the two-chord motif that opens the piece that also recurs several times.

The tranquility of 'L'alouette calandrelle' is well achieved in Hill's recording. This can be found in his rendering of the short-toed lark's song in the introduction but with a slightly slower tempo. However, other pianists such as Ugorski and Loriod, adhere more to the indicated metronome marking in presenting a more straightforward sound of the soloist's song. In the introduction, Hill clearly announces the two-chord motif of the short-toed lark's song with a slight *tenuto*

when rising to the higher B (L.H) and Ab (R.H) (example 4.2.1). He also gives a shape to the soloist's song, with a slight hesitation before rising to the repeated notes. This is all part of his tranquil approach. The argument for Hill's approach is that the background chords and the lark's song are linked (most unusually) by tempo (quaver = 54/ 108). The only other instance in the *Catalogue* is in 'L'alouette lulu' (example 4.2.2). So, it is reasonable to conclude that 'L'alouette calandrelle' should open with a similar hypnotic mood.

However, it depends which kind of presentation is required. Either the soloist's song can be interpreted as conforming to the calm atmosphere of this piece, or presented more literally as birdsong. Most of the pianists give a rather 'active' short-toed lark's call with the repeated notes played rather hurriedly and heavily. This is especially evident in Dominique's recording. Even though the two-chord motif is a frame which supports the soloist's song, there are two possibilities of correspondence between the two; either the two materials are being demonstrated to highlight their contrasting ideas (the habitat and birdsong), or both are exhibiting the same expression, the calmness and the stillness. The sonority of the bass of the two-chord motif is important to allow the birdsong to float on it, giving a kind of background atmosphere enveloping the birdsongs. If both materials are too contrastingly presented, this may further enhance the birdsongs in the foreground from the depiction. However, the dynamics that Messiaen indicates for these two subjects are not extremely contrasted (*pp* to *mf*). Unlike the vineyard motif that corresponds with the black-eared wheatear in 'Le traquet stapazin', the chords do not sustain for the entry of the birdsongs, but they function to represent a contrasting characteristic.

In other sections of the short-toed lark's song, a greater variety of interpretations by pianists are shown particularly in the background harmonies. In section X'(1) [p.2], the arpeggio *résonance contractée* (example 4.2.3) and the *accords tournants* (example 4.2.4) are played with most clarity by Loriod and Zehn. Although Messiaen's tempo is fairly fast to accommodate the demisemiquavers, it may be more effective that these arpeggios are executed clearly in order to highlight the intrinsic significance of each harmony. Surprisingly, pianists tend to articulate these harmonies differently from the composer's indication. At bar 17 (example 4.2.5),

Austbø uses a slight pedalling towards the four-chord progression while at bar 21 (example 4.2.6), Hill articulates the descending dyads with slurs in couplets. At these two bars, Dominique is generous with the pedalling throughout the phrase. There is no doubt that, to be faithful to the minute difference between the two tempi of *Vif* (quaver = 152) and *Vif* (quaver = 160) is indeed challenging. Even with a similar metronome marking *Vif* (quaver = 160), the tempo of certain harmonies may indirectly change slightly as a result of their significance. This occurs particularly at bar 21 which needs a stricter pulse, whereas the *renversement transposé* at bar 24 (example 4.2.7) may require a slightly slower tempo since it resolves and closes the whole section in *pianissimo*.

Seeing it as a climax section (bars 43-57), Hill presents the soloist's song more straightforwardly compared to the opening, thus following the energetic mood to build the intensity. Similar to the previous section, the non-birdsong harmonies that sustain the short-toed lark's song reveal more variety of interpretations. Due to the rapidness, Dominique and Muraro seem to play these harmonies in a glissando manner; this applies to bars 55-56 (example 4.2.8).¹⁰ Here, Muraro also gives more emphasis to the top accented notes that alternates from left to right hand rather than the resonance of the harmonies. The loudest non-birdsong harmony is at bar 53 (example 4.2.9), but only Zehn and Hill give much weight particularly to the low bass note.

The most articulate passage is the duet section (bars 27-42). It is noteworthy that Ugorski obviously takes the shortest time for the pause before starting the duet section. These long pauses are very typical of Messiaen, signifying the change of sections, and portraying other periods of time. Similar to the introduction, Hill retains the delicacy of the birdsongs and there is a progressive fluidity given to both melodic lines. The shape of the ABA form is clearly presented where the termination at section B (example 4.2.10, bar 38) is resolved gently, while he gives a slight *tenuto* and *diminuendo* at the ending of the section. Austbø presents another striking colour in this duet. For example at bar 30 (example 4.2.11 x), he characterizes the dialogue by holding back the two slurred couplets, first by the

¹⁰ Other examples can be found in bar 49 and 51.

crested lark followed by the short-toed lark, thus emphasizing a contrasting texture. The emphasis on the articulation of accents and fortissimo is most obvious in Loriod's playing and the bright and sharp tone colours somehow give another dimension, which may portray the two birdsongs battling with each other. Inclining to her recording is Dominique's, but it seems that the rhythm of his duet section is more hurried which impinges on the flow and the clarity of the songs. In many instances, the rhythms of the left and right hand are not aligned.

One of the most important sections is the trio, with the more static and mechanical motifs that contrast to other materials. Most of the pianists present a slower tempo from the metronome markings especially Loriod (the cicada at about quaver = 110, the kestrel at about quaver = 138). Austbø and Ugorski produce a good timbre in the low register and thus build the crescendo of the trills rather effectively (example 4.2.12). Perhaps, it is the result of the harmonic balancing, where the stress is given more on the lower pitches. However, it is surprising that both Ugorski and Muraro take an extremely fast tempo for the quail (example 4.2.13), which is almost double the indicated speed! The same goes to the short hoopoe's call in 'La bouscarle' where Muraro similarly takes a remarkably fast tempo. Different interpretations of the simple quail's call are evident. Arguably, the main function of this call is to create a mysterious sense of anticipation for a new section. It is particularly important to evoke the extraneous interference at the end of this movement, the skylark's call. In comparison between the two trio sections, the unsettling effect is greater at the second appearance because of the inconsistent rests between the steady rhythms of the quail's call. Here, Hill seems to stress the top C note and produces a balanced quiet sound for the quail. However, Loriod chooses to emphasize the B (L.H), which probably disguises the top note but produces a different flavour from the combination of pitches in the chord. Another instance is at bar 24 (example 4.2.7) where she similarly gives more prominence to the inner notes for the *renversement transposé* progression. At the second section of the trio, Loriod even varies the call of the quail with a short staccato on the first chord instead of three consistent detached chords. Her predilection for varying the balancing of harmonies for similar figures repeated in different sections appears also in 'Le traquet stapazin' which is discussed in later section. On the other hand, Austbø employs a longer detached for the three consistent dyads and this may be

another effective choice in contrast with the previous short accented cicada's and kestrel's call.

The most virtuoso passage comes in the skylark's song at the end of this movement. The extemporization of this section is displayed brilliantly by Austbø, Hill and Zehn who successfully portray the intensity of jubilation and vehemence as the composer indicated. Loriod and Ugorski both present this passage with a different emphasis from other pianists. Both employ a more flexible tempo, which enables them to put more weight on the accented notes. This can be found in Ugorski's, especially at bars 84 and 85 (example 4.2.14) where he holds the higher accented B a little longer before descending to the slurred notes. On the other hand, Loriod punctuates the accents with great attacks and gives a prominent weight to the last quaver of the three repeated bars (example 4.2.14, bars 86-88). Though the heavier touch may reflect a more ponderous approach in this virtuosic passage, it may match one of Messiaen's explanations of the skylark's song which is quoted from the notes of Loriod's recording, 'The skylark is jubilant, flying between a high pitched dominant and longer low-pitched notes, soaring in the air before it preludes to alighting'.¹¹

Overall, the above recordings do not mark a distinctive difference towards the tempi. It is the variety of articulations which are employed by these pianists that indirectly influences the tempo of certain passages. There are not many technical difficulties in executing both the static frame and the short-toed lark's song, but what attracts our interest is the correspondence between all these sections. We can notice that pianists such as Hill equally consider the soloist's song to merge with the background music in providing the stillness of this movement. His performance suggested that the tranquility of both the habitat and the soloist flows along the movement, until it builds and ends with the sudden outburst of the skylark. This gives an impression that the movement is 'woken' from the serene 'scene', which later anticipates the following cetti's warbler's call in 'La bouscarle'. Pianists such as Loriod, however, characterize the birdsong more agitatedly in this movement against the habitat music. In this instance, the birdsong is featured independently

¹¹ Quoted from CD notes in Yvonne Loriod's recording, Erato ECD 71590 (March 1970)

from the habitat music. This serves the purpose of providing a contrast between the two subjects, while simultaneously suggesting the birdsongs more literally, although the correspondence between sections is not so prominently shown.

4.3 La rousserolle effarvate

For this movement, Ugorski's has recorded the fastest performance at 29:12 minutes, while Hill's is the longest, at 31:55 minutes. However, in view of the overall timing, they can be considered fairly close to each other since it is a lengthy piece. A great number of pauses and the extremely contrasting tempo between the birdsong and habitats can affect the overall timing, although slight changes of tempo in a particular section can sometimes be identified. Accordingly, the time difference between these recordings for this movement is insignificant.

In this movement, Loriod's recording shows far more liberties with the tempo within a section. In terms of birdsongs, Loriod presents the song of the starling characteristically; the slight anticipation on the rhythm further enhances the birdsong's effect. Another example is from the water rail's call where she uses *accelerando* for the repetitive notes, one of the common features of the birdsong. For the white wagtail's phrase, a hesitation of tempo is created at the beginning of the song before the music gradually keeps up the tempo. Such an idea conveys a sense to listeners that the bird is not confident in establishing its song at the beginning. At the call of the coot (example 4.3.1, x, p. 35), a slight hesitation or a *rallentando* is used again, which creates a suspenseful effect of the bird's call. However, at the two opening staccato notes of the nightingale, Loriod has put a slight emphasis which diminishes the spontaneous response of the birdsong, although the playing is more rhythmical. The abruptness in starting these nightingale strophes seems to be more effectively presented by other artists. Again, the rotating pattern of the sedge warbler's song is presented slower by Loriod in comparison with Ugorski's and Hill's, where both their versions sound more effective.

Apart from the flexible tempi employed by Loriod, the effectiveness of the overall presentation of birdsongs is substantially brought out, except for the reed warbler's songs which are occasionally presented too prominently, though the incisive accents and articulation regularly enliven the birdsong style. Loriod seems not to view the reed warbler's motifs as a song but more as a speech manner, letting each motif burst out spontaneously. Hill gives a kind of continuation between the different motif patterns in an extremely fast tempo, thus presenting the virtuosity in this playing. The continuation of the song has been one of the difficult elements, since motifs change continuously with great leaps. What contrasts with Loriod is that Hill gives a lighter and more consistent touch in terms of articulation. The delicacy of the repeated appoggiatura and a more refined tone is nonetheless clear in his playing. On the other hand, a third remarkable version comes from Muraro. Although the continuation of this long passage is not emphasized in his playing, he appears to focus distinctively on the different characteristics of each motif, which displays a variety of tone colours. Consequently, this results in some hesitation between the changes of motifs. However, this does not give a slower impression of his reed warbler's song because the distinctive motif that unfolds from bar to bar is infinitely fascinating. This is then contrary to Zehn's playing. Overall, there is no doubt that Zehn's achieves a crystal clear quality in his recording. Although there are some instances where his technique should be praised, the tidiness of his playing seems too 'well-planned' and sometimes lacks spontaneity. This applies similarly in other movements of his recording.

Turning back to 'La rousserolle effarvate', one of the most interesting features that catches my attention is Loriod's glissando playing. Here, I should state that the glissando effects are not necessarily identical to other movements. Other than speeds, her glissando smoothly glides on the keyboard, producing an effective sound rather than the common scalic manner. Zehn's glissandos are as closely sounded as Loriod's, while Hill tends to put emphasis on the first note of each glissando. The outcome seems to present that the first note is hanging before gliding down, giving a momentum of dropping from that particular note. This offers another style of birdsong effect, providing more freedom in tempo to the glissando, as reflecting a phenomenon of nature since the glissando could not have been identical in each birdsong.

The glissando is also a main feature for the bittern's call, especially in its semicircle melodic pattern (example 4.3.2). To enhance this glissando, Loriod plays the few first notes longer and holds slightly on to the later ones in creating the gliding effect. On the other hand, Ugorski chooses to emphasize the G at the end of each call with a slight weight, perhaps in highlighting the staccato marked by the composer. However, this tends to interrupt the flow of the glissando as the staccatos here may not meant to be executed individually, but to serve more in closing off the smooth glissando in a strict and direct manner. This is shown by the pedal marking, where it ends together with the staccato in both hands. For the virtuoso skylark's song, Ugorski presents a similar style of playing, as in the final coda in 'L'alouette calandrelle', which has been mentioned previously. Different from 'L'alouette calandrelle', the skylark passages in 'La rousserolle effarvate' are indicated with more explanation from the composer – *en plein ciel* and *elle tombe comme une pierre*. In this instance, a brighter and sharper tone may be suggested to highlight the portrayal of the birds in '*en plein ciel*'. Indeed, the skylark is at their best when singing in special high song-flight.¹²

For the sunrise and sunset theme, Loriod tends to give a *ritardando* to the chordal passage which move gradually in ascending or descending, together with crescendo or diminuendo. In all these phrases, Messiaen did not specify any indication of *ritardando* in paralleling the detailed dynamic markings along the chords. It is rather natural to slow down towards the end of these long chordal phrases, since the crescendo with the slower tempo may broaden the resonance of the chords and vice versa. Other pianists did not slow down as much as Loriod, perhaps in adherence to the composer's indications. Nevertheless, the outcome of the *ritardando* also sounded quite effective in leading the chords to its destination: the sunrise theme rises to a *fortissimo* while the sunset diminishes to a *pppp*, where the chords are supposed to fade away in the sustaining pedal. For the chords of *résonance contractée* that appear after the sunrise motif, Loriod does not join the chords although both chords are marked with pedal, (example 4.3.3 x). Her decision to

¹² Rob Hume, Royal Society for the Protection of Birds (RSPB): *Birds of Britain and Europe* (London: Dorling Kindersley, 2002) p. 232

omit the pedal on the *résonance contractée* provides a contrast with the sostenuto sunrise theme.

In this sunrise and sunset theme, all pianists play approximately in the same tempo according to Messiaen's metronome indication. For the bell-like colour motif that is constructed purely by mode 6, (example 4.3.4), Hill tends to play even slower than other pianists. As mentioned, the contrast in tempo between birdsongs and the habitat sections is a hallmark of his recording, since his performance of the overall birdsongs sounds fastest, especially the reed warbler's song. In consequence, the contrast may assist listeners in realizing the denotation of birdsong and non-birdsong ideas. However, the slower tempo for these passages occasionally makes the music too static and it is not easy for the listener to follow the flow of the music. In whatever tempos, the resonance of the bell-like motif in the higher register has an important function and is suggested to be given emphasis since it is repeated symmetrically in the 'recapitulation' of the sunset motif.

The 'music of the pond' opens with Messiaen's metronome marking at *Bien modéré* quaver = 100; Loriod follows very closely the indicated tempo, as do Ugorski and Austbø. Loriod's accent for these series of semiquavers are emphasized which results in some hesitation between the notes (example 4.3.5). However, it is quite surprising that the 9th interval in her recording sounds fairly inconsistent; often, missing notes can be heard which disturb the consistent semiquavers. The intensity of this passage is achieved most noticeably in Hill's recording, although it has the slowest tempo (quaver = 80). Hill's recording thus conveys a more mysterious effect and produces the serenity of the 'night'. However, this metronome at quaver = 80 could be rather slower than the composer's tempo. Contrasting with Hill's is the faster version from Muraro at about (semiquaver = 120). Perhaps Muraro looks forward to the noises of the night music in that he chose to drive these semiquavers more directly. In the version by Dominique, a more legato style is applied to the semiquavers instead. The touch of these semiquavers is slightly heavier though he did not slow down the tempo. We should be reminded that the accent is particularly important, as it is easy for the player to anticipate the rhythm too soon. Therefore, it is helpful if one holds back slightly on the accent, avoiding the tendency to rush through the rhythm.

The question of judging the clarity of this kind of programmatic work can sometimes be confusing. From time to time, we will wonder which element should be placed as the prime concern; the importance of portraying a depiction, or the clarity in piano playing. The problem is that occasionally, the rendering for some effect may affect the clarity of the playing to certain extent. The ascending and descending trills of the frogs' calls after the 'music of the pond' is a good example (example 4.3.6), though it is not a main subject in this work. For the two groups of four-demisemiquavers, almost all the pianists except Loriod neglect the clarity of the second group in descending where it lands on the A notes. Loriod made very clear all the right hand's trills together with the turning notes of the trills. However, other pianists may not focus so much on the second group of demisemiquavers since the trills move along in diminuendo.


This goes similarly for the arpeggio-like 'marsh noise' at p.10 (example 4.3.7). In contrast, one can hardly notice the changes of the ascending arpeggios in Loriod's playing, together with the use of *accelerando*. In fact, all the changes of different arpeggio are blurred by the heavy sustaining pedal. On the other hand, Ugorski and Hill carry out this passage smoothly towards the chord on the dominant, and the changes in chords are clearly audible, though with the blurring of the sustaining pedal. Unlike Loriod, they keep this passage in a consistent tempo throughout.

In 'La rousserolle effarvate', one of the important features is the extremely long trill of the grasshopper warbler (example 4.3.8). Though it is the simplest call of the bird within the entire piece, it marks two important points for the whole work. Here, it is surprising that Loriod's trill is louder than we expected, as opposed to Messiaen's indication of *ppp* and *trille très serré*. In order to achieve this effect, the trill is likely to be played more 'tightly' since it is written in a high register with the lesser key action. One may find that Hill treated the trill in a controlled way. The soft dynamic in the high register, the rapidness and the consistency of notes thus present a kind of remarkable sound effect. According to Hill, four microphones were used for his recording; two were switched off in order to achieve the quality of the sound for this trill passage. There is not much difficulty in executing the trill, but to maintain the same quality of sound in such a great length from both hands no doubt requires concentration and patience.

In producing the birdsong's effect, the way of presenting the articulation of slurs is important. It is often used as a glide, but other effects can be obtained depending on the characteristic of the birdsong. In view of the different context of each movement, it is noticeable that pianists approach these slur effects differently. In 'La rousserolle effarvate', one example can be heard in the great reed warbler's strophe, where the lower range motif at the later phrase turns into repetitive slur couplets in the 2nd interval (example 4.3.9). Loriod presents them by holding over the first notes slightly longer, so that the second note of each slur is barely heard. This is certainly one of the ways of accentuating the birdsong effect. On the other hand, Zehn treats these slurs in a totally different manner, choosing not to emphasize the link between two notes but rather to pronounce them clearly. Often, the slur is not stressed but the clarity of the notes, both in staccatos, is given more consideration. His execution of the slurs is similar throughout the work. In fact, one can discern that Zehn quite often changes the original indications in this movement, especially in terms of articulation and pedalling. For example 4.3.10, the first two semiquavers are played with added slurs, in contrast to the detached marking; in example 4.3.11, Zehn seems to slur the first two notes instead of the original three-note slur. This is also similar to another slurred motif of the great reed warbler's strophe (example 4.3.12); the slur seems to be omitted but the articulations in each couplet, the accent and staccato are presented distinctly.

Some pedallings are also different from those marked by the composer. There are many instances where Zehn omits the pedaling, especially for rotating notes or scale patterns (example 4.3.13a, b, c, d x). All these omissions achieve greater clarity in the playing but Messiaen would certainly have reasons for marking the pedalling in order to produce a different variety of effects. All the above features show that Zehn looks more highly on the pianistic value in his interpretation. Nevertheless, he executed the changing of trills at the sedge warbler's strophe effectively. To avoid the gap between the changes of trills (since both hands lift for the change of each trill), Zehn holds the left hand trills slightly longer before the right hand reaches another chord.

For the *accords tournants* in the water lily motif (which also appears in *Cantéjodjayâ*), it is questionable whether the composer intended to highlight the repeated G or the inner voices (example 4.3.14). Only Loriod and Hill emphasize the inner harmonies of the chords, while others stress the top voices. Both approaches present different effects, but the main idea is that voices are changing under the upper voice. Zooming out further, the whole series of chords is flanked by the outer melodic line from the highest and lowest register. This may be one of Messiaen's ideas in reflecting the layers and curves of the flower. The layering of the voices can also be noticed when both hands move simultaneously from the highest and lowest register to the middle range of the keyboard. At the last phrase of this water lily motif, Zehn has used *tenuto* on several notes (example 3.4.14 x). It is as if he is generating another two shorter phrasings from the primary phrase. In this instance, it should be stated that Muraro uses this kind of 'rubato' playing more significantly in other movements. Overall, his non-birdsong subjects such as the sunrise and sunset cycle and all the flower themes in 'La rouserolle effarvate' are played in a straightforward manner.

Another feature is from one of the flower themes with appoggiatura (the purple foxglove). Here, what is of interest here is the consistent grace-note that leads towards the chordal theme (example 4.3.15). Dominique's version is most distinct where he indeed changes the entire chord into an arpeggiando follow by each grace-note. These accented appoggiaturas not only serve as bass notes but also construct a melodic line. With consistency in view, Loriod plays each grace-note in a strict rhythm, where each appoggiatura falls on the dotted semiquaver beats; presenting a sequence of dotted rhythm ().

4.4 La bouscarle

In the performance of the whole cycle of *Catalogue d'oiseaux*, the difficulty lies in the performer's preparation in changing different narratives or settings in each movement. The switch of mood and narration can be seen from the delicate 'L'alouette calandrelle' to the more agitated 'La bouscarle'. Although quiet

passages that portray the habitat similarly appear in 'La bouscarle', long silences (rests) are fewer in comparison with other movements. In turn, it is the sudden extemporization of each character in short phrases that is the hallmark of this piece. This can be observed when pianists correspond to the sense of narrative between the spontaneity and the calmness of all the subjects. Despite the multifarious characters of the birdsongs, the most attractive subject that enlightens 'La bouscarle' is none other than the river theme. For once this is not the *Turangalila* motif and its uniqueness is enhanced by an unusual tonal harmony, using a combination of A major 6th together with Messiaen's mode 3.

Zehn	10:42
Loriod	11:07
Dominique	11:08
Austbø	11:24
Muraro	11:35
Ugorski	11:45
Hill	12:45

Although Hill's recording is the longest at 12:45 minutes, it appears that Loriod's seems to be slowest audibly. Apparently, this is due to Hill's rendering of the slower river theme (at about semiquaver = 40) which is not foreign to his interpretation as mentioned previously. However, Loriod opens the movement with a generally much more ponderous touch for the birdsongs. This is especially evidenced at bar 13 (example 4.4.1) where the tempo of the kingfisher's call is surprisingly slower, almost by half of the metronome marking. The same goes for the song thrush's song at bars 66 to 73 where the third motif is presented in a sudden drop of tempo (example 4.4.2). In a different aspect, such as in other movements, Loriod's brightest tone quality in the recording no doubt successfully enhances the presentation of the authoritative calls of the cetti's warbler but is less effective for the calm and quiet passages.

Both habitat descriptions in this movement have a similar calm mood which represent the gracefulness of the reflection and the river. The agitated mood of the opening resolves to the reflection of willows and poplars which are written in *pp*

throughout the passage (example 4.4.3). Hill and Ugorski give the most atmospheric stability of the reflection that contrasts with the introduction. Though the first passage is written strictly in 2/4 time, the balance of touch between both hands is not easy, due to the dotted rhythms in the passage. Furthermore, most of the intervals between these chords are rather wide which require a fast movement of hand position, in order to maintain the stability of the frozen *pp* without any sense of accents. Metaphorically, these rhythms perhaps delineate the slight movement of the tree in the reflection of the water. Most pianists adhere quite accurately to Messiaen's tempo *Vif* (quaver = 152) where the second reflection passage near to the ending is slower at *Un peu vif* (quaver = 120). With the absence of tonality, some pianists such as Hill tend to shape the inner phrasing within the passage. This contrast with his interpretation of the *Mode de valeurs* in 'La chouette hulotte', where the individuality and the static of each rhythm is more emphasized. Ugorski, however, emphasizes the equality of both hands and this produces a bouncing effect from the combination of rhythmic lines which is quite marvellous.

The reflection music is immediately followed by the attractive, but contrasting, tonal river theme (example 4.4.4). Most pianists treat it with much appreciation by not exceeding the metronome marking. Due to the simplicity of the theme, all pianists seem to have the same understanding of shaping and phrasing according to the contour of the melodic line. Muraro gives extreme priority to the top notes of each chord which result in his inner harmonies of the chord sound rather frail. Furthermore, the endings of his phrases are much softer in comparison with other pianists. However, all harmonies that form the river theme should not be too neglected in order to provide a warmer timbre. The same approach from the previous movements shows that one of his styles is to feature the lyricism of the melodic line rather than the harmonic importance for the non-birdsong subject using chordal themes. This occurs similarly in the consistent chord progression at the kingfisher's flight (example 4.4.5, bars 86-87). Another example also appears in his rendering of the *Turangalila* theme in 'Le traquet stapazin'.

As mentioned, Hill's recording has the slowest version of the river theme, which provides a contrasting mood to the excited birdsongs. One interesting point is where Hill's tempo even reduces remarkably along the ending of the climax, lingeringly

allowing the confirmation of the repeated E major (dominant) at bar 134 (example 4.4.6). Loriod similarly applies the same approach, but her ritardando is not as obvious as Hill's. However, most pianists in general ritard at bar 132 according to the indicated diminuendo sign.

In relation to the emphasis on the balancing of harmonies, it appears that there are quite a number of different predilections within this river theme, other than Muraro's version mentioned above. Generally, Hill seems to give a slight prominence to all the As (tonic) at the end of the phrase, even though some are not present as the top note of a chord. Near to the end of the climax, Ugorski pronounces more weight on the accented acciacatura (B); no doubt this emphasizes the second cadence of E major, which later resolve the theme to a perfect cadence. This point of cadence is noteworthy since it merges Messiaen's mode 3 with a simple cadence of IC-V-I. Ugorski employs another method in bringing out the beautiful river theme. In many instances, his right hand chords are played a split second faster than the left hand. This may be one of the functions to balance the chord in order to enhance the top note of the melodic line. However, the overuse of this method can result in an artificial sense towards the passage. Ugorski's style of using this method can be similarly found in the *Turangalila* chordal theme in 'Le traquet stapazin'.

At the climax, another version is by Austbø where he equally brings out the middle staves line that is similarly played by the right hand (thumb). This is a reasonable choice as the composer may have written all harmonies in the treble stave; the lower notes on the other hand are written independently on a separate stave, signifying a hint towards the importance of the inner voice. At this finale chord (E major 6th), Loriod stresses the D, a common approach in her interpretation for bringing out different emphasis in pitch for repeated harmonies.

Regarding the interaction between the river theme and the birdsongs, Austbø's and Hill's entry of the robin's song are effective (example 4.4.7). The longer sustained chord at the end of the river theme allows the resonance of the harmony to decrease gradually. It might be more difficult to control the clarity of the song if it comes in too early immediately after the sustained chords, since the harmony will be too

corrupted. Furthermore, the robin songs always appear in the close-cadence phrase of the river theme, and the entrance of its song can emerge in a more mysterious effect as opposed to the joyful blackbird's song. In other words, this is where the river theme resolves in one whole phrase and the robin acts as a concluding material. With the more spacious tempo between the sustaining chord and the entry of the song, both Austbø's and Hill's robin songs which are in great control in producing a delicate touch thus reflects the birdsongs from a further distance. The blackbird's songs that accompany the open-cadence phrases of the river theme are more straightforward, with Messiaen's marking as '*Joyeux et clair*'. Here, only Loriod plays it slower, with each note clearly pronounced. Another birdsong is that of the blackcap, which only appears in the climax section. The song has two contrasting features in each phrase; it begins with the soft delicate motif and concludes with a loud authoritative call. Zehn achieves the agility but in a too 'tidy' rhythm that makes the song rather restrained. Here, Ugorski and Hill present the songs more imaginatively with a flexible shape to the melodic line.

Throughout the movement, pianists have created different effects in some of the birdsongs. Naturally, we should be reminded that what Messiaen wrote are transcriptions of songs and calls, where it is quite reasonable that the same notation may have been viewed differently, which then result in various interpretations. Here, the different characters switch very quickly in the introduction, even for materials in short phrases. Since most of the birdsongs are in a rather quick tempo, rests that are placed in between each change of calls suggest a sense of hesitation and anticipation. The difficulties lie in the preparation for the player to change one character to another quickly, where some even involve virtuoso phrases such as in bar 10 (example 4.4.8). After the abruptness of the opening soloist's call, the moorhen itself presents a varied character. This is remarkable especially where the sudden *p* bursts into a loud call (example 4.4.9). Here, Ugorski and Muraro give a slight hesitation to the staccato chords, which lead effectively to the *explosif* call. The same goes for the kingfisher's call: this is written in simple quaver chords, but the phrase ends with its flight motif in lightning speed. With this simple introduction, both the moorhen's and the kingfisher's calls share a similar style where the pulse of anticipation exists from the rest that are placed between the softer short staccato chords.

Muraro's live recording may result in some unintentional interpretation. There are many passages where the pedal is scarcely used despite the composer's indications. Further than this, his tempi in several passages are very different from the metronome marking. Regarding the pedalling, this can be noticed at the first two bars of cetti's warbler's call, where his pedal is held only until the second semiquaver, but leaving the third without pedal (example 4.4.10). He also nearly omits the pedal for the technical passages of the kingfisher's flight, this is especially significant at the *harmony litany* and the following descending passages. The next obvious example is from the song thrush's songs, where the agitated motifs at both strophes (bars 66-69 and 108-110) are played almost without pedal at all. Together with his lighter tone quality, these motifs become much more gentle instead of 'incantatoire' and 'arraché'. Even at the following motif (example 4.4.11, bars 115-118), the pedalling of the repeated calls are changed; instead of ending the pedal at the last semiquaver rest as indicated, Muraro holds the pedal until the first accented chord in the following bar, giving a different effect. In this case, the written rest is omitted with the pedal sustained over the bars. The omission of pedal also includes the nightingale's song at bars 148-149 where the rotation is presented in a dry, short and light manner.

Despite being merely a simple and short call, the variety of timbres of the corncrake and the hoopoe are interestingly brought out by different pianists. Their calls are similar throughout the piece and function to provide a noise rather than tone. Here, the metronome marking of *Presque Lent* (semiquaver = 104) for the corncrake does not create any obvious dissimilarity between pianists, except that Muraro presents it extremely fast at approximately semiquaver = 150 (example 4.4.12). Similarly, his hoopoe's call is in an extremely fast tempo rather than in *Lent* (semiquaver = 92) (example 4.4.13). Again, this reminds us of the quail's call in 'L'alouette calandrelle', where he played it remarkably fast instead of at the indicated tempo. This call has the simplest motif above all the material. Its appearance provides a mysterious anticipation in the lower voice before the entry of the brilliant and loud wren's song.

What highlights the corncrake's call is the lower register timbre with a cluster of tones as if in a strict $\frac{3}{4}$ time if we treat the hemidemisemiquaver as a grace-note.

However, the group of 'anacrusis' notes should not be too neglected as they provide the composer's idea of '*râclé, bruit de scie et de récu-réco*', where a gliding sound towards the two accented beat is one of the effects. This is excellently performed by Ugorski and Zehn where the emphasis is focused more on the left hand figure. Loriod and Hill both present another effect. The right hand B is played more significantly by Hill and his rhythmic pulses of the two semiquavers are well characterized. On the other hand, Loriod emphasizes the A in the left hand instead. In any case, all are possible effects that derive from different preferences.

The song thrush's song is the next attractive figure that presents a few different characters. Its strophe appears twice, which involves a variety of articulation but none of the motifs is repeated. Although only one single metronome indication is given for all the different motifs, Loriod's tempo is much slower, and surprisingly the third motif (bars 72-73) is almost half the speed of the indicated tempo. Zehn's version is attractive for his effective articulation with the use of a slight pedal. Again, Ugorski's grace-notes in both strophes are more pronounced, as in other movements. Although this will slightly delay the tempo, the heavier grace-note equally gives a kind of sliding effect to the slurs. Here, only Hill's and Zehn's glissando (bars 106-107) match Messiaen's '*perlé, liquide*' while most pianists seem to render it too loudly and heavily (example 4.4.14). Overall, Hill and Zehn present a spontaneous song thrush's song especially at the second strophe which then proceeds to the climax.

One distinctive material that exhilarates 'La bouscarle' is the dazzling kingfisher's flight. Hill refers to these virtuoso passages as reflecting the 'grace and flexibility of Chopin's playing'.¹³ In this movement, the flight motif is very different from those in other movements. Both the eagle's flight in 'Les chocard des alpes' and the buzzard's in 'La buse variable' emphasise the stability in their flight. However, the kingfishers' are in an extremely fast tempo which depict a quick movement with a sense of direction. In the introduction, Muraro presents the scale-like chord in mode 3 with great clarity and his playing is well controlled for the extremely fast tempo *Très Vif* (quaver = 200) (example 4.4.8). No matter which interpretations are used,

¹³ Peter Hill, 'For the Birds', *Musical Times*, Vol. 135, No. 1819 (Sep. 1994), p.555

the fast tempo is undoubtedly unavoidable since it reflects the flight that flashes the green and blue colour of the bird. Here, Loriod's tempo is much slower again at about quaver = 150. On the other hand, Ugorski uses an *accelerando* which effectively creates a momentum for the bird's flight.

The more challenging flight passages are at bars 54-56 and 163-166 with a kind of arpeggio pattern (example 4.4.15). What makes it difficult is the right hand figure, where the alternative chords and single notes require a well-controlled hand position. Here, Hill gives a brilliant performance where the lightness of his chords provides a transparent effect. This perhaps results in the slight changes in pedalling that will avoid the blurring of harmonies. Zehn's rendering is closer to that of Hill. The pedalling in the next flight motif (example 4.4.5, bars 86-87) raises a problem in which the change of pedal will create gaps between each group of three semiquavers. Examples are shown clearly in Austbø's and Ugorski's version. However, one is not certain whether it was one of Messiaen's intentions to create this effect. Another version which presents a long smooth phrasing can be found in Zehn's and Hill's, where the pedal is probably changed slightly later than the chords in which the disruptions of the pedal changes are avoided.

Overall, the spontaneity of the birdsongs are effectively brought out by Austbø and Ugorski. Despite a great technical performance, Muraro's rendering of some birdsong attacks may be rather too gentle in this movement. Hill's is marked most distinctively in shaping the river theme although with the slowest tempo, which could have been more difficult to carry out. His *ritardando* towards the ending of the climax thus assists in revealing clearly the shape of the movement's structure.

4.5 Le traquet stapazin

The presence of E major in this movement indirectly provides us with a sense of tonality, together leading us to imagine the brightness that is brought by the involvement of sunrise and sunset. In 'Le traquet stapazin', the sense of mobility comes from the sunrise and sunset, where the more static section is led by the vineyard motif. This time Hill marks the fastest tempo¹⁴ but the reason is clear where he renders all birdsongs faster than Dominique and Loriod, since their birdsongs sound ponderous in comparison.

Hill	14:11
Muraro	14:22
Austbø	14:56
Ugorski	15:03
Zehn	15:19
Loriod	15:42
Dominique	16:37

We have different views from these pianists on how they interpret the static frame that occurs four times (see p.153), although each time it is extended or varied than the previous. A subtle and gentle approach of this frame is given by both Muraro and Loriod, although overall each expresses a different outcome. In both versions, it is clear that the characteristics of the different birdsongs in the frame is not treated with the extreme contrasting expression. Generally, the birdsongs in this frame can be discerned clearly in three layers of voices and each presents an absolutely contrasting style: the higher range goldfinch in a delicate but voluble call; the middle-above register of the spectacled warbler and the ethereal ortolan bunting's call; the harsh calls of the raven and the common gull in the lower range. Finally, we should not forget that the soloist (black-eared wheatear) is highlighted with its abrupt and unexpected motif. These layers of expressions and sounds are brought out substantially by Hill and Austbø throughout the four frames.

¹⁴ He also has the fastest performance for 'Le merle Bleu'.

In comparison, Loriod and Muraro compress the characteristic of these materials probably to keep them aligned with the tranquility of the vineyard motif. Although each note of the black-eared wheatear's call is clearly pronounced in Loriod's version, the motif lacks the spontaneity and the demisemi-quavers sound too strict and predictable. Dominique's version is no different, and his birdsong rendering is overall even slower and more ponderous. As for Muraro, his version achieves the abruptness but in a more delicate manner.

However, Loriod does not treat the harmonies in these frames strictly as she may view each appearance differently in order to 'naturalize' the scene. Again, this can be seen from her alteration of harmonic balance in some repeated passages (habitat motif). For example, this appears at the vineyard motif at bar 54 (example 4.5.1 x) where the B is played slightly more prominently than at any other time; and at the recapitulation of the frame (example 4.5.2 x, bar 203) the D in the harmony that supports the ortolan bunting is heard louder. From another angle, Muraro renders a more generous tempo at the beginning. However, his playing gradually speeds up along in these passages, though the live performance of his recording may be accounted as one of the reasons.

This relates further to Muraro's use of extreme dynamics for the arch shape in the sunrise-sunset cycle (example 4.5.3). Muraro begins the sunrise chords with less dynamic, almost in *mp* without any sign of accentuation on the chords. Even at bar 115 where *più f* is indicated, the dynamic is not much louder. Though the ascent and descent of the dynamic level are not neglected by other pianists, they seem to pay more attention to the importance of the chord that signifies the mountains. In turn, Muraro pays much attention to the ascending movement of the sun rising. Ugorski and Hill thus take more generous tempo to allow the superimposition of resonance. On the other hand, Zehn releases the lower resonance chords faster while the upper register chords are slower, as if giving more importance to the higher resonance. In my view, the *renversement transposé* can be represented as the sun rising or setting since it moves in ascending but with a great augmentation that encapsulates other harmonies; and these harmonies may portray the mountain (according to Messiaen's description), either by depicting their shapes or reflecting shadows and colours caused by the sun.

The sunrise-sunset feature will then direct us to the graceful *Turangalila* theme towards the ending (example 4.5.4). The appearance of the theme that represents the sea is first accompanied by E major 6th, the tonality of the spectacled warbler's song. This time, however, it supports the thekla lark's song instead. Here, again Muraro uses the dynamic differently where he plays the thekla lark under the *Turangalila* motif in a softer tone. This shows that he portrays the sea in the foreground while leaving the birdsongs as background. Ugorski seems to balance the melodic line of the 'sea' motif slightly more forward than the accompanying chords, as mentioned previously where he uses the similar method in 'La bouscarle' river theme to enunciate the theme. For the thekla lark's phrasing, Austbø gives an extreme resolution to the slurs to signify the cry, where occasionally the resolve notes is hardly heard. However, his strong accents and the emphasis of the articulation are in contrast with Muraro's version, in that Austbø focuses the birdsong at a nearer view. With an indication of *Très Lent* (quaver = 40), the second *Turangalila* motif appears in a parallel chord in both hands. Though in this slow tempo, no pianists attempt it faster than the indication except Muraro at about quaver = 50 especially for the phrase at bar 264. Surprisingly, Zehn's has an extreme tempo which is almost twice as slow as the marking.

Since the spectacled warbler's song can be considered almost as important as the soloist, it is interesting to note how pianists have flavoured this motif. It is probable that the song in E major sixth gives a kind of attraction for the players. Muraro appears to render a most extreme 'romantic' approach towards this motif, to the extent that he even uses some slight pedalling for the melodic line despite Messiaen's indication that no pedalling should be used for this motif (except in some instances near the ending). Muraro's pedalling even occurs in the last line which rounds off the movement. At bar 95 (example 4.5.5 x), it seems that he took a 'breath' to reach the higher B. Similarly, a rubato playing is given by Ugorski for the spectacled warbler's motifs where a slight delay or tenuto is always used at the end of the phrasing. Hill and Austbø are inclined towards a legatissimo touch such as the cantabile running notes in a 'classical' style. For the short description of *gai* that usually precedes before the spectacled warbler's songs, Zehn emphasises the C# most evidently. This is a very justifiable choice since it naturally leads the C# to resolve to the B which usually starts off the spectacled warbler's song. Surprisingly,

Dominique plays this preceding motif slower by half of the tempo marking. At the end of the movement, the song of the spectacled warbler is transformed to an extremely slow tempo, suggesting a 'memory'. Here, Hill plays it slowest at about semiquaver = 45 (the indication at semiquaver = 52) while most of the pianists have a fairly quick speed, especially Muraro.

Again, Ugorski has the most distinctive sound in the lower register song for the common gull and the raven. Generally, he gives a kind of buzzing or nasal timbre by providing a roughness and weighty accents to these calls. This lower register effect though is much less in Hill's version, where Hill seems to occasionally beautify the low register calls. As in other movements, Ugorski delivers his grace-notes longer in all the birdsongs. Though this articulation gives significance in comparison with the others, not all are effective. One of the examples is the ortolan bunting's song, where the emphasis on E for the grace-note may undermine the simplicity and lightness of the phrase (example 4.5.2). On the other hand, the emphasis on grace-note is perhaps effective in the orphean warbler's song such as at bars 125-127 (example 4.5.6). This provides a variety of articulations for the consistent semiquavers throughout the songs.

From here, it is worth mentioning the orphean warbler's song which covers quite a few longer passages in the sunrise section. Although decorated with a variety of dynamics and articulations, this song can probably appear to be quite uninteresting with its consistent semiquaver pulses in slur couplets. A few examples show how pianists give an essence to this song. As well as using a weighty grace-note, Ugorski also occasionally pulls the slurs slightly longer together with the accents. This allows more freedom for these slurs, but it depends on one's preference. In another instance, Muraro delivers the two semiquavers beat in a faster tempo than the rest at bars 151-153 (example 4.5.7 x), which clearly results in a change of character. Here, his use of extreme contrast of dynamic is quite effective at bar 176 (example 4.5.8 x), where the dynamic drops suddenly for the last three notes together with a slightly fast tempo. In between the passages of the orphean warbler's song, there is the corn bunting's song which always appears in one phrase and which serves as a transition or a bridge for the other songs that come in longer passages. However, it is noted that many pianists treat it rather 'pianistically' where

a ritardando is sometimes applied too much at the end of the phrase. This is clearly shown in Zehn's and Ugorski's playing, though the *rit.* at bar 181 before the long passage of thekla larks' calls is effective, since it provides a suspension before the vibrant song begins.

Hill's version inclines towards structuring the climax at the thekla lark's song (bars 183-197, p.17). This can be seen from his extraordinarily fast execution of the thekla lark's song before the frame recaps at bar 199. Not only the fastest, he also gives a direct momentum to all the gliding calls of the thekla lark without any hesitation until it rounds off to a long silence. This energetic song thus serves contrastingly not only in expression but also in giving a bright timbre that stands out prominently from the tranquility of the atmosphere. Another instance is the goldfinch's song, where it should be noted that Hill's and Austbø's goldfinch's duets are remarkable for virtuosity. Both versions demonstrate the two birdsongs that sing in a delicate manner with extreme rapidity. In the previous goldfinch's song at the very beginning (example 4.5.9 x, bar 41), Austbø seems to view the arpeggio of *renversement transposé* as a quick glissando since the composer indicates a substantial tempo at *Très Vif* (quaver = 184). However, most pianists choose a slightly slower tempo to announce this harmony prominently. For example, Loriod delivers the arpeggio in a steadier rhythm which pronounces the *renversement transposé* more clearly.

Overall, it can be seen that Loriod inclines towards serving the whole movement with a rather tranquil effect even when proceeding along the sunrise-sunset cycle. One of the possible reasons is the substantial influence of E major which probably gives the pianist a kind of fundamental familiarity with tonality, and therefore causes her to treat most of the sections more lyrically and freely. This may have been another reason why Muraro treats it in a 'romantic' approach, with his more generous use of pedal and rubato, especially for the spectacled warbler's song. Hill, Austbø and Ugorski give more attention to the different characteristics of the birdsongs. In this instance, we are reminded that the sunset motif is quite short in comparison with the sunrise. However, the sense of sunset decreases along with other materials until the ending is apparent; the slow cantabile *Turangalila* motif; and rests (silence) increases in between the material (at last page); and most

importantly the last line of the spectacled warbler slows down, as if going into a standstill. The sense of these materials can be heard most effectively in Hill's and Austbø's versions.

Listening to these pieces, there seem to be two inclinations (angles) from which the pianists present the work: some artists are more concerned with the pianistic value of the works, while others focus on the main idea of the portraits – birdsong effects or other elements of nature. What makes Messiaen's *Catalogue* difficult is the problem of achieving both the pianistic playing and also the effectiveness of different birdsongs' portrayals. In my view, the fundamental contrast between the habitats and the birdsongs is essential.

A few features should be noted in order not to misjudge these recordings. The first important element is regarding the sound production. It should be mentioned that in general, Loriod's recording has the brightest and loudest sound amongst others, where in some instances the higher registers often sound too sharp. The sound of Dominique's recording is much inclined towards Loriod's, and both contrast with Muraro's. Here, the live recording of Muraro's playing may be one of the reasons that some passages are rendered faster than they were intended. Another significant feature that is perhaps worth mentioning is the obvious relationship between the birdsong and non-birdsong enhancement by Hill. This is evident from his extreme rendering of tempo: slower non-birdsong material (often slower than the indication) but contrasting with brilliant and fast birdsong sections. As Freeman wrote in his review:

Hill is concerned with narrative, with contemplative space, a poetic, unhurried rendering of details that makes of the listener a detached if rapt observer able to order his vision as he is borne along. He generally favours slower tempos, which is all to the good.¹⁵

In the same review, Freeman later quotes an extract of a dialogue between Messiaen and Xavier Darasse:

X.D : Vous voulez donc qu'on vous joue très lentement?

O.M : Oui, très, très lentement.¹⁶

As far as being faithful to the composer's indication is concerned, it is quite impracticable to name a particular pianist. To a certain extent, each pianist has been faithful to the indication, and for some reason the changes which are different from the markings thus occasionally create stunning effects. Consequently, it also shows how pianists employ different ideas and techniques to execute certain passages. This applies particularly to birdsongs characteristics such as glissandi, trills, appoggiaturas, rotating patterns, and production of different noises formed by harmonies. In short, although Messiaen's marking of instructions are detailed particularly in terms of pedaling and articulation, there are still spaces for the player to explore the existing notation, resulting in totally individual styles of playing.

¹⁵ Freeman, Robin, 'Courtesy towards the things of nature: Interpretations of Messiaen's *Catalogue d'oiseaux*', *Tempo*, No.192 (1995), p.11

¹⁶ *Ibid.*, p.11

Figure 14¹⁷

Catalogue d'oiseaux															
Pianist	I Le Chocard des Alpes	II Le Loriot	III Le Merle bleu	IV Le Traquet stapazin	V La Chouette hulotte	VI L'Alouette lulu	VII La Rousserolle effarvate	VIII L'Alouette calandrelle	IX La Bouscarle	X Le Merle de roche	XI La Buse variable	XII Le Traquet rieur	XIII Le Courlis cendré	Total	La Fauvette des jardins
Y. Loriod	10:21	9:12	13:22	15:42	8:04	8:51	30:13	5:25	12:07	18:37	9:27	8:24	10:56	162:03	27:57
P. Hill	8:18	8:35	11:35	14:11	7:33	7:42	31:55	5:38	12:45	19:09	11:18	8:35	10:24	159:41	32:11
C.-A. Dominique	8:49	8:25	13:02	16:37	7:34	7:08	31:51	4:57	11:08	19:13	10:27	8:15	8:52	158:20	33:24
A. Ugorski	8:42	8:35	13:44	15:03	7:40	8:05	29:13	4:25	11:45	17:00	10:04	7:37	10:25	152:38	27:42
H. Austbø	8:12	8:56	12:30	14:56	7:25	7:28	29:50	4:53	11:24	18:16	10:38	7:20	9:46	153:30	32:39
R. Muraro	9:12	8:16	12:38	14:22	7:31	8:08	28:25	5:09	11:35	16:37	9:51	7:14	11:01	149:59	32:21
M. Zehn	8:08	9:23	13:02	15:19	7:42	7:00	29:56	5:51	10:42	16:44	10:04	8:06	9:52	151:56	-

¹⁷ Source: http://www1.ocn.ne.jp/~messiaen/discography/disks_catalogue.html

Conclusion

Although this study does not provide an analysis of all thirteen pieces of *Catalogue d'oiseaux*, the individual style of the selected movements shows in depth and detail the richness of Messiaen's compositional style and the development of his piano writing. In comparison with the *Vingt Regards* or his much earlier *Préludes*, the *Catalogue* is indubitably much more dissonant in sound, and its structure notably more complex. This study focuses on the performance analysis of five selected movements from *Catalogue*, together with a discussion of fingerings, interpretations and particular facets of Messiaen's piano writing. An interest in how the composer obtained his ideas, the development of his birdsong writing and the progress of his work on the *Catalogue* is discussed in the Introduction.

One of the most distinctive discoveries from the analysis is none other than the structure of each movement at both a detailed and a broader structured level. I believe that a clear understanding of the structure certainly solves the major difficulty of the comprehensibility of a work and enables us to appreciate the logical arrangement of ideas by the composer. Messiaen's emphasis on the nature element in the *Catalogue* not only applies to the material used (both birdsongs and non-birdsong) but also to the construction of movements. Throughout the analysis, it is possible to see how the composer has used his descriptive material as a substitute for a variety of musical forms and functions. For example, the occurrence of a similar short birdsong phrase may be treated as a bridge passage or a transition; occasionally a birdsong or a landscape section may function as a coda, codetta, or introduction; and the characteristics of certain birdsongs or non-birdsongs may even contribute to a climax. In some instances, the structure of a movement may reveal several possible forms or designs, by taking account of how the composer relates natural phenomena or conventional musical forms to the particularized structure of a particular piece. The organization of Messiaen's structures is basically formed by two features – namely, the static and mobile elements. In Messiaen, the static subject usually refers to the description of a scene or landscape. The function of the static subject can be varied. In certain instances it serves to encapsulate the birdsong

(the mobile subject), where a kind of frame will emerge as in 'Le traquet stapazin' and 'L'alouette calandrelle'. On the other hand, the idea of the mobile subject applies mainly to the birdsong elements, which are more improvised and free. However, we should be reminded that there are many examples where birdsong appears consistently and is represented with a single and almost identical phrase, such as in the case of the wren, the chaffinch and the corn bunting, which then tend to function as a static motif instead. In turn, the element of water, which is considered a part of the descriptive natural landscape, may be seen as a mobile subject. Indeed, in 'La bouscarle' the whole direction of the music is given by the river, which articulates out a ternary form.

The construction of certain movements may appear as relatively simple as a binary form, as in the case of 'La chouette hulotte'. The arrangement of the different owls' calls, led by the complex and evocative night music, appears twice, though the second time it is more extended and ends with a short coda. The cycle of a day as a model of the basic framework is one of the fundamental structures in the *Catalogue*, emphasizing the nature element of this work at the temporal and structured level. However, the superimposition of sections, the symmetrical and palindromic orders, are also important keys to understand the structure of the *Catalogue*. These approaches may seem to be abstractly technical, but it is probable that the composer relates these forms to natural phenomena.¹ Similarly, Messiaen's predilection for highlighting the meaning of eternity in nature since *Quatuor pour la fin du temps* is also evident in the *Catalogue*. The element of eternity is apparent in that a short phrase or fragment often reappears at the end of some movements, signifying infinity or the cycle of nature. Three examples are 'Le loriot', 'La rousserolle effarvate' and 'L'alouette calandrelle'. We should not forget that conventional or archetypal forms such as sonata, binary or ternary form are equally used, though these forms are usually superimposed on or embedded within in a larger structure.

The analysis of the work's structure also assists us in explaining the long pauses and the abundance of rests between each section. This is crucial in performance where the pianist needs to understand the function of silence. In addition, long

¹ This has been discussed above in examining how the composer may have regarded some of the symmetrical growth patterns to be found in leaves, sunflowers and seashells (See Chapter 1, p.29)

pauses usually signify the boundary of a section, and it is essential also to identify the correlation within the sections in order to present the overall architecture of the work flowingly and convincingly.

According to the constructions and principles used in these movements, it is possible to relate Messiaen's *Catalogue* to the practice of painting. Messiaen pointed out to Peter Hill that he emphatically believed himself not to be an impressionist. As a distinguished teacher, Messiaen must have realized the importance of visualization and auditory perception in playing music. His portrayal of each subject, like a diary or a documentary film, is based on the views and perceptions he encountered which first existed in reality. Here, we should note that Messiaen's role as a composer in using his birdsong transcriptions also inclined in another direction, in particular to the *Catalogue*. Messiaen claimed that his birds were 'real authors'² and that he served merely as a transcriber. This is evident from the unpublished sketches of birdsong transcriptions³, such as in the notation for 'Le traquet stapazin', where the transcriptions are already identical to the final score. Unlike many composers, Messiaen's aim is not only to give an impression of birdsong, but to reveal these birdsongs in as much detail as possible, through small-scale elaboration and large-scale contextualization. Clearly, the movements in the *Catalogue* are not sentimental. What Messiaen emphasizes is the interesting characteristic of birdsongs and the dramatic representation of each depiction. Although Messiaen indeed anthropomorphized the birdsong in his verbal explanation, this was his personal view and he did not restrict players from expressing their individual interpretation. A further question is whether a knowledge of ornithology is necessary for the listener in approaching Messiaen's birdsong works. As he himself said:

Knowing the bird and the landscape I want to depict must impart particular pleasure for the listener who rediscovers friends, childhood memories, or certain things lost in the back of the mind; in any case, that's my feeling. Nevertheless, the musical result is there, and the listener who doesn't recognize the bird songs may take pleasure in the music alone. Moreover,

² Bernard Gavoty, Who are you, Olivier Messiaen? *Tempo*, Vol.58 (1961), p.36

³ Obtained from Peter Hill (on the deposit at the Bibliothèque Nationale de France, Paris MS. no. 23056)

if the work succeeds, life is revealed on its own without identification being necessary. So many beautiful portraits of past centuries are of characters we don't know, yet they seem to us to be crying out with life and truth! We think we recognize people we've never seen because the paintings are successful.⁴

In the *Catalogue*, birdsong transcriptions must be seen as new sources for Messiaen in comparison with the non-birdsong materials. Though a line of development from previous birdsong writing occurs, his studies of ornithology since 1952 had provided him with the ability to transcribe birdsong much more confidently. These birdsong transcriptions alone may not constitute Messiaen's hallmark, since the non-birdsong subjects have a major role in illuminating the composer's conception and revealing his compositional 'hand'. As discussed in the chapter on piano writing, almost all non-birdsong materials came from previous sources in his music in terms of their harmonic construction and character, such as the *résonance contractée*, *renversement transposé*, *accords tournants*, and so forth. All these features are present in some form at the time of *Quatuor* and the wartime works onwards, and are codified in *Technique de mon langage musical*. In addition, we should also refer to Pierre Boulez's criticism that 'he does not compose - he juxtaposes - and he constantly relies on an exclusively harmonic style of writing'.⁵

As Robert Sherlaw Johnson wrote:

If one traces Stravinsky's development from the extravagant early works, through the neo-classical period to the final serial period, there is always some element of rejection of an earlier aesthetic, and ultimately no sense of return to the nature of the early music. With Messiaen, this is not so, at each stage of his development he has exploited new ideas and ultimately achieved an integration of all his earlier procedures in the later music, thus enriching his musical

⁴ Samuel 1994, p.96

⁵ Cheong Wai-Ling, Messiaen's Chord Tables: Ordering the Disordered, *Tempo*, Vol.57 issue 226 (2003), taken from Pierre Boulez, *Relevés d'apprenti* (Paris: Edition du Seuil), 1966, translated by Stephen Walsh as *Stocktakings from an Apprenticeship* (Oxford: Clarendon, 1991) p.49

language and liberating it from the more classically-orientated constraints of the early works.⁶

Another broader and poetic as well as technical explanation by Armfelt also distinctively describes Messiaen's music:

One of the most striking features of some of Messiaen's music is that it makes one conscious that everything in it is within a context of something bigger. There is the sound behind the sound, the longer duration behind the shorter one. And behind all movement there is an awareness of silence, and behind all measured time an awareness of eternity.⁷

However, we need to remember that *Cantéjodjayâ* and the *Turangalila-Symphonie* are two crucially important works leading to the *Catalogue*. The combination of material in short sections in *Cantéjodjayâ* thus appears as if it were a dictionary of Messiaen's musical language, including the important passage of *Mode de valeurs*, as also in the specific étude *Mode de valeurs et d'intensités*. The contribution of *Turangalila* to the *Catalogue* certainly comes from its famous themes, along with a few harmonic sequences. The other important work to be emphasised is perhaps the flute piece *Le merle noir* (1952) that provided the germinal idea in terms of structure and handling of subject and materials for the *Catalogue*. In short, the *Catalogue*, with its thirteen movements not only introduces new sources – birdsongs – but also becomes a centre in gathering materials from Messiaen's musical language and transformed them into a broadly laid-out, profound works that also shows great subtlety and elaboration in its working out of musical detail. In addition, all these harmonic materials are transformed and provided with a visualization of an object along with various degrees of descriptive translation into sound.

Messiaen must have been fascinated by birdsong characteristics as parallel to the elements of our human musical language, such as the recitative style, and with their different technical features which include trills, glissando, tremolo and so forth.

⁶ Johnson 1975, p. 191

⁷ Nicholas Armfelt, 'Emotion in the Music of Messiaen', *Musical Times*, xcvi (1955), p.857

These features contribute to the manifold technical difficulties in the piano playing of the *Catalogue*. Messiaen's notation is conventional but is enhanced by verbal descriptions of sounds and sights. The clearest example regarding the precision of Messiaen's notation is illustrated by his use of added value. The fundamental idea of the added value enhances the natural sense of the birdsong, which Messiaen intended to be fluid in rhythm in conformity with Nature. A further function of this rhythmic idea is explained by David Morris in his analysis of 'Abîme Des Oiseaux'⁸ where it serves as a written-out accelerando and ritardando (refer to bar 17 and bars 27-29). Rests within some of the birdsongs or calls similarly serve the same function, though Messiaen did not entirely omit the actual indication of *accel.* or *rall.* All these can be found constantly in the *Catalogue*. Apart from the indicated trills, this kind of written out notation also occurs in the tremolo playing and glissando. With all the detailed pedalling and fingering markings, there is no doubt that Messiaen intended the player to be extremely faithful to his notation.

In this study, the authenticity of Messiaen's birdsong writing is not discussed. The reader is referred to Trevor Hold's article 'Messiaen's birds'.⁹ Hold studied Messiaen's birdsong by using a scientific method, using sound spectrographs and transcriptions by other ornithologists. And he clearly stated that the truly realistic imitation of birdsong characteristics by any instrument is impossible. Certainly, we understand the limitations in producing transcriptions of birdsong for the piano or for any other instrument. However, we should bear in mind that what Messiaen actually did was to transcribe birdsong by his own ear and mode of musical hearing. This may also relate to a quote from Debussy that 'all ears don't hear in the same manner'; which is taken from his reply to Pierre Lalo, the critic who claimed that he did not hear, did not see and did not feel the sea when listening to Debussy's *La mer*.¹⁰

Nonetheless, when learning some of the movements of *Catalogue*, I have been curious about the composer's imaginative transcriptions when compared with

⁸ David Morris, 'A Semiotic Investigation of Messiaen's 'Abîme Des Oiseaux', *Music Analysis*, 8:12 (1989), p.148

⁹ Trevor Hold, 'Messiaen's Birds', *Music and Letters*, Vol.LII No.2 (April 1971), Vol.LII No.2

¹⁰ Claude Abrevant, 'Symbolism and Performance' *Debussy in Performance*, ed. James R. Briscoe (London: Yale University Press, 1999), p.32

recorded samples of birdsongs from web pages and cassettes. The birdsongs that are chosen for comparison is that of the more common birds such as the nightingale, the reed warbler and the skylark. From listening to the samples, it appears that Messiaen tended to emphasise melodic contour and salient rhythmic patterns. A further description comes from David Drew:

Certain principles of structure – governing rise and fall, accent and repetition – appeal particularly to Messiaen, and the ‘line’ of a complex bird-song is such that it admits of highly chromatic stylisation.¹¹

Although it is impossible for the human ears to accurately detect the real birdsong’s tempo and pitches, we are able to identify an approximation of the birdsong characteristics, a contour and a broad rhythmic delineation which certainly can be found in Messiaen’s.

For my purposes, the identification of Messiaen’s authenticity in birdsong writing is largely irrelevant. However, it is undoubtedly helpful if players have the chance to hear some real birdsongs in order to enhance their interpretation of the work. This is also one of the composer’s intentions as for example in *Réveil des oiseaux*, where the performer is explicitly advised to experience the sound of birdsong in the forest. The reason is due to the limitations of musical notation where a variety of subtle birdsong effects can hardly be reproduced in notation. A few noteworthy examples include declamatory effect, calls in recitative manner, glides of various kinds and other figurations which may not be written or described in words. This can be related to Bartók’s folksong writing as discussed in a previous chapter.

Catalogue d'oiseaux is Messiaen’s greatest birdsong work within his overall compositional output. After the *Catalogue*, the composer continued with other works, and birdsong always appears as part of the material even though sometimes as a minor subject within a work. Yet *La Fauvette des Jardins* (1970) is an exception. This one-movement work has a considerable length of about 35 minutes, again taken from the landscape scene in the Dauphiné, in particular at Lake Laffrey

¹¹ Meri Kurenniemi, ‘Messiaen, the Ornithologist’, *The Music Review*, Vol.41 (1980), p. 123, quotes from David Drew, ‘Messiaen – a provisional study I’, *The Score* (December 1954), p.44

and the 'bald-headed' mountain. This is the place where the composer built a house in the 1930s to which he returned each summer to compose.

Another spectacular work that consists entirely of materials drawn from the elements of nature and birdsong is *Des Canyons aux Etoiles* (1973). This work was commissioned by Alice Tully from New York for the celebrations of the American Bicentennial. What is so interesting is the background of the composition's genesis, which took the composer to one of the grandest landscapes in the world – the canyons of Utah. This work even shows another element which added to Messiaen's wide-ranging interest in nature, that of geology. On 5 August, 1978, nine miles from Parawan, Utah, the White Cliff, also known as Lion's Peak, was renamed, in honour of the composer, as Mount Messiaen. At Bryce Canyon, the composer was able to discover birds not to be found anywhere else, for example the western tanager, and the blue grouse.¹² Apart from noting down all kinds of birdsongs in Utah, this is one of the descriptions by Messiaen regarding his inspiration from the canyon landscapes:

I've seen the canyon from two perspectives. I'd seen them from on high, with the vertigo of the abyss, that's important, one sees vast black holes against the red of the cliffs. Afterwards my wife and I went down the trails, very carefully, never leaving the paths, and we made our way to the depths, all the way to the bottom. From the depth of the abyss, we could see the path circling very high above us, and that is what inspired the title of my work, *From the Canyon to the Stars*, one progresses from the deepest bowels of the earth and ascends towards the stars.¹³

After the three large-scale works – *Des Canyons aux Etoiles* (1971-74), *Saint François d'Assise* (1975-83), and *Livre du Saint Sacrement* (1984) – Messiaen proceeded to produce two smaller scale works that again feature birdsongs. These are *Petites esquisses d'oiseaux* for solo piano (1984) and *Un vitrail et des oiseaux*

¹² Harriot Watts, 'Canyon, Colours and Birds: An interview with Oliver Messiaen', *Tempo*, no.128 (1979), p. 4

¹³ *ibid.*, p.6

(1986) for piano and small ensemble. *Petites esquisses* emerged from a request by Loriod for a musical depiction of the robins. The first, third, and fifth movements are devoted to the robin's song, alternating with different songs in the second (blackbird), fourth (song thrush) the sixth movements (skylark). Though written for solo piano, the six short movements are quite different from the *Catalogue* in terms of their simplicity. Each movement only portrays the one solo bird and no other birds are involved. Furthermore, non-birdsong materials are represented solely by Messiaen's harmonies and colour chords, and there is no description of the bird's habitat or other landscape features. Perhaps, the reason for this comes from his use of more common European birdsongs such as the robin, blackbird, song thrush and skylark. Retaining the same simplicity, *Un vitrail et des oiseaux* features the importance not merely of birdsongs but also of colour (as in the title: 'A stained glass window and birds'). Similar to its predecessors, *Réveil des oiseaux*, *Oiseaux exotiques*, and *Couleurs de la cité céleste*, the piano and the principal groups of xylophone, xylorimba and marimba are again highlighted. However, Messiaen keeps the work in a simple form so that one can clearly identify the chorale theme (a quasi-*Turangalila* motif) presented in alternation with birdsongs. The simplicity of these two works may perhaps signify that Messiaen sought serenity and tranquillity in birdsongs, away from the virtuosic and complicated sound-world of other works.

In comparison with the two vital sources of subject matter in his works, the Catholic faith and the surrealism of his treatment of the Tristan and Isolde story, the birdsongs have formed part of the realism of nature which is at its most organic and closest to human beings. In the *Catalogue*, Messiaen's exploration of each scene and birdsong in depth and detail may perhaps be another reason why the *Catalogue* is written for solo piano. Not only emphasizing a certain visionary simplicity (by eliminating the number of players), the solo pianist is also allowed a completely free interpretation as though encountering the very journey Messiaen has viewed. The uniqueness and originality of the *Catalogue* certainly began even before the work was composed. The combination of Messiaen's ability as a composer with the existing avian songs 'in Nature' thus created a new style of music, and moreover left the performers to express the distinctiveness and breadth of this work as well as the visionary colour. As Theo Hirsbrunner describes it:

In the *Catalogue d'oiseaux*, Messiaen invites us to a quiet meditation. We can look at the pictures of the birds on the title pages of the individual books, read the commentaries, which are veritable prose poems, and then lose ourselves in the music which transports us to the magical theatre of nature.¹⁴

The process of the evolution of Messiaen's birdsong writing in the 1950s marked an important turning point in his later work. The transformation of the birdsong motifs throughout his work certainly involves much of his personal life experiences and his astonishing determination in transcription. It was in the 1950s that Messiaen's approach to birdsong matured, from the extremely literal *Réveil des oiseaux* (1953) to the dramatic fantasy of, say, 'Le courlis cendré' or 'La chouette hulotte'. *Catalogue d'oiseaux* not only lays a foundation for Messiaen's later works, most importantly, it will also remain one of the great masterpieces of our piano literature.

¹⁴ Theo Hirsbrunner, 'Magic and Enchantment in the *Catalogue d'oiseaux*', in Siglind Bruhn (ed.), *Messiaen's Languages of Mystical Love* (New York: Garland, 1998), p.198

Bibliography

- Armstrong, E.A.: *A Study of Bird Song* (London: Oxford University Press, 1963)
- Audrey Ekdahl Davidson: *Olivier Messiaen and the Tristan Myth* (London: Praeger Publisher, 2001)
- Bruhn, Siglind (ed.): *Messiaen's Languages of Mystical Love* (New York: Garland, 1998)
- Griffiths, Paul: *Olivier Messiaen and the Music of Time* (London: Faber and Faber, 1985)
- Hill, Peter (ed.): *The Messiaen Companion* (London: Faber and Faber, 1994)
- Hill, Peter and Simeone, Nigel: *Messiaen* (Yale University Press, forthcoming)
- Hsu, Madeleine: *Olivier Messiaen, the Musical Mediator: A Study of the Influence of Liszt, Debussy, and Bartók* (London: Associated University Press, 1996)
- Hume, Rob: Royal Society for the Protection of Birds (RSPB): *Birds of Britain and Europe* (London: Dorling Kindersley, 2002)
- Johnson, Robert Sherlaw: *Messiaen* (London: J. M. Dent & Sons Ltd, 1975).
- Messiaen, Olivier: *The Technique of My Musical Language*. Volume 1/Text; Volume 2/Musical examples, English translation by John Satterfield (Paris: Alphonse Leduc, 1956)

Messiaen, Olivier. *Traité de Rythme, de Couleur, et d'Ornithologie (1949-1992)*, Vols. I-VIII (Paris: Alphonse Leduc, 1994)

Neuhaus, Heinrich. *The Art of Piano Playing*, trans. K.A. Leibovitch (London, Barrie & Jenkins, 1973)

Nichols, Roger. *Debussy Remembered* (London, Faber and Faber, 1992)

Rink, John (ed.): *Musical Performance: A Guide to Understanding* (Cambridge: Cambridge University Press, 2002)

Samuel, Claude: *Olivier Messiaen Music and Color. Conversations with Claude Samuel*, Eng. trans. by E. Thomas Glasow (Portland, Oregon: Amadeus Press, 1994)

Treize, Simon: *The Cambridge Companion to Debussy* (Cambridge: Cambridge University Press, 2003)

Articles

Armfelt, Nicholas: 'Emotion in the Music of Messiaen', *Musical Times*, xcvi (1955), pp.856-858

Cheong, Wai Leng: 'Messiaen's Chord Tables: Ordering the Disordered', *Tempo*, Vol.57, Issue 226 (2003), pp.2-10

David Morris: "A Semiotic Investigation of Messiaen's 'Abîme Des Oiseaux'", *Music Analysis*, 8:1-2 (1989), pp.125-158

Delaere, Mark: 'Olivier Messiaen's Analysis Seminar and the Development of Post-War Serial Music', *Music Analysis*, 21/1 (2002), pp.35 -51

Drew, David: 'Messiaen – A Provisional Study', *The Score*, no. 10 (1954) p.33-49

Fischer, V.: 'Articulation Notation in the Piano Music of Béla Bartók: Evolution and Interpretation', *Studia Musicologica Academiae Scientarum Hungaricae* 36/3-4 (1995)

Forte, Allen: 'Olivier Messiaen as Serialist', *Music Analysis*, 21/I (2002), pp. 3-34

Freeman, Robin: 'Courtesy towards the things of nature: Interpretations of Messiaen's *Catalogue d'oiseaux*', *Tempo*, no.192 (1995), pp.9-14

Gavoty, Bernard: 'Who are you, Olivier Messiaen?', *Tempo*, Vol. 58 (1961), p.33-36

Harley, M.A.: 'Bartók's Nature Music Idiom', *Studia Musicologica Academiae Scientarum Hungaricae* 36/3-4, 1995, pp.329-349

Harley, M.A.: 'Birds in concert: North American birdsong in Bartók's Piano Concerto No.3', *Tempo*, New Ser., No.189 (June 1994), pp.8-16

Hill, Peter: 'For the Birds', *Musical Times*, Vol. 135, no. 1819 (Sep. 1994) pp.552-555

Hold, Trevor: 'Messiaen's Birds', *Music and Letters*, Vol.Lii no.2 (1971) pp.113-22

Kurenniemi, Meri: 'Messiaen, the Ornithologist', *The Music Review*, Vol.41, (1980), pp.121-126

Newman, William S: 'Beethoven's Fingerings as Interpretive Clues', *The Journal of Musicology*, Vol.1, No.2 (Apr., 1982), pp.171-197

Nichols, Roger: 'Messiaen's 'Le merle noir': The Case of a Blackbird in A Historical Pic', *Musical Times*, cxxix (1988), pp. 648-50

Somfai, Laszlo: 'Analytical Notes on Bartók's Piano Year of 1926', *Studia Musicologica Academiae Scientarum Hungaricae*, 26 (1984), p.5-58

Street, Donald: 'The Modes of Limited Transposition', *Musical Times*, Vol. 117 no. 1604 (1976) pp.819-823

Toop, Richard: 'Messiaen/Goeyvaerts, Fano/Stockhausen, Boulez', *Perspectives of New Music*, Vol.13, No.1 (Autumn-Winter, 1974), pp.141-169

Watts, Harriet: 'Canyon, Colour and Birds: An interview with Olivier Messiaen', *Tempo*, no.128 (1979), pp.2-8

Internet resources

Rayleigh, *The Sound of Bells*:
<http://www.hibberts.co.uk/rayleigh.htm>

Biography of Frédéric Mistral:
<http://www.kirjasto.sci.fi/fmistral.htm>

Messiaen's discography:
http://www11.ocn.ne.jp/~messiaen/discography/disks_catalogue.html

Audio of birdsongs

Ortolan bunting and woodlark:
<http://www.provenceweb.fr/83/centre-var/oiseaux/ukdoc.htm>

Reed warbler, great reed warbler, tawny owl, skylarks and so forth:
<http://www.northamptonshirewildlife.co.uk/nsgallery.htm>

Nightingale, skylark, and sedge warbler:
<http://www.wildsong.demon.co.uk/LR/listening.html>

Great reed warbler:
http://www.teorekol.lu.se/ekol_inst/mol_ekol/grw_homepage.htm

Blackbird and Chaffinch:
http://www.open.ac.uk/Nature_Trail/Birds.htm

Blackbird:
<http://www.naravildmark.nu/forest.htm>

Recordings

Yvonne Loriod: Erato ECD 71590 (March 1970)

Anatol Ugorski: DG 493251-2 (March, April, November 1993)

Peter Hill: Unicorn-Kanchana DKB 9062, 9075, 9090 (6-8 December 1986, 5-7 April 1988, 4 December 1989)

Martin Zehn: ARTN 74321 72122-2 (February, March, April 2000)

Roger Muraro: Accord 465 768-2 (February 1999)

Carl-Axel Dominique: BIS-CD-594/596 (1-7 July, 10-12 December 1992)

Håkon Austbø: Naxos 8.553532-34 (24-27 April, 1-3 August 1996)